7450 Ethernet Service Switch
7750 Service Router
7950 Extensible Routing System
Virtualized Service Router

Release 23.7.R1

MD-CLI Command Reference Guide

3HE 19224 AAAD TQZZA 01
Edition 01
July 2023

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Table of contents

1 Getting started ... 5
1.1 About this guide ... 5
1.2 Platforms and terminology ... 5
1.3 Conventions ... 7
1.4 MD-CLI command reference ... 8

2 Operational commands ... 14
2.1 admin commands ... 15
2.2 Configuration mode commands ... 83
2.3 environment commands ... 100
2.4 file commands ... 112
2.5 Global commands ... 132
2.6 Output modifier commands ... 264
2.7 perform commands ... 272
2.8 reset commands ... 287

3 Configuration commands ... 317
3.1 aaa commands ... 318
3.2 anysec commands ... 385
3.3 application-assurance commands ... 396
3.4 aps commands ... 756
3.5 bfd commands ... 761
3.6 bmp commands ... 767
3.7 bof commands ... 781
3.8 call-trace commands ... 811
3.9 card commands ... 822
3.10 cflowd commands ... 891
3.11 chassis commands ... 914
3.12 connection-profile commands ... 923
3.13 debug commands ... 926
3.14 esa commands ... 1186
3.15 eth-cfm commands ... 1192
3.16 eth-ring commands ... 1207
3.17 filter commands ... 1225

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3.18 fwd-path-ext commands 1477
3.19 group-encryption commands 1490
3.20 ipsec commands 1496
3.21 isa commands 1589
3.22 lag commands 1658
3.23 li commands 1699
3.24 log commands 1778
3.25 macsec commands 2414
3.26 mcac commands 2424
3.27 mirror commands 2435
3.28 multicast-management commands 2471
3.29 oam-pm commands 2558
3.30 openflow commands 2637
3.31 policy-options commands 2648
3.32 port commands 2790
3.33 port-policy commands 3063
3.34 port-xc commands 3066
3.35 pw-port commands 3069
3.36 python commands 3081
3.37 qos commands 3102
3.38 redundancy commands 3479
3.39 router commands 3536
3.40 routing-options commands 5020
3.41 saa commands 5041
3.42 satellite commands 5083
3.43 service commands 5095
3.44 sfm commands 8253
3.45 subscriber-mgmt commands 8256
3.46 system commands 8869
3.47 test-oam commands 9351
3.48 vrrp commands 9382

4 Deprecated and obsolete commands 9401
4.1 Deprecated commands 9402
4.2 Obsolete commands 9403

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1 Getting started

1.1 About this guide

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

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

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

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

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

1.2 Platforms and terminology

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

Table 1: Platforms and terminology

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

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

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

1.3 Conventions

This section describes the general conventions used in this guide.

1.3.1 Precautionary and information messages

The following information symbols are used in the documentation.

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

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

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

Note: Note provides additional operational information.

Tip: Tip provides suggestions for use or best practices.

1.3.2 Options or substeps in procedures and sequential workflows

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

Example: Options in a procedure

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

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

Example: Substeps in a procedure

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

1.4 MD-CLI command reference

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1.4.1 MD-CLI tree hierarchy

Table 2: Command syntax symbols

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

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

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

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

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

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Figure 1: MD-CLI configuration tree example

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

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

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

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

The command description indicates the required syntax for each command. See MD-CLI command descriptions for more information.

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

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

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

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- number
- IPv4 address
- IPv6 address
- MAC address

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

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

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

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

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

1.4.1.1 Context path

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

Figure 2: Command tree navigation

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1.4.2 MD-CLI command descriptions

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

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

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

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

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

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

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

Table 3: Command descriptions fields

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

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Field	Description
Reference	Reference to an element instance in the configuration or state datastore
Min./Max. Instances	For lists and leaf-lists, the minimum or maximum number of instances for this element
Notes	Information about special attributes of the element, including whether the element is: • a key for an element • mandatory • ordered by the user (instead of by the system) • part of a choice of elements
Introduced	Release in which the element was introduced
Deprecated	Release in which the element was deprecated
Platforms	Hardware platforms on which the element is available. See Platforms and terminology for more information about the platforms. **Note:** Some SR OS features are platform-specific and therefore may not be available or visible on all platforms. See the *SR OS R23.x.Rx Software Release Notes*, part number 3HE 19269 000 *x* TQZZA, for information about platform support.

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

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

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2 Operational commands

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

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2.1 admin commands

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

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


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admin show configuration [cli-path]

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


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admin system security pki cmpv2 initial-registration subject-dn

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


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admin system security pki import output-file

```
                - output-file string
                - password string
                - type keyword
                - validate-certificate-chain
            - reload
                - application keyword
                - certificate string
                - key string
            - show
                - file-content
                    - [file-path] string
                    - format keyword
                    - password string
                    - type keyword
            - update-certificate
                - certificate reference
        - secure-boot
            - activate
                - card reference
                - confirmation-code string
                - serial-number string
            - revoke-key
                - card reference
                - confirmation-code string
                - serial-number string
            - update-key
                - card reference
                - confirmation-code string
                - serial-number string
                - software-image string
            - validate
                - software-image string
        - system-password
            - admin-password
    - telemetry
        - grpc
            - cancel
                - all
                - subscription-id number
- tech-support
    - [url] string
```


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2.1.1 admin command descriptions

admin

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

application-assurance

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

group [aa-group-id] *reference*

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

[**aa-group-id**] *reference*

Synopsis	AA group ID
Context	admin application-assurance group *reference*
Tree	group
Reference	**state application-assurance group** *number*

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

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

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

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

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

upgrade

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

upgrade

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

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

clear

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

security

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

lockout

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

all

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

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

user *string*

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

password-history

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

all

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

user *string*

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

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

disconnect

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

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

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

op-table-bypass *boolean*

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

session-id *number*

Synopsis	ID of the session to disconnect

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Context	admin disconnect session-id *number*
Tree	session-id
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

session-type *keyword*

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

username *string*

Synopsis	Username to disconnect
Context	admin disconnect username *string*
Tree	username
String Length	1 to 32
Introduced	19.10.R1
Platforms	All

nat

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

save-deterministic-script

Synopsis	Save script that computes deterministic NAT map entries

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

reboot

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

[**card**] *keyword*

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

hold

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

now

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

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Introduced	16.0.R1
Platforms	All

redundancy

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

force-switchover

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

ignore-status

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

now

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

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synchronize

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

boot-environment

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

certificate

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

configuration

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

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Introduced	20.10.R1
Platforms	All

satellite

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

ethernet-satellite [satellite-id] *reference*

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

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

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

reboot

Synopsis	Initiate an administrative reboot of the chassis
Context	admin satellite ethernet-satellite *reference* reboot
Tree	reboot
Introduced	22.2.R1

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

now

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

upgrade

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

synchronize

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

tech-support

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

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

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

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

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

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

[**url**] *string*

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

save

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

bof

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

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

configure

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

debug

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

li

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

[**url**] *string*

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

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Tree	[url]
Introduced	16.0.R1
Platforms	All

set

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

time

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

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

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

show

Synopsis	Enter the **show** context
Context	admin show

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Tree	show
Introduced	16.0.R1
Platforms	All

configuration

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

bof

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

booted

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

cflash-id *string*

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

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

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

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

configure

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

debug

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

detail

Synopsis	Include default and unconfigured values
Context	admin show configuration detail

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Tree	detail
Introduced	20.7.R1
Platforms	All

flat

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

full-context

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

intended

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

json

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

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

li

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

running

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

units

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

xml

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

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

support-mode

Synopsis	Enable the kernel and shell commands
Context	admin support-mode
Tree	support-mode
Description	This command enables the **kernel** and **shell** commands. **Note**: This command should only be used with authorized direction from Nokia support.
Introduced	16.0.R4
Platforms	All

system

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

license

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

activate

Synopsis	Load and activate a system license
Context	admin system license activate

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Tree	activate
Introduced	19.10.R1
Platforms	All

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

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

now

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

clear

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

now

Synopsis	Clear license entitlements immediately
Context	admin system license clear now

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Tree	now
Introduced	23.7.R1
Platforms	All

validate

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

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

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

management-interface

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

operations

Synopsis	Enter the **operations** context
Context	admin system management-interface operations
Tree	operations

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

delete-operation

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

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

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

op-table-bypass *boolean*

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

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stop-operation

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

op-table-bypass *boolean*

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

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

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

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security

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

hash-control

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

custom-hash

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

algorithm *keyword*

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

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Platforms	All

key *string*

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

remove-custom-hash

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

pki

Synopsis	Perform PKI related operations
Context	admin system security pki
Tree	pki
Description	Commands in this context specify options for public key infrastructure operations.
Introduced	23.3.R1
Platforms	All

clear-ocsp-cache

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

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Platforms	All

[**entry-id**] *number*

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

cmpv2

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

cert-request

Synopsis	Request an additional certificate
Context	admin system security pki cmpv2 cert-request
Tree	cert-request
Description	When specified, the system requests an additional certificate after the initial certificate has been obtained from the CA. The request is authenticated by a signature signed by the current key, along with the current certificate. The hash algorithm used for the signature depends on the key type: • DSA key - SHA1 • RSA key: MD5 | SHA1 | SHA224 | SHA256 | SHA384 | SHA512 (default is SHA1) • ECDSA key: SHA1 | SHA224 | SHA256 | SHA384 | SHA512 (default is SHA256) CA may not return a certificate immediately, for example, if the request process requires manual intervention. The **poll** command can be used to poll the status of the request.
Introduced	23.3.R1

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Platforms	All

ca-profile *reference*

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

current-certificate *string*

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

current-key *string*

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

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domain-name *string*

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

hash-algorithm *keyword*

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

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

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

new-key *string*

Synopsis	New imported key file to create certificate request
Context	admin system security pki cmpv2 cert-request new-key *string*
Tree	new-key

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String Length	1 to 95
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

save-as *string*

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

subject-dn *string*

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

clear-request

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

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Platforms	All

ca-profile *reference*

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

initial-registration

Synopsis	Request initial certificate using the CMPv2 protocol
Context	admin system security pki cmpv2 initial-registration
Tree	initial-registration
Description	When specified, the system requests the initial certificate from the CA using the CMPv2 initial registration procedure.

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

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

The request is authenticated via one of the following methods:

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

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Sending a chain is enabled by specifying the **send-chain** and **with-ca** command options.

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

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

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

Introduced	23.3.R1
Platforms	All

ca-profile *reference*

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

certificate *string*

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

domain-name *string*

Synopsis	FQDNs for the Subject Alternative Name

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

hash-algorithm *keyword*

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

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

Synopsis	IP address for the Subject Alternative Name
Context	admin system security pki cmpv2 initial-registration ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-address
Description	This command specifies an IPv4 or IPv6 address for the Subject Alternative Name extension of the requesting certificate.
Introduced	23.3.R1
Platforms	All

key-to-certify *string*

Synopsis	Name of the key file used to create initial request
Context	admin system security pki cmpv2 initial-registration key-to-certify *string*
Tree	key-to-certify
String Length	1 to 95

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

password *string*

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

protection-key *string*

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

reference *string*

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

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Platforms	All

save-as *string*

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

send-chain

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

subject-dn *string*

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

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with-ca *reference*

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

key-update

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

ca-profile *reference*

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

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hash-algorithm *keyword*

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

new-key *string*

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

old-certificate *string*

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

old-key *string*

Synopsis	Name of the old key file to be replaced
Context	admin system security pki cmpv2 key-update old-key *string*
Tree	old-key
String Length	1 to 95

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

save-as *string*

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

poll

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

ca-profile *reference*

Synopsis	PKI CA profile name
Context	admin system security pki cmpv2 poll ca-profile *reference*
Tree	ca-profile
Description	This command configures the CA profile that contains the CMPv2 configuration like server URL.
Reference	**state system security pki ca-profile** *string*

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

convert-file

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

force

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

format *keyword*

Synopsis	File format to convert to
Context	admin system security pki convert-file format *keyword*
Tree	format
Options	secure, legacy
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

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

Synopsis	Name of the file to be converted

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Context	admin system security pki convert-file [input-file] *string*
Tree	[input-file]
String Length	1 to 95
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

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

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

crl-update

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

ca-profile *reference*

Synopsis	PKI CA profile name
Context	admin system security pki crl-update ca-profile *reference*
Tree	ca-profile
Description	This command configures the CA profile that contains the CMPv2 configuration like server URL.
Reference	**state system security pki ca-profile** *string*

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

est

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

ca-certificates

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

est-profile *string*

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

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force

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

output-url *string*

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

enroll

Synopsis	Enroll a new certificate with CA with the EST protocol
Context	admin system security pki est enroll
Tree	enroll
Description	When specified, the system enrolls a new certificate with Certificate Authority (CA) by the EST protocol specified with the **est-profile** command with a imported private key specified by the **key** command. The **est-profile** commad specifies the authentication between the system and EST server. The **hash-alg**, **subject-dn**, **domain-name**, and **ip-address** commands are used to generate the Certificate Signing Request (CSR) in the EST request message. The **domain-name** and **ip-address** commands are used as subject alternative names. If **validate-certificate-chain** is specified, the system validates the chain of result certificate before importing it. The certificate chain is the chain of all certificates from the result certificate to the issuing CA. The result certificate is the new certificate returned by the EST server. The result certificate is imported and saved with the filename specified by the **output-file** command. If the **force** command is specified, the system overwrites the existing file with same name as the output file.
Introduced	23.3.R1

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Platforms	All

domain-name *string*

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

est-profile *string*

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

force

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

hash-algorithm *keyword*

Synopsis	Hash algorithm used for the certificate signature
Context	admin system security pki est enroll hash-algorithm *keyword*

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Tree	hash-algorithm
Options	md5, sha1, sha224, sha256, sha384, sha512
Introduced	23.3.R1
Platforms	All

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

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

key *string*

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

output-file *string*

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

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subject-dn *string*

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

validate-certificate-chain

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

renew

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

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certificate *string*

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

est-profile *string*

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

force

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

hash-algorithm *keyword*

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

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Platforms	All

key *string*

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

output-file *string*

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

validate-certificate-chain

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

export

Synopsis	Export an imported file
Context	admin system security pki export
Tree	export

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Introduced	23.3.R1
Platforms	All

format *keyword*

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

input-file *string*

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

key-file *string*

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

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output-url *string*

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

password *string*

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

type *keyword*

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

generate-csr

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

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Platforms	All

domain-name *string*

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

hash-algorithm *keyword*

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

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

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

key-url *string*

Synopsis	Full path to the key file used to generate the request

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Context	admin system security pki generate-csr key-url *string*
Tree	key-url
String Length	1 to 200
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

output-url *string*

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

subject-dn *string*

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

use-printable

Synopsis	Force ASCII encoding for input subject DN attributes
Context	admin system security pki generate-csr use-printable
Tree	use-printable

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Description	When specified, the system forces the use of ASCII encoding for the input subject DN attributes. Otherwise, the system uses UTF-8 encoding.
Introduced	23.3.R1
Platforms	All

generate-keypair

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

dsa-key-size *number*

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

ecdsa-curve *keyword*

Synopsis	Elliptic curve of the ECDSA key to be generated
Context	admin system security pki generate-keypair ecdsa-curve *keyword*
Tree	ecdsa-curve
Options	secp256r1, secp384r1, secp521r1
Default	secp256r1
Notes	The following elements are part of a mandatory choice: **dsa-key-size**, **ecdsa-curve**, or **rsa-key-size**.

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Introduced	23.3.R1
Platforms	All

rsa-key-size *number*

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

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

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

import

Synopsis	Import a certificate related file
Context	admin system security pki import
Tree	import
Description	When specified, the system imports an input file (key/certificate/CRL) to be used by SROS applications. The following summarizes the supported formats: • Certificate - PKCS #12, PKCS #7 PEM encoded, PKCS #7 DER encoded, PEM, DER • Key - PKCS #12, PEM, DER • CRL - PKCS #7 PEM encoded, PKCS #7 DER encoded, PEM, DER

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Introduced	23.3.R1
Platforms	All

format *keyword*

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

input-url *string*

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

output-file *string*

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

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password *string*

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

type *keyword*

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

validate-certificate-chain

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

reload

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

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Platforms	All

application *keyword*

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

certificate *string*

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

key *string*

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

show

Synopsis	Enter the show context

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Context	admin system security pki show
Tree	show
Description	Commands in this context include operations to display the PKI file.
Introduced	23.3.R1
Platforms	All

file-content

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

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

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

format *keyword*

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

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password *string*

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

type *keyword*

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

update-certificate

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

certificate *reference*

Synopsis	Name of the certificate file to be updated
Context	admin system security pki update-certificate certificate *reference*
Tree	certificate
Reference	**state system security pki certificate-auto-update** *string*

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

secure-boot

Synopsis	Enter the secure-boot context
Context	admin system security secure-boot
Tree	secure-boot
Introduced	23.7.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS-40

activate

Synopsis	Activate secure boot on a CPM
Context	admin system security secure-boot activate
Tree	activate
Description	This command activates Secure Boot to enforce digital signature verification of the software on every boot. Once Secure Boot is activated on a CPM, the capability is permanently enabled and cannot be disabled.
Introduced	23.7.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS-40

card *reference*

Synopsis	CPM slot where secure boot is activated or modified
Context	admin system security secure-boot activate card *reference*
Tree	card
Reference	**state cpm** *string*
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS-40

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confirmation-code *string*

Synopsis	Confirmation code
Context	admin system security secure-boot activate confirmation-code *string*
Tree	confirmation-code
String Length	1 to 32
Introduced	23.7.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS-40

serial-number *string*

Synopsis	CPM card serial number which secure-boot activates
Context	admin system security secure-boot activate serial-number *string*
Tree	serial-number
String Length	1 to 32
Introduced	23.7.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS-40

revoke-key

Synopsis	Revoke secure boot keys
Context	admin system security secure-boot revoke-key
Tree	revoke-key
Introduced	23.7.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS-40

card *reference*

Synopsis	CPM slot where secure boot is activated or modified
Context	admin system security secure-boot revoke-key card *reference*
Tree	card
Reference	**state cpm** *string*
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS-40

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confirmation-code *string*

Synopsis	Confirmation code
Context	admin system security secure-boot revoke-key confirmation-code *string*
Tree	confirmation-code
String Length	1 to 32
Introduced	23.7.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS-40

serial-number *string*

Synopsis	CPM card serial number which secure-boot activates
Context	admin system security secure-boot revoke-key serial-number *string*
Tree	serial-number
String Length	1 to 32
Introduced	23.7.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS-40

update-key

Synopsis	Update secure boot keys
Context	admin system security secure-boot update-key
Tree	update-key
Introduced	23.7.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS-40

card *reference*

Synopsis	CPM slot where secure boot is activated or modified
Context	admin system security secure-boot update-key card *reference*
Tree	card
Reference	**state cpm** *string*
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS-40

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confirmation-code *string*

Synopsis	Confirmation code
Context	admin system security secure-boot update-key confirmation-code *string*
Tree	confirmation-code
String Length	1 to 32
Introduced	23.7.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS-40

serial-number *string*

Synopsis	CPM card serial number which secure-boot activates
Context	admin system security secure-boot update-key serial-number *string*
Tree	serial-number
String Length	1 to 32
Introduced	23.7.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS-40

software-image *string*

Synopsis	Location of the target software image
Context	admin system security secure-boot update-key software-image *string*
Tree	software-image
String Length	1 to 180
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS-40

validate

Synopsis	Validate software signature for the specified image
Context	admin system security secure-boot validate
Tree	validate
Introduced	23.7.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS-40

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software-image *string*

Synopsis	Location of the target software image
Context	admin system security secure-boot validate software-image *string*
Tree	software-image
String Length	1 to 180
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS-40

system-password

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

admin-password

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

telemetry

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

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grpc

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

cancel

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

all

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

subscription-id *number*

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

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tech-support

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

[**url**] *string*

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

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2.2 Configuration mode commands

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

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


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2.2.1 Configuration mode command descriptions

annotate [comment-text] *string*

Synopsis	Annotate a configuration element with a comment
Context	annotate *string*
Tree	annotate
Introduced	21.5.R1
Platforms	All

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

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

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

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

commit

Synopsis	Commit the candidate configuration
Context	commit
Tree	commit

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Introduced	16.0.R1
Platforms	All

comment *string*

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

confirmed

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

accept

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

cancel

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

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

comment *string*

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

persist-id *string*

Synopsis	Persistent confirmed commit ID
Context	commit confirmed persist-id *string*
Tree	persist-id
Introduced	16.0.R1
Platforms	All

[**timeout**] *number*

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

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Platforms	All

compare [from] *string* to *string*

Synopsis	Compare changes between datastores
Context	compare *string* [to] *string*
Tree	compare
Introduced	16.0.R1
Platforms	All

[**from**] *string*

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

[**to**] *string*

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

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

Synopsis	Absolute path or relative path from pwc
Context	compare *string* [to] *string* [cli-path] *string*
Tree	[cli-path]

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Introduced	20.10.R1
Platforms	All

flat

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

full-context

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

lines *number*

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

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netconf-rpc

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

summary

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

copy

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

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

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

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Platforms	All

to *string*

Synopsis	Destination path, or 'pwc'
Context	copy to *string*
Tree	to
Introduced	20.10.R1
Platforms	All

discard

Synopsis	Discard changes in the candidate configuration
Context	discard
Tree	discard
Introduced	16.0.R1
Platforms	All

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

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

insert [new-entry] *string*

Synopsis	Insert an element into a user-ordered list
Context	insert *string*
Tree	insert
Introduced	19.10.R1
Platforms	All

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

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

after

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

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

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

before

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

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

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

beginning

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

end

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

load [mode] *keyword*

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

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[**mode**] *keyword*

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

encryption-key *string*

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

interactive

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

[**url**] *string*

Synopsis	Location of the file to be loaded

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

rename

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

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

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

to *string*

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

replace [pattern] *string* with *string*

Synopsis	Match and replace values in the candidate configuration

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Context	replace *string* with *string*
Tree	replace
Introduced	23.7.R1
Platforms	All

[**pattern**] *string*

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

with *string*

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

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

Synopsis	Absolute path or relative path from pwc
Context	replace *string* with *string* [cli-path] *string*
Tree	[cli-path]
Introduced	23.7.R1
Platforms	All

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continue-on-error

Synopsis	Continue the replace operation upon errors
Context	replace *string* with *string* continue-on-error
Tree	continue-on-error
Introduced	23.7.R1
Platforms	All

depth *number*

Synopsis	Replace operation depth from the pwc
Context	replace *string* with *string* depth *number*
Tree	depth
Range	1 to 4294967040
Introduced	23.7.R1
Platforms	All

ignore-case

Synopsis	Ignore case in pattern match
Context	replace *string* with *string* ignore-case
Tree	ignore-case
Introduced	23.7.R1
Platforms	All

rollback

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

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commit-id *number*

Synopsis	Commit ID to roll back to
Context	rollback commit-id *number*
Tree	commit-id
Range	1 to 4294967295
Notes	The following elements are part of a choice: **commit-id** or **rollback-id**.
Introduced	23.3.R1
Platforms	All

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

Synopsis	Saved configuration number to roll back to
Context	rollback [rollback-id] *(keyword | number)*
Tree	[rollback-id]
Range	0 to 200
Options	startup – Configuration loaded when the system boots
Notes	The following elements are part of a choice: **commit-id** or **rollback-id**.
Introduced	23.3.R1
Platforms	All

update

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

/configure

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

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Platforms	All

/bof

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

check

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

/debug

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

/li

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

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validate

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

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2.3 environment commands

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

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


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2.3.1 environment command descriptions

environment

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

command-alias

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

alias [alias-name] *string*

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

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

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

admin-state *keyword*

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

cli-command *string*

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

description *string*

Synopsis	Text description
Context	environment command-alias alias *string* description *string*

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

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

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

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

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

python-script *reference*

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

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command-completion

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

enter *boolean*

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

space *boolean*

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

tab *boolean*

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

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console

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

length *number*

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

width *number*

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

info-output

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

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always-display

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

admin-state *boolean*

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

message-severity-level

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

cli *keyword*

Synopsis	Message severity threshold for CLI messages
Context	environment message-severity-level cli *keyword*
Tree	cli
Options	warning, info

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Default	info
Introduced	16.0.R1
Platforms	All

more *boolean*

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

progress-indicator

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

admin-state *keyword*

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

delay *number*

Synopsis	Delay before the progress indicator is displayed
Context	environment progress-indicator delay *number*

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

type *keyword*

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

prompt

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

context *boolean*

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

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newline *boolean*

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

timestamp *boolean*

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

uncommitted-changes-indicator *boolean*

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

python

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

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memory-reservation *number*

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

minimum-available-memory *number*

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

timeout *number*

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

time-display *keyword*

Synopsis	Time zone to display time
Context	environment time-display *keyword*
Tree	time-display

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

time-format *keyword*

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

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2.4 file commands

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

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


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file repair [cflash-id]

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


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2.4.1 file command descriptions

file

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

change-directory

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

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

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

checksum

Synopsis	Compute and display checksums
Context	file checksum
Tree	checksum

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

[**type**] *keyword*

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

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

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

copy

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

client-tls-profile *string*

Synopsis	Connect over HTTP with a client TLS profile

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

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

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

direct-http

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

force

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

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proxy *string*

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

recursive

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

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

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

disable

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

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Platforms	All

active

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

cflash-id *string*

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

standby

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

edit

Synopsis	Edit files with the text editor
Context	file edit
Tree	edit

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

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

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

enable

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

active

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

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cflash-id *string*

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

standby

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

format

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

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

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

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list

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

reverse

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

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

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

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

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

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make-directory

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

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

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

move

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

client-tls-profile *string*

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

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

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

direct-http

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

force

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

proxy *string*

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

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

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

permission

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

[**attribute**] *keyword*

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

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

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

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remove

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

client-tls-profile *string*

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

direct-http

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

force

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

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proxy *string*

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

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

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

remove-directory

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

force

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

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recursive

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

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

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

repair

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

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

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

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show

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

client-tls-profile *string*

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

direct-http

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

proxy *string*

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

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

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

unzip

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

create-destination

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

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

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

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force

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

list

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

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

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

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version

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

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

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

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2.5 Global commands

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

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


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


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


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


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


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


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


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tree

```
  – tree
    – [cli-path] string
    – detail
    – flat
```


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2.5.1 Global command descriptions

back [levels] *number*

Synopsis	Move back one or more levels
Context	back *number*
Tree	back
Introduced	16.0.R1
Platforms	All

[**levels**] *number*

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

bof

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

exclusive

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

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Platforms	All

private

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

read-only

Synopsis	Enter read-only configuration mode
Context	bof read-only
Tree	read-only
Introduced	20.10.R1
Platforms	All

configure

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

exclusive

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

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global

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

private

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

read-only

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

debug

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

exclusive

Synopsis	Enter exclusive configuration mode
Context	debug exclusive

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Tree	exclusive
Introduced	21.5.R1
Platforms	All

private

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

read-only

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

delete [cli-path] *string*

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

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

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

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Platforms	All

edit-config

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

bof

Synopsis	Enter the bof configuration context
Context	edit-config bof
Tree	bof
Introduced	20.10.R1
Platforms	All

debug

Synopsis	Enter the debug configuration context
Context	edit-config debug
Tree	debug
Introduced	21.5.R1
Platforms	All

exclusive

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

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global

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

li

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

private

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

read-only

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

enable

Synopsis	Enable administrative mode
Context	enable

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Tree	enable
Introduced	20.2.R1
Platforms	All

exec [url] *string*

Synopsis	Execute commands from a file
Context	exec *string*
Tree	exec
Introduced	16.0.R1
Platforms	All

[**url**] *string*

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

echo

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

exit

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

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Platforms	All

all

Synopsis	Return to the root context
Context	exit all
Tree	all
Introduced	16.0.R1
Platforms	All

history

Synopsis	Show the command history
Context	history
Tree	history
Introduced	16.0.R1
Platforms	All

info [from] *keyword*

Synopsis	Show the information under the present working context
Context	info *keyword*
Tree	info
Introduced	16.0.R1
Platforms	All

[**from**] *keyword*

Synopsis	Source datastore
Context	info *keyword*
Tree	info
Description	This command specifies the source datastore. This option is not supported for **state** elements.
Options	candidate – The candidate datastore running – The running datastore baseline – The baseline candidate configuration

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	intended – The intended datastore
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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

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

converted

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

detail

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

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differences

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

flat

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

full-context

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

inheritance

Synopsis	Include configuration inherited from configuration groups
Context	info *keyword* inheritance
Tree	inheritance
Description	This option specifies the inclusion of configuration inherited from configuration groups in the output.

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This option should only be used in the **configure** region when configuration groups are used. The output with this option is the same as **info** when used in other configuration regions.

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

Introduced 16.0.R1

Platforms All

json

Synopsis Show the output in indented JSON IETF format

Context info *keyword* json

Tree json

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

Introduced 19.10.R1

Platforms All

model *keyword*

Synopsis Data model for which to display converted output

Context info *keyword* model *keyword*

Tree model

Description This option specifies the data model for which to display the converted output.

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

Options all – All models
openconfig – OpenConfig models

Default all

Notes The following elements are part of a choice: **differences**, **model**, or **values**.

Introduced 20.7.R1

Platforms All

units

Synopsis Include unit types for applicable elements

Context info *keyword* units

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Tree	units
Introduced	20.5.R1
Platforms	All

values

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

xml

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

li

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

exclusive

Synopsis	Enter exclusive configuration mode
Context	li exclusive

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Tree	exclusive
Introduced	19.10.R1
Platforms	All

private

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

read-only

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

logout

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

oam

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

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efm

Synopsis	Enter the **efm** context
Context	oam efm
Tree	efm
Introduced	20.2.R1
Platforms	All

local-loopback

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

[**action**] *keyword*

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

port-id *string*

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

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remote-loopback

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

[**action**] *keyword*

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

port-id *string*

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

eth-cfm

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

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eth-test

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

data-length *number*

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

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

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

ma-admin-name *reference*

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

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Introduced	20.2.R1
Platforms	All

md-admin-name *reference*

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

mep-id *number*

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

priority *number*

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

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linktrace

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

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

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

ma-admin-name *reference*

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

md-admin-name *reference*

Synopsis	Domain name
Context	oam eth-cfm linktrace md-admin-name *reference*
Tree	md-admin-name
Reference	**state eth-cfm domain** *string*
Notes	This element is mandatory.

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Introduced	20.2.R1
Platforms	All

mep-id *number*

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

ttl *number*

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

loopback

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

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

Synopsis	Destination MAC address or remote MEP ID of the peer
Context	oam eth-cfm loopback [destination] *(mac-unicast-address-no-zero | keyword | number)*

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Tree	[destination]
Range	1 to 8191
Options	multicast – Class one destination multicast address based on the level of the local MEP
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

interval *number*

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

lbm-padding *number*

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

ma-admin-name *reference*

Synopsis	Association name

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

md-admin-name *reference*

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

mep-id *number*

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

priority *number*

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

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Platforms	All

send-count *number*

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

size *number*

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

timeout *number*

Synopsis	Wait time for a reply to a sent message request
Context	oam eth-cfm loopback timeout *number*
Tree	timeout
Description	This command specifies the time the router waits for a message reply after sending a message request. Upon expiration of the timeout, the router assumes that the message response is not received. Any response received after the timeout is silently discarded.

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

one-way-delay-test

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

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

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

ma-admin-name *reference*

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

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md-admin-name *reference*

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

mep-id *number*

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

priority *number*

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

two-way-delay-test

Synopsis	Initiate a two-way delay test
Context	oam eth-cfm two-way-delay-test
Tree	two-way-delay-test

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Introduced	20.2.R1
Platforms	All

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

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

ma-admin-name *reference*

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

md-admin-name *reference*

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

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mep-id *number*

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

priority *number*

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

two-way-slm-test

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

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

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

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Platforms	All

interval *(number | decimal-number)*

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

ma-admin-name *reference*

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

md-admin-name *reference*

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

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mep-id *number*

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

priority *number*

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

send-count *number*

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

size *number*

Synopsis	Data portion size of the data TLV, octet string allowed
Context	oam eth-cfm two-way-slm-test size *number*
Tree	size

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Description	This command specifies the size of the data portion of the data TLV allowing for an optional octet string to be included.
Range	0 to 1500
Units	bytes
Default	0
Introduced	20.2.R1
Platforms	All

timeout *number*

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

lsp-ping

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

bgp-label

Synopsis	Perform a BGP-label LSP trace test
Context	oam lsp-ping bgp-label
Tree	bgp-label

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

fc *keyword*

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

interface *reference*

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

interval *number*

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

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

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

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

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

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

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

profile *keyword*

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

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send-count *number*

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

size *number*

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

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

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

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-ping bgp-label timeout *number*

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Tree	timeout
Range	1 to 10
Units	seconds
Default	5
Introduced	23.3.R1
Platforms	All

ttl *number*

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

ldp

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

fc *keyword*

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

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interface *reference*

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

interval *number*

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

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

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

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

Synopsis	IP address of the path destination
Context	oam lsp-ping ldp path-destination *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	path-destination

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Introduced	23.3.R1
Platforms	All

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

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

profile *keyword*

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

send-count *number*

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

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size *number*

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

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

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

timeout *number*

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

ttl *number*

Synopsis	TTL value for the MPLS label of the echo request
Context	oam lsp-ping ldp ttl *number*
Tree	ttl
Range	1 to 255

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Default	255
Introduced	23.3.R1
Platforms	All

rsvp-te

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

fc *keyword*

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

interval *number*

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

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lsp-name *reference*

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

path *reference*

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

profile *keyword*

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

send-count *number*

Synopsis	Number of echo request packets to send
Context	oam lsp-ping rsvp-te send-count *number*
Tree	send-count
Range	1 to 100

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Units	packets
Default	1
Introduced	23.3.R1
Platforms	All

size *number*

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

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

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

timeout *number*

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

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ttl *number*

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

sr-isis

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

fc *keyword*

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

flex-algo *number*

Synopsis	Segment Routing Flexible Algorithm for the test
Context	oam lsp-ping sr-isis flex-algo *number*
Tree	flex-algo
Range	128 to 255
Introduced	23.7.R1

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Platforms	All

igp-instance *number*

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

interface *reference*

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

interval *number*

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

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

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

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

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

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

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

profile *keyword*

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

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send-count *number*

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

size *number*

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

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

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

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-ping sr-isis timeout *number*
Tree	timeout

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Range	1 to 10
Units	seconds
Default	5
Introduced	23.3.R1
Platforms	All

ttl *number*

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

sr-ospf

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

fc *keyword*

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

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flex-algo *number*

Synopsis	Segment Routing Flexible Algorithm for the test
Context	oam lsp-ping sr-ospf flex-algo *number*
Tree	flex-algo
Range	128 to 255
Introduced	23.7.R1
Platforms	All

igp-instance *number*

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

interface *reference*

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

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-ping sr-ospf interval *number*
Tree	interval
Range	1 to 10
Units	seconds

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Default	1
Introduced	23.3.R1
Platforms	All

next-hop *string*

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

path-destination *string*

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

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

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

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-ping sr-ospf profile *keyword*
Tree	profile

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Options	in, out
Default	out
Introduced	23.3.R1
Platforms	All

send-count *number*

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

size *number*

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

source-ip-address *string*

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

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timeout *number*

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

ttl *number*

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

sr-ospf3

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

fc *keyword*

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-ping sr-ospf3 fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc

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Default	be
Introduced	23.3.R1
Platforms	All

igp-instance *number*

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

interface *reference*

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

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-ping sr-ospf3 interval *number*
Tree	interval
Range	1 to 10
Units	seconds
Default	1
Introduced	23.3.R1
Platforms	All

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

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

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

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

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

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

profile *keyword*

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

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send-count *number*

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

size *number*

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

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

Synopsis	Source IP address
Context	oam lsp-ping sr-ospf3 source-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-ip-address
Introduced	23.3.R1
Platforms	All

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-ping sr-ospf3 timeout *number*
Tree	timeout

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Range	1 to 10
Units	seconds
Default	5
Introduced	23.3.R1
Platforms	All

ttl *number*

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

sr-policy

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

color *number*

Synopsis	Segment Routing color for the test
Context	oam lsp-ping sr-policy color *number*
Tree	color
Max. Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

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

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

fc *keyword*

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

interface *reference*

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

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-ping sr-policy interval *number*
Tree	interval
Range	1 to 10

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Units	seconds
Default	1
Introduced	23.3.R1
Platforms	All

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

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

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

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

profile *keyword*

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

segment-list *number*

Synopsis	Segment Routing segment list for the test

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Context	oam lsp-ping sr-policy segment-list *number*
Tree	segment-list
Range	1 to 32
Introduced	23.3.R1
Platforms	All

send-count *number*

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

size *number*

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

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

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

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timeout *number*

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

ttl *number*

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

sr-te

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

fc *keyword*

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-ping sr-te fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc

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Default	be
Introduced	23.3.R1
Platforms	All

interface *reference*

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

interval *number*

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

lsp-name *reference*

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

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

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

path *reference*

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

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

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

profile *keyword*

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

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send-count *number*

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

size *number*

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

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

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

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-ping sr-te timeout *number*
Tree	timeout

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Range	1 to 10
Units	seconds
Default	5
Introduced	23.3.R1
Platforms	All

ttl *number*

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

lsp-trace

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

bgp-label

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

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downstream-map-tlv *keyword*

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	oam lsp-trace bgp-label downstream-map-tlv *keyword*
Tree	downstream-map-tlv
Options	dsmap – Downstream mapping TLV ddmap – Detailed downstream mapping TLV none – No mapping TLV
Introduced	23.3.R1
Platforms	All

fc *keyword*

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

interface *reference*

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

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-trace bgp-label interval *number*
Tree	interval

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

max-fail *number*

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

max-ttl *number*

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

min-ttl *number*

Synopsis	Initial TTL for the test
Context	oam lsp-trace bgp-label min-ttl *number*
Tree	min-ttl
Range	1 to 255
Default	1
Introduced	23.3.R1
Platforms	All

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

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

output-format *keyword*

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

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

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

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

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

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probe-count *number*

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

profile *keyword*

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

size *number*

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

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

Synopsis	Source IP address

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Context	oam lsp-trace bgp-label source-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-ip-address
Introduced	23.3.R1
Platforms	All

timeout *number*

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

ldp

Synopsis	Perform an LDP LSP trace test
Context	oam lsp-trace ldp
Tree	ldp
Introduced	23.3.R1
Platforms	All

downstream-map-tlv *keyword*

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	oam lsp-trace ldp downstream-map-tlv *keyword*
Tree	downstream-map-tlv
Options	dsmap – Downstream mapping TLV ddmap – Detailed downstream mapping TLV none – No mapping TLV
Introduced	23.3.R1
Platforms	All

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fc *keyword*

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

interface *reference*

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

interval *number*

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

max-fail *number*

Synopsis	Maximum consecutive timeouts before terminating test
Context	oam lsp-trace ldp max-fail *number*

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Tree	max-fail
Range	1 to 255
Default	5
Introduced	23.3.R1
Platforms	All

max-ttl *number*

Synopsis	Maximum TTL
Context	oam lsp-trace ldp max-ttl *number*
Tree	max-ttl
Range	1 to 255
Default	30
Introduced	23.3.R1
Platforms	All

min-ttl *number*

Synopsis	Initial TTL for the test
Context	oam lsp-trace ldp min-ttl *number*
Tree	min-ttl
Range	1 to 255
Default	1
Introduced	23.3.R1
Platforms	All

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

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

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output-format *keyword*

Synopsis	Output format for the result
Context	oam lsp-trace ldp output-format *keyword*
Tree	output-format
Options	summary, detail
Default	summary
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address of the path destination
Context	oam lsp-trace ldp path-destination *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	path-destination
Introduced	23.3.R1
Platforms	All

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

Synopsis	Destination IP prefix for the test
Context	oam lsp-trace ldp prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

probe-count *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	oam lsp-trace ldp probe-count *number*
Tree	probe-count
Range	1 to 10
Default	1
Introduced	23.3.R1

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Platforms	All

profile *keyword*

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

size *number*

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

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

Synopsis	Source IP address
Context	oam lsp-trace ldp source-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-ip-address
Introduced	23.3.R1
Platforms	All

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-trace ldp timeout *number*

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Tree	timeout
Range	1 to 10
Units	seconds
Default	5
Introduced	23.3.R1
Platforms	All

rsvp-te

Synopsis	Perform an RSVP-TE LSP trace test
Context	oam lsp-trace rsvp-te
Tree	rsvp-te
Introduced	23.3.R1
Platforms	All

downstream-map-tlv *keyword*

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	oam lsp-trace rsvp-te downstream-map-tlv *keyword*
Tree	downstream-map-tlv
Options	dsmap – Downstream mapping TLV ddmap – Detailed downstream mapping TLV none – No mapping TLV
Introduced	23.3.R1
Platforms	All

fc *keyword*

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

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interval *number*

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

lsp-name *reference*

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

max-fail *number*

Synopsis	Maximum consecutive timeouts before terminating test
Context	oam lsp-trace rsvp-te max-fail *number*
Tree	max-fail
Range	1 to 255
Default	5
Introduced	23.3.R1
Platforms	All

max-ttl *number*

Synopsis	Maximum TTL
Context	oam lsp-trace rsvp-te max-ttl *number*

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Tree	max-ttl
Range	1 to 255
Default	30
Introduced	23.3.R1
Platforms	All

min-ttl *number*

Synopsis	Initial TTL for the test
Context	oam lsp-trace rsvp-te min-ttl *number*
Tree	min-ttl
Range	1 to 255
Default	1
Introduced	23.3.R1
Platforms	All

output-format *keyword*

Synopsis	Output format for the result
Context	oam lsp-trace rsvp-te output-format *keyword*
Tree	output-format
Options	summary, detail
Default	summary
Introduced	23.3.R1
Platforms	All

path *reference*

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

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probe-count *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	oam lsp-trace rsvp-te probe-count *number*
Tree	probe-count
Range	1 to 10
Default	1
Introduced	23.3.R1
Platforms	All

profile *keyword*

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

size *number*

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

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

Synopsis	Source IP address
Context	oam lsp-trace rsvp-te source-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

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Tree	source-ip-address
Introduced	23.3.R1
Platforms	All

timeout *number*

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

sr-isis

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

downstream-map-tlv *keyword*

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	oam lsp-trace sr-isis downstream-map-tlv *keyword*
Tree	downstream-map-tlv
Options	dsmap – Downstream mapping TLV ddmap – Detailed downstream mapping TLV none – No mapping TLV
Introduced	23.3.R1
Platforms	All

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fc *keyword*

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

flex-algo *number*

Synopsis	Segment Routing Flexible Algorithm for the test
Context	oam lsp-trace sr-isis flex-algo *number*
Tree	flex-algo
Range	128 to 255
Introduced	23.7.R1
Platforms	All

igp-instance *number*

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

interface *reference*

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

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Introduced	23.3.R1
Platforms	All

interval *number*

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

max-fail *number*

Synopsis	Maximum consecutive timeouts before terminating test
Context	oam lsp-trace sr-isis max-fail *number*
Tree	max-fail
Range	1 to 255
Default	5
Introduced	23.3.R1
Platforms	All

max-ttl *number*

Synopsis	Maximum TTL
Context	oam lsp-trace sr-isis max-ttl *number*
Tree	max-ttl
Range	1 to 255
Default	30
Introduced	23.3.R1
Platforms	All

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min-ttl *number*

Synopsis	Initial TTL for the test
Context	oam lsp-trace sr-isis min-ttl *number*
Tree	min-ttl
Range	1 to 255
Default	1
Introduced	23.3.R1
Platforms	All

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

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

output-format *keyword*

Synopsis	Output format for the result
Context	oam lsp-trace sr-isis output-format *keyword*
Tree	output-format
Options	summary, detail
Default	summary
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address of the path destination
Context	oam lsp-trace sr-isis path-destination *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	path-destination
Introduced	23.3.R1
Platforms	All

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

Synopsis	Destination IP prefix for the test
Context	oam lsp-trace sr-isis prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

probe-count *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	oam lsp-trace sr-isis probe-count *number*
Tree	probe-count
Range	1 to 10
Default	1
Introduced	23.3.R1
Platforms	All

profile *keyword*

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

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-trace sr-isis size *number*
Tree	size
Range	1 to 9786

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Units	bytes
Default	1
Introduced	23.3.R1
Platforms	All

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

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

timeout *number*

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

sr-ospf

Synopsis	Perform an SR-OSPF LSP trace test
Context	oam lsp-trace sr-ospf
Tree	sr-ospf
Introduced	23.3.R1
Platforms	All

downstream-map-tlv *keyword*

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU

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Context	oam lsp-trace sr-ospf downstream-map-tlv *keyword*
Tree	downstream-map-tlv
Options	dsmap – Downstream mapping TLV ddmap – Detailed downstream mapping TLV none – No mapping TLV
Introduced	23.3.R1
Platforms	All

fc *keyword*

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

flex-algo *number*

Synopsis	Segment Routing Flexible Algorithm for the test
Context	oam lsp-trace sr-ospf flex-algo *number*
Tree	flex-algo
Range	128 to 255
Introduced	23.7.R1
Platforms	All

igp-instance *number*

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

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Platforms	All

interface *reference*

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

interval *number*

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

max-fail *number*

Synopsis	Maximum consecutive timeouts before terminating test
Context	oam lsp-trace sr-ospf max-fail *number*
Tree	max-fail
Range	1 to 255
Default	5
Introduced	23.3.R1
Platforms	All

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max-ttl *number*

Synopsis	Maximum TTL
Context	oam lsp-trace sr-ospf max-ttl *number*
Tree	max-ttl
Range	1 to 255
Default	30
Introduced	23.3.R1
Platforms	All

min-ttl *number*

Synopsis	Initial TTL for the test
Context	oam lsp-trace sr-ospf min-ttl *number*
Tree	min-ttl
Range	1 to 255
Default	1
Introduced	23.3.R1
Platforms	All

next-hop *string*

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

output-format *keyword*

Synopsis	Output format for the result
Context	oam lsp-trace sr-ospf output-format *keyword*
Tree	output-format
Options	summary, detail
Default	summary

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Introduced	23.3.R1
Platforms	All

path-destination *string*

Synopsis	IP address of the path destination
Context	oam lsp-trace sr-ospf path-destination *string*
Tree	path-destination
Introduced	23.3.R1
Platforms	All

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

Synopsis	Destination IP prefix for the test
Context	oam lsp-trace sr-ospf prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

probe-count *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	oam lsp-trace sr-ospf probe-count *number*
Tree	probe-count
Range	1 to 10
Default	1
Introduced	23.3.R1
Platforms	All

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-trace sr-ospf profile *keyword*
Tree	profile

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Options	in, out
Default	out
Introduced	23.3.R1
Platforms	All

size *number*

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

source-ip-address *string*

Synopsis	Source IP address
Context	oam lsp-trace sr-ospf source-ip-address *string*
Tree	source-ip-address
Introduced	23.3.R1
Platforms	All

timeout *number*

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

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sr-ospf3

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

downstream-map-tlv *keyword*

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	oam lsp-trace sr-ospf3 downstream-map-tlv *keyword*
Tree	downstream-map-tlv
Options	dsmap – Downstream mapping TLV ddmap – Detailed downstream mapping TLV none – No mapping TLV
Introduced	23.3.R1
Platforms	All

fc *keyword*

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

igp-instance *number*

Synopsis	IGP instance for the SR-OSPFv3 test
Context	oam lsp-trace sr-ospf3 igp-instance *number*
Tree	igp-instance
Range	0 to 31 | 64 to 95
Default	0

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Introduced	23.3.R1
Platforms	All

interface *reference*

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

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-trace sr-ospf3 interval *number*
Tree	interval
Range	1 to 10
Units	seconds
Default	1
Introduced	23.3.R1
Platforms	All

max-fail *number*

Synopsis	Maximum consecutive timeouts before terminating test
Context	oam lsp-trace sr-ospf3 max-fail *number*
Tree	max-fail
Range	1 to 255
Default	5
Introduced	23.3.R1
Platforms	All

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max-ttl *number*

Synopsis	Maximum TTL
Context	oam lsp-trace sr-ospf3 max-ttl *number*
Tree	max-ttl
Range	1 to 255
Default	30
Introduced	23.3.R1
Platforms	All

min-ttl *number*

Synopsis	Initial TTL for the test
Context	oam lsp-trace sr-ospf3 min-ttl *number*
Tree	min-ttl
Range	1 to 255
Default	1
Introduced	23.3.R1
Platforms	All

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

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

output-format *keyword*

Synopsis	Output format for the result
Context	oam lsp-trace sr-ospf3 output-format *keyword*
Tree	output-format
Options	summary, detail
Default	summary

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Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address of the path destination
Context	oam lsp-trace sr-ospf3 path-destination *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	path-destination
Introduced	23.3.R1
Platforms	All

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

Synopsis	Destination IP prefix for the test
Context	oam lsp-trace sr-ospf3 prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

probe-count *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	oam lsp-trace sr-ospf3 probe-count *number*
Tree	probe-count
Range	1 to 10
Default	1
Introduced	23.3.R1
Platforms	All

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-trace sr-ospf3 profile *keyword*
Tree	profile

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Options	in, out
Default	out
Introduced	23.3.R1
Platforms	All

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-trace sr-ospf3 size *number*
Tree	size
Range	1 to 9786
Units	bytes
Default	1
Introduced	23.3.R1
Platforms	All

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

Synopsis	Source IP address
Context	oam lsp-trace sr-ospf3 source-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-ip-address
Introduced	23.3.R1
Platforms	All

timeout *number*

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

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sr-policy

Synopsis	Perform an SR policy LSP trace test
Context	oam lsp-trace sr-policy
Tree	sr-policy
Introduced	23.3.R1
Platforms	All

color *number*

Synopsis	Segment Routing color for the test
Context	oam lsp-trace sr-policy color *number*
Tree	color
Max. Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

downstream-map-tlv *keyword*

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	oam lsp-trace sr-policy downstream-map-tlv *keyword*
Tree	downstream-map-tlv
Options	dsmap – Downstream mapping TLV ddmap – Detailed downstream mapping TLV none – No mapping TLV
Introduced	23.3.R1
Platforms	All

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

Synopsis	Segment Routing endpoint for the test
Context	oam lsp-trace sr-policy endpoint *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	endpoint
Notes	This element is mandatory.

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Introduced	23.3.R1
Platforms	All

fc *keyword*

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

interface *reference*

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

interval *number*

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

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max-fail *number*

Synopsis	Maximum consecutive timeouts before terminating test
Context	oam lsp-trace sr-policy max-fail *number*
Tree	max-fail
Range	1 to 255
Default	5
Introduced	23.3.R1
Platforms	All

max-ttl *number*

Synopsis	Maximum TTL
Context	oam lsp-trace sr-policy max-ttl *number*
Tree	max-ttl
Range	1 to 255
Default	30
Introduced	23.3.R1
Platforms	All

min-ttl *number*

Synopsis	Initial TTL for the test
Context	oam lsp-trace sr-policy min-ttl *number*
Tree	min-ttl
Range	1 to 255
Default	1
Introduced	23.3.R1
Platforms	All

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

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-trace sr-policy next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	next-hop
Notes	The following elements are part of a choice: **interface** or **next-hop**.

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Introduced	23.3.R1
Platforms	All

output-format *keyword*

Synopsis	Output format for the result
Context	oam lsp-trace sr-policy output-format *keyword*
Tree	output-format
Options	summary, detail
Default	summary
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address of the path destination
Context	oam lsp-trace sr-policy path-destination *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	path-destination
Introduced	23.3.R1
Platforms	All

probe-count *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	oam lsp-trace sr-policy probe-count *number*
Tree	probe-count
Range	1 to 10
Default	1
Introduced	23.3.R1
Platforms	All

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-trace sr-policy profile *keyword*

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Tree	profile
Options	in, out
Default	out
Introduced	23.3.R1
Platforms	All

segment-list *number*

Synopsis	Segment Routing segment list for the test
Context	oam lsp-trace sr-policy segment-list *number*
Tree	segment-list
Range	1 to 32
Introduced	23.3.R1
Platforms	All

size *number*

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

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

Synopsis	Source IP address
Context	oam lsp-trace sr-policy source-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-ip-address
Introduced	23.3.R1
Platforms	All

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timeout *number*

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

sr-te

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

downstream-map-tlv *keyword*

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	oam lsp-trace sr-te downstream-map-tlv *keyword*
Tree	downstream-map-tlv
Options	dsmap – Downstream mapping TLV ddmap – Detailed downstream mapping TLV none – No mapping TLV
Introduced	23.3.R1
Platforms	All

fc *keyword*

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-trace sr-te fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc

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Default	be
Introduced	23.3.R1
Platforms	All

interface *reference*

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

interval *number*

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

lsp-name *reference*

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

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max-fail *number*

Synopsis	Maximum consecutive timeouts before terminating test
Context	oam lsp-trace sr-te max-fail *number*
Tree	max-fail
Range	1 to 255
Default	5
Introduced	23.3.R1
Platforms	All

max-ttl *number*

Synopsis	Maximum TTL
Context	oam lsp-trace sr-te max-ttl *number*
Tree	max-ttl
Range	1 to 255
Default	30
Introduced	23.3.R1
Platforms	All

min-ttl *number*

Synopsis	Initial TTL for the test
Context	oam lsp-trace sr-te min-ttl *number*
Tree	min-ttl
Range	1 to 255
Default	1
Introduced	23.3.R1
Platforms	All

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

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-trace sr-te next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	next-hop

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Notes	The following elements are part of a choice: **interface** or **next-hop**.
Introduced	23.3.R1
Platforms	All

output-format *keyword*

Synopsis	Output format for the result
Context	oam lsp-trace sr-te output-format *keyword*
Tree	output-format
Options	summary, detail
Default	summary
Introduced	23.3.R1
Platforms	All

path *reference*

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

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

Synopsis	IP address of the path destination
Context	oam lsp-trace sr-te path-destination *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	path-destination
Introduced	23.3.R1
Platforms	All

probe-count *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	oam lsp-trace sr-te probe-count *number*

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Tree	probe-count
Range	1 to 10
Default	1
Introduced	23.3.R1
Platforms	All

profile *keyword*

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

size *number*

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

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

Synopsis	Source IP address
Context	oam lsp-trace sr-te source-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-ip-address
Introduced	23.3.R1
Platforms	All

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timeout *number*

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

oam-pm

Synopsis	Initiate an on-demand OAM Performance Monitoring test
Context	oam oam-pm
Tree	oam-pm
Introduced	20.2.R1
Platforms	All

action *keyword*

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

session *reference*

Synopsis	OAM-PM session name
Context	oam oam-pm session *reference*
Tree	session
Reference	**state oam-pm session** *string*

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

test-type *keyword*

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

saa

Synopsis	Enter the **saa** context
Context	oam saa
Tree	saa
Introduced	22.10.R1
Platforms	All

owner [owner-name] *reference* test *reference*

Synopsis	SAA owner name
Context	oam saa owner *reference* test *reference*
Tree	owner
Introduced	22.10.R1
Platforms	All

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

Synopsis	Name of the owner of SAA test to be stopped or started
Context	oam saa owner *reference* test *reference*
Tree	owner

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Reference	**state saa owner** *string*
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

test *reference*

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

start

Synopsis	Start the SAA test
Context	oam saa owner *reference* test *reference* start
Tree	start
Introduced	22.10.R1
Platforms	All

accounting *boolean*

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

stop

Synopsis	Stop the SAA test

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Context	oam saa owner *reference* test *reference* stop
Tree	stop
Introduced	22.10.R1
Platforms	All

accounting *boolean*

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

password

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

ping

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

bypass-routing

Synopsis	Bypass routing table when sending ping request to host
Context	ping bypass-routing
Tree	bypass-routing

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Notes	The following elements are part of a choice: **bypass-routing**, **interface**, **next-hop-address**, or **subscriber**.
Introduced	19.10.R1
Platforms	All

color *number*

Synopsis	Color identifier of the Segment Routing IPv6 policy
Context	ping color *number*
Tree	color
Max. Range	0 to 4294967295
Notes	The following elements are part of a mandatory choice: (**destination**, **router-instance**, and **source-address**) or (**color**, **endpoint**, **segment-list**, and **srv6-policy**).
Introduced	23.7.R1
Platforms	All

count *number*

Synopsis	Number of ping requests to send to the remote host
Context	ping count *number*
Tree	count
Range	1 to 100000
Units	packets
Default	5
Introduced	19.10.R1
Platforms	All

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

Synopsis	Destination IP address or DNS name
Context	ping [destination] *(ipv4-address-with-zone | ipv6-address-with-zone | string-not-all-spaces)*
Tree	[destination]
String Length	1 to 128
Notes	The following elements are part of a mandatory choice: (**destination**, **router-instance**, and **source-address**) or (**color**, **endpoint**, **segment-list**, and **srv6-policy**).

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Introduced	19.10.R1
Platforms	All

do-not-fragment

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

endpoint *string*

Synopsis	Endpoint identifier of the Segment Routing IPv6 policy to be pinged
Context	ping endpoint *string*
Tree	endpoint
Notes	The following elements are part of a mandatory choice: (**destination**, **router-instance**, and **source-address**) or (**color**, **endpoint**, **segment-list**, and **srv6-policy**).
Introduced	23.7.R1
Platforms	All

fc *keyword*

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

interface *string*

Synopsis	Sending interface name

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Context	ping interface *string*
Tree	interface
String Length	1 to 32
Reference	**state router** *string* **interface** *string* **state service ies** *string* **interface** *string* **state service ies** *string* **subscriber-interface** *string* **state service vprn** *string* **interface** *string* **state service vprn** *string* **subscriber-interface** *string*
Notes	The following elements are part of a choice: **bypass-routing**, **interface**, **next-hop-address**, or **subscriber**.
Introduced	19.10.R1
Platforms	All

interval *(number | decimal-number)*

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

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

Synopsis	Next-hop address to send packet, ignoring routing table
Context	ping next-hop-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	next-hop-address
Notes	The following elements are part of a choice: **bypass-routing**, **interface**, **next-hop-address**, or **subscriber**.
Introduced	19.10.R1
Platforms	All

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output-format *keyword*

Synopsis	Output format
Context	ping output-format *keyword*
Tree	output-format
Options	summary, detail
Default	detail
Introduced	19.10.R1
Platforms	All

pattern *(keyword | number)*

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

router-instance *string*

Synopsis	Router name or VPRN service name
Context	ping router-instance *string*
Tree	router-instance
Default	Base
Notes	The following elements are part of a mandatory choice: (**destination**, **router-instance**, and **source-address**) or (**color**, **endpoint**, **segment-list**, and **srv6-policy**).
Introduced	19.10.R1
Platforms	All

segment-list *number*

Synopsis	Segment Routing IPv6 segment list to be pinged
Context	ping segment-list *number*

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Tree	segment-list
Range	1 to 32
Notes	The following elements are part of a mandatory choice: (**destination**, **router-instance**, and **source-address**) or (**color**, **endpoint**, **segment-list**, and **srv6-policy**).
Introduced	23.7.R1
Platforms	All

size *number*

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

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

Synopsis	Source IP address used in the ICMP Echo Request packet
Context	ping source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-address
Notes	The following elements are part of a mandatory choice: (**destination**, **router-instance**, and **source-address**) or (**color**, **endpoint**, **segment-list**, and **srv6-policy**).
Introduced	19.10.R1
Platforms	All

srv6-policy

Synopsis	Ping a Segment Routing IPv6 policy
Context	ping srv6-policy
Tree	srv6-policy
Notes	The following elements are part of a mandatory choice: (**destination**, **router-instance**, and **source-address**) or (**color**, **endpoint**, **segment-list**, and **srv6-policy**).
Introduced	23.7.R1

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Platforms	All

subscriber *string*

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

timeout *number*

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

tos *number*

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

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ttl *number*

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

pwc

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

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

Synopsis	Alternative format to display the path
Context	pwc [path-type] *keyword*
Tree	[path-type]
Description	This command provides alternative formats to display the present working context.
Options	model-path – YANG-modeled format for RESTCONF gnmi-path – gNMI format for streaming telemetry cli-path – MD-CLI format on a single line for copying and pasting json-instance-path – YANG-modeled format for pySROS
Introduced	19.10.R1
Platforms	All

previous

Synopsis	Display previous working context
Context	pwc previous
Tree	previous

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Introduced	16.0.R1
Platforms	All

pyexec [url] *(string | reference)*

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

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

Synopsis	Location of the script to be executed
Context	pyexec *(string | reference)*
Tree	pyexec
Reference	**state python python-script** *string*
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	All

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

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

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

Synopsis	Second argument
Context	pyexec *(string | reference)* [argument-02] *string*
Tree	[argument-02]
Introduced	21.7.R1

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Platforms	All

[**argument-03**] *string*

Synopsis	Third argument
Context	pyexec *(string* | *reference)* [argument-03] *string*
Tree	[argument-03]
Introduced	21.7.R1
Platforms	All

[**argument-04**] *string*

Synopsis	Fourth argument
Context	pyexec *(string* | *reference)* [argument-04] *string*
Tree	[argument-04]
Introduced	21.7.R1
Platforms	All

[**argument-05**] *string*

Synopsis	Fifth argument
Context	pyexec *(string* | *reference)* [argument-05] *string*
Tree	[argument-05]
Introduced	21.7.R1
Platforms	All

[**argument-06**] *string*

Synopsis	Sixth argument
Context	pyexec *(string* | *reference)* [argument-06] *string*
Tree	[argument-06]
Introduced	21.7.R1
Platforms	All

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[**argument-07**] *string*

Synopsis	Seventh argument
Context	pyexec *(string* | *reference)* [argument-07] *string*
Tree	[argument-07]
Introduced	21.7.R1
Platforms	All

[**argument-08**] *string*

Synopsis	Eight argument
Context	pyexec *(string* | *reference)* [argument-08] *string*
Tree	[argument-08]
Introduced	21.7.R1
Platforms	All

[**argument-09**] *string*

Synopsis	Ninth argument
Context	pyexec *(string* | *reference)* [argument-09] *string*
Tree	[argument-09]
Introduced	21.7.R1
Platforms	All

[**argument-10**] *string*

Synopsis	Tenth argument
Context	pyexec *(string* | *reference)* [argument-10] *string*
Tree	[argument-10]
Introduced	21.7.R1
Platforms	All

quit-config

Synopsis	Exit the candidate configuration mode
Context	quit-config

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Tree	quit-config
Introduced	16.0.R1
Platforms	All

ssh

Synopsis	SSH to an IP address or DNS name
Context	ssh
Tree	ssh
Introduced	20.7.R1
Platforms	All

[**destination**] *(ipv4-address-with-zone | ipv6-address-with-zone | string-not-all-spaces)*

Synopsis	Destination IP address or DNS name
Context	ssh [destination] *(ipv4-address-with-zone | ipv6-address-with-zone | string-not-all-spaces)*
Tree	[destination]
String Length	1 to 128
Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	All

key-re-exchange

Synopsis	Enter the **key-re-exchange** context
Context	ssh key-re-exchange
Tree	key-re-exchange
Introduced	20.7.R1
Platforms	All

mbytes *(number | keyword)*

Synopsis	Maximum bytes before initiating key re-exchange
Context	ssh key-re-exchange mbytes *(number | keyword)*

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Tree	mbytes
Description	This command specifies the number of bytes transmitted on an SSH session, after which the SSH client initiates the key re-exchange.
Range	1 to 64000
Units	megabytes
Options	infinite
Default	1024
Introduced	20.7.R1
Platforms	All

minutes *(number | keyword)*

Synopsis	Time after which SSH client initiates key re-exchange
Context	ssh key-re-exchange minutes *(number | keyword)*
Tree	minutes
Range	1 to 1440
Units	minutes
Options	infinite
Default	60
Introduced	20.7.R1
Platforms	All

login-name *string*

Synopsis	SSH login username
Context	ssh login-name *string*
Tree	login-name
String Length	1 to 32
Introduced	20.7.R1
Platforms	All

router-instance *(reference | reference)*

Synopsis	Router name or VPRN service name
Context	ssh router-instance *(reference | reference)*

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Tree	router-instance
Default	Base
Reference	**state router** *string* **state service vprn** *string*
Introduced	20.7.R1
Platforms	All

telnet

Synopsis	Telnet to an IP address or DNS name
Context	telnet
Tree	telnet
Description	This command opens a Telnet session to a remote host. In SR-series networks, the Telnet servers limit Telnet clients to three login attempts; if unsuccessful, the Telnet client session disconnects. The number is not user configurable.
Introduced	20.7.R1
Platforms	All

[**destination**] *(ipv4-address-with-zone | ipv6-address-with-zone | string-not-all-spaces)*

Synopsis	Destination IP address or DNS name
Context	telnet [destination] *(ipv4-address-with-zone* | *ipv6-address-with-zone* | *string-not-all-spaces)*
Tree	[destination]
Description	This command specifies the IP address or DNS name (if DNS name resolution is configured) of the remote host for the Telnet session.
String Length	1 to 128
Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	All

port *number*

Synopsis	Remote host TCP port for the Telnet connection
Context	telnet port *number*
Tree	port

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Range	1 to 65535
Default	23
Introduced	20.7.R1
Platforms	All

router-instance *(reference | reference)*

Synopsis	Router name or VPRN service name
Context	telnet router-instance *(reference | reference)*
Tree	router-instance
Default	Base
Reference	**state router** *string* **state service vprn** *string*
Introduced	20.7.R1
Platforms	All

source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source IP address of the Telnet packets
Context	telnet source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-address
Introduced	20.7.R1
Platforms	All

top

Synopsis	Move to the top level of the context
Context	top
Tree	top
Introduced	16.0.R1
Platforms	All

traceroute

Synopsis	Show the route taken to an IP address or DNS name

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Context	traceroute
Tree	traceroute
Introduced	19.10.R1
Platforms	All

color *number*

Synopsis	Color ID of the SRv6 policy to trace
Context	traceroute color *number*
Tree	color
Description	This command launches a traceroute of an SRv6 policy that matches a specific color.
Max. Range	0 to 4294967295
Notes	The following elements are part of a mandatory choice: (**destination**, **router-instance**, and **source-address**) or (**color**, **endpoint**, **segment-list**, and **srv6-policy**).
Introduced	23.3.R1
Platforms	All

decode *keyword*

Synopsis	Perform original datagram parsing functions
Context	traceroute decode *keyword*
Tree	decode
Options	none, original-datagram
Default	none
Introduced	22.7.R1
Platforms	All

dest-port *number*

Synopsis	Transport protocol destination port number
Context	traceroute dest-port *number*
Tree	dest-port
Range	1 to 65535
Default	33434
Introduced	20.10.R1

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Platforms	All

dest-port-udp-fixed

Synopsis	Avoid increment of destination port number for UDP test
Context	traceroute dest-port-udp-fixed
Tree	dest-port-udp-fixed
Introduced	21.10.R1
Platforms	All

[**destination**] *(ipv4-address-no-zone | ipv6-address-no-zone | string-not-all-spaces)*

Synopsis	Destination IP address or DNS name
Context	traceroute [destination] *(ipv4-address-no-zone | ipv6-address-no-zone | string-not-all-spaces)*
Tree	[destination]
String Length	1 to 128
Notes	The following elements are part of a mandatory choice: (**destination**, **router-instance**, and **source-address**) or (**color**, **endpoint**, **segment-list**, and **srv6-policy**).
Introduced	19.10.R1
Platforms	All

detail

Synopsis	Display MPLS label stack information or TCP port status
Context	traceroute detail
Tree	detail
Introduced	19.10.R1
Platforms	All

endpoint *string*

Synopsis	Endpoint of the SRv6 policy to trace
Context	traceroute endpoint *string*
Tree	endpoint

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Description	This command configures an IPv6 endpoint address for an SRv6 policy as the target of the traceroute.
Notes	The following elements are part of a mandatory choice: (**destination**, **router-instance**, and **source-address**) or (**color**, **endpoint**, **segment-list**, and **srv6-policy**).
Introduced	23.3.R1
Platforms	All

min-ttl *number*

Synopsis	First hop traceroute probes using the TTL value
Context	traceroute min-ttl *number*
Tree	min-ttl
Description	This command specifies the first hop traceroute probes, using the **ttl** value.
Range	1 to 255
Default	1
Introduced	21.10.R1
Platforms	All

numeric

Synopsis	Display IP addresses instead of DNS names
Context	traceroute numeric
Tree	numeric
Introduced	19.10.R1
Platforms	All

probe-count *number*

Synopsis	Number of probes to send per hop
Context	traceroute probe-count *number*
Tree	probe-count
Range	1 to 10
Default	3
Introduced	20.10.R1
Platforms	All

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protocol *keyword*

Synopsis	Packet type to send
Context	traceroute protocol *keyword*
Tree	protocol
Description	This command sets the transport protocol, UDP or TCP, for the traceroute packet. A targeted VPRN service silently discards TCP traceroutes and only responds to UDP traceroutes.
Options	udp, tcp
Default	udp
Introduced	21.10.R1
Platforms	All

router-instance *string*

Synopsis	Router name or VPRN service name
Context	traceroute router-instance *string*
Tree	router-instance
Default	Base
Notes	The following elements are part of a mandatory choice: (**destination**, **router-instance**, and **source-address**) or (**color**, **endpoint**, **segment-list**, and **srv6-policy**).
Introduced	19.10.R1
Platforms	All

segment-list *number*

Synopsis	SR IPv6 segment list to trace
Context	traceroute segment-list *number*
Tree	segment-list
Description	This command configures the traceroute probe to target a specific segment list of an SRv6 policy. When the segment list is not specified, the traceroute probe is sent on the lowest available segment list.
Range	1 to 32
Notes	The following elements are part of a mandatory choice: (**destination**, **router-instance**, and **source-address**) or (**color**, **endpoint**, **segment-list**, and **srv6-policy**).
Introduced	23.3.R1

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Platforms	All

size *number*

Synopsis	Number of pad bytes in each transmitted packet
Context	traceroute size *number*
Tree	size
Range	0 to 9786
Units	bytes
Default	0
Introduced	21.10.R1
Platforms	All

source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source address of the probe packets
Context	traceroute source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-address
Description	This command specifies the source address of the probe packets. If the IP address is not one of the interfaces of the device, the system returns an error.
Notes	The following elements are part of a mandatory choice: (**destination**, **router-instance**, and **source-address**) or (**color**, **endpoint**, **segment-list**, and **srv6-policy**).
Introduced	19.10.R1
Platforms	All

srv6-policy

Synopsis	Trace an SRv6 policy
Context	traceroute srv6-policy
Tree	srv6-policy
Description	This command launches a traceroute of a Segment Routing IPv6 (SRv6) policy.
Notes	The following elements are part of a mandatory choice: (**destination**, **router-instance**, and **source-address**) or (**color**, **endpoint**, **segment-list**, and **srv6-policy**).
Introduced	23.3.R1
Platforms	All

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tos *number*

Synopsis	Type of Service (ToS) bits in the IP header
Context	traceroute tos *number*
Tree	tos
Range	0 to 255
Default	0
Introduced	19.10.R1
Platforms	All

ttl *number*

Synopsis	Maximum number of hops (TTL) to probe
Context	traceroute ttl *number*
Tree	ttl
Range	1 to 255
Default	30
Introduced	19.10.R1
Platforms	All

wait *number*

Synopsis	Time to wait for a response to the probe
Context	traceroute wait *number*
Tree	wait
Range	10 to 60000
Units	milliseconds
Default	5000
Introduced	19.10.R1
Platforms	All

tree

Synopsis	Show the command tree under the present working context
Context	tree

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Tree	tree
Introduced	16.0.R1
Platforms	All

[**cli-path**] *string*

Synopsis	Absolute path or relative path from pwc
Context	tree [cli-path] *string*
Tree	[cli-path]
Introduced	20.10.R1
Platforms	All

detail

Synopsis	Display the tree with keys and field values
Context	tree detail
Tree	detail
Introduced	16.0.R1
Platforms	All

flat

Synopsis	Show the context from the pwc on each line
Context	tree flat
Tree	flat
Introduced	16.0.R1
Platforms	All

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2.6 Output modifier commands

See “Using output modifiers in the MD-CLI” in the *7450 ESS, 7750 SR, 7950 XRS, and VSR MD-CLI User Guide* for more information.

```
- |
  - count
  - match string
    - ignore-case boolean
    - invert-match boolean
    - max-count number
    - post-lines number
    - pre-lines number
  - no-more
  - pyexec (string | reference)
    - [argument-01] string
    - [argument-02] string
    - [argument-03] string
    - [argument-04] string
    - [argument-05] string
    - [argument-06] string
    - [argument-07] string
    - [argument-08] string
    - [argument-09] string
    - [argument-10] string
  - reverse-dns
- > (cflash-url | ftp-tftp-url)
```


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2.6.1 Output modifier command descriptions

|

Synopsis	Apply an output modifier
Context	|
Tree	|
Introduced	16.0.R1
Platforms	All

count

Synopsis	Show the line count of the output
Context	| count
Tree	count
Introduced	16.0.R1
Platforms	All

match [pattern] *string*

Synopsis	Match on a string (") or regular expression (')
Context	| match *string*
Tree	match
Introduced	16.0.R1
Platforms	All

[**pattern**] *string*

Synopsis	String (") or regular expression (') pattern to match
Context	| match *string*
Tree	match
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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ignore-case *boolean*

Synopsis	Ignore case in pattern match
Context	| match *string* ignore-case *boolean*
Tree	ignore-case
Default	false
Introduced	16.0.R1
Platforms	All

invert-match *boolean*

Synopsis	Invert the pattern match selection
Context	| match *string* invert-match *boolean*
Tree	invert-match
Default	false
Introduced	16.0.R1
Platforms	All

max-count *number*

Synopsis	Maximum number of displayed matches
Context	| match *string* max-count *number*
Tree	max-count
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

post-lines *number*

Synopsis	Number of lines to display following the matched line
Context	| match *string* post-lines *number*
Tree	post-lines
Range	0 to 4294967295
Default	0
Introduced	16.0.R1

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Platforms	All

pre-lines *number*

Synopsis	Number of lines to display preceding the matched line
Context	| match *string* pre-lines *number*
Tree	pre-lines
Range	0 to 4294967295
Default	0
Introduced	16.0.R1
Platforms	All

no-more

Synopsis	Prevent pagination for the displayed output
Context	| no-more
Tree	no-more
Introduced	16.0.R1
Platforms	All

pyexec [url] *(string* | *reference)*

Synopsis	Execute a Python application
Context	| pyexec *(string* | *reference)*
Tree	pyexec
Introduced	21.7.R1
Platforms	All

[**url**] *(string* | *reference)*

Synopsis	Location of the script to be executed
Context	| pyexec *(string* | *reference)*
Tree	pyexec
Reference	**state python python-script** *string*
Notes	This element is part of a list key.

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Introduced	21.7.R1
Platforms	All

[**argument-01**] *string*

Synopsis	First argument
Context	| pyexec *(string* | *reference)* [argument-01] *string*
Tree	[argument-01]
Introduced	21.7.R1
Platforms	All

[**argument-02**] *string*

Synopsis	Second argument
Context	| pyexec *(string* | *reference)* [argument-02] *string*
Tree	[argument-02]
Introduced	21.7.R1
Platforms	All

[**argument-03**] *string*

Synopsis	Third argument
Context	| pyexec *(string* | *reference)* [argument-03] *string*
Tree	[argument-03]
Introduced	21.7.R1
Platforms	All

[**argument-04**] *string*

Synopsis	Fourth argument
Context	| pyexec *(string* | *reference)* [argument-04] *string*
Tree	[argument-04]
Introduced	21.7.R1
Platforms	All

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[**argument-05**] *string*

Synopsis	Fifth argument
Context	| pyexec *(string* | *reference)* [argument-05] *string*
Tree	[argument-05]
Introduced	21.7.R1
Platforms	All

[**argument-06**] *string*

Synopsis	Sixth argument
Context	| pyexec *(string* | *reference)* [argument-06] *string*
Tree	[argument-06]
Introduced	21.7.R1
Platforms	All

[**argument-07**] *string*

Synopsis	Seventh argument
Context	| pyexec *(string* | *reference)* [argument-07] *string*
Tree	[argument-07]
Introduced	21.7.R1
Platforms	All

[**argument-08**] *string*

Synopsis	Eight argument
Context	| pyexec *(string* | *reference)* [argument-08] *string*
Tree	[argument-08]
Introduced	21.7.R1
Platforms	All

[**argument-09**] *string*

Synopsis	Ninth argument
Context	| pyexec *(string* | *reference)* [argument-09] *string*

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Tree	[argument-09]
Introduced	21.7.R1
Platforms	All

[**argument-10**] *string*

Synopsis	Tenth argument
Context	| pyexec *(string* | *reference)* [argument-10] *string*
Tree	[argument-10]
Introduced	21.7.R1
Platforms	All

reverse-dns

Synopsis	Resolve IP addresses to DNS names in input
Context	| reverse-dns
Tree	reverse-dns
Introduced	22.7.R1
Platforms	All

> [url] *(cflash-url* | *ftp-tftp-url)*

Synopsis	Redirect output to a file
Context	> *(cflash-url* | *ftp-tftp-url)*
Tree	>
Introduced	16.0.R4
Platforms	All

[**url**] *(cflash-url* | *ftp-tftp-url)*

Synopsis	Location to save the output
Context	> *(cflash-url* | *ftp-tftp-url)*
Tree	>
String Length	1 to 199
Notes	This element is part of a list key.

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Introduced	16.0.R4
Platforms	All

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2.7 perform commands

The **perform** commands are YANG-modeled versions of the **tools perform** commands and are available in MD-CLI and NETCONF interfaces.

```
perform
   –  filter
      –  ip-filter reference
         –  entry reference
            –  activate-primary-action
      –  ipv6-filter reference
         –  entry reference
            –  activate-primary-action
      –  mac-filter reference
         –  entry reference
            –  activate-primary-action
      –  redirect-policy reference
         –  activate-best-dest
   –  lag
      –  clear-force
         –  lag
            –  [lag-name] reference
            –  sub-group number
         –  multi-chassis
            –  all
            –  peer
               –  [ip-address] reference
      –  force-active
         –  lag
            –  [lag-name] reference
            –  sub-group number
         –  multi-chassis
            –  all
            –  peer
               –  [ip-address] reference
      –  force-standby
         –  lag
            –  [lag-name] reference
            –  sub-group number
         –  multi-chassis
            –  all
            –  peer
               –  [ip-address] reference
      –  load-balance
         –  class number
         –  [lag-name] reference
   –  system
      –  security
         –  secure-boot
            –  show
               –  uefi-variables
                  –  card reference
```


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2.7.1 perform command descriptions

perform

Synopsis	Perform troubleshooting and debugging
Context	perform
Tree	perform
Introduced	23.7.R1
Platforms	All

filter

Synopsis	Enter the **filter** context
Context	perform filter
Tree	filter
Introduced	23.7.R1
Platforms	All

ip-filter [filter-name] *reference*

Synopsis	Enter the **ip-filter** list instance
Context	perform filter ip-filter *reference*
Tree	ip-filter
Introduced	23.7.R1
Platforms	All

[**filter-name**] *reference*

Synopsis	Name to associate with the IP filter
Context	perform filter ip-filter *reference*
Tree	ip-filter
Reference	**state filter ip-filter** *string*
Notes	This element is part of a list key.
Introduced	23.7.R1

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Platforms	All

entry [entry-id] *reference*

Synopsis	Enter the **entry** list instance
Context	perform filter ip-filter *reference* entry *reference*
Tree	entry
Introduced	23.7.R1
Platforms	All

[**entry-id**] *reference*

Synopsis	ID for the IP filter entry
Context	perform filter ip-filter *reference* entry *reference*
Tree	entry
Reference	**state filter ip-filter** *string* **entry** *number*
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

activate-primary-action

Synopsis	Switch from the secondary to the primary action
Context	perform filter ip-filter *reference* entry *reference* activate-primary-action
Tree	activate-primary-action
Description	This command activates the primary action for the specified filter policy entry. If the primary action is already active, the command has no effect. If a secondary action is active, the primary action is activated unless the primary target is down. If the **configure filter redirect sticky-dest** command is configured, the timer expires.
Introduced	23.7.R1
Platforms	All

ipv6-filter [filter-name] *reference*

Synopsis	Enter the **ipv6-filter** list instance
Context	perform filter ipv6-filter *reference*

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Tree	ipv6-filter
Introduced	23.7.R1
Platforms	All

[**filter-name**] *reference*

Synopsis	Name to associate with the IPv6 filter
Context	perform filter ipv6-filter *reference*
Tree	ipv6-filter
Reference	**state filter ipv6-filter** *string*
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

entry [entry-id] *reference*

Synopsis	Enter the **entry** list instance
Context	perform filter ipv6-filter *reference* entry *reference*
Tree	entry
Introduced	23.7.R1
Platforms	All

[**entry-id**] *reference*

Synopsis	ID for the IPv6 filter entry
Context	perform filter ipv6-filter *reference* entry *reference*
Tree	entry
Reference	**state filter ipv6-filter** *string* **entry** *number*
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

activate-primary-action

Synopsis	Switch from the secondary to the primary action

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Context	perform filter ipv6-filter *reference* entry *reference* activate-primary-action
Tree	activate-primary-action
Description	This command activates the primary action for the specified filter policy entry. If the primary action is already active, the command has no effect. If a secondary action is active, the primary action is activated unless the primary target is down. If the **configure filter redirect sticky-dest** command is configured, the timer expires.
Introduced	23.7.R1
Platforms	All

mac-filter [filter-name] *reference*

Synopsis	Enter the **mac-filter** list instance
Context	perform filter mac-filter *reference*
Tree	mac-filter
Introduced	23.7.R1
Platforms	All

[**filter-name**] *reference*

Synopsis	Name to associate with the MAC filter
Context	perform filter mac-filter *reference*
Tree	mac-filter
Reference	**state filter mac-filter** *string*
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

entry [entry-id] *reference*

Synopsis	Enter the **entry** list instance
Context	perform filter mac-filter *reference* entry *reference*
Tree	entry
Introduced	23.7.R1
Platforms	All

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[**entry-id**] *reference*

Synopsis	ID for the MAC filter entry
Context	perform filter mac-filter *reference* entry *reference*
Tree	entry
Reference	**state filter mac-filter** *string* **entry** *number*
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

activate-primary-action

Synopsis	Switch from the secondary to the primary action
Context	perform filter mac-filter *reference* entry *reference* activate-primary-action
Tree	activate-primary-action
Description	This command activates the primary action for the specified filter policy entry. If the primary action is already active, the command has no effect. If a secondary action is active, the primary action is activated unless the primary target is down. If the **configure filter redirect sticky-dest** command is configured, the timer expires.
Introduced	23.7.R1
Platforms	All

redirect-policy [redirect-policy-name] *reference*

Synopsis	Enter the **redirect-policy** list instance
Context	perform filter redirect-policy *reference*
Tree	redirect-policy
Introduced	23.7.R1
Platforms	All

[**redirect-policy-name**] *reference*

Synopsis	Name of the redirect policy
Context	perform filter redirect-policy *reference*
Tree	redirect-policy
Reference	**state filter redirect-policy** *string*

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Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

activate-best-dest

Synopsis	Activate the current best destination
Context	perform filter redirect-policy *reference* activate-best-dest
Tree	activate-best-dest
Description	This command forces a PBR switch to the best destination selected by the redirect policy when that destination is not currently active as result of sticky destination functionality being enabled for the specified redirect policy. If the **configure filter redirect sticky-dest** command is configured, the timer expires.
Introduced	23.7.R1
Platforms	All

lag

Synopsis	Perform LAG operations
Context	perform lag
Tree	lag
Introduced	23.7.R1
Platforms	All

clear-force

Synopsis	Perform LAG clear-force operation
Context	perform lag clear-force
Tree	clear-force
Introduced	23.7.R1
Platforms	All

lag

Synopsis	Perform LAG operation on the specified LAG
Context	perform lag clear-force lag

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Tree	lag
Introduced	23.7.R1
Platforms	All

[**lag-name**] *reference*

Synopsis	LAG name
Context	perform lag clear-force lag [lag-name] *reference*
Tree	[lag-name]
Reference	**state lag** *string*
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

sub-group *number*

Synopsis	Sub-group in the LAG
Context	perform lag clear-force lag sub-group *number*
Tree	sub-group
Range	1 to 16
Default	1
Introduced	23.7.R1
Platforms	All

multi-chassis

Synopsis	Enter the **multi-chassis** context
Context	perform lag clear-force multi-chassis
Tree	multi-chassis
Introduced	23.7.R1
Platforms	All

all

Synopsis	Perform LAG operation on all multi-chassis LAGs

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Context	perform lag clear-force multi-chassis all
Tree	all
Introduced	23.7.R1
Platforms	All

peer

Synopsis	Perform LAG operation on the MC peer
Context	perform lag clear-force multi-chassis peer
Tree	peer
Introduced	23.7.R1
Platforms	All

[**ip-address**] *reference*

Synopsis	Peer IP address
Context	perform lag clear-force multi-chassis peer [ip-address] *reference*
Tree	[ip-address]
Reference	**state redundancy multi-chassis peer** *string*
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

force-active

Synopsis	Perform LAG force-active operation
Context	perform lag force-active
Tree	force-active
Introduced	23.7.R1
Platforms	All

lag

Synopsis	Perform LAG operation on the specified LAG
Context	perform lag force-active lag

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Tree	lag
Introduced	23.7.R1
Platforms	All

[**lag-name**] *reference*

Synopsis	LAG name
Context	perform lag force-active lag [lag-name] *reference*
Tree	[lag-name]
Reference	**state lag** *string*
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

sub-group *number*

Synopsis	Sub-group in the LAG
Context	perform lag force-active lag sub-group *number*
Tree	sub-group
Range	1 to 16
Default	1
Introduced	23.7.R1
Platforms	All

multi-chassis

Synopsis	Enter the **multi-chassis** context
Context	perform lag force-active multi-chassis
Tree	multi-chassis
Introduced	23.7.R1
Platforms	All

all

Synopsis	Perform LAG operation on all multi-chassis LAGs

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Context	perform lag force-active multi-chassis all
Tree	all
Introduced	23.7.R1
Platforms	All

peer

Synopsis	Perform LAG operation on the MC peer
Context	perform lag force-active multi-chassis peer
Tree	peer
Introduced	23.7.R1
Platforms	All

[**ip-address**] *reference*

Synopsis	Peer IP address
Context	perform lag force-active multi-chassis peer [ip-address] *reference*
Tree	[ip-address]
Reference	**state redundancy multi-chassis peer** *string*
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

force-standby

Synopsis	Perform LAG force-standby operation
Context	perform lag force-standby
Tree	force-standby
Introduced	23.7.R1
Platforms	All

lag

Synopsis	Perform LAG operation on the specified LAG
Context	perform lag force-standby lag

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Tree	lag
Introduced	23.7.R1
Platforms	All

[**lag-name**] *reference*

Synopsis	LAG name
Context	perform lag force-standby lag [lag-name] *reference*
Tree	[lag-name]
Reference	**state lag** *string*
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

sub-group *number*

Synopsis	Sub-group in the LAG
Context	perform lag force-standby lag sub-group *number*
Tree	sub-group
Range	1 to 16
Default	1
Introduced	23.7.R1
Platforms	All

multi-chassis

Synopsis	Enter the **multi-chassis** context
Context	perform lag force-standby multi-chassis
Tree	multi-chassis
Introduced	23.7.R1
Platforms	All

all

Synopsis	Perform LAG operation on all multi-chassis LAGs

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Context	perform lag force-standby multi-chassis all
Tree	all
Introduced	23.7.R1
Platforms	All

peer

Synopsis	Perform LAG operation on the MC peer
Context	perform lag force-standby multi-chassis peer
Tree	peer
Introduced	23.7.R1
Platforms	All

[**ip-address**] *reference*

Synopsis	Peer IP address
Context	perform lag force-standby multi-chassis peer [ip-address] *reference*
Tree	[ip-address]
Reference	**state redundancy multi-chassis peer** *string*
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

load-balance

Synopsis	Perform LAG load-balance operation
Context	perform lag load-balance
Tree	load-balance
Introduced	23.7.R1
Platforms	All

class *number*

Synopsis	Class used for load balancing
Context	perform lag load-balance class *number*

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Tree	class
Range	1 to 3
Default	1
Introduced	23.7.R1
Platforms	All

[**lag-name**] *reference*

Synopsis	LAG name
Context	perform lag load-balance [lag-name] *reference*
Tree	[lag-name]
Reference	**state lag** *string*
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

system

Synopsis	Enter the **system** context
Context	perform system
Tree	system
Introduced	23.7.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS-40

security

Synopsis	Enter the **security** context
Context	perform system security
Tree	security
Introduced	23.7.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS-40

secure-boot

Synopsis	Enter the **secure-boot** context

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Context	perform system security secure-boot
Tree	secure-boot
Introduced	23.7.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS-40

show

Synopsis	Enter the **show** context
Context	perform system security secure-boot show
Tree	show
Introduced	23.7.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS-40

uefi-variables

Synopsis	Display secure-boot UEFI variables
Context	perform system security secure-boot show uefi-variables
Tree	uefi-variables
Introduced	23.7.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS-40

card *reference*

Synopsis	CPM slot where UEFI variables are returned
Context	perform system security secure-boot show uefi-variables card *reference*
Tree	card
Reference	**state cpm** *string*
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS-40

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2.8 reset commands

The **reset** commands are YANG-modeled versions of the **clear** commands and are available in MD-CLI and NETCONF interfaces.The **reset** commands are primarily used to:

- set statistics in a specific area back to a value of zero
- reset specific hardware assemblies, for example, cards
- delete temporary operational state data, for example, contents of a log in memory

```
reset
   –  filter
      –  ip-exception
         –  direction keyword
         –  entry reference
         –  [filter-name] reference
      –  ip-filter
         –  direction keyword
         –  entry reference
         –  [filter-name] reference
      –  ipv6-exception
         –  direction keyword
         –  entry reference
         –  [filter-name] reference
      –  ipv6-filter
         –  direction keyword
         –  entry reference
         –  [filter-name] reference
      –  log
         –  [log-id] reference
      –  mac-filter
         –  direction keyword
         –  entry reference
         –  [filter-name] reference
   –  lag reference
      –  bfd-session
         –  port
            –  family keyword
            –  [lag-port] reference
      –  lacp-statistics
      –  statistics
   –  log
      –  event-handling
         –  handlers
            –  all
            –  handler
               –  [name] reference
         –  information
      –  log-events
         –  repeating-events
            –  all
      –  log-id
         –  [name] reference
   –  router string
      –  interface string
         –  hold-time
         –  mac
            –  address
               –  [mac-address] string
            –  all
         –  policy-accounting
```


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reset router interface policy-accounting all

```
            - all
            - class
               - all
               - index number
               - [name] keyword
            - policer
               - all
               - index
                  - [policer-index] number
         - statistics
         - urpf-statistics
   - saa
      - owner reference test reference
         - statistics
   - system
      - management-interface
         - remote-management
            - managers
               - all
               - manager
                  - [name] reference
            - statistics
               - all
               - manager
                  - [name] reference
      - script-control
         - script-policy
            - completed
               - all
               - policy
                  - owner reference
                  - [policy-name] reference
      - security
         - cpm-filter
            - cpm-queue
               - queue-id reference
            - ip-filter
               - entry reference
            - ipv6-filter
               - entry reference
            - mac-filter
               - entry reference
         - management-access-filter
            - ip-filter
               - entry reference
            - ipv6-filter
               - entry reference
            - mac-filter
               - entry reference
```


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2.8.1 reset command descriptions

reset

Synopsis	Clear statistics or reset operational state
Context	reset
Tree	reset
Description	Commands in this context are used to clear specific statistics, reset specific hardware assemblies (for example, cards), and delete temporary operational state data (for example, contents of a log in memory).
Introduced	23.3.R1
Platforms	All

filter

Synopsis	Enter the **filter** context
Context	reset filter
Tree	filter
Introduced	23.3.R1
Platforms	All

ip-exception

Synopsis	Reset operation on the specified IP exception filter
Context	reset filter ip-exception
Tree	ip-exception
Introduced	23.3.R1
Platforms	VSR

direction *keyword*

Synopsis	Statistics direction for IP exception filter entries
Context	reset filter ip-exception direction *keyword*
Tree	direction
Options	ingress, egress

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Introduced	23.3.R1
Platforms	VSR

entry *reference*

Synopsis	Entry ID for the filter
Context	reset filter ip-exception entry *reference*
Tree	entry
Reference	**state filter ip-exception** *string* **entry** *number*
Introduced	23.3.R1
Platforms	VSR

[**filter-name**] *reference*

Synopsis	IP exception filter name
Context	reset filter ip-exception [filter-name] *reference*
Tree	[filter-name]
Reference	**state filter ip-exception** *string*
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

ip-filter

Synopsis	Reset operation on the specified IP filter
Context	reset filter ip-filter
Tree	ip-filter
Introduced	23.3.R1
Platforms	All

direction *keyword*

Synopsis	Statistics direction for IP filter entries
Context	reset filter ip-filter direction *keyword*
Tree	direction

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Options	ingress, egress
Introduced	23.3.R1
Platforms	All

entry *reference*

Synopsis	Entry ID for the filter
Context	reset filter ip-filter entry *reference*
Tree	entry
Reference	**state filter ip-filter** *string* **entry** *number*
Introduced	23.3.R1
Platforms	All

[**filter-name**] *reference*

Synopsis	IP filter name
Context	reset filter ip-filter [filter-name] *reference*
Tree	[filter-name]
Reference	**state filter ip-filter** *string*
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

ipv6-exception

Synopsis	Reset operation on the specified IPv6 exception filter
Context	reset filter ipv6-exception
Tree	ipv6-exception
Introduced	23.3.R1
Platforms	VSR

direction *keyword*

Synopsis	Statistics direction for IPv6 exception filter entries
Context	reset filter ipv6-exception direction *keyword*

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Tree	direction
Options	ingress, egress
Introduced	23.3.R1
Platforms	VSR

entry *reference*

Synopsis	Entry ID for the filter
Context	reset filter ipv6-exception entry *reference*
Tree	entry
Reference	**state filter ipv6-exception** *string* **entry** *number*
Introduced	23.3.R1
Platforms	VSR

[**filter-name**] *reference*

Synopsis	IPv6 exception filter name
Context	reset filter ipv6-exception [filter-name] *reference*
Tree	[filter-name]
Reference	**state filter ipv6-exception** *string*
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

ipv6-filter

Synopsis	Reset operation on the specified IPv6 filter
Context	reset filter ipv6-filter
Tree	ipv6-filter
Introduced	23.3.R1
Platforms	All

direction *keyword*

Synopsis	Statistics direction of IPv6 filter entries

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Context	reset filter ipv6-filter direction *keyword*
Tree	direction
Options	ingress, egress
Introduced	23.3.R1
Platforms	All

entry *reference*

Synopsis	Entry ID for the IPv6 filter
Context	reset filter ipv6-filter entry *reference*
Tree	entry
Reference	**state filter ipv6-filter** *string* **entry** *number*
Introduced	23.3.R1
Platforms	All

[**filter-name**] *reference*

Synopsis	IPv6 exception filter name
Context	reset filter ipv6-filter [filter-name] *reference*
Tree	[filter-name]
Reference	**state filter ipv6-filter** *string*
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

log

Synopsis	Reset the specified filter log
Context	reset filter log
Tree	log
Description	This command reinitializes or rolls over the specified memory filter log. Memory filter logs are reinitialized and cleared of contents. This command is applicable only to filter logs that are directed to memory destinations. Filter logs with destinations other than memory are not affected by this command.
Introduced	23.7.R1

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Platforms	All

[**log-id**] *reference*

Synopsis	ID of the filter log to reset
Context	reset filter log [log-id] *reference*
Tree	[log-id]
Reference	**state filter log** *number*
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

mac-filter

Synopsis	Reset operation on the specified MAC filter
Context	reset filter mac-filter
Tree	mac-filter
Introduced	23.3.R1
Platforms	All

direction *keyword*

Synopsis	Statistics direction for MAC filter entries
Context	reset filter mac-filter direction *keyword*
Tree	direction
Options	ingress, egress
Introduced	23.3.R1
Platforms	All

entry *reference*

Synopsis	Entry ID for the MAC filter
Context	reset filter mac-filter entry *reference*
Tree	entry
Reference	**state filter mac-filter** *string* **entry** *number*

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Introduced	23.3.R1
Platforms	All

[**filter-name**] *reference*

Synopsis	MAC filter name
Context	reset filter mac-filter [filter-name] *reference*
Tree	[filter-name]
Reference	**state filter mac-filter** *string*
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

lag [lag-name] *reference*

Synopsis	Enter the **lag** list instance
Context	reset lag *reference*
Tree	lag
Description	Commands in this context configure LAG reset operations.
Introduced	23.3.R1
Platforms	All

[**lag-name**] *reference*

Synopsis	LAG name, starting with lag-
Context	reset lag *reference*
Tree	lag
Reference	**state lag** *string*
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

bfd-session

Synopsis	Enter the **bfd-session** context

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Context	reset lag *reference* bfd-session
Tree	bfd-session
Description	Commands in this context reset the LAG BFD session data.
Introduced	23.3.R1
Platforms	All

port

Synopsis	Port identifier in the LAG
Context	reset lag *reference* bfd-session port
Tree	port
Introduced	23.3.R1
Platforms	All

family *keyword*

Synopsis	BFD session family type
Context	reset lag *reference* bfd-session port family *keyword*
Tree	family
Options	ipv4, ipv6
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

[**lag-port**] *reference*

Synopsis	Member port of the LAG
Context	reset lag *reference* bfd-session port [lag-port] *reference*
Tree	[lag-port]
Reference	**state lag** *string* **port** *string*
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

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lacp-statistics

Synopsis	Reset LACP statistics
Context	reset lag *reference* lacp-statistics
Tree	lacp-statistics
Introduced	23.3.R1
Platforms	All

statistics

Synopsis	Reset LAG statistics
Context	reset lag *reference* statistics
Tree	statistics
Introduced	23.3.R1
Platforms	All

log

Synopsis	Enter the **log** context
Context	reset log
Tree	log
Description	Commands in this context provide reset operations for events, logs, and the event handling system (EHS).
Introduced	23.7.R1
Platforms	All

event-handling

Synopsis	Enter the **event-handling** context
Context	reset log event-handling
Tree	event-handling
Description	Commands in this context provide reset operations for the EHS.
Introduced	23.7.R1
Platforms	All

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handlers

Synopsis	Enter the **handlers** context
Context	reset log event-handling handlers
Tree	handlers
Description	Commands in this context reset statistics related to EHS handlers.
Introduced	23.7.R1
Platforms	All

all

Synopsis	Reset statistics for all EHS handlers
Context	reset log event-handling handlers all
Tree	all
Description	This command resets all statistics for all handlers in the **state log event-handling handler** context and in the output of the **show log event-handling handler** command.
Introduced	23.7.R1
Platforms	All

handler

Synopsis	Reset statistics for a specified EHS handler
Context	reset log event-handling handlers handler
Tree	handler
Description	This command resets all statistics for the specified handler in the **state log event-handling handler** context and in the output of the **show log event-handling handler** command.
Introduced	23.7.R1
Platforms	All

[**name**] *reference*

Synopsis	Handler name to reset
Context	reset log event-handling handlers handler [name] *reference*
Tree	[name]
Reference	**state log event-handling handler** *string*

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Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

information

Synopsis	Reset general EHS operational data
Context	reset log event-handling information
Tree	information
Description	This command resets all data in the **state log event-handling summary-statistics** context and in the output of the **show log event-handling information** command.
Introduced	23.7.R1
Platforms	All

log-events

Synopsis	Enter the **log-events** context
Context	reset log log-events
Tree	log-events
Description	Commands in this context reset the operational state related to log events.
Introduced	23.7.R1
Platforms	All

repeating-events

Synopsis	Enter the **repeating-events** context
Context	reset log log-events repeating-events
Tree	repeating-events
Description	Commands in this context reset the operational state related to repeating log events.
Introduced	23.7.R1
Platforms	All

all

Synopsis	Reset operation for all repeating log events

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Context	reset log log-events repeating-events all
Tree	all
Description	This command cancels the repetition of all log events that are currently repeating. All repeating log events stop repeating.
Introduced	23.7.R1
Platforms	All

log-id

Synopsis	Reset the specified event log
Context	reset log log-id
Tree	log-id
Description	This command reinitializes or rolls over the specified memory or file event log. Memory logs are reinitialized and cleared of contents. File logs are manually rolled over by this command. This command is applicable only to event logs that are directed to file destinations and memory destinations. This command does not affect SNMP, syslog, console, CLI, or session logs.
Introduced	23.7.R1
Platforms	All

[**name**] *reference*

Synopsis	Name of the event log to reset
Context	reset log log-id [name] *reference*
Tree	[name]
Reference	**state log log-id** *string*
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

router [router-instance] *string*

Synopsis	Enter the **router** list instance
Context	reset router *string*
Tree	router

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Introduced	23.7.R1
Platforms	All

[**router-instance**] *string*

Synopsis	Router name or VPRN service name
Context	reset router *string*
Tree	router
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

interface [interface-name] *string*

Synopsis	Enter the **interface** list instance
Context	reset router *string* interface *string*
Tree	interface
Description	Commands in this context reset IP interface statistics.
Introduced	23.7.R1
Platforms	All

[**interface-name**] *string*

Synopsis	Interface name
Context	reset router *string* interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

hold-time

Synopsis	Reset the IP interface activation hold timers
Context	reset router *string* interface *string* hold-time

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Tree	hold-time
Introduced	23.7.R1
Platforms	All

mac

Synopsis	Enter the **mac** context
Context	reset router *string* interface *string* mac
Tree	mac
Introduced	23.7.R1
Platforms	All

address

Synopsis	Reset specified MAC address from associated interface
Context	reset router *string* interface *string* mac address
Tree	address
Introduced	23.7.R1
Platforms	All

[**mac-address**] *string*

Synopsis	MAC address
Context	reset router *string* interface *string* mac address [mac-address] *string*
Tree	[mac-address]
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

all

Synopsis	Reset all MAC addresses for the specified interface
Context	reset router *string* interface *string* mac all
Tree	all
Introduced	23.7.R1

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Platforms	All

policy-accounting

Synopsis	Enter the **policy-accounting** context
Context	reset router *string* interface *string* policy-accounting
Tree	policy-accounting
Description	Commands in this context reset the accounting statistics.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

all

Synopsis	Reset all the policy-accounting statistics
Context	reset router *string* interface *string* policy-accounting all
Tree	all
Description	When configured, the system resets all classes, indexes, and policers.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

class

Synopsis	Reset the specified policy-accounting class
Context	reset router *string* interface *string* policy-accounting class
Tree	class
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

all

Synopsis	Reset all policy-accounting class indexes
Context	reset router *string* interface *string* policy-accounting class all
Tree	all
Notes	The following elements are part of a mandatory choice: **all** or **index**.
Introduced	23.7.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

index *number*

Synopsis	Policy-accounting class index
Context	reset router *string* interface *string* policy-accounting class index *number*
Tree	index
Range	1 to 255
Notes	The following elements are part of a mandatory choice: **all** or **index**.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

[**name**] *keyword*

Synopsis	Policy-accounting class source or destination
Context	reset router *string* interface *string* policy-accounting class [name] *keyword*
Tree	[name]
Options	source-class, destination-class
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

policer

Synopsis	Enter the **policer** context
Context	reset router *string* interface *string* policy-accounting policer
Tree	policer
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

all

Synopsis	Reset all the policer statistics
Context	reset router *string* interface *string* policy-accounting policer all
Tree	all

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Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

index

Synopsis	Reset the specified policer
Context	reset router *string* interface *string* policy-accounting policer index
Tree	index
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

[**policer-index**] *number*

Synopsis	Policer index
Context	reset router *string* interface *string* policy-accounting policer index [policer-index] *number*
Tree	[policer-index]
Range	1 to 63
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

statistics

Synopsis	Reset the interface traffic statistics
Context	reset router *string* interface *string* statistics
Tree	statistics
Introduced	23.7.R1
Platforms	All

urpf-statistics

Synopsis	Reset the interface uRPF statistics
Context	reset router *string* interface *string* urpf-statistics
Tree	urpf-statistics
Introduced	23.7.R1

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Platforms	All

saa

Synopsis	Enter the **saa** context
Context	reset saa
Tree	saa
Introduced	23.3.R1
Platforms	All

owner [owner-name] *reference* test *reference*

Synopsis	Enter the **owner** list instance
Context	reset saa owner *reference* test *reference*
Tree	owner
Introduced	23.3.R1
Platforms	All

[**owner-name**] *reference*

Synopsis	Name of SAA test owner for which to reset statistics
Context	reset saa owner *reference* test *reference*
Tree	owner
Description	This command configures the name of the SAA test owner. When not configured, the system uses "TiMOS CLI" as the default owner.
Reference	**state saa owner** *string*
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

test *reference*

Synopsis	Name of the SAA test for which to reset statistics
Context	reset saa owner *reference* test *reference*
Tree	owner

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Reference	**state saa owner** *string* **test** *string*
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

statistics

Synopsis	Clear the SAA test statistics
Context	reset saa owner *reference* test *reference* statistics
Tree	statistics
Description	This command clears historical statistics for a completed run. If this option is not configured, the reset operation has no impact.
Introduced	23.3.R1
Platforms	All

system

Synopsis	Enter the **system** context
Context	reset system
Tree	system
Introduced	23.3.R1
Platforms	All

management-interface

Synopsis	Enter the **management-interface** context
Context	reset system management-interface
Tree	management-interface
Introduced	23.7.R1
Platforms	All

remote-management

Synopsis	Enter the **remote-management** context
Context	reset system management-interface remote-management

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Tree	remote-management
Description	Commands in this context reset operational information related to the remote management feature that is used with the Network Interface Shell (NISH) Tool.
Introduced	23.7.R1
Platforms	All

managers

Synopsis	Enter the **managers** context
Context	reset system management-interface remote-management managers
Tree	managers
Description	Commands in this context reset and restart the remote management manager connection process for NISH managers.
Introduced	23.7.R1
Platforms	All

all

Synopsis	Reset connections for all remote NISH managers
Context	reset system management-interface remote-management managers all
Tree	all
Description	This command resets and restarts the remote management manager connection process for all NISH managers.
Introduced	23.7.R1
Platforms	All

manager

Synopsis	Reset connection for a remote NISH manager
Context	reset system management-interface remote-management managers manager
Tree	manager
Description	This command resets and restarts the remote management manager connection process for the specified NISH manager.
Introduced	23.7.R1
Platforms	All

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[**name**] *reference*

Synopsis	Name of the manager
Context	reset system management-interface remote-management managers manager [name] *reference*
Tree	[name]
Reference	**state system management-interface remote-management manager** *string*
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

statistics

Synopsis	Enter the **statistics** context
Context	reset system management-interface remote-management statistics
Tree	statistics
Description	Commands in this context reset statistics for NISH remote management managers.
Introduced	23.7.R1
Platforms	All

all

Synopsis	Reset statistics for all remote NISH managers
Context	reset system management-interface remote-management statistics all
Tree	all
Introduced	23.7.R1
Platforms	All

manager

Synopsis	Reset statistics for the specified remote NISH manager
Context	reset system management-interface remote-management statistics manager
Tree	manager
Introduced	23.7.R1
Platforms	All

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[**name**] *reference*

Synopsis	Name of the manager
Context	reset system management-interface remote-management statistics manager [name] *reference*
Tree	[name]
Reference	**state system management-interface remote-management manager** *string*
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

script-control

Synopsis	Enter the **script-control** context
Context	reset system script-control
Tree	script-control
Introduced	23.7.R1
Platforms	All

script-policy

Synopsis	Enter the **script-policy** context
Context	reset system script-control script-policy
Tree	script-policy
Introduced	23.7.R1
Platforms	All

completed

Synopsis	Enter the **completed** context
Context	reset system script-control script-policy completed
Tree	completed
Description	Commands in this context delete completed script run history entries.
Introduced	23.7.R1
Platforms	All

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all

Synopsis	Delete script run entries for all script policies
Context	reset system script-control script-policy completed all
Tree	all
Introduced	23.7.R1
Platforms	All

policy

Synopsis	Delete script run entries for specific policies
Context	reset system script-control script-policy completed policy
Tree	policy
Introduced	23.7.R1
Platforms	All

owner *reference*

Synopsis	Script-policy owner for run history deletion
Context	reset system script-control script-policy completed policy owner *reference*
Tree	owner
Description	This command specifies the script policy owner for run history deletion. The system only deletes run history entries for script policies with this owner and the specified policy name.
Default	TiMOS CLI
Reference	**state system script-control script-policy** *string* **owner** *string*
Introduced	23.7.R1
Platforms	All

[**policy-name**] *reference*

Synopsis	Script-policy name for run history deletion
Context	reset system script-control script-policy completed policy [policy-name] *reference*
Tree	[policy-name]
Reference	**state system script-control script-policy** *string*

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Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

security

Synopsis	Enter the **security** context
Context	reset system security
Tree	security
Introduced	23.3.R1
Platforms	All

cpm-filter

Synopsis	Enter the **cpm-filter** context
Context	reset system security cpm-filter
Tree	cpm-filter
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cpm-queue

Synopsis	Reset CPM queue information
Context	reset system security cpm-filter cpm-queue
Tree	cpm-queue
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

queue-id *reference*

Synopsis	Queue ID for the CPM queue
Context	reset system security cpm-filter cpm-queue queue-id *reference*
Tree	queue-id
Reference	**state system security cpm-queue queue** *number*
Notes	This element is mandatory.

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Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ip-filter

Synopsis	Reset IP filter information
Context	reset system security cpm-filter ip-filter
Tree	ip-filter
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

entry *reference*

Synopsis	Entry ID for IP filter
Context	reset system security cpm-filter ip-filter entry *reference*
Tree	entry
Reference	**state system security cpm-filter ip-filter entry** *number*
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6-filter

Synopsis	Reset IPv6 filter information
Context	reset system security cpm-filter ipv6-filter
Tree	ipv6-filter
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

entry *reference*

Synopsis	Entry ID for IPv6 filter
Context	reset system security cpm-filter ipv6-filter entry *reference*
Tree	entry
Reference	**state system security cpm-filter ipv6-filter entry** *number*
Introduced	23.3.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-filter

Synopsis	Reset MAC filter information
Context	reset system security cpm-filter mac-filter
Tree	mac-filter
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

entry *reference*

Synopsis	Entry ID for mac-filter
Context	reset system security cpm-filter mac-filter entry *reference*
Tree	entry
Reference	**state system security cpm-filter mac-filter entry** *number*
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

management-access-filter

Synopsis	Enter the **management-access-filter** context
Context	reset system security management-access-filter
Tree	management-access-filter
Introduced	23.3.R1
Platforms	All

ip-filter

Synopsis	Reset operation on the specified IP filter
Context	reset system security management-access-filter ip-filter
Tree	ip-filter
Introduced	23.3.R1
Platforms	All

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entry *reference*

Synopsis	Entry ID for the IP filter
Context	reset system security management-access-filter ip-filter entry *reference*
Tree	entry
Reference	**state system security management-access-filter ip-filter entry** *number*
Introduced	23.3.R1
Platforms	All

ipv6-filter

Synopsis	Reset operation on the specified IPv6 filter
Context	reset system security management-access-filter ipv6-filter
Tree	ipv6-filter
Introduced	23.3.R1
Platforms	All

entry *reference*

Synopsis	Entry ID for the IPv6 filter
Context	reset system security management-access-filter ipv6-filter entry *reference*
Tree	entry
Reference	**state system security management-access-filter ipv6-filter entry** *number*
Introduced	23.3.R1
Platforms	All

mac-filter

Synopsis	Reset operation on the specified MAC filter
Context	reset system security management-access-filter mac-filter
Tree	mac-filter
Introduced	23.3.R1
Platforms	All

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entry *reference*

Synopsis	Entry ID for the MAC filter
Context	reset system security management-access-filter mac-filter entry *reference*
Tree	entry
Reference	**state system security management-access-filter mac-filter entry** *number*
Introduced	23.3.R1
Platforms	All

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3 Configuration commands

This section lists MD-CLI configuration commands.

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3.1 aaa commands

```
configure
   - aaa
      - apply-groups reference
      - apply-groups-exclude reference
      - diameter
         - node string
            - apply-groups reference
            - apply-groups-exclude reference
            - connection
               - ipv4
                  - allow-connections boolean
                  - local-address string
               - ipv6
                  - allow-connections boolean
                  - local-address string
               - timer number
            - description string
            - origin-realm string
            - peer index number
               - address (ipv4-address-no-zone | ipv6-address-no-zone)
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - connection-timer number
               - default-peer boolean
               - destination-host string
               - preference number
               - route index number
                  - application keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - preference number
                  - realm string
               - watchdog-timer number
            - python-policy reference
            - router-instance string
      - radius
         - acct-on-off-group string
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
         - coa-port number
         - isa-policy string
            - accounting
               - include-attributes
                  - acct-delay-time boolean
                  - acct-triggered-reason boolean
                  - called-station-id boolean
                  - calling-station-id boolean
                  - circuit-id boolean
                  - class boolean
                  - credit-control-quota boolean
                  - dhcp-options boolean
                  - dhcp-vendor-class-id boolean
                  - frame-counters boolean
                  - framed-ip-address boolean
                  - framed-ip-netmask boolean
                  - framed-ipv6-prefix boolean
                  - hardware-timestamp boolean
```


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configure aaa radius isa-policy accounting include-attributes ipv6-address

```
                  - ipv6-address boolean
                  - mac-address boolean
                  - millisecond-event-timestamp boolean
                  - multi-session-id boolean
                  - nas-identifier boolean
                  - nas-ip-address boolean
                  - nas-ipv6-address boolean
                  - nas-port boolean
                  - nas-port-id boolean
                  - nas-port-type boolean
                  - nat-inside-service-id boolean
                  - nat-outside-ip-address boolean
                  - nat-outside-service-id boolean
                  - nat-port-range-block boolean
                  - nat-subscriber-string boolean
                  - octet-counters boolean
                  - proxied-subscriber-data boolean
                  - release-reason boolean
                  - remote-id boolean
                  - rssi boolean
                  - session-time boolean
                  - subscriber-id boolean
                  - toserver-dhcp6-options boolean
                  - ue-creation-type boolean
                  - user-name boolean
                  - wlan-ssid-vlan boolean
                  - xconnect-tunnel-home-address boolean
                  - xconnect-tunnel-local-ipv6-address boolean
                  - xconnect-tunnel-remote-ipv6-address boolean
                  - xconnect-tunnel-service boolean
                  - xconnect-tunnel-type boolean
               - nat-periodic-update
                  - interval number
                  - rate-limit (number | keyword)
               - update-triggers
                  - address-state boolean
                  - soft-quota-exhausted boolean
            - apply-groups reference
            - apply-groups-exclude reference
            - authentication
               - include-attributes
                  - called-station-id boolean
                  - calling-station-id boolean
                  - circuit-id boolean
                  - dhcp-vendor-class-id boolean
                  - framed-ip-address boolean
                  - ipv6-address boolean
                  - mac-address boolean
                  - nas-identifier boolean
                  - nas-ip-address boolean
                  - nas-ipv6-address boolean
                  - nas-port boolean
                  - nas-port-id boolean
                  - nas-port-type boolean
                  - remote-id boolean
                  - toserver-dhcp-options boolean
                  - toserver-dhcp6-options boolean
                  - wlan-ssid-vlan boolean
                  - xconnect-tunnel-home-address boolean
            - description string
            - nas-ip-address-origin keyword
            - password string
            - python-policy reference
            - servers
```


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configure aaa radius isa-policy servers access-algorithm

```
            - access-algorithm keyword
            - ipv6
               - mtu number
               - source-prefix string
            - router-instance string
            - server number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
               - purpose
                  - accounting
                     - udp-port number
                  - authentication
                     - udp-port number
                  - coa
                     - udp-port number
               - secret string
            - source-address-range string
            - timeout number
            - total-tries number
         - user-name
            - format keyword
            - mac-format keyword
      - l2tp-accounting-policy string
         - accounting-type
            - session boolean
            - tunnel boolean
         - acct-tunnel-connection-fmt string
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - include-radius-attribute
            - calling-station-id boolean
            - nas-identifier boolean
            - nas-port
               - bit-spec string
            - nas-port-id
               - prefix-string string
               - suffix keyword
            - nas-port-type
               - type (keyword | number)
         - radius-server-policy reference
      - route-downloader string
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - base-user-name string
         - default-metric number
         - default-tag number
         - description string
         - download-interval number
         - max-routes number
         - password string
         - radius-server-policy reference
         - retry-interval
            - max number
            - min number
      - server-policy string
         - acct-on-off
            - apply-groups reference
            - apply-groups-exclude reference
            - monitor reference
            - oper-state-change
```


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configure aaa radius server-policy acct-on-off oper-state-change group

```
                - group reference
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - python-policy reference
            - servers
                - access-algorithm keyword
                - buffering
                    - acct-interim
                        - lifetime number
                        - max number
                        - min number
                    - acct-start
                        - lifetime number
                        - max number
                        - min number
                    - acct-stop
                        - lifetime number
                        - max number
                        - min number
                - health-check
                    - down-timeout number
                    - test-account
                        - admin-state keyword
                        - interval number
                        - password string
                        - user-name string
                - hold-down-time number
                - ipv6-source-address string
                - retry-count number
                - router-instance string
                - server number
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - server-name string
                - source-address string
                - stickiness boolean
                - timeout number
    - wpp
        - apply-groups reference
        - apply-groups-exclude reference
        - portal-group string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - portal string name string
        - system-name string
```


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3.1.1 aaa command descriptions

aaa

Synopsis	Enter the **aaa** context
Context	**configure** aaa
Tree	aaa
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

diameter

Synopsis	Enter the **diameter** context
Context	**configure** aaa diameter
Tree	diameter
Description	Commands in this context configure Diameter Base parameters.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

node [origin-host] *string*

Synopsis	Enter the **node** list instance
Context	**configure** aaa diameter node *string*
Tree	node
Max. Instances	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**origin-host**] *string*

Synopsis	Origin-Host AVP
Context	**configure** aaa diameter node *string*
Tree	node
String Length	1 to 80

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Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

connection

Synopsis	Enter the **connection** context
Context	**configure** aaa diameter node *string* connection
Tree	connection
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** aaa diameter node *string* connection ipv4
Tree	ipv4
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-connections *boolean*

Synopsis	Listen on local address for incoming peer connections
Context	**configure** aaa diameter node *string* connection ipv4 allow-connections *boolean*
Tree	allow-connections
Description	When configured to **true**, this command is used in multi-chassis redundancy where the local Diameter node accepts connection from the inter-chassis peer. The peer requesting the connection must have the same Diameter name as the local peer and its source address must match the IP address of the locally configured destination peer. The IPv4 address on which the node listens for incoming connection is the configured source address of the local peer. This source IPv4 address can reference any local interface, including loopbacks. When configured to **false**, incoming requests for connections are refused.
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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local-address *string*

Synopsis	IPv4 source address for the TCP peer connection
Context	**configure** aaa diameter node *string* connection ipv4 local-address *string*
Tree	local-address
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** aaa diameter node *string* connection ipv6
Tree	ipv6
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-connections *boolean*

Synopsis	Listen on local address for incoming peer connections
Context	**configure** aaa diameter node *string* connection ipv6 allow-connections *boolean*
Tree	allow-connections
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-address *string*

Synopsis	IPv6 source address for the TCP peer connection
Context	**configure** aaa diameter node *string* connection ipv6 local-address *string*
Tree	local-address
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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timer *number*

Synopsis	Wait time before attempting reconnection to peer
Context	**configure** aaa diameter node *string* connection timer *number*
Tree	timer
Description	This command configures the time the system waits before attempting to reconnect to a peer after the connection is lost.
Range	1 to 1000
Units	seconds
Default	30
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** aaa diameter node *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

origin-realm *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Origin-realm name
Context	**configure** aaa diameter node *string* origin-realm *string*
Tree	origin-realm
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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peer index *number*

Synopsis	Enter the **peer** list instance
Context	**configure** aaa diameter node *string* peer index *number*
Tree	peer
Max. Instances	5
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

index *number*

Synopsis	Index of a peer within the node
Context	**configure** aaa diameter node *string* peer index *number*
Tree	peer
Range	1 to 5
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Diameter peer address
Context	**configure** aaa diameter node *string* peer index *number* address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	address
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the Diameter peer
Context	**configure** aaa diameter node *string* peer index *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable

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Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

connection-timer *number*

Synopsis	Wait time before attempting reconnection to peer
Context	**configure** aaa diameter node *string* peer index *number* connection-timer *number*
Tree	connection-timer
Range	1 to 1000
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-peer *boolean*

Synopsis	Use the peer as default route for realm-based routing
Context	**configure** aaa diameter node *string* peer index *number* default-peer *boolean*
Tree	default-peer
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destination-host *string*

WARNING:
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Synopsis	Destination-Host AVP string for Diameter messages
Context	**configure** aaa diameter node *string* peer index *number* destination-host *string*
Tree	destination-host
String Length	1 to 80
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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preference *number*

Synopsis	Diameter routing preference for a peer
Context	**configure** aaa diameter node *string* peer index *number* preference *number*
Tree	preference
Range	1 to 100
Default	50
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

route index *number*

Synopsis	Enter the **route** list instance
Context	**configure** aaa diameter node *string* peer index *number* route index *number*
Tree	route
Max. Instances	15
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

index *number*

Synopsis	Static Diameter route ID
Context	**configure** aaa diameter node *string* peer index *number* route index *number*
Tree	route
Description	This command configures the ID of the static route used to reach remote realms that are not directly connected to the origin realm. The route can also be used to override the route preference (peer preference) of the directly-connected realms.
Range	1 to 15
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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application *keyword*

WARNING:
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Synopsis	Diameter application to which the route applies
Context	**configure** aaa diameter node *string* peer index *number* route index *number* application *keyword*
Tree	application
Description	This command specifies the Diameter application in the destination realm reachable via the static route.
Options	nasreq, gy, gx
Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference *number*

Synopsis	Static route preference; lower value is preferred
Context	**configure** aaa diameter node *string* peer index *number* route index *number* preference *number*
Tree	preference
Description	This command configures the preference of the static route. The preference is compared with the preference values of all other static and dynamic routes. The dynamic route is a realm route learned directly from the peer via the Capabilities Exchange process during the peer negotiation phase. The preference value of the dynamic route is configured directly under the peer configuration. A lower preference value is preferred for route selection.
Range	1 to 100
Default	50
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

realm *string*

WARNING:
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Synopsis	Destination realm reachable via the static route
Context	**configure** aaa diameter node *string* peer index *number* route index *number* realm *string*
Tree	realm
String Length	1 to 80
Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

watchdog-timer *number*

Synopsis	Time between consecutive watchdog messages
Context	**configure** aaa diameter node *string* peer index *number* watchdog-timer *number*
Tree	watchdog-timer
Range	1 to 1000
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy for received or sent Diameter messages
Context	**configure** aaa diameter node *string* python-policy *reference*
Tree	python-policy
Reference	**configure** python python-policy *string*
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Router in which this node connects to its peers
Context	**configure** aaa diameter node *string* router-instance *string*
Tree	router-instance
Default	Base
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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radius

Synopsis	Enter the **radius** context
Context	**configure** aaa radius
Tree	radius
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-on-off-group [name] *string*

Synopsis	Enter the **acct-on-off-group** list instance
Context	**configure** aaa radius acct-on-off-group *string*
Tree	acct-on-off-group
Max. Instances	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Group name for accounting on/off
Context	**configure** aaa radius acct-on-off-group *string*
Tree	acct-on-off-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** aaa radius acct-on-off-group *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

coa-port *number*

Synopsis	RADIUS listening port for CoA and Disconnect messages
Context	**configure** aaa radius coa-port *number*
Tree	coa-port
Range	1647 | 1700 | 1812 | 3799
Default	3799
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

isa-policy [name] *string*

Synopsis	Enter the **isa-policy** list instance
Context	**configure** aaa radius isa-policy *string*
Tree	isa-policy
Max. Instances	8
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	ISA RADIUS policy name referenced by a NAT application
Context	**configure** aaa radius isa-policy *string*
Tree	isa-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting

Synopsis	Enter the **accounting** context

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Context	**configure** aaa radius isa-policy *string* accounting
Tree	accounting
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

include-attributes

Synopsis	Enter the **include-attributes** context
Context	**configure** aaa radius isa-policy *string* accounting include-attributes
Tree	include-attributes
Description	Commands in this context specify the attributes to include in the RADIUS accounting messages.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

acct-delay-time *boolean*

Synopsis	Include the accounting delay time attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes acct-delay-time *boolean*
Tree	acct-delay-time
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

acct-triggered-reason *boolean*

Synopsis	Include the accounting triggered reason attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes acct-triggered-reason *boolean*
Tree	acct-triggered-reason
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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called-station-id *boolean*

Synopsis	Include the Called-Station-Id attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes called-station-id *boolean*
Tree	called-station-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

calling-station-id *boolean*

Synopsis	Include the Calling-Station-Id attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes calling-station-id *boolean*
Tree	calling-station-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

circuit-id *boolean*

Synopsis	Include the Agent-Circuit-Id attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes circuit-id *boolean*
Tree	circuit-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

class *boolean*

Synopsis	Include the Class attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes class *boolean*
Tree	class
Default	false
Introduced	16.0.R4

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

credit-control-quota *boolean*

Synopsis	Add unconsumed volume quota to Credit-Control-Quota
Context	**configure** aaa radius isa-policy *string* accounting include-attributes credit-control-quota *boolean*
Tree	credit-control-quota
Default	false
Introduced	21.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp-options *boolean*

Synopsis	Include the Alc-ToServer-Dhcp-Options attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes dhcp-options *boolean*
Tree	dhcp-options
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp-vendor-class-id *boolean*

Synopsis	Include the Alc-Dhcp-Vendor-Class-Id attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes dhcp-vendor-class-id *boolean*
Tree	dhcp-vendor-class-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

frame-counters *boolean*

Synopsis	Include Acct-Input-Packets and Acct-Output-Packets
Context	**configure** aaa radius isa-policy *string* accounting include-attributes frame-counters *boolean*

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Tree	frame-counters
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

framed-ip-address *boolean*

Synopsis	Include the Framed-IP-Address attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes framed-ip-address *boolean*
Tree	framed-ip-address
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

framed-ip-netmask *boolean*

Synopsis	Include the Framed-IP-Netmask attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes framed-ip-netmask *boolean*
Tree	framed-ip-netmask
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

framed-ipv6-prefix *boolean*

Synopsis	Include the Framed-IPv6-Prefix attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes framed-ipv6-prefix *boolean*
Tree	framed-ipv6-prefix
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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hardware-timestamp *boolean*

Synopsis	Include the Event-Timestamp attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes hardware-timestamp *boolean*
Tree	hardware-timestamp
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *boolean*

Synopsis	Include the Alc-Ipv6-Address attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes ipv6-address *boolean*
Tree	ipv6-address
Description	When configured to **true**, the IA_NA address of the UE is included in the accounting message if an active IA_NA lease exists. When configured to **false**, the address is not included.
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-address *boolean*

Synopsis	Include the Alc-Client-Hardware-Addr attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes mac-address *boolean*
Tree	mac-address
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

millisecond-event-timestamp *boolean*

Synopsis	Include the Alc-Millisecond-Event-Timestamp attribute

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Context	**configure** aaa radius isa-policy *string* accounting include-attributes millisecond-event-timestamp *boolean*
Tree	millisecond-event-timestamp
Description	When configured to **true**, the router includes the Alc-Millisecond-Event-Timestamp attribute in the accounting message. This attribute includes the time the accounting event was logged in milliseconds since Jan 1, 1970 00:00:00 UTC. When configured to **false**, the router does not include this attribute.
Default	false
Introduced	20.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-session-id *boolean*

Synopsis	Include the Acct-Multi-Session-Id attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes multi-session-id *boolean*
Tree	multi-session-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-identifier *boolean*

Synopsis	Include the NAS-Identifier attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes nas-identifier *boolean*
Tree	nas-identifier
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-ip-address *boolean*

Synopsis	Include the NAS-IP-Address attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes nas-ip-address *boolean*
Tree	nas-ip-address

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Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-ipv6-address *boolean*

Synopsis	Include the NAS-IPv6-Address attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes nas-ipv6-address *boolean*
Tree	nas-ipv6-address
Description	When configured to **true**, the router includes the NAS-IPv6-Address attribute in RADIUS accounting messages using the address specified in the **configure aaa radius isa-policy nas-ip-address-origin** command. The NAS-IPv6-Address attribute is included in both IPv4 and IPv6 RADIUS connections. When configured to **false**, the router does not include the NAS-IPv6-Address attribute in RADIUS accounting messages.
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-port *boolean*

Synopsis	Include the NAS-Port attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes nas-port *boolean*
Tree	nas-port
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-port-id *boolean*

Synopsis	Include the NAS-Port-Id attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes nas-port-id *boolean*
Tree	nas-port-id
Default	false
Introduced	16.0.R4

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-port-type *boolean*

Synopsis	Include the NAS-Port-Type attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes nas-port-type *boolean*
Tree	nas-port-type
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-inside-service-id *boolean*

Synopsis	Include NAT inside service ID in Alc-Serv-Id attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes nat-inside-service-id *boolean*
Tree	nat-inside-service-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-outside-ip-address *boolean*

Synopsis	Include the Alc-Nat-Outside-Ip-Addr attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes nat-outside-ip-address *boolean*
Tree	nat-outside-ip-address
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-outside-service-id *boolean*

Synopsis	Include NAT outside service ID in Alc-Serv-Id attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes nat-outside-service-id *boolean*

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Tree	nat-outside-service-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-port-range-block *boolean*

Synopsis	Include the Alc-Nat-Port-Range attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes nat-port-range-block *boolean*
Tree	nat-port-range-block
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-subscriber-string *boolean*

Synopsis	Include the Alc-Subsc-ID-Str attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes nat-subscriber-string *boolean*
Tree	nat-subscriber-string
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

octet-counters *boolean*

Synopsis	Include Acct-Input-Octets and Acct-Output-Octets
Context	**configure** aaa radius isa-policy *string* accounting include-attributes octet-counters *boolean*
Tree	octet-counters
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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proxied-subscriber-data *boolean*

Synopsis	Include subscriber data as RADIUS attributes
Context	**configure** aaa radius isa-policy *string* accounting include-attributes proxied-subscriber-data *boolean*
Tree	proxied-subscriber-data
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

release-reason *boolean*

Synopsis	Include reason in the Acct-Terminate-Cause attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes release-reason *boolean*
Tree	release-reason
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-id *boolean*

Synopsis	Include the Agent-Remote-Id attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes remote-id *boolean*
Tree	remote-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rssi *boolean*

Synopsis	Include the Alc-RSSI attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes rssi *boolean*
Tree	rssi
Default	false
Introduced	16.0.R4

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-time *boolean*

Synopsis	Include the Acct-Session-Time attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes session-time *boolean*
Tree	session-time
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-id *boolean*

Synopsis	Include the Alc-Subsc-ID-Str attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes subscriber-id *boolean*
Tree	subscriber-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

toserver-dhcp6-options *boolean*

Synopsis	Include the Alc-ToServer-Dhcp6-Options attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes toserver-dhcp6-options *boolean*
Tree	toserver-dhcp6-options
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ue-creation-type *boolean*

Synopsis	Include the Alc-Wlan-Ue-Creation-Type attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes ue-creation-type *boolean*

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Tree	ue-creation-type
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

user-name *boolean*

Synopsis	Include the User-Name attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes user-name *boolean*
Tree	user-name
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-ssid-vlan *boolean*

Synopsis	Include per-SSID VLAN in Alc-Wlan-SSID-VLAN attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes wlan-ssid-vlan *boolean*
Tree	wlan-ssid-vlan
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect-tunnel-home-address *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Home-Ipv6 attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes xconnect-tunnel-home-address *boolean*
Tree	xconnect-tunnel-home-address
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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xconnect-tunnel-local-ipv6-address *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Local-Ipv6 attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes xconnect-tunnel-local-ipv6-address *boolean*
Tree	xconnect-tunnel-local-ipv6-address
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect-tunnel-remote-ipv6-address *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Remote-Ipv6 attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes xconnect-tunnel-remote-ipv6-address *boolean*
Tree	xconnect-tunnel-remote-ipv6-address
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect-tunnel-service *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Service attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes xconnect-tunnel-service *boolean*
Tree	xconnect-tunnel-service
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect-tunnel-type *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Type attribute
Context	**configure** aaa radius isa-policy *string* accounting include-attributes xconnect-tunnel-type *boolean*
Tree	xconnect-tunnel-type
Default	false

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Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-periodic-update

Synopsis	Enter the **nat-periodic-update** context
Context	**configure** aaa radius isa-policy *string* accounting nat-periodic-update
Tree	nat-periodic-update
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Interval for periodic RADIUS Interim-Update messages
Context	**configure** aaa radius isa-policy *string* accounting nat-periodic-update interval *number*
Tree	interval
Range	1 to 72
Units	hours
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-limit *(number | keyword)*

Synopsis	Rate limit for periodic RADIUS Interim-Update messages
Context	**configure** aaa radius isa-policy *string* accounting nat-periodic-update rate-limit *(number | keyword)*
Tree	rate-limit
Range	1 to 100000
Units	packets per second
Options	unlimited
Default	unlimited
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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update-triggers

Synopsis	Enter the **update-triggers** context
Context	**configure** aaa radius isa-policy *string* accounting update-triggers
Tree	update-triggers
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

address-state *boolean*

Synopsis	Send an Interim-Update when address allocated or freed
Context	**configure** aaa radius isa-policy *string* accounting update-triggers address-state *boolean*
Tree	address-state
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

soft-quota-exhausted *boolean*

Synopsis	Send interim update when soft volume quota is reached
Context	**configure** aaa radius isa-policy *string* accounting update-triggers soft-quota-exhausted *boolean*
Tree	soft-quota-exhausted
Default	false
Introduced	21.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication

Synopsis	Enter the **authentication** context
Context	**configure** aaa radius isa-policy *string* authentication
Tree	authentication
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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include-attributes

Synopsis	Enter the **include-attributes** context
Context	**configure** aaa radius isa-policy *string* authentication include-attributes
Tree	include-attributes
Description	Commands in this context specify the attributes to include in the RADIUS authentication messages.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

called-station-id *boolean*

Synopsis	Include the Called-Station-Id attribute
Context	**configure** aaa radius isa-policy *string* authentication include-attributes called-station-id *boolean*
Tree	called-station-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

calling-station-id *boolean*

Synopsis	Include the Calling-Station-Id attribute
Context	**configure** aaa radius isa-policy *string* authentication include-attributes calling-station-id *boolean*
Tree	calling-station-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

circuit-id *boolean*

Synopsis	Include the Agent-Circuit-Id attribute
Context	**configure** aaa radius isa-policy *string* authentication include-attributes circuit-id *boolean*
Tree	circuit-id
Default	false
Introduced	16.0.R4

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp-vendor-class-id *boolean*

Synopsis	Include the Alc-DHCP-Vendor-Class-Id attribute
Context	**configure** aaa radius isa-policy *string* authentication include-attributes dhcp-vendor-class-id *boolean*
Tree	dhcp-vendor-class-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

framed-ip-address *boolean*

Synopsis	Include the Framed-IP-Address attribute
Context	**configure** aaa radius isa-policy *string* authentication include-attributes framed-ip-address *boolean*
Tree	framed-ip-address
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *boolean*

Synopsis	Include the Alc-IPv6-address attribute
Context	**configure** aaa radius isa-policy *string* authentication include-attributes ipv6-address *boolean*
Tree	ipv6-address
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-address *boolean*

Synopsis	Include the Alc-Client-Hardware-Addr attribute
Context	**configure** aaa radius isa-policy *string* authentication include-attributes mac-address *boolean*

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Tree	mac-address
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-identifier *boolean*

Synopsis	Include the NAS-Identifier attribute
Context	**configure** aaa radius isa-policy *string* authentication include-attributes nas-identifier *boolean*
Tree	nas-identifier
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-ip-address *boolean*

Synopsis	Include the NAS-IP-Address attribute
Context	**configure** aaa radius isa-policy *string* authentication include-attributes nas-ip-address *boolean*
Tree	nas-ip-address
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-ipv6-address *boolean*

Synopsis	Include the NAS-IPv6-Address attribute
Context	**configure** aaa radius isa-policy *string* authentication include-attributes nas-ipv6-address *boolean*
Tree	nas-ipv6-address
Description	When configured to **true**, the router includes the NAS-IPv6-Address attribute in RADIUS authentication messages using the address specified in the **configure aaa radius isa-policy nas-ip-address-origin** command. The NAS-IPv6-Address attribute is included in both IPv4 and IPv6 RADIUS connections. When configured to **false**, the router does not include the NAS-IPv6-Address attribute in RADIUS authentication messages.

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Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-port *boolean*

Synopsis	Include the NAS-Port attribute
Context	**configure** aaa radius isa-policy *string* authentication include-attributes nas-port *boolean*
Tree	nas-port
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-port-id *boolean*

Synopsis	Include the NAS-Port-Id attribute
Context	**configure** aaa radius isa-policy *string* authentication include-attributes nas-port-id *boolean*
Tree	nas-port-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-port-type *boolean*

Synopsis	Include the NAS-Port-Type attribute
Context	**configure** aaa radius isa-policy *string* authentication include-attributes nas-port-type *boolean*
Tree	nas-port-type
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-id *boolean*

Synopsis	Include the Agent-Remote-Id attribute

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Context	**configure** aaa radius isa-policy *string* authentication include-attributes remote-id *boolean*
Tree	remote-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

toserver-dhcp-options *boolean*

Synopsis	Include the Alc-ToServer-Dhcp-Options attribute
Context	**configure** aaa radius isa-policy *string* authentication include-attributes toserver-dhcp-options *boolean*
Tree	toserver-dhcp-options
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

toserver-dhcp6-options *boolean*

Synopsis	Include the Alc-ToServer-Dhcp6-Options attribute
Context	**configure** aaa radius isa-policy *string* authentication include-attributes toserver-dhcp6-options *boolean*
Tree	toserver-dhcp6-options
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-ssid-vlan *boolean*

Synopsis	Include per-SSID VLAN in Alc-Wlan-SSID-VLAN attribute
Context	**configure** aaa radius isa-policy *string* authentication include-attributes wlan-ssid-vlan *boolean*
Tree	wlan-ssid-vlan
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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xconnect-tunnel-home-address *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Home-Ipv6 attribute
Context	**configure** aaa radius isa-policy *string* authentication include-attributes xconnect-tunnel-home-address *boolean*
Tree	xconnect-tunnel-home-address
Default	false
Introduced	16.0.R5
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** aaa radius isa-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-ip-address-origin *keyword*

Synopsis	NAS-IP-Address attribute
Context	**configure** aaa radius isa-policy *string* nas-ip-address-origin *keyword*
Tree	nas-ip-address-origin
Options	system-ip, isa-ip
Default	system-ip
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	Password used in the RADIUS access requests
Context	**configure** aaa radius isa-policy *string* password *string*
Tree	password
String Length	1 to 42

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Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy used for modifying RADIUS messages
Context	**configure** aaa radius isa-policy *string* python-policy *reference*
Tree	python-policy
Reference	**configure** python python-policy *string*
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

servers

Synopsis	Enter the **servers** context
Context	**configure** aaa radius isa-policy *string* servers
Tree	servers
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

access-algorithm *keyword*

Synopsis	Algorithm that accesses the RADIUS servers
Context	**configure** aaa radius isa-policy *string* servers access-algorithm *keyword*
Tree	access-algorithm
Options	direct, round-robin, hash-based, direct-priority
Default	direct
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** aaa radius isa-policy *string* servers ipv6
Tree	ipv6

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Description	Commands in this context configure how to communicate with IPv6 RADIUS servers.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtu *number*

Synopsis	MTU used to fragment outgoing IPv6 RADIUS packets
Context	**configure** aaa radius isa-policy *string* servers ipv6 mtu *number*
Tree	mtu
Range	1280 to 9000
Default	9000
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source-prefix *string*

Synopsis	Prefix containing individual source addresses per ISA
Context	**configure** aaa radius isa-policy *string* servers ipv6 source-prefix *string*
Tree	source-prefix
Description	This command configures an IPv6 prefix containing individual /128 addresses. These addresses are used as the source address for connections to IPv6 RADIUS servers. The prefix must be large enough to accommodate all BB-ISAs or ESA VMs in the system.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Routing instance
Context	**configure** aaa radius isa-policy *string* servers router-instance *string*
Tree	router-instance
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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server [index] *number*

Synopsis	Enter the **server** list instance
Context	**configure** aaa radius isa-policy *string* servers server *number*
Tree	server
Max. Instances	10
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**index**] *number*

Synopsis	RADIUS server ID
Context	**configure** aaa radius isa-policy *string* servers server *number*
Tree	server
Range	1 to 10
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the ISA RADIUS server
Context	**configure** aaa radius isa-policy *string* servers server *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address of the RADIUS server

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Context	**configure** aaa radius isa-policy *string* servers server *number* ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-address
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

purpose

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **purpose** context
Context	**configure** aaa radius isa-policy *string* servers server *number* purpose
Tree	purpose
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **accounting** context
Context	**configure** aaa radius isa-policy *string* servers server *number* purpose accounting
Tree	accounting
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp-port *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA RADIUS server accounting UDP port

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Context	**configure** aaa radius isa-policy *string* servers server *number* purpose accounting udp-port *number*
Tree	udp-port
Range	1 to 65535
Default	1813
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **authentication** context
Context	**configure** aaa radius isa-policy *string* servers server *number* purpose authentication
Tree	authentication
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp-port *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA RADIUS server authentication UDP port
Context	**configure** aaa radius isa-policy *string* servers server *number* purpose authentication udp-port *number*
Tree	udp-port
Range	1 to 65535
Default	1812
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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coa

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **coa** context
Context	**configure** aaa radius isa-policy *string* servers server *number* purpose coa
Tree	coa
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp-port *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA RADIUS server change of authorization UDP port
Context	**configure** aaa radius isa-policy *string* servers server *number* purpose coa udp-port *number*
Tree	udp-port
Range	1 to 65535
Default	3799
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

secret *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Secret key to access the RADIUS server
Context	**configure** aaa radius isa-policy *string* servers server *number* secret *string*
Tree	secret
String Length	1 to 115
Introduced	16.0.R4

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source-address-range *string*

Synopsis	Starting IP address of the IP address range
Context	**configure** aaa radius isa-policy *string* servers source-address-range *string*
Tree	source-address-range
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Timeout for a response from the RADIUS server
Context	**configure** aaa radius isa-policy *string* servers timeout *number*
Tree	timeout
Range	1 to 90
Units	seconds
Default	5
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

total-tries *number*

Synopsis	Maximum number of tries toward the same RADIUS server
Context	**configure** aaa radius isa-policy *string* servers total-tries *number*
Tree	total-tries
Range	1 to 10
Default	3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

user-name

Synopsis	Enter the **user-name** context
Context	**configure** aaa radius isa-policy *string* user-name

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Tree	user-name
Description	Commands in this context define the format of the username field in the UE authentication request sent to the RADIUS server. For authentication of IPv6 triggers (ICMPv6, DHCPv6, IPv6 data-trigger) the username format will always fall back to MAC only.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

format *keyword*

Synopsis	Username format in RADIUS message
Context	**configure** aaa radius isa-policy *string* user-name format *keyword*
Tree	format
Options	mac, mac-ip, dhcp-vendor, circuit-id
Default	mac
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-format *keyword*

Synopsis	MAC address format when contacting RADIUS server
Context	**configure** aaa radius isa-policy *string* user-name mac-format *keyword*
Tree	mac-format
Options	alu, ieee
Default	alu
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2tp-accounting-policy [name] *string*

Synopsis	Enter the **l2tp-accounting-policy** list instance
Context	**configure** aaa radius l2tp-accounting-policy *string*
Tree	l2tp-accounting-policy
Max. Instances	32
Introduced	16.0.R4

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	L2TP RADIUS accounting policy name
Context	**configure** aaa radius l2tp-accounting-policy *string*
Tree	l2tp-accounting-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-type

Synopsis	Enter the **accounting-type** context
Context	**configure** aaa radius l2tp-accounting-policy *string* accounting-type
Tree	accounting-type
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session *boolean*

Synopsis	Enable per-session accounting
Context	**configure** aaa radius l2tp-accounting-policy *string* accounting-type session *boolean*
Tree	session
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tunnel *boolean*

Synopsis	Enable per-tunnel accounting
Context	**configure** aaa radius l2tp-accounting-policy *string* accounting-type tunnel *boolean*
Tree	tunnel
Default	true

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Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-tunnel-connection-fmt *string*

Synopsis	Accounting tunnel connection ASCII specification
Context	**configure** aaa radius l2tp-accounting-policy *string* acct-tunnel-connection-fmt *string*
Tree	acct-tunnel-connection-fmt
String Length	1 to 253
Default	%n
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** aaa radius l2tp-accounting-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

include-radius-attribute

Synopsis	Enter the **include-radius-attribute** context
Context	**configure** aaa radius l2tp-accounting-policy *string* include-radius-attribute
Tree	include-radius-attribute
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

calling-station-id *boolean*

Synopsis	Include the Calling-Station-Id attribute
Context	**configure** aaa radius l2tp-accounting-policy *string* include-radius-attribute calling-station-id *boolean*
Tree	calling-station-id

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Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-identifier *boolean*

Synopsis	Include the NAS-Identifier attribute
Context	**configure** aaa radius l2tp-accounting-policy *string* include-radius-attribute nas-identifier *boolean*
Tree	nas-identifier
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port

Synopsis	Enable the **nas-port** context
Context	**configure** aaa radius l2tp-accounting-policy *string* include-radius-attribute nas-port
Tree	nas-port
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bit-spec *string*

Synopsis	RADIUS NAS-Port attribute
Context	**configure** aaa radius l2tp-accounting-policy *string* include-radius-attribute nas-port bit-spec *string*
Tree	bit-spec
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port-id

Synopsis	Enable the **nas-port-id** context

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Context	**configure** aaa radius l2tp-accounting-policy *string* include-radius-attribute nas-port-id
Tree	nas-port-id
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-string *string*

Synopsis	Prefix string added to RADIUS NAS-Port attribute
Context	**configure** aaa radius l2tp-accounting-policy *string* include-radius-attribute nas-port-id prefix-string *string*
Tree	prefix-string
String Length	1 to 8
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suffix *keyword*

Synopsis	NAS-Port-Id suffix type
Context	**configure** aaa radius l2tp-accounting-policy *string* include-radius-attribute nas-port-id suffix *keyword*
Tree	suffix
Options	circuit-id, remote-id
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port-type

Synopsis	Enable the **nas-port-type** context
Context	**configure** aaa radius l2tp-accounting-policy *string* include-radius-attribute nas-port-type
Tree	nas-port-type
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *(keyword | number)*

Synopsis	Value for RADIUS NAS-Port-Type attribute

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Context	**configure** aaa radius l2tp-accounting-policy *string* include-radius-attribute nas-port-type type *(keyword | number)*
Tree	type
Range	0 to 255
Options	rfc-aligned
Default	rfc-aligned
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-server-policy *reference*

Synopsis	RADIUS server policy referenced
Context	**configure** aaa radius l2tp-accounting-policy *string* radius-server-policy *reference*
Tree	radius-server-policy
Reference	**configure** aaa radius server-policy *string*
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

route-downloader [name] *string*

Synopsis	Enter the **route-downloader** list instance
Context	**configure** aaa radius route-downloader *string*
Tree	route-downloader
Max. Instances	1
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	RADIUS route downloader name
Context	**configure** aaa radius route-downloader *string*
Tree	route-downloader
String Length	1 to 32
Notes	This element is part of a list key.

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Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of this route downloader
Context	**configure** aaa radius route-downloader *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

base-user-name *string*

Synopsis	Prefix of the username used as access requests
Context	**configure** aaa radius route-downloader *string* base-user-name *string*
Tree	base-user-name
Description	This command sets the prefix for the username that is used for access requests. The actual name used is a concatenation of this string, the “-” (dash) character and a monotonically increasing integer.
String Length	1 to 32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-metric *number*

Synopsis	Default metric that RTM imported routes acquire
Context	**configure** aaa radius route-downloader *string* default-metric *number*
Tree	default-metric
Range	0 to 254
Default	2
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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default-tag *number*

Synopsis	Default tag of this route downloader
Context	**configure** aaa radius route-downloader *string* default-tag *number*
Tree	default-tag
Range	0 to 4294967295
Default	0
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** aaa radius route-downloader *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

download-interval *number*

Synopsis	Wait time between consecutive runs of the process
Context	**configure** aaa radius route-downloader *string* download-interval *number*
Tree	download-interval
Range	1 to 1440
Units	minutes
Default	720
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-routes *number*

Synopsis	Maximum routes imported by this route downloader
Context	**configure** aaa radius route-downloader *string* max-routes *number*
Tree	max-routes
Range	1 to 200000

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Default	200000
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	Route downloader password for RADIUS access requests
Context	**configure** aaa radius route-downloader *string* password *string*
Tree	password
String Length	1 to 71
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-server-policy *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	RADIUS server policy referenced
Context	**configure** aaa radius route-downloader *string* radius-server-policy *reference*
Tree	radius-server-policy
Reference	**configure** aaa radius server-policy *string*
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retry-interval

Synopsis	Enter the **retry-interval** context
Context	**configure** aaa radius route-downloader *string* retry-interval
Tree	retry-interval
Description	Commands in this context configure parameters of the retry interval timer, which is an exponential backoff timer. The system retries sending an Access Request message after the previous message was unanswered (for example, a RADIUS failure or ICMP port unreachable error).
Introduced	16.0.R4

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max *number*

Synopsis	Maximum duration of the retry interval
Context	**configure** aaa radius route-downloader *string* retry-interval max *number*
Tree	max
Range	1 to 1440
Units	minutes
Default	20
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min *number*

Synopsis	Minimum duration of the retry interval
Context	**configure** aaa radius route-downloader *string* retry-interval min *number*
Tree	min
Description	This command specifies the minimum duration of the retry interval. This duration grows exponentially after each sequential failure.
Range	1 to 1440
Units	minutes
Default	10
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server-policy [name] *string*

Synopsis	Enter the **server-policy** list instance
Context	**configure** aaa radius server-policy *string*
Tree	server-policy
Max. Instances	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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[**name**] *string*

Synopsis	RADIUS server policy name
Context	**configure** aaa radius server-policy *string*
Tree	server-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-on-off

Synopsis	Enable the **acct-on-off** context
Context	**configure** aaa radius server-policy *string* acct-on-off
Tree	acct-on-off
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

monitor *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Accounting on/off group name
Context	**configure** aaa radius server-policy *string* acct-on-off monitor *reference*
Tree	monitor
Reference	**configure** aaa radius acct-on-off-group *string*
Notes	The following elements are part of a choice: **monitor** or **oper-state-change**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

oper-state-change

Synopsis	Enable the **oper-state-change** context
Context	**configure** aaa radius server-policy *string* acct-on-off oper-state-change

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Tree	oper-state-change
Notes	The following elements are part of a choice: **monitor** or **oper-state-change**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Operational state for a group
Context	**configure** aaa radius server-policy *string* acct-on-off oper-state-change group *reference*
Tree	group
Reference	**configure** aaa radius acct-on-off-group *string*
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** aaa radius server-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy for RADIUS packets to/from RADIUS servers
Context	**configure** aaa radius server-policy *string* python-policy *reference*
Tree	python-policy
Reference	**configure** python python-policy *string*
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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servers

Synopsis	Enter the **servers** context
Context	**configure** aaa radius server-policy *string* servers
Tree	servers
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

access-algorithm *keyword*

Synopsis	Algorithm to select a RADIUS server from the pool
Context	**configure** aaa radius server-policy *string* servers access-algorithm *keyword*
Tree	access-algorithm
Options	direct, round-robin, hash-based
Default	direct
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

buffering

Synopsis	Enter the **buffering** context
Context	**configure** aaa radius server-policy *string* servers buffering
Tree	buffering
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-interim

Synopsis	Enable the **acct-interim** context
Context	**configure** aaa radius server-policy *string* servers buffering acct-interim
Tree	acct-interim
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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lifetime *number*

Synopsis	Time accounting message can be in retransmission buffer
Context	**configure** aaa radius server-policy *string* servers buffering acct-interim lifetime *number*
Tree	lifetime
Range	1 to 25
Units	hours
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max *number*

Synopsis	Maximum time between accounting message resend attempts
Context	**configure** aaa radius server-policy *string* servers buffering acct-interim max *number*
Tree	max
Range	1 to 3600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min *number*

Synopsis	Minimum time between accounting message resend attempts
Context	**configure** aaa radius server-policy *string* servers buffering acct-interim min *number*
Tree	min
Range	1 to 3600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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acct-start

Synopsis	Enable the **acct-start** context
Context	**configure** aaa radius server-policy *string* servers buffering acct-start
Tree	acct-start
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lifetime *number*

Synopsis	Time accounting message can be in retransmission buffer
Context	**configure** aaa radius server-policy *string* servers buffering acct-start lifetime *number*
Tree	lifetime
Range	1 to 25
Units	hours
Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max *number*

Synopsis	Maximum time between accounting message resend attempts
Context	**configure** aaa radius server-policy *string* servers buffering acct-start max *number*
Tree	max
Range	1 to 3600
Units	seconds
Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min *number*

Synopsis	Minimum time between accounting message resend attempts
Context	**configure** aaa radius server-policy *string* servers buffering acct-start min *number*
Tree	min
Range	1 to 3600

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Units	seconds
Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-stop

Synopsis	Enable the **acct-stop** context
Context	**configure** aaa radius server-policy *string* servers buffering acct-stop
Tree	acct-stop
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lifetime *number*

Synopsis	Time accounting message can be in retransmission buffer
Context	**configure** aaa radius server-policy *string* servers buffering acct-stop lifetime *number*
Tree	lifetime
Range	1 to 25
Units	hours
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max *number*

Synopsis	Maximum time between accounting message resend attempts
Context	**configure** aaa radius server-policy *string* servers buffering acct-stop max *number*
Tree	max
Range	1 to 3600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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min *number*

Synopsis	Minimum time between accounting message resend attempts
Context	**configure** aaa radius server-policy *string* servers buffering acct-stop min *number*
Tree	min
Range	1 to 3600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

health-check

Synopsis	Enter the **health-check** context
Context	**configure** aaa radius server-policy *string* servers health-check
Tree	health-check
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

down-timeout *number*

Synopsis	Wait time before declaring RADIUS server out-of-service
Context	**configure** aaa radius server-policy *string* servers health-check down-timeout *number*
Tree	down-timeout
Range	1 to 340
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

test-account

Synopsis	Enter the **test-account** context
Context	**configure** aaa radius server-policy *string* servers health-check test-account
Tree	test-account
Introduced	16.0.R4

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the health check
Context	**configure** aaa radius server-policy *string* servers health-check test-account admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Time for test account to check health of RADIUS servers
Context	**configure** aaa radius server-policy *string* servers health-check test-account interval *number*
Tree	interval
Range	1 to 60
Units	seconds
Default	3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	Test account password for RADIUS server health check
Context	**configure** aaa radius server-policy *string* servers health-check test-account password *string*
Tree	password
String Length	1 to 115
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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user-name *string*

Synopsis	Username to send access requests to probe RADIUS server
Context	**configure** aaa radius server-policy *string* servers health-check test-account user-name *string*
Tree	user-name
String Length	1 to 64
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-down-time *number*

Synopsis	Hold time before reusing a RADIUS server that was down
Context	**configure** aaa radius server-policy *string* servers hold-down-time *number*
Tree	hold-down-time
Range	30 to 86400
Units	seconds
Default	30
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-source-address *string*

Synopsis	Source address for IPv6 RADIUS datagrams
Context	**configure** aaa radius server-policy *string* servers ipv6-source-address *string*
Tree	ipv6-source-address
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retry-count *number*

Synopsis	Number of retries for contacting the RADIUS server
Context	**configure** aaa radius server-policy *string* servers retry-count *number*
Tree	retry-count
Range	1 to 256
Default	3

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Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	RADIUS routing instance
Context	**configure** aaa radius server-policy *string* servers router-instance *string*
Tree	router-instance
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server [server-index] *number*

Synopsis	Enter the **server** list instance
Context	**configure** aaa radius server-policy *string* servers server *number*
Tree	server
Max. Instances	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**server-index**] *number*

Synopsis	RADIUS server index
Context	**configure** aaa radius server-policy *string* servers server *number*
Tree	server
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server-name *string*

Synopsis	RADIUS server name
Context	**configure** aaa radius server-policy *string* servers server *number* server-name *string*

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Tree	server-name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-address *string*

Synopsis	Source address of RADIUS messages
Context	**configure** aaa radius server-policy *string* servers source-address *string*
Tree	source-address
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stickiness *boolean*

Synopsis	Allow stickiness in a multi-server application
Context	**configure** aaa radius server-policy *string* servers stickiness *boolean*
Tree	stickiness
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Time until the next retry to the RADIUS server
Context	**configure** aaa radius server-policy *string* servers timeout *number*
Tree	timeout
Range	1 to 340
Units	seconds
Default	5
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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wpp

Synopsis	Enter the **wpp** context
Context	**configure** aaa wpp
Tree	wpp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

portal-group [group-name] *string*

Synopsis	Enter the **portal-group** list instance
Context	**configure** aaa wpp portal-group *string*
Tree	portal-group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**group-name**] *string*

Synopsis	Portal group name
Context	**configure** aaa wpp portal-group *string*
Tree	portal-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the portal group
Context	**configure** aaa wpp portal-group *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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description *string*

Synopsis	Text description
Context	**configure** aaa wpp portal-group *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

portal [router-instance] *string* name *string*

Synopsis	Add a list entry for **portal**
Context	**configure** aaa wpp portal-group *string* portal *string* name *string*
Tree	portal
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**router-instance**] *string*

Synopsis	Router on which the portal is configured
Context	**configure** aaa wpp portal-group *string* portal *string* name *string*
Tree	portal
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	Web portal server name
Context	**configure** aaa wpp portal-group *string* portal *string* name *string*
Tree	portal
String Length	1 to 32
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

system-name *string*

Synopsis	System name used in WPP protocol messages
Context	**configure** aaa wpp system-name *string*
Tree	system-name
String Length	1 to 16
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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3.2 anysec commands

```
configure
   –  anysec
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  mka-over-ip
         –  mka-udp-port number
      –  reserved-label-block reference
      –  tunnel-encryption
         –  encryption-group string
            –  admin-state keyword
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  ca-name reference
            –  encryption-label number
            –  peer (ipv4-address-no-zone | ipv6-address-no-zone)
               –  admin-state keyword
               –  apply-groups reference
               –  apply-groups-exclude reference
               –  encryption-label number
            –  peer-tunnel-attributes
               –  flex-algo-id number
               –  igp-instance-id number
               –  routing-protocol keyword
            –  security-termination-policy reference
         –  security-termination-policy string
            –  admin-state keyword
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  flex-algo-id number
            –  igp-instance-id number
            –  local-address (ipv4-address-no-zone | ipv6-address-no-zone)
            –  routing-protocol keyword
            –  rx-must-be-encrypted boolean
```


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3.2.1 anysec command descriptions

anysec

Synopsis	Enter the **anysec** context
Context	**configure** anysec
Tree	anysec
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

mka-over-ip

Synopsis	Enter the **mka-over-ip** context
Context	**configure** anysec mka-over-ip
Tree	mka-over-ip
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

mka-udp-port *number*

Synopsis	ANYSec MKA UDP port
Context	**configure** anysec mka-over-ip mka-udp-port *number*
Tree	mka-udp-port
Range	1024 to 49151
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

reserved-label-block *reference*

Synopsis	ANYSec reserved label block
Context	**configure** anysec reserved-label-block *reference*
Tree	reserved-label-block
Reference	**configure** router *string* mpls-labels reserved-label-block *string*

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Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

tunnel-encryption

Synopsis	Enter the **tunnel-encryption** context
Context	**configure** anysec tunnel-encryption
Tree	tunnel-encryption
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

encryption-group [group-name] *string*

Synopsis	Enter the **encryption-group** list instance
Context	**configure** anysec tunnel-encryption encryption-group *string*
Tree	encryption-group
Max. Instances	512
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

[**group-name**] *string*

Synopsis	ANYSec encryption group name
Context	**configure** anysec tunnel-encryption encryption-group *string*
Tree	encryption-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

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admin-state *keyword*

Synopsis	Enable or disable encryption group
Context	**configure** anysec tunnel-encryption encryption-group *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	23.3.R2
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

ca-name *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MACSec connectivity association for encryption group
Context	**configure** anysec tunnel-encryption encryption-group *string* ca-name *reference*
Tree	ca-name
Reference	**configure** macsec connectivity-association *string*
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

encryption-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Label identifying packets sent from the node to peers
Context	**configure** anysec tunnel-encryption encryption-group *string* encryption-label *number*
Tree	encryption-label
Range	32 to 1048575
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

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peer [peer-ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **peer** list instance
Context	**configure** anysec tunnel-encryption encryption-group *string* peer *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	peer
Max. Instances	512
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

[**peer-ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Peer IP address
Context	**configure** anysec tunnel-encryption encryption-group *string* peer *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	peer
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

admin-state *keyword*

Synopsis	Administrative state of the encryption group peer
Context	**configure** anysec tunnel-encryption encryption-group *string* peer *(ipv4-address-no-zone | ipv6-address-no-zone)* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

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encryption-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Label identifying packets sent from the peer
Context	**configure** anysec tunnel-encryption encryption-group *string* peer *(ipv4-address-no-zone | ipv6-address-no-zone)* encryption-label *number*
Tree	encryption-label
Range	32 to 1048575
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

peer-tunnel-attributes

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **peer-tunnel-attributes** context
Context	**configure** anysec tunnel-encryption encryption-group *string* peer-tunnel-attributes
Tree	peer-tunnel-attributes
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

flex-algo-id *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Flexible algorithm ID
Context	**configure** anysec tunnel-encryption encryption-group *string* peer-tunnel-attributes flex-algo-id *number*
Tree	flex-algo-id
Range	128 to 255

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Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

igp-instance-id *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IGP instance ID
Context	**configure** anysec tunnel-encryption encryption-group *string* peer-tunnel-attributes igp-instance-id *number*
Tree	igp-instance-id
Range	0 to 31 | 64 to 95
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

routing-protocol *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Routing protocol
Context	**configure** anysec tunnel-encryption encryption-group *string* peer-tunnel-attributes routing-protocol *keyword*
Tree	routing-protocol
Options	sr-ospf, sr-ospf3, sr-isis
Default	sr-isis
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

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security-termination-policy *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Security termination policy used by encryption group
Context	**configure** anysec tunnel-encryption encryption-group *string* security-termination-policy *reference*
Tree	security-termination-policy
Reference	**configure** anysec tunnel-encryption security-termination-policy *string*
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

security-termination-policy [policy-name] *string*

Synopsis	Enter the **security-termination-policy** list instance
Context	**configure** anysec tunnel-encryption security-termination-policy *string*
Tree	security-termination-policy
Max. Instances	512
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

[**policy-name**] *string*

Synopsis	ANYSec security termination policy name
Context	**configure** anysec tunnel-encryption security-termination-policy *string*
Tree	security-termination-policy
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

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admin-state *keyword*

Synopsis	Administrative state of the security termination policy
Context	**configure** anysec tunnel-encryption security-termination-policy *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

flex-algo-id *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Flexible algorithm ID
Context	**configure** anysec tunnel-encryption security-termination-policy *string* flex-algo-id *number*
Tree	flex-algo-id
Range	128 to 255
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

igp-instance-id *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IGP instance ID
Context	**configure** anysec tunnel-encryption security-termination-policy *string* igp-instance-id *number*
Tree	igp-instance-id
Range	0 to 31 | 64 to 95
Introduced	23.3.R1

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Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

local-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local address
Context	**configure** anysec tunnel-encryption security-termination-policy *string* local-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	local-address
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

routing-protocol *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Routing protocol
Context	**configure** anysec tunnel-encryption security-termination-policy *string* routing-protocol *keyword*
Tree	routing-protocol
Options	sr-ospf, sr-ospf3, sr-isis
Default	sr-isis
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

rx-must-be-encrypted *boolean*

Synopsis	Enforce encryption for received packets
Context	**configure** anysec tunnel-encryption security-termination-policy *string* rx-must-be-encrypted *boolean*
Tree	rx-must-be-encrypted

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Default	false
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

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3.3 application-assurance commands

```
configure
   –  application-assurance
      –  aarp number
         –  admin-state keyword
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  description string
         –  master-selection-mode keyword
         –  peer (ipv4-address-no-zone | ipv6-address-no-zone)
         –  peer-endpoint
            –  sap
               –  encap-type keyword
               –  sap-id string
            –  spoke-sdp string
         –  priority number
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  cflowd
         –  field string
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  comment string
      –  flow-attribute
         –  attribute string
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  comment string
      –  group number
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  certificate-profile string
            –  admin-state keyword
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  description string
            –  file string
         –  cflowd
            –  admin-state keyword
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  collector (ipv4-address-no-zone | ipv6-address-no-zone) port number
               –  admin-state keyword
               –  apply-groups reference
               –  apply-groups-exclude reference
               –  description string
            –  comprehensive
               –  apply-groups reference
               –  apply-groups-exclude reference
               –  flow-rate number
               –  flow-rate-2 number
               –  template
                  –  apply-groups reference
                  –  apply-groups-exclude reference
                  –  dynamic-fields
                     –  admin-state keyword
                     –  field string
                  –  field-selection keyword
            –  direct-export
               –  collector number
```


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```
                - address (ipv4-address-no-zone | ipv6-address-no-zone) port number
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                - apply-groups reference
                - apply-groups-exclude reference
                - description string
              - vlan-id number
            - export-override
              - mode keyword
              - prefix string
            - obfuscation
              - aes-128-encryption-key string
              - aes-256-encryption-key string
            - rtp-performance
              - apply-groups reference
              - apply-groups-exclude reference
              - audio-template
                - apply-groups reference
                - apply-groups-exclude reference
                - dynamic-fields
                  - admin-state keyword
                  - field string
                - field-selection keyword
              - flow-rate number
              - flow-rate-2 number
              - video-template
                - apply-groups reference
                - apply-groups-exclude reference
                - dynamic-fields
                  - admin-state keyword
                  - field string
                - field-selection keyword
              - voice-template
                - apply-groups reference
                - apply-groups-exclude reference
                - dynamic-fields
                  - admin-state keyword
                  - field string
                - field-selection keyword
            - tcp-performance
              - apply-groups reference
              - apply-groups-exclude reference
              - flow-rate number
              - flow-rate-2 number
              - template
                - apply-groups reference
                - apply-groups-exclude reference
                - dynamic-fields
                  - admin-state keyword
                  - field string
                - field-selection keyword
            - template-retransmit number
            - volume
              - rate number
              - template
                - apply-groups reference
                - apply-groups-exclude reference
                - dynamic-fields
                  - admin-state keyword
                  - field string
                - field-selection keyword
          - dns-ip-cache string
            - admin-state keyword
```


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```
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - dns-match
               - domain string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - expression string
               - trusted-server-address (ipv4-address-no-zone | ipv6-address-no-zone)
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - server-name string
            - ip-cache
               - high-watermark number
               - low-watermark number
               - size number
               - static-address (ipv4-address-no-zone | ipv6-address-no-zone)
         - http-enrich string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - field string
               - aes-initialization-vector string
               - anti-spoof boolean
               - apply-groups reference
               - apply-groups-exclude reference
               - calling-line-id boolean
               - encode
                  - cert-base64 reference
                  - cert-profile reference
                  - key
                     - type keyword
                     - value string
               - md5-salt string
               - name string
               - static-string string
            - rat-type-enrichment
               - rat-type keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - rat-string string
         - http-error-redirect string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - error-code number
               - apply-groups reference
               - apply-groups-exclude reference
               - custom-message-size number
            - http-host string
            - participant-id string
            - template number
         - http-notification string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - interval (number | keyword)
            - script-url string
            - template number
         - http-redirect string
            - admin-state keyword
```


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configure application-assurance group http-redirect apply-groups

```
            - apply-groups reference
            - apply-groups-exclude reference
            - captive-redirect
               - vlan-id number
            - description string
            - redirect-https boolean
            - redirect-url string
            - tcp-client-reset boolean
            - template number
         - ip-identification-assist
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - passive-dns
               - monitor boolean
               - trusted-server (ipv4-address-no-zone | ipv6-address-no-zone)
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - comment string
         - partition number
            - aa-sub-congestion-detection
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - rat-type keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - rtt-threshold (number | keyword)
               - rtt-threshold (number | keyword)
               - rtt-threshold-tolerance number
            - aa-sub-remote boolean
            - access-network-location
               - source keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - rat-type keyword
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - rtt-threshold (number | keyword)
                  - rtt-threshold (number | keyword)
                  - rtt-threshold-tolerance number
                  - source-level keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - aqp-initial-lookup boolean
            - cflowd
               - export-type keyword
                  - admin-state keyword
                  - app-group reference
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - rate-choice keyword
                  - application reference
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - rate-choice keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
            - description string
            - event-log string
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - buffer-type keyword
```


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configure application-assurance group partition event-log max-entries

```
                - max-entries number
                - syslog
                  - address (ipv4-address-no-zone | ipv6-address-no-zone)
                  - description string
                  - facility keyword
                  - port number
                  - severity keyword
                  - vlan-id number
            - gtp
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - gtp-filter string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - description string
                  - gtp-in-gtp keyword
                  - gtp-tunnel-database
                    - default-tunnel-endpoint-limit number
                    - validate-gtp-tunnels boolean
                    - validate-sequence-number boolean
                    - validate-source-ip-addr boolean
                  - imsi-apn-filter
                    - default-action keyword
                    - entry number
                      - action keyword
                      - apn string
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - imsi-mcc-mnc-prefix string
                      - src-gsn
                        - ip-prefix (ipv4-prefix | ipv6-prefix)
                        - ip-prefix-list reference
                  - log
                    - action keyword
                    - event-log reference
                  - max-payload-length number
                  - message-type
                    - default-action keyword
                    - entry number
                      - action keyword
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - value (number | keyword)
                  - message-type-gtp-v2
                    - default-action keyword
                    - entry number
                      - action keyword
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - value (number | keyword)
                - gtpc-inspection boolean
                - log
                  - action keyword
                  - event-log reference
                - mode keyword
            - http-match-all-requests boolean
            - http-x-online-host boolean
            - ip-identification-contribute boolean
            - ip-prefix-list string
                - apply-groups reference
                - apply-groups-exclude reference
                - description string
                - prefix (ipv4-prefix | ipv6-prefix)
```


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configure application-assurance group partition ip-prefix-list prefix apply-groups

```
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - name string
            - policy
               - app-filter
                  - entry number
                     - admin-state keyword
                     - application reference
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - description string
                     - expression number
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - eq string
                        - neq string
                        - type keyword
                     - flow-setup-direction keyword
                     - http-match-all-requests boolean
                     - http-port
                        - eq
                           - port-list reference
                           - port-number number
                        - neq
                           - port-list reference
                           - port-number number
                     - ip-identification-assist boolean
                     - ip-protocol
                        - eq (number | keyword)
                        - neq (number | keyword)
                     - network-address
                        - eq
                           - ip-prefix (ipv4-prefix | ipv6-prefix)
                           - ip-prefix-list reference
                        - neq
                           - ip-prefix (ipv4-prefix | ipv6-prefix)
                           - ip-prefix-list reference
                     - protocol
                        - eq (string | named-item)
                        - neq (string | named-item)
                     - server-address
                        - eq
                           - dns-ip-cache reference
                           - ip-prefix (ipv4-prefix | ipv6-prefix)
                           - ip-prefix-list reference
                           - masked-ip
                              - address (ipv4-address-no-zone | ipv6-address-no-zone)
                              - netmask (ipv4-address-no-zone | ipv6-address-no-zone)
                        - neq
                           - dns-ip-cache reference
                           - ip-prefix (ipv4-prefix | ipv6-prefix)
                           - ip-prefix-list reference
                           - masked-ip
                              - address (ipv4-address-no-zone | ipv6-address-no-zone)
                              - netmask (ipv4-address-no-zone | ipv6-address-no-zone)
                     - server-port
                        - eq
                           - first-packet-policy keyword
                           - port-list reference
                           - port-number number
                           - range
                              - end number
                              - start number
                        - gt
```


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configure application-assurance group partition policy app-filter entry server-port gt port-number

```
                        - port-number number
                     - lt
                        - port-number number
                     - neq
                        - port-list reference
                        - port-number number
                        - range
                           - end number
                           - start number
               - app-group string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - charging-group reference
                  - description string
                  - export-id number
               - app-profile string
                  - aa-sub-suppressible boolean
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - capacity-cost number
                  - characteristic reference
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - value reference
                  - description string
                  - divert boolean
               - app-qos-policy
                  - entry number
                     - action
                        - abandon-tcp-optimization boolean
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - bandwidth-policer
                           - anl reference
                           - dual-bucket reference
                           - single-bucket reference
                        - dns-ip-cache reference
                        - drop boolean
                        - error-drop
                           - event-log reference
                        - flow-count-limit-policer
                           - event-log reference
                           - policer-name reference
                        - flow-setup-rate-policer
                           - event-log reference
                           - policer-name reference
                        - fragment-drop
                           - drop-scope keyword
                           - event-log reference
                        - gtp-filter reference
                        - http-enrich reference
                        - http-error-redirect reference
                        - http-notification reference
                        - http-redirect
                           - flow-type keyword
                           - name reference
                        - mirror-source
                           - all-inclusive boolean
                           - mirror-service reference
                        - overload-drop
                           - event-log reference
                        - remark
                           - dscp
                              - in-profile keyword
```


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configure application-assurance group partition policy app-qos-policy entry action remark dscp out-profile

```
                        - out-profile keyword
                     - fc keyword
                     - priority keyword
                  - sctp-filter reference
                  - session-filter reference
                  - tcp-mss-adjust number
                  - tcp-validate reference
                  - tls-enrich reference
                  - url-filter
                     - characteristic reference
                     - name reference
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - description string
               - match
                  - aa-sub
                     - esm
                        - eq string
                        - neq string
                     - esm-mac
                        - eq string
                        - neq string
                     - sap
                        - eq string
                        - neq string
                     - spoke-sdp
                        - eq string
                        - neq string
                     - transit
                        - eq string
                        - neq string
                  - aa-sub-tethering keyword
                  - app-group
                     - eq reference
                     - neq reference
                  - application
                     - eq reference
                     - neq reference
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - characteristic reference
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - eq reference
                     - neq reference
                  - charging-group
                     - eq reference
                     - neq reference
                  - dscp
                     - eq keyword
                     - neq keyword
                  - dst-ip
                     - eq
                        - ip-prefix (ipv4-prefix | ipv6-prefix)
                        - ip-prefix-list reference
                     - neq
                        - ip-prefix (ipv4-prefix | ipv6-prefix)
                        - ip-prefix-list reference
                  - dst-port
                     - eq
                        - port-list reference
                        - port-number number
                        - range
```


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configure application-assurance group partition policy app-qos-policy entry match dst-port eq range end

```
                                    - end number
                                    - start number
                                 - neq
                                    - port-list reference
                                    - port-number number
                                    - range
                                       - end number
                                       - start number
                              - flow-attribute string
                                 - apply-groups reference
                                 - apply-groups-exclude reference
                                 - confidence
                                    - eq number
                                    - gte number
                                    - lt number
                              - ip-protocol
                                 - eq (number | keyword)
                                 - neq (number | keyword)
                              - src-ip
                                 - eq
                                    - ip-prefix (ipv4-prefix | ipv6-prefix)
                                    - ip-prefix-list reference
                                 - neq
                                    - ip-prefix (ipv4-prefix | ipv6-prefix)
                                    - ip-prefix-list reference
                              - src-port
                                 - eq
                                    - port-list reference
                                    - port-number number
                                    - range
                                       - end number
                                       - start number
                                 - neq
                                    - port-list reference
                                    - port-number number
                                    - range
                                       - end number
                                       - start number
                              - traffic-direction keyword
                        - app-service-options
                           - characteristic string
                              - apply-groups reference
                              - apply-groups-exclude reference
                              - default-value string
                              - value string
                        - application string
                           - app-group reference
                           - apply-groups reference
                           - apply-groups-exclude reference
                           - charging-group reference
                           - description string
                           - export-id number
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - charging-filter
                           - entry number
                              - admin-state keyword
                              - apply-groups reference
                              - apply-groups-exclude reference
                              - charging-group reference
                              - description string
                              - match
                                 - app-group
                                    - eq reference
```


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configure application-assurance group partition policy charging-filter entry match app-group neq

```
                        - neq reference
                     - application
                        - eq reference
                        - neq reference
                     - flow-attribute string
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - confidence
                           - eq number
                           - gte number
                           - lt number
                     - tethered-flow
               - charging-group string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - description string
                  - export-id number
                  - notify-start-stop keyword
               - custom-protocol string
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - description string
                  - expression number
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - direction keyword
                     - eq string
                     - offset number
                  - ip-protocol keyword
               - default-charging-group reference
               - default-tethered-charging-group reference
            - policy-override
               - aa-sub
                  - sap string
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - characteristic reference
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - value reference
                  - spoke-sdp string
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - characteristic reference
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - value reference
                  - transit string
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - characteristic reference
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - value reference
            - port-list string
               - apply-groups reference
               - apply-groups-exclude reference
               - description string
               - port number
               - range start number end number
            - sctp-filter string
               - apply-groups reference
               - apply-groups-exclude reference
```


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configure application-assurance group partition sctp-filter description

```
                - description string
                - event-log reference
                - ppid
                  - default-action keyword
                  - entry number
                    - action keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - value (number | keyword)
                - ppid-range
                  - max number
                  - min number
            - session-filter string
                - apply-groups reference
                - apply-groups-exclude reference
                - default-action
                  - action keyword
                  - event-log reference
                - description string
                - entry number
                  - action
                    - deny
                    - event-log reference
                    - http-redirect reference
                    - permit
                    - tcp-optimizer reference
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - description string
                  - match
                    - dst-ip
                      - dns-ip-cache reference
                      - ip-prefix (ipv4-prefix | ipv6-prefix)
                      - ip-prefix-list reference
                    - dst-port
                      - eq number
                      - gt number
                      - lt number
                      - port-list reference
                      - range
                        - end number
                        - start number
                    - ip-protocol (number | keyword)
                    - src-ip
                      - ip-prefix (ipv4-prefix | ipv6-prefix)
                      - ip-prefix-list reference
                    - src-port
                      - eq number
                      - gt number
                      - lt number
                      - port-list reference
                      - range
                        - end number
                        - start number
            - shallow-inspection boolean
            - statistics
                - aa-admit-deny
                  - accounting-policy reference
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - collect-stats boolean
                  - gtp-filter-stats boolean
                  - policer-stats boolean
                  - policer-stats-resources boolean
```


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configure application-assurance group partition statistics aa-admit-deny sctp-filter-stats

```
                - sctp-filter-stats boolean
                - session-filter-stats boolean
                - tcp-validate-stats boolean
            - aa-app-group
                - accounting-policy reference
                - apply-groups reference
                - apply-groups-exclude reference
                - collect-stats boolean
            - aa-application
                - accounting-policy reference
                - apply-groups reference
                - apply-groups-exclude reference
                - collect-stats boolean
            - aa-partition
                - accounting-policy reference
                - apply-groups reference
                - apply-groups-exclude reference
                - collect-stats boolean
                - tethering-stats boolean
                - traffic-type-stats boolean
            - aa-protocol
                - accounting-policy reference
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - collect-stats boolean
            - aa-sub
                - accounting-policy reference
                - aggregate-stats-export-using keyword
                - app-group reference
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - export-using keyword
                - application reference
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - export-using keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - charging-group reference
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - export-using keyword
                - collect-stats boolean
                - exclude-tcp-retrans boolean
                - max-throughput-stats boolean
                - protocol string
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - export-using keyword
                - radius-accounting-policy reference
                - usage-monitoring boolean
            - aa-sub-study keyword
                - aa-sub
                    - esm string
                    - esm-mac string
                    - sap string
                    - spoke-sdp string
                    - transit string
                - accounting-policy reference
                - apply-groups reference
                - apply-groups-exclude reference
                - collect-stats boolean
        - tcp-validate string
```


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configure application-assurance group partition tcp-validate apply-groups

```
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - log
               - all boolean
               - event-log reference
            - strict boolean
         - tethering-detection
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - single-device
               - expected-ttl number
               - invert-match boolean
            - ttl-monitor
               - tcp-protocols keyword
               - udp-protocols keyword
         - threshold-crossing-alert
            - criteria keyword direction keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - high-watermark number
               - low-watermark number
            - gtp-filter reference criteria keyword direction keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - high-watermark number
               - low-watermark number
            - gtp-filter-entry reference entry-id number direction keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - high-watermark number
               - low-watermark number
            - policer string direction keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - high-watermark number
               - low-watermark number
            - sctp-filter reference criteria keyword direction keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - high-watermark number
               - low-watermark number
            - sctp-filter-entry reference entry-id reference direction keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - high-watermark number
               - low-watermark number
            - session-filter reference criteria keyword direction keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - high-watermark number
               - low-watermark number
            - session-filter-entry reference entry-id reference direction keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - high-watermark number
               - low-watermark number
            - tcp-validate reference direction keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - high-watermark number
               - low-watermark number
         - transit-ip-policy number
```


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configure application-assurance group partition transit-ip-policy apply-groups

```
            - apply-groups reference
            - apply-groups-exclude reference
            - default-app-profile reference
            - description string
            - detect-seen-ip boolean
            - dhcp
              - admin-state keyword
            - diameter
              - admin-state keyword
              - application-policy reference
            - ipv6-address-prefix-length number
            - radius
              - admin-state keyword
              - authentication-policy reference
              - seen-ip-radius-acct-policy reference
            - static-aa-sub string
              - app-profile reference
              - apply-groups reference
              - apply-groups-exclude reference
              - ip (ipv4-unicast-address | ipv6-prefix)
            - sub-ident-policy reference
            - transit-auto-create
              - admin-state keyword
              - inactivity-monitor boolean
        - transit-prefix-policy number
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
              - aa-sub reference
              - apply-groups reference
              - apply-groups-exclude reference
              - match
                - aa-sub-ip (ipv4-prefix | ipv6-prefix)
                - network-ip (ipv4-prefix | ipv6-prefix)
            - static-aa-sub string
              - app-profile reference
              - apply-groups reference
              - apply-groups-exclude reference
              - is-remote boolean
        - wap1x
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
    - policer
        - anl-bandwidth-policer string
            - action keyword
            - adaptation-rule
              - pir keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - mbs number
            - rate-percentage number
            - rate-percentage-stage-2 number
        - dual-bucket-bandwidth-policer string
            - adaptation-rule
              - cir keyword
              - pir keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - cbs number
            - cir (number | keyword)
            - congestion-override
```


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configure application-assurance group policer dual-bucket-bandwidth-policer congestion-override cbs

```
                  - cbs number
                  - cir (number | keyword)
                  - mbs number
                  - pir (number | keyword)
               - congestion-override-stage-2
                  - cbs number
                  - cir (number | keyword)
                  - mbs number
                  - pir (number | keyword)
               - description string
               - mbs number
               - pir (number | keyword)
               - time-of-day-override number
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - cbs number
                  - cir (number | keyword)
                  - description string
                  - mbs number
                  - pir (number | keyword)
                  - time-range
                     - daily
                        - all-days
                        - end string
                        - on keyword
                        - start string
                     - weekly
                        - end
                           - day keyword
                           - time string
                        - start
                           - day keyword
                           - time string
            - flow-count-limit-policer string
               - action keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - description string
               - granularity keyword
               - limit-gtp-flows boolean
               - peak-flow-count (number | keyword)
               - time-of-day-override number
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - description string
                  - peak-flow-count (number | keyword)
                  - time-range
                     - daily
                        - all-days
                        - end string
                        - on keyword
                        - start string
                     - weekly
                        - end
                           - day keyword
                           - time string
                        - start
                           - day keyword
                           - time string
            - flow-setup-rate-policer string
               - action keyword
               - adaptation-rule
```


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configure application-assurance group policer flow-setup-rate-policer adaptation-rule peak-flow-setup-rate

```
                - peak-flow-setup-rate keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - flow-setup-rate-burst-size number
            - granularity keyword
            - peak-flow-setup-rate (number | keyword)
            - time-of-day-override number
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - description string
                - flow-setup-rate-burst-size number
                - peak-flow-setup-rate (number | keyword)
                - time-range
                    - daily
                        - all-days
                        - end string
                        - on keyword
                        - start string
                    - weekly
                        - end
                            - day keyword
                            - time string
                        - start
                            - day keyword
                            - time string
        - single-bucket-bandwidth-policer string
            - action keyword
            - adaptation-rule
                - pir keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - congestion-override
                - mbs number
                - pir (number | keyword)
            - congestion-override-stage-2
                - mbs number
                - pir (number | keyword)
            - description string
            - granularity keyword
            - mbs number
            - pir (number | keyword)
            - time-of-day-override number
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - description string
                - mbs number
                - pir (number | keyword)
                - time-range
                    - daily
                        - all-days
                        - end string
                        - on keyword
                        - start string
                    - weekly
                        - end
                            - day keyword
                            - time string
                        - start
                            - day keyword
                            - time string
    - tcp-optimizer string
```


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configure application-assurance group tcp-optimizer apply-groups

```
            - apply-groups reference
            - apply-groups-exclude reference
            - dack-timeout number
            - description string
            - initial-cwnd number
            - initial-ss-threshold (number | keyword)
            - network-rtt-threshold number
            - tcp-stack keyword
         - url-filter string
            - admin-state keyword
            - apply-function-specific-behaviour boolean
            - apply-groups reference
            - apply-groups-exclude reference
            - default-action
               - allow
               - block-all
               - block-http-redirect reference
            - description string
            - http-redirect reference
            - http-request-filtering keyword
            - icap
               - custom-x-header string
               - default-action
                  - allow
                  - block-all
                  - block-http-redirect reference
               - http-redirect reference
               - server (ipv4-address-no-zone | ipv6-address-no-zone) port number
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - description string
               - vlan-id number
            - local-filtering
               - allow-list reference
               - deny-list reference
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - default-action
                     - allow
                     - block-all
                     - block-http-redirect reference
                  - http-redirect reference
            - web-service
               - category-set number
               - classification-overrides
                  - entry number
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - category-name string
                     - expression string
               - classifier keyword
               - default-action
                  - allow
                  - block-all
                  - block-http-redirect reference
               - default-profile reference
               - dns-server (ipv4-address-no-zone | ipv6-address-no-zone)
               - fqdn string
               - http-redirect reference
               - profile string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - block
```


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configure application-assurance group url-filter web-service profile block category

```
                    - category string
                  - description string
               - server (ipv4-address-no-zone | ipv6-address-no-zone) port number
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - description string
               - vlan-id number
         - url-list string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - file string
            - host-expressions boolean
            - key string
            - size keyword
      - http-enrich
         - field string
            - apply-groups reference
            - apply-groups-exclude reference
            - comment string
      - http-error-redirect
         - error-code number
            - apply-groups reference
            - apply-groups-exclude reference
            - comment string
         - template number
            - apply-groups reference
            - apply-groups-exclude reference
            - comment string
      - http-notification
         - template number
            - apply-groups reference
            - apply-groups-exclude reference
            - comment string
      - http-redirect
         - template number
            - apply-groups reference
            - apply-groups-exclude reference
            - comment string
      - protocol string
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
      - radius-accounting-policy string
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - interim-update-interval number
         - radius-accounting-server
            - access-algorithm keyword
            - retry number
            - router-instance string
            - server number
               - address string
               - apply-groups reference
               - apply-groups-exclude reference
               - port number
               - secret string
            - source-address string
            - timeout number
         - significant-change number
      - usage-alert-thresholds
```


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configure application-assurance usage-alert-thresholds bit-rate-high-wmark

```
        - bit-rate-high-wmark (number | keyword)
        - bit-rate-low-wmark number
        - datapath-cpu-high-wmark (number | keyword)
        - datapath-cpu-low-wmark number
        - flow-setup-rate-high-wmark (number | keyword)
        - flow-setup-rate-low-wmark number
        - flow-table-high-wmark number
        - flow-table-low-wmark number
        - packet-rate-high-wmark (number | keyword)
        - packet-rate-low-wmark number
```


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3.3.1 application-assurance command descriptions

application-assurance

Synopsis	Enter the **application-assurance** context
Context	**configure** application-assurance
Tree	application-assurance
Description	Commands in this context configure the attributes of Application Assurance (AA) operations.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aarp [aarp-id] *number*

Synopsis	Enter the **aarp** list instance
Context	**configure** application-assurance aarp *number*
Tree	aarp
Description	Commands in this context define an Application Assurance Redundancy Protocol (AARP) instance. This instance is paired with the same AARP ID in a peer node, as part of the configuration to provide flow and packet asymmetry removal for traffic of a multi-homed SAP or spoke SDP.
Max. Instances	100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**aarp-id**] *number*

Synopsis	AARP ID
Context	**configure** application-assurance aarp *number*
Tree	aarp
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of the AARP instance
Context	**configure** application-assurance aarp *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance aarp *number* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

master-selection-mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	AARP master selection mode
Context	**configure** application-assurance aarp *number* master-selection-mode *keyword*
Tree	master-selection-mode
Description	This command configures the AARP mode of operation with the peer instance. The modes affect the AARP state machine behavior according to the specified behavior.
Options	minimize-switchovers, inter-chassis-efficiency, priority-based-balance
Default	minimize-switchovers
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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peer *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
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Synopsis	AARP peer IP address
Context	**configure** application-assurance aarp *number* peer *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	peer
Description	This command defines the IP address of the AARP peer router, which must be a routable system IP address. If no peer is configured when the AARP is administratively enabled, it is configured as a single node AARP instance.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-endpoint

Synopsis	Enter the **peer-endpoint** context
Context	**configure** application-assurance aarp *number* peer-endpoint
Tree	peer-endpoint
Description	Commands in this context specify the attributes of the peer endpoint parent AA subscriber of the AARP peer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap

Synopsis	Enable the **sap** context
Context	**configure** application-assurance aarp *number* peer-endpoint sap
Tree	sap
Notes	The following elements are part of a choice: **sap** or **spoke-sdp**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encap-type *keyword*

Synopsis	Encapsulation type for peer endpoint SAP

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Context	**configure** application-assurance aarp *number* peer-endpoint sap encap-type *keyword*
Tree	encap-type
Options	null, dot1q, qinq
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap-id *string*

Synopsis	AARP peer endpoint SAP ID
Context	**configure** application-assurance aarp *number* peer-endpoint sap sap-id *string*
Tree	sap-id
String Length	1 to 45
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

spoke-sdp *string*

Synopsis	AARP peer endpoint spoke SDP
Context	**configure** application-assurance aarp *number* peer-endpoint spoke-sdp *string*
Tree	spoke-sdp
String Length	3 to 16
Notes	The following elements are part of a choice: **sap** or **spoke-sdp**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority *number*

WARNING:
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Synopsis	AARP priority
Context	**configure** application-assurance aarp *number* priority *number*

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Tree	priority
Description	This command defines the priority for the AARP instance. The priority value is used to determine the master and backup upon initialization or rebalance.
Range	0 to 255
Default	100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cflowd

Synopsis	Enter the **cflowd** context
Context	**configure** application-assurance cflowd
Tree	cflowd
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field [field-name] *string*

Synopsis	Enter the **field** list instance
Context	**configure** application-assurance cflowd field *string*
Tree	field
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**field-name**] *string*

Synopsis	Cflowd record field name
Context	**configure** application-assurance cflowd field *string*
Tree	field
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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comment *string*

Synopsis	User information comment
Context	**configure** application-assurance cflowd field *string* comment *string*
Tree	comment
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-attribute

Synopsis	Enter the **flow-attribute** context
Context	**configure** application-assurance flow-attribute
Tree	flow-attribute
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

attribute [attribute-name] *string*

Synopsis	Enter the **attribute** list instance
Context	**configure** application-assurance flow-attribute attribute *string*
Tree	attribute
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**attribute-name**] *string*

Synopsis	Attribute name
Context	**configure** application-assurance flow-attribute attribute *string*
Tree	attribute
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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comment *string*

Synopsis	User information comment
Context	**configure** application-assurance flow-attribute attribute *string* comment *string*
Tree	comment
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

group [aa-group-id] *number*

Synopsis	Enter the **group** list instance
Context	**configure** application-assurance group *number*
Tree	group
Description	Commands in this context configure an Application Assurance group and partition parameters.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**aa-group-id**] *number*

Synopsis	AA group ID
Context	**configure** application-assurance group *number*
Tree	group
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

certificate-profile [cert-prof-name] *string*

Synopsis	Enter the **certificate-profile** list instance
Context	**configure** application-assurance group *number* certificate-profile *string*
Tree	certificate-profile
Description	Commands in this context create a certificate profile to be used for certificate-based encryption in HTTP header enrichment.

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**cert-prof-name**] *string*

Synopsis	AA group certificate profile name
Context	**configure** application-assurance group *number* certificate-profile *string*
Tree	certificate-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the AA certificate profile
Context	**configure** application-assurance group *number* certificate-profile *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* certificate-profile *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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file *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Certificate file name
Context	**configure** application-assurance group *number* certificate-profile *string* file *string*
Tree	file
String Length	1 to 95
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cflowd

Synopsis	Enter the **cflowd** context
Context	**configure** application-assurance group *number* cflowd
Tree	cflowd
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of cflowd export
Context	**configure** application-assurance group *number* cflowd admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collector [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number*

Synopsis	Enter the **collector** list instance
Context	**configure** application-assurance group *number* cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number*
Tree	collector

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Description	Commands in this context configure flow data collectors for cflowd data. In the current release, the system supports IPv4 addresses only for the cflowd collector host.
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the remote cflowd collector host
Context	**configure** application-assurance group *number* cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number*
Tree	collector
Description	This command configures the IP address of the remote cflowd collector host. In the current release, the system supports IPv4 addresses only for the cflowd collector host.
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port *number*

Synopsis	Cflowd collector host port number
Context	**configure** application-assurance group *number* cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number*
Tree	collector
Description	This command configures the UDP port number used by the remote cflowd collector host. In the MD-CLI, the default port is 4739.
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of the cflowd export
Context	**configure** application-assurance group *number* cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

comprehensive

Synopsis	Enter the **comprehensive** context
Context	**configure** application-assurance group *number* cflowd comprehensive
Tree	comprehensive
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-rate *number*

Synopsis	Cflowd flow sampling rate
Context	**configure** application-assurance group *number* cflowd comprehensive flow-rate *number*
Tree	flow-rate
Range	1 to 1000
Units	flows per second

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-rate-2 *number*

Synopsis	Cflowd per-flow second sampling rate
Context	**configure** application-assurance group *number* cflowd comprehensive flow-rate-2 *number*
Tree	flow-rate-2
Range	1 to 1000
Units	flows per second
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template

Synopsis	Enter the **template** context
Context	**configure** application-assurance group *number* cflowd comprehensive template
Tree	template
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic-fields

Synopsis	Enter the **dynamic-fields** context
Context	**configure** application-assurance group *number* cflowd comprehensive template dynamic-fields
Tree	dynamic-fields
Description	Commands in this context configure the fields that are included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the dynamic fields

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Context	**configure** application-assurance group *number* cflowd comprehensive template dynamic-fields admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field [field-name] *string*

Synopsis	Add a list entry for **field**
Context	**configure** application-assurance group *number* cflowd comprehensive template dynamic-fields field *string*
Tree	field
Description	This command adds a dynamic field to be included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**field-name**] *string*

Synopsis	Cflowd template dynamic field name
Context	**configure** application-assurance group *number* cflowd comprehensive template dynamic-fields field *string*
Tree	field
Description	This command specifies the name of the field to be included in the exported cflowd template.

- Common to all templates are the following values: flowStartSeconds | flowDuration Milliseconds |postIpPrecedence | aaProt | aaApp | aaAppGrp | hostName |hostName Extended| deviceId | deviceMfgId | deviceOsId |ipFamily | deviceOsVer1 | device OsVer2 | deviceOsVer3 |anlType | anlTopology | anlCongestionState | apn | charge Id |mnc | imsi | msisdn | sgw-sgsnAddr | pgw-ggsnAddr | bsid |ratType | regionId | cellId |timeZone | aaChargingGrp |flowAttr_video | flowAttr_abr_service | flowAttr_ audio |flowAttr_encrypted | flowAttr_download |flowAttr_upload |flowAttr_realtime_ communication | aaSubTetheringState | imei| ipTTL | imei roamingStatus | mcc | uli | chargingChar | plmnid| customerId
- When AA is deployed in FWA SR, the following value applies: ApnExtended
- For the rtp-voice template only, the following values apply: flowStartSeconds | flow DurationMilliseconds |postIpPrecedence | aaProt | aaApp | aaAppGrp |rtpBurstCount| rtpAvgBurstLengthMs | rtpGapCount | rtpAvgGapLengthMs |MAPDV | RBurst | RGap | SSRC

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- For the rtp-video template only, the following values apply: flowStartSeconds | flowDurationMilliseconds |postIpPrecedence | aaProt | aaApp | aaAppGrp |rtpRefClockRate | MOSAV | VSTQ | estimatedPSNR |GoPType | avgGoPLength | avgInterIFrameGap | imageWidth| imageHeight | frameRate |slicesPerIFrame | SSRC |videoInterlaced | IFrameReceived | IFrameImpaired |PFrameReceived | PFrameImpaired | BFrameReceived |BFrameImpaired | SIFrameReceived | SIFrameImpaired | SPFrameReceived | SPFrameImpaired |frameInterArrivalJitter| IFrameInterArrivalJitter | avgFrameArrivalDelay
- For the rtp-audio template only, the following values apply: flowStartSeconds | flowDurationMilliseconds |postIpPrecedence | aaProt | aaApp | aaAppGrp | rtpBurstCount| rtpAvgBurstLengthPkts | rtpGapCount |rtpAvgGapLengthPkts | PPDVM | rtpNumAudioChannels |rtpRefClockRate |rtpPeakAudioBw | SSRC | hostName
- For volume and comprehensive templates, the following values apply: tcpSessionEstDelay | tcpRetransmittedBytes |tcpRetransmittedPackets

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field-selection *keyword*

Synopsis	Field selection method
Context	**configure** application-assurance group *number* cflowd comprehensive template field-selection *keyword*
Tree	field-selection
Description	This command configures the method for selecting the fields to be included in the exported cflowd template.
Options	legacy, dynamic
Default	legacy
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direct-export

Synopsis	Enter the **direct-export** context
Context	**configure** application-assurance group *number* cflowd direct-export
Tree	direct-export
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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collector [collector-id] *number*

Synopsis	Enter the **collector** list instance
Context	**configure** application-assurance group *number* cflowd direct-export collector *number*
Tree	collector
Max. Instances	16
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**collector-id**] *number*

Synopsis	Cflowd direct export collector ID
Context	**configure** application-assurance group *number* cflowd direct-export collector *number*
Tree	collector
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number*

Synopsis	Enter the **address** list instance
Context	**configure** application-assurance group *number* cflowd direct-export collector *number* address *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number*
Tree	address
Description	Commands in this context configure the cflowd direct export collector IP address. In the current release, the system supports IPv4 addresses only for the cflowd direct export collector.
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the remote cflowd collector host
Context	**configure** application-assurance group *number* cflowd direct-export collector *number* address *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number*
Tree	address
Description	This command configures the IP address of the remote cflowd collector host. In the current release, the system supports IPv4 addresses only for the cflowd collector host.
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port *number*

Synopsis	Cflowd collector host port number
Context	**configure** application-assurance group *number* cflowd direct-export collector *number* address *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number*
Tree	address
Description	This command configures the UDP port number used by the remote cflowd collector host. In the MD-CLI, the default port is 4739.
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the direct export collector
Context	**configure** application-assurance group *number* cflowd direct-export collector *number* address *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* admin-state *keyword*
Tree	admin-state
Description	This command sets the administrative state of the cflowd direct export collector. In the current release, the system supports IPv4 addresses only for the cflowd direct export collector.

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Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* cflowd direct-export collector *number* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vlan-id *number*

Synopsis	Cflowd direct export VLAN ID
Context	**configure** application-assurance group *number* cflowd direct-export vlan-id *number*
Tree	vlan-id
Range	1 to 4094
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-override

Synopsis	Enter the **export-override** context
Context	**configure** application-assurance group *number* cflowd export-override
Tree	export-override
Description	Commands in this context configure the AA subtype used in the cflowd record export. The cflowd statistics exported to the cflowd collector look identical to AA for the type of system defined by the mode. The following cflowd export fields are affected: • The cflowd export observation point (field 138) mode is derived from the export-override category that is selected. • The cflowd export AA_Subscriber_Type (field 12) mode is modified as configured, using existing field types.

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- The cflowd interface name is used as the sub-ID field, optionally modified to use the configured **mode** and **prefix** commands for global identifiers.

All AA cflowd record types are affected by export override. To change the export override or prefix, cflowd must first be disabled. When this command is set back to the default, the prefix is also set back to its default.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	AA cflowd export override mode
Context	**configure** application-assurance group *number* cflowd export-override mode *keyword*
Tree	mode
Description	This command specifies the type of system emulated for the cflowd export.
Options	mobile, ifname-obfuscate
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	AA group cflowd export override prefix
Context	**configure** application-assurance group *number* cflowd export-override prefix *string*
Tree	prefix
Description	This command specifies the prefix-string associated with the export override. The prefix string specifies up to an 8 character string. If the 8 character prefix is "ABCDEFG_" for a particular node, the cflowd export override would generate IPv4 interface names such as ABCDEFG_255.255.255.255 or IPv6 as ABCDEFG_2001:DB8:EF01:2345::/64. By default, the prefix is left blank.
String Length	1 to 8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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obfuscation

Synopsis	Enter the **obfuscation** context
Context	**configure** application-assurance group *number* cflowd obfuscation
Tree	obfuscation
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aes-128-encryption-key *string*

Synopsis	AES-128 encryption key
Context	**configure** application-assurance group *number* cflowd obfuscation aes-128-encryption-key *string*
Tree	aes-128-encryption-key
Description	This command specifies the AES-128 key used to encrypt export cflowd fields.
String Length	51
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aes-256-encryption-key *string*

Synopsis	AES-256 encryption key
Context	**configure** application-assurance group *number* cflowd obfuscation aes-256-encryption-key *string*
Tree	aes-256-encryption-key
Description	This command specifies the AES-256 key used to encrypt exported cflowd fields.
String Length	71
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtp-performance

Synopsis	Enter the **rtp-performance** context
Context	**configure** application-assurance group *number* cflowd rtp-performance
Tree	rtp-performance

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

audio-template

Synopsis	Enter the **audio-template** context
Context	**configure** application-assurance group *number* cflowd rtp-performance audio-template
Tree	audio-template
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic-fields

Synopsis	Enter the **dynamic-fields** context
Context	**configure** application-assurance group *number* cflowd rtp-performance audio-template dynamic-fields
Tree	dynamic-fields
Description	Commands in this context configure dynamic fields to be included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the dynamic fields
Context	**configure** application-assurance group *number* cflowd rtp-performance audio-template dynamic-fields admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field [field-name] *string*

Synopsis	Add a list entry for **field**

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Context	**configure** application-assurance group *number* cflowd rtp-performance audio-template dynamic-fields field *string*
Tree	field
Description	This command adds a list entry for fields to include in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**field-name**] *string*

Synopsis	Cflowd template dynamic field name
Context	**configure** application-assurance group *number* cflowd rtp-performance audio-template dynamic-fields field *string*
Tree	field
Description	This command specifies the name of the field to be included in the exported cflowd template.

- Common to all templates are the following values: flowStartSeconds | flowDuration Milliseconds |postIpPrecedence | aaProt | aaApp | aaAppGrp | hostName |hostName Extended| deviceId | deviceMfgId | deviceOsId |ipFamily | deviceOsVer1 | device OsVer2 | deviceOsVer3 |anlType | anlTopology | anlCongestionState | apn | charge Id |mnc | imsi | msisdn | sgw-sgsnAddr | pgw-ggsnAddr | bsid |ratType | regionId | cellId |timeZone | aaChargingGrp |flowAttr_video | flowAttr_abr_service | flowAttr_ audio |flowAttr_encrypted | flowAttr_download |flowAttr_upload |flowAttr_realtime_ communication | aaSubTetheringState | imei| ipTTL | imei roamingStatus | mcc | uli | chargingChar | plmnid| customerId
- When AA is deployed in FWA SR, the following value applies: ApnExtended
- For the rtp-voice template only, the following values apply: flowStartSeconds | flow DurationMilliseconds |postIpPrecedence | aaProt | aaApp | aaAppGrp |rtpBurstCount| rtpAvgBurstLengthMs | rtpGapCount | rtpAvgGapLengthMs |MAPDV | RBurst | RGap | SSRC
- For the rtp-video template only, the following values apply: flowStartSeconds | flow DurationMilliseconds |postIpPrecedence | aaProt | aaApp | aaAppGrp |rtpRefClock Rate | MOSAV | VSTQ | estimatedPSNR |GoPType | avgGoPLength | avgInterIFrame Gap | imageWidth| imageHeight | frameRate |slicesPerIFrame | SSRC |video Interlaced | IFrameReceived | IFrameImpaired |PFrameReceived | PFrameImpaired | BFrameReceived |BFrameImpaired | SIFrameReceived | SIFrameImpaired | SPFrameReceived | SPFrameImpaired |frameInterArrivalJitter| IFrameInterArrival Jitter | avgFrameArrivalDelay
- For the rtp-audio template only, the following values apply: flowStartSeconds | flow DurationMilliseconds |postIpPrecedence | aaProt | aaApp | aaAppGrp | rtpBurst Count| rtpAvgBurstLengthPkts | rtpGapCount |rtpAvgGapLengthPkts | PPDVM | rtp NumAudioChannels |rtpRefClockRate |rtpPeakAudioBw | SSRC | hostName
- For volume and comprehensive templates, the following values apply: tcpSessionEst Delay | tcpRetransmittedBytes |tcpRetransmittedPackets

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String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field-selection *keyword*

Synopsis	Field selection method
Context	**configure** application-assurance group *number* cflowd rtp-performance audio-template field-selection *keyword*
Tree	field-selection
Description	This command configures the method for selecting the fields to be included in the exported cflowd template.
Options	legacy, dynamic
Default	legacy
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-rate *number*

Synopsis	Cflowd flow sampling rate
Context	**configure** application-assurance group *number* cflowd rtp-performance flow-rate *number*
Tree	flow-rate
Range	1 to 1000
Units	flows per second
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-rate-2 *number*

Synopsis	Cflowd per-flow second sampling rate
Context	**configure** application-assurance group *number* cflowd rtp-performance flow-rate-2 *number*
Tree	flow-rate-2
Range	1 to 1000

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Units	flows per second
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

video-template

Synopsis	Enter the **video-template** context
Context	**configure** application-assurance group *number* cflowd rtp-performance video-template
Tree	video-template
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic-fields

Synopsis	Enter the **dynamic-fields** context
Context	**configure** application-assurance group *number* cflowd rtp-performance video-template dynamic-fields
Tree	dynamic-fields
Description	Commands in this context configure dynamic fields to be included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the dynamic fields
Context	**configure** application-assurance group *number* cflowd rtp-performance video-template dynamic-fields admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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field [field-name] *string*

Synopsis	Add a list entry for **field**
Context	**configure** application-assurance group *number* cflowd rtp-performance video-template dynamic-fields field *string*
Tree	field
Description	This command adds a list entry for the fields to include in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**field-name**] *string*

Synopsis	Cflowd template dynamic field name
Context	**configure** application-assurance group *number* cflowd rtp-performance video-template dynamic-fields field *string*
Tree	field
Description	This command specifies the name of the field to be included in the exported cflowd template.

- Common to all templates are the following values: flowStartSeconds | flowDuration Milliseconds |postIpPrecedence | aaProt | aaApp | aaAppGrp | hostName |hostName Extended| deviceId | deviceMfgId | deviceOsId |ipFamily | deviceOsVer1 | device OsVer2 | deviceOsVer3 |anlType | anlTopology | anlCongestionState | apn | charge Id |mnc | imsi | msisdn | sgw-sgsnAddr | pgw-ggsnAddr | bsid |ratType | regionId | cellId |timeZone | aaChargingGrp |flowAttr_video | flowAttr_abr_service | flowAttr_ audio |flowAttr_encrypted | flowAttr_download |flowAttr_upload |flowAttr_realtime_ communication | aaSubTetheringState | imei| ipTTL | imei roamingStatus | mcc | uli | chargingChar | plmnid| customerId
- When AA is deployed in FWA SR, the following value applies: ApnExtended
- For the rtp-voice template only, the following values apply: flowStartSeconds | flow DurationMilliseconds |postIpPrecedence | aaProt | aaApp | aaAppGrp |rtpBurstCount| rtpAvgBurstLengthMs | rtpGapCount | rtpAvgGapLengthMs |MAPDV | RBurst | RGap | SSRC
- For the rtp-video template only, the following values apply: flowStartSeconds | flow DurationMilliseconds |postIpPrecedence | aaProt | aaApp | aaAppGrp |rtpRefClock Rate | MOSAV | VSTQ | estimatedPSNR |GoPType | avgGoPLength | avgInterIFrame Gap | imageWidth| imageHeight | frameRate |slicesPerIFrame | SSRC |video Interlaced | IFrameReceived | IFrameImpaired |PFrameReceived | PFrameImpaired | BFrameReceived |BFrameImpaired | SIFrameReceived | SIFrameImpaired | SPFrameReceived | SPFrameImpaired |frameInterArrivalJitter| IFrameInterArrival Jitter | avgFrameArrivalDelay
- For the rtp-audio template only, the following values apply: flowStartSeconds | flow DurationMilliseconds |postIpPrecedence | aaProt | aaApp | aaAppGrp | rtpBurst Count| rtpAvgBurstLengthPkts | rtpGapCount |rtpAvgGapLengthPkts | PPDVM | rtp NumAudioChannels |rtpRefClockRate |rtpPeakAudioBw | SSRC | hostName

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- For volume and comprehensive templates, the following values apply: tcpSessionEstDelay | tcpRetransmittedBytes |tcpRetransmittedPackets

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field-selection *keyword*

Synopsis	Field selection method
Context	**configure** application-assurance group *number* cflowd rtp-performance video-template field-selection *keyword*
Tree	field-selection
Description	This command configures the method for selecting the fields to be included in the exported cflowd template.
Options	legacy, dynamic
Default	legacy
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

voice-template

Synopsis	Enter the **voice-template** context
Context	**configure** application-assurance group *number* cflowd rtp-performance voice-template
Tree	voice-template
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic-fields

Synopsis	Enter the **dynamic-fields** context
Context	**configure** application-assurance group *number* cflowd rtp-performance voice-template dynamic-fields
Tree	dynamic-fields
Description	Commands in this context configure dynamic fields to be included in the exported cflowd template.

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the dynamic fields
Context	**configure** application-assurance group *number* cflowd rtp-performance voice-template dynamic-fields admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field [field-name] *string*

Synopsis	Add a list entry for **field**
Context	**configure** application-assurance group *number* cflowd rtp-performance voice-template dynamic-fields field *string*
Tree	field
Description	This command adds a cflowd record field to the list included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**field-name**] *string*

Synopsis	Cflowd template dynamic field name
Context	**configure** application-assurance group *number* cflowd rtp-performance voice-template dynamic-fields field *string*
Tree	field
Description	This command specifies the name of the field to be included in the exported cflowd template.

- Common to all templates are the following values: flowStartSeconds | flowDuration Milliseconds |postIpPrecedence | aaProt | aaApp | aaAppGrp | hostName |hostName Extended| deviceId | deviceMfgId | deviceOsId |ipFamily | deviceOsVer1 | device OsVer2 | deviceOsVer3 |anlType | anlTopology | anlCongestionState | apn | charge Id |mnc | imsi | msisdn | sgw-sgsnAddr | pgw-ggsnAddr | bsid |ratType | regionId |

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cellId |timeZone | aaChargingGrp |flowAttr_video | flowAttr_abr_service | flowAttr_audio |flowAttr_encrypted | flowAttr_download |flowAttr_upload |flowAttr_realtime_communication | aaSubTetheringState | imei| ipTTL | imei roamingStatus | mcc | uli | chargingChar | plmnid| customerId

- When AA is deployed in FWA SR, the following value applies: ApnExtended
- For the rtp-voice template only, the following values apply: flowStartSeconds | flow DurationMilliseconds |postIpPrecedence | aaProt | aaApp | aaAppGrp |rtpBurstCount| rtpAvgBurstLengthMs | rtpGapCount | rtpAvgGapLengthMs |MAPDV | RBurst | RGap | SSRC
- For the rtp-video template only, the following values apply: flowStartSeconds | flow DurationMilliseconds |postIpPrecedence | aaProt | aaApp | aaAppGrp |rtpRefClock Rate | MOSAV | VSTQ | estimatedPSNR |GoPType | avgGoPLength | avgInterIFrame Gap | imageWidth| imageHeight | frameRate |slicesPerIFrame | SSRC |video Interlaced | IFrameReceived | IFrameImpaired |PFrameReceived | PFrameImpaired | BFrameReceived |BFrameImpaired | SIFrameReceived | SIFrameImpaired | SPFrameReceived | SPFrameImpaired |frameInterArrivalJitter| IFrameInterArrival Jitter | avgFrameArrivalDelay
- For the rtp-audio template only, the following values apply: flowStartSeconds | flow DurationMilliseconds |postIpPrecedence | aaProt | aaApp | aaAppGrp | rtpBurst Count| rtpAvgBurstLengthPkts | rtpGapCount |rtpAvgGapLengthPkts | PPDVM | rtp NumAudioChannels |rtpRefClockRate |rtpPeakAudioBw | SSRC | hostName
- For volume and comprehensive templates, the following values apply: tcpSessionEst Delay | tcpRetransmittedBytes |tcpRetransmittedPackets

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field-selection *keyword*

Synopsis	Field selection method
Context	**configure** application-assurance group *number* cflowd rtp-performance voice-template field-selection *keyword*
Tree	field-selection
Description	This command configures the method for selecting the fields to be included in the exported cflowd template.
Options	legacy, dynamic
Default	legacy
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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tcp-performance

Synopsis	Enter the **tcp-performance** context
Context	**configure** application-assurance group *number* cflowd tcp-performance
Tree	tcp-performance
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-rate *number*

Synopsis	Cflowd flow sampling rate
Context	**configure** application-assurance group *number* cflowd tcp-performance flow-rate *number*
Tree	flow-rate
Range	1 to 1000
Units	flows per second
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-rate-2 *number*

Synopsis	Cflowd per-flow second sampling rate
Context	**configure** application-assurance group *number* cflowd tcp-performance flow-rate-2 *number*
Tree	flow-rate-2
Range	1 to 1000
Units	flows per second
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template

Synopsis	Enter the **template** context
Context	**configure** application-assurance group *number* cflowd tcp-performance template
Tree	template
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic-fields

Synopsis	Enter the **dynamic-fields** context
Context	**configure** application-assurance group *number* cflowd tcp-performance template dynamic-fields
Tree	dynamic-fields
Description	Commands in this context configure the fields to be included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the dynamic fields
Context	**configure** application-assurance group *number* cflowd tcp-performance template dynamic-fields admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field [field-name] *string*

Synopsis	Add a list entry for **field**
Context	**configure** application-assurance group *number* cflowd tcp-performance template dynamic-fields field *string*
Tree	field
Description	This command adds a list entry for fields to include in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**field-name**] *string*

Synopsis Cflowd template dynamic field name

Context **configure** application-assurance group *number* cflowd tcp-performance template dynamic-fields field *string*

Tree field

Description This command specifies the name of the field to be included in the exported cflowd template.

- Common to all templates are the following values: flowStartSeconds | flowDuration Milliseconds |postIpPrecedence | aaProt | aaApp | aaAppGrp | hostName |hostName Extended| deviceId | deviceMfgId | deviceOsId |ipFamily | deviceOsVer1 | device OsVer2 | deviceOsVer3 |anlType | anlTopology | anlCongestionState | apn | charge Id |mnc | imsi | msisdn | sgw-sgsnAddr | pgw-ggsnAddr | bsid |ratType | regionId | cellId |timeZone | aaChargingGrp |flowAttr_video | flowAttr_abr_service | flowAttr_ audio |flowAttr_encrypted | flowAttr_download |flowAttr_upload |flowAttr_realtime_ communication | aaSubTetheringState | imei| ipTTL | imei roamingStatus | mcc | uli | chargingChar | plmnid| customerId
- When AA is deployed in FWA SR, the following value applies: ApnExtended
- For the rtp-voice template only, the following values apply: flowStartSeconds | flow DurationMilliseconds |postIpPrecedence | aaProt | aaApp | aaAppGrp |rtpBurstCount| rtpAvgBurstLengthMs | rtpGapCount | rtpAvgGapLengthMs |MAPDV | RBurst | RGap | SSRC
- For the rtp-video template only, the following values apply: flowStartSeconds | flow DurationMilliseconds |postIpPrecedence | aaProt | aaApp | aaAppGrp |rtpRefClock Rate | MOSAV | VSTQ | estimatedPSNR |GoPType | avgGoPLength | avgInterIFrame Gap | imageWidth| imageHeight | frameRate |slicesPerIFrame | SSRC |video Interlaced | IFrameReceived | IFrameImpaired |PFrameReceived | PFrameImpaired | BFrameReceived |BFrameImpaired | SIFrameReceived | SIFrameImpaired | SPFrameReceived | SPFrameImpaired |frameInterArrivalJitter| IFrameInterArrival Jitter | avgFrameArrivalDelay
- For the rtp-audio template only, the following values apply: flowStartSeconds | flow DurationMilliseconds |postIpPrecedence | aaProt | aaApp | aaAppGrp | rtpBurst Count| rtpAvgBurstLengthPkts | rtpGapCount |rtpAvgGapLengthPkts | PPDVM | rtp NumAudioChannels |rtpRefClockRate |rtpPeakAudioBw | SSRC | hostName
- For volume and comprehensive templates, the following values apply: tcpSessionEst Delay | tcpRetransmittedBytes |tcpRetransmittedPackets

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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field-selection *keyword*

Synopsis	Field selection method
Context	**configure** application-assurance group *number* cflowd tcp-performance template field-selection *keyword*
Tree	field-selection
Description	This command configures the method for selecting the fields to be included in the exported cflowd template.
Options	legacy, dynamic
Default	legacy
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template-retransmit *number*

Synopsis	Template retransmit time
Context	**configure** application-assurance group *number* cflowd template-retransmit *number*
Tree	template-retransmit
Range	10 to 600
Units	seconds
Default	600
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

volume

Synopsis	Enter the **volume** context
Context	**configure** application-assurance group *number* cflowd volume
Tree	volume
Description	Commands in this context configure the cflowd volume export.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate *number*

Synopsis	Cflowd packet sampling rate

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Context	**configure** application-assurance group *number* cflowd volume rate *number*
Tree	rate
Range	1 to 10000
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template

Synopsis	Enter the **template** context
Context	**configure** application-assurance group *number* cflowd volume template
Tree	template
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic-fields

Synopsis	Enter the **dynamic-fields** context
Context	**configure** application-assurance group *number* cflowd volume template dynamic-fields
Tree	dynamic-fields
Description	Commands in this context configure the fields to be included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the dynamic fields
Context	**configure** application-assurance group *number* cflowd volume template dynamic-fields admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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field [field-name] *string*

Synopsis	Add a list entry for **field**
Context	**configure** application-assurance group *number* cflowd volume template dynamic-fields field *string*
Tree	field
Description	This command adds a list entry for the fields to be included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**field-name**] *string*

Synopsis	Cflowd template dynamic field name
Context	**configure** application-assurance group *number* cflowd volume template dynamic-fields field *string*
Tree	field
Description	This command specifies the name of the field to be included in the exported cflowd template.

- Common to all templates are the following values: flowStartSeconds | flowDuration Milliseconds |postIpPrecedence | aaProt | aaApp | aaAppGrp | hostName |hostName Extended| deviceId | deviceMfgId | deviceOsId |ipFamily | deviceOsVer1 | device OsVer2 | deviceOsVer3 |anlType | anlTopology | anlCongestionState | apn | charge Id |mnc | imsi | msisdn | sgw-sgsnAddr | pgw-ggsnAddr | bsid |ratType | regionId | cellId |timeZone | aaChargingGrp |flowAttr_video | flowAttr_abr_service | flowAttr_ audio |flowAttr_encrypted | flowAttr_download |flowAttr_upload |flowAttr_realtime_ communication | aaSubTetheringState | imei| ipTTL | imei roamingStatus | mcc | uli | chargingChar | plmnid| customerId
- When AA is deployed in FWA SR, the following value applies: ApnExtended
- For the rtp-voice template only, the following values apply: flowStartSeconds | flow DurationMilliseconds |postIpPrecedence | aaProt | aaApp | aaAppGrp |rtpBurstCount| rtpAvgBurstLengthMs | rtpGapCount | rtpAvgGapLengthMs |MAPDV | RBurst | RGap | SSRC
- For the rtp-video template only, the following values apply: flowStartSeconds | flow DurationMilliseconds |postIpPrecedence | aaProt | aaApp | aaAppGrp |rtpRefClock Rate | MOSAV | VSTQ | estimatedPSNR |GoPType | avgGoPLength | avgInterIFrame Gap | imageWidth| imageHeight | frameRate |slicesPerIFrame | SSRC |video Interlaced | IFrameReceived | IFrameImpaired |PFrameReceived | PFrameImpaired | BFrameReceived |BFrameImpaired | SIFrameReceived | SIFrameImpaired | SPFrameReceived | SPFrameImpaired |frameInterArrivalJitter| IFrameInterArrival Jitter | avgFrameArrivalDelay
- For the rtp-audio template only, the following values apply: flowStartSeconds | flow DurationMilliseconds |postIpPrecedence | aaProt | aaApp | aaAppGrp | rtpBurst

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Count| rtpAvgBurstLengthPkts | rtpGapCount |rtpAvgGapLengthPkts | PPDVM | rtp NumAudioChannels |rtpRefClockRate |rtpPeakAudioBw | SSRC | hostName

- For volume and comprehensive templates, the following values apply: tcpSessionEst Delay | tcpRetransmittedBytes |tcpRetransmittedPackets

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field-selection *keyword*

Synopsis	Field selection method
Context	**configure** application-assurance group *number* cflowd volume template field-selection *keyword*
Tree	field-selection
Description	This command configures the method for selecting the fields to be included in the exported cflowd template.
Options	legacy, dynamic
Default	legacy
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns-ip-cache [dns-ip-cache-name] *string*

Synopsis	Enter the **dns-ip-cache** list instance
Context	**configure** application-assurance group *number* dns-ip-cache *string*
Tree	dns-ip-cache
Description	Commands in this context configure a DNS IP cache that is used to snoop DNS requests generated by subscribers, to populate a cache of IP addresses that match a specified list of domain names. In the context of strengthening URL-content charging, Operators may also specify a list of trusted DNS servers to populate the DNS IP cache.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**dns-ip-cache-name**] *string*

Synopsis	DNS IP cache name within the AA group

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Context	**configure** application-assurance group *number* dns-ip-cache *string*
Tree	dns-ip-cache
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the AA DNS IP cache object
Context	**configure** application-assurance group *number* dns-ip-cache *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* dns-ip-cache *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns-match

Synopsis	Enter the **dns-match** context
Context	**configure** application-assurance group *number* dns-ip-cache *string* dns-match
Tree	dns-match
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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domain [domain-name] *string*

Synopsis	Enter the **domain** list instance
Context	**configure** application-assurance group *number* dns-ip-cache *string* dns-match domain *string*
Tree	domain
Description	Commands in this context configure a domain expression to populate the DNS IP cache.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**domain-name**] *string*

Synopsis	DNS IP cache domain name
Context	**configure** application-assurance group *number* dns-ip-cache *string* dns-match domain *string*
Tree	domain
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

expression *string*

Synopsis	AA DNS domain expression to match
Context	**configure** application-assurance group *number* dns-ip-cache *string* dns-match domain *string* expression *string*
Tree	expression
Description	This command specifies a domain name expression string used to define a pattern match. The domain expression uses the same syntax as the expressions used in **configure application-assurance group partition policy app-filter entry app-filters** configuration.
String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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trusted-server-address [dns-server-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **trusted-server-address** list instance
Context	**configure** application-assurance group *number* dns-ip-cache *string* dns-match trusted-server-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	trusted-server-address
Description	Commands in this context configure a trusted DNS server address. DNS responses from this DNS server are used to populate the DNS IP cache.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**dns-server-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Trusted DNS server address
Context	**configure** application-assurance group *number* dns-ip-cache *string* dns-match trusted-server-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	trusted-server-address
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server-name *string*

Synopsis	DNS server name
Context	**configure** application-assurance group *number* dns-ip-cache *string* dns-match trusted-server-address *(ipv4-address-no-zone | ipv6-address-no-zone)* server-name *string*
Tree	server-name
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-cache

Synopsis	Enter the **ip-cache** context
Context	**configure** application-assurance group *number* dns-ip-cache *string* ip-cache
Tree	ip-cache

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark value for the DNS IP cache
Context	**configure** application-assurance group *number* dns-ip-cache *string* ip-cache high-watermark *number*
Tree	high-watermark
Description	This command configures the high watermark value for the DNS IP cache. When the number of cached IP addresses exceeds the threshold, the system generates a trap.
Range	0 to 100
Default	90
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark value for the DNS IP cache
Context	**configure** application-assurance group *number* dns-ip-cache *string* ip-cache low-watermark *number*
Tree	low-watermark
Description	This command configures the low watermark value for the DNS IP cache. When the number of cached IP addresses exceeds the high watermark threshold, the system generates a trap based on the high watermark. The trap clears after the number of cached IP addresses drops below the configured low watermark value.
Range	0 to 100
Default	80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

size *number*

Synopsis	Maximum number of IP addresses stored in the cache
Context	**configure** application-assurance group *number* dns-ip-cache *string* ip-cache size *number*
Tree	size

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Range	10 to 64000
Default	10
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

static-address [static-ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Add a list entry for **static-address**
Context	**configure** application-assurance group *number* dns-ip-cache *string* ip-cache static-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	static-address
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**static-ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Trusted IP address for the DNS IP cache
Context	**configure** application-assurance group *number* dns-ip-cache *string* ip-cache static-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	static-address
Description	This command configures an IP address to be used as a trusted IP address. For packets whose destination IP address matches that of the trusted IP address, a cache hit is assumed.
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-enrich [http-enrich-name] *string*

Synopsis	Enter the **http-enrich** list instance
Context	**configure** application-assurance group *number* http-enrich *string*
Tree	http-enrich
Description	Commands in this context configure the attributes of the HTTP enrichment policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**http-enrich-name**] *string*

Synopsis	HTTP header enrichment policy name
Context	**configure** application-assurance group *number* http-enrich *string*
Tree	http-enrich
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the HTTP enrichment policy
Context	**configure** application-assurance group *number* http-enrich *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* http-enrich *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field [field-name] *string*

Synopsis	Enter the **field** list instance
Context	**configure** application-assurance group *number* http-enrich *string* field *string*
Tree	field
Introduced	21.10.R1

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Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**field-name**] *string*

Synopsis Field name to insert into the HTTP header

Context **configure** application-assurance group *number* http-enrich *string* field *string*

Tree field

Description This command specifies the field type to insert into the HTTTP header. The command must be repeated for each field to be inserted. The same field cannot be inserted twice into the header under different header names.

Note: AA can insert two copies of the following fields in the same HTTP header (with a different header name):

imei-hyphenated, imei-hyphenated-2, imsi, imsi-2, static-string, static-string-2, user-location-raw, and user-location-raw2.

The following field types are supported in any deployment:

static-string - header name for the inserted string

static-string-2 - header name for the inserted string

subscriber-id - header name for the subscriber ID

subscriber-ip - header name for the subscriber IP address

The following field types are supported in Fixed Wireless Access (FWA) deployments only:

apn - complete APN string

apn-ni - APN Network Identifier (APN-NI) used by the UE

billing-type - UE charging type (charging characteristics)

dynamic-acr - dynamic Anonymous Customer Record (ACR)

static-acr - static ACR

imei-hyphenated - subscriber IMEI with format AABBBBBB-CCCCCC-EE

imei-hyphenated-2 - subscriber IMEI with format AABBBBBB-CCCCCC-EE

imei-sv - subscriber IMEI with format AABBBBBBCCCCCCEE

imsi - subscriber IMSI

imsi-2 - subscriber IMSI

msisdn - subscriber MSISDN

msisdn-ts - subscriber MSISDN appended with the UNIX timestamp

msisdn-without-cc - subscriber MSISDN without a country code

pgw-ggsn-address - PGW/GGSN address serving the UE

plmn-id - Public Land Mobile Network (PLMN) ID of the SGSN/MME

rat-type - Radio Access Technology (RAT) type

timestamp - timestamp inserted in UNIX time format; for example, 1531204313

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	user-location - UE LOCATION (ULI) user-location-3gpp - ULI encoded as defined in 3GPP 29.061 user-location-raw - ULI in raw format:<ULI-TYPE1>[+<ULI-TYPE2>]=<ULI HEX> Example: x-locinfo: TAI+ECGI=1300622c46130062014adf16 user-location-raw-2 - ULI in raw format:<ULI-TYPE1>[+<ULI-TYPE2>]=<ULI HEX> Example: x-locinfo: TAI+ECGI=1300622c46130062014adf16
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aes-initialization-vector *string*

Synopsis	Initialization vector for the AES CBC encryption
Context	**configure** application-assurance group *number* http-enrich *string* field *string* aes-initialization-vector *string*
Tree	aes-initialization-vector
Description	This command configures the initialization vector used for the AES CBC encryption. The vector consists of 34 characters, that is, 0x followed by exactly 32 hexadecimal characters.
String Length	34
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

anti-spoof *boolean*

Synopsis	Enable anti-spoofing
Context	**configure** application-assurance group *number* http-enrich *string* field *string* anti-spoof *boolean*
Tree	anti-spoof
Description	When configured to **true**, this command enables the HTTP header enrichment anti-spoofing functionality.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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calling-line-id *boolean*

Synopsis	Enable calling line identification
Context	**configure** application-assurance group *number* http-enrich *string* field *string* calling-line-id *boolean*
Tree	calling-line-id
Description	When configured to **true**, this command configures the HTTP header for “x-up-calling-line-id” anti-spoofing.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encode

Synopsis	Enter the **encode** context
Context	**configure** application-assurance group *number* http-enrich *string* field *string* encode
Tree	encode
Description	Commands in this context configure the encoding applied to the HTTP header enrichment field.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cert-base64 *reference*

Synopsis	Certificate profile name
Context	**configure** application-assurance group *number* http-enrich *string* field *string* encode cert-base64 *reference*
Tree	cert-base64
Reference	**configure** application-assurance group *number* certificate-profile *string*
Notes	The following elements are part of a choice: **cert-base64**, **cert-profile**, or **key**.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cert-profile *reference*

Synopsis	Certificate profile name used for encryption

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Context	**configure** application-assurance group *number* http-enrich *string* field *string* encode cert-profile *reference*
Tree	cert-profile
Reference	**configure** application-assurance group *number* certificate-profile *string*
Notes	The following elements are part of a choice: **cert-base64**, **cert-profile**, or **key**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

key

Synopsis	Enter the **key** context
Context	**configure** application-assurance group *number* http-enrich *string* field *string* encode key
Tree	key
Description	Commands in this context configure the encryption fields.
Notes	The following elements are part of a choice: **cert-base64**, **cert-profile**, or **key**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Encoding type
Context	**configure** application-assurance group *number* http-enrich *string* field *string* encode key type *keyword*
Tree	type
Description	This command configures the encoding/ encryption method.
Options	md5, rc4, rc4-md5-base64, aes128, aes256, aes128cbc, aes256cbc
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value *string*

Synopsis	Secret key for encrypting the field
Context	**configure** application-assurance group *number* http-enrich *string* field *string* encode key value *string*
Tree	value

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String Length	1 to 114
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

md5-salt *string*

Synopsis	MD5 salt string
Context	**configure** application-assurance group *number* http-enrich *string* field *string* md5-salt *string*
Tree	md5-salt
Description	This command configures an MD5 salt string. The configured string is appended to the parameter before performing MD5 hashing of the field.
String Length	1 to 16
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	HTTP header field name
Context	**configure** application-assurance group *number* http-enrich *string* field *string* name *string*
Tree	name
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

static-string *string*

Synopsis	HTTP header enrichment template field static string
Context	**configure** application-assurance group *number* http-enrich *string* field *string* static-string *string*
Tree	static-string
String Length	1 to 16
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rat-type-enrichment

Synopsis	Enter the **rat-type-enrichment** context
Context	**configure** application-assurance group *number* http-enrich *string* rat-type-enrichment
Tree	rat-type-enrichment
Description	Commands in this context configure Radio Access Type (RAT) enrichment.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rat-type [rat-type-name] *keyword*

Synopsis	Enter the **rat-type** list instance
Context	**configure** application-assurance group *number* http-enrich *string* rat-type-enrichment rat-type *keyword*
Tree	rat-type
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**rat-type-name**] *keyword*

Synopsis	RAT type name
Context	**configure** application-assurance group *number* http-enrich *string* rat-type-enrichment rat-type *keyword*
Tree	rat-type
Description	This command configures a customised RAT value for the specified RAT-Type.
Options	utran, geran, wlan, gan, hspa-evol, eutran, virtual, eutran-nb, ehrpd, hrpd, cdma-1x, umb, wifi, nr, lte-m
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rat-string *string*

Synopsis	Customised RAT type value

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Context	**configure** application-assurance group *number* http-enrich *string* rat-type-enrichment rat-type *keyword* rat-string *string*
Tree	rat-string
String Length	1 to 31
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-error-redirect [http-error-redirect-name] *string*

Synopsis	Enter the **http-error-redirect** list instance
Context	**configure** application-assurance group *number* http-error-redirect *string*
Tree	http-error-redirect
Description	Commands in this context configure an HTTP error redirect policy that contains important information relevant to the redirect server.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**http-error-redirect-name**] *string*

Synopsis	HTTP error redirect policy name
Context	**configure** application-assurance group *number* http-error-redirect *string*
Tree	http-error-redirect
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the HTTP error redirect object
Context	**configure** application-assurance group *number* http-error-redirect *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* http-error-redirect *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

error-code [error-code-value] *number*

Synopsis	Enter the **error-code** list instance
Context	**configure** application-assurance group *number* http-error-redirect *string* error-code *number*
Tree	error-code
Description	Commands in this context configure the HTTP error status codes to which a redirect action is applied. Only messages with sizes less than that configured for the **custom-message-size** command are eligible for redirect action.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**error-code-value**] *number*

Synopsis	HTTP error code value for an HTTP error redirect
Context	**configure** application-assurance group *number* http-error-redirect *string* error-code *number*
Tree	error-code
Range	400 to 999
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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custom-message-size *number*

Synopsis	HTTP error redirect error code custom message size
Context	**configure** application-assurance group *number* http-error-redirect *string* error-code *number* custom-message-size *number*
Tree	custom-message-size
Description	This command specifies the maximum message size above which an HTTP error redirect is not performed.
Max. Range	0 to 4294967295
Units	octets
Default	1024
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-host *string*

Synopsis	HTTP host for the HTTP error redirect object
Context	**configure** application-assurance group *number* http-error-redirect *string* http-host *string*
Tree	http-host
Description	This command specifies the HTTP hostname of the landing server (Barefruit or Xerocole). It is used in the HTTP GET operation from the client (which is being redirected) to the redirect search landing server. The hostname must contain a valid IP address or HTTP hostname or URI for the HTTP GET from the client to the landing server.
String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

participant-id *string*

Synopsis	Participant ID for the HTTP error redirect object
Context	**configure** application-assurance group *number* http-error-redirect *string* participant-id *string*
Tree	participant-id
Description	This command specifies a string assigned to the operator by Barefruit. It is used by Barefruit landing servers (applies to template # 1 only).
String Length	1 to 32
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template *number*

Synopsis	Template ID for the HTTP error redirect object
Context	**configure** application-assurance group *number* http-error-redirect *string* template *number*
Tree	template
Description	This command configures the template of parameters passed from the AA-ISA to the redirect server using JavaScript in the redirect packet. The template is specific to the redirect server used in the network. Currently, two partners are supported with AA-ISA redirect solution, Barefruit, and Xerocole.
Max. Range	0 to 4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-notification [http-notification-name] *string*

Synopsis	Enter the **http-notification** list instance
Context	**configure** application-assurance group *number* http-notification *string*
Tree	http-notification
Description	Commands in this context configure an HTTP notification object for the subscriber in-browser notification.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**http-notification-name**] *string*

Synopsis	HTTP notification policy name
Context	**configure** application-assurance group *number* http-notification *string*
Tree	http-notification
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of the AA HTTP notification object
Context	**configure** application-assurance group *number* http-notification *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* http-notification *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *(number | keyword)*

Synopsis	Minimum HTTP response notification interval
Context	**configure** application-assurance group *number* http-notification *string* interval *(number | keyword)*
Tree	interval
Range	1 to 1440
Units	minutes
Options	one-time
Default	one-time
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

script-url *string*

Synopsis	Script URL inserted into the HTTP response

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Context	**configure** application-assurance group *number* http-notification *string* script-url *string*
Tree	script-url
Description	This command configures the URL of the script used by the HTTP notification policy.
String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template *number*

Synopsis	Template ID for the AA HTTP notification object
Context	**configure** application-assurance group *number* http-notification *string* template *number*
Tree	template
Description	This command configures the template that defines the format and attributes included in the HTTP notification message.
Max. Range	0 to 4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect [http-redirect-name] *string*

Synopsis	Enter the **http-redirect** list instance
Context	**configure** application-assurance group *number* http-redirect *string*
Tree	http-redirect
Description	Commands in this context configure the parameters of the HTTP redirect policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**http-redirect-name**] *string*

Synopsis	HTTP redirect policy name
Context	**configure** application-assurance group *number* http-redirect *string*
Tree	http-redirect
Description	This command specifies the applied HTTP redirect name. If no redirect name is specified, HTTP redirect is not enabled.
String Length	1 to 32

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Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the AA HTTP redirect object
Context	**configure** application-assurance group *number* http-redirect *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

captive-redirect

Synopsis	Enter the **captive-redirect** context
Context	**configure** application-assurance group *number* http-redirect *string* captive-redirect
Tree	captive-redirect
Description	Commands in this context configure the captive redirect capability for an HTTP redirect policy. HTTP redirect policies using captive redirect can be used in conjunction with a session-filter policy to terminate TCP flows in the ISA-AA card before reaching the Internet to redirect subscribers to the predefined redirect URL. Non-HTTP TCP flows are TCP reset. Captive redirect uses the provisioned VLAN ID to send the HTTP response to subscribers; therefore, this VLAN ID must be properly assigned in the same VPN as the subscriber. The operator can select the URL arguments to include in the redirect URL using either a specific template ID or by configuring the redirect URL using a supported macro substitution keyword.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vlan-id *number*

Synopsis	Captive redirect VLAN ID
Context	**configure** application-assurance group *number* http-redirect *string* captive-redirect vlan-id *number*

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Tree	vlan-id
Description	This command configures the VLAN ID for a captive redirect. Captive redirect uses the provisioned VLAN ID to send the HTTP response to subscribers; therefore, this VLAN ID must be properly assigned in the same VPN as the subscriber.
Range	1 to 4094
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* http-redirect *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

redirect-https *boolean*

Synopsis	Enable HTTPS redirect
Context	**configure** application-assurance group *number* http-redirect *string* redirect-https *boolean*
Tree	redirect-https
Description	When set to **true**, the HTTP redirect policy redirects HTTPS sessions to the configured redirect URL.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

redirect-url *string*

Synopsis	HTTP redirect URL
Context	**configure** application-assurance group *number* http-redirect *string* redirect-url *string*
Tree	redirect-url
Description	This command configures the HTTP redirect URL which is the URL (page) that the user is redirected to when an HTTP redirect takes effect.

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The operator can select the URL arguments to include in the redirect URL, using either a specific template ID or by configuring any of the following macro substitution keywords:

- $URL - The Request-URI in the HTTP GET Request received
- $SUB - The subscriber ID
- $IP - The IP address of the subscriber host
- $RTRID - The router ID
- $URLPRM - The HTTP URL parameter associated with the subscriber
- $MAC - The UE MAC address
- $SAP - The UE SAP
- $CID - The circuit ID or interface ID of the subscriber
- $RID - The remote ID of the subscriber
- $CATID - The URL filter web-service rating category identifier
- $CATNAME - The URL filter web-service rating category name

Only ESM and ESM-MAC sub types support $MAC, $SAP, $CID, and $RID macro substitution.

String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-client-reset *boolean*

Synopsis	Enable TCP client reset
Context	**configure** application-assurance group *number* http-redirect *string* tcp-client-reset *boolean*
Tree	tcp-client-reset
Description	When configured to **true**, this command enables an HTTP-redirect policy to initiate a TCP reset towards the client if the AA policy results in a redirect with packet drop but the HTTP redirect cannot be delivered. Scenarios for this include HTTP (TLS) sessions, blocking of non-HTTP TCP traffic, and blocking of existing flows after a policy re-evaluation of an existing subscriber.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template *number*

Synopsis	Template ID for the HTTP redirect object

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Context	**configure** application-assurance group *number* http-redirect *string* template *number*
Tree	template
Description	This command configures the template that defines which parameters are appended to the HTTP host redirect field in the redirect message. The HTTP redirect template provides HTTP 302 redirect containing only the URL specified in the redirect policy, with no other parameters.
Max. Range	0 to 4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-identification-assist

Synopsis	Enter the **ip-identification-assist** context
Context	**configure** application-assurance group *number* ip-identification-assist
Tree	ip-identification-assist
Description	Commands in this context configure the IP identification assist feature, which uses IP addresses to assist in traffic identification. This optional mechanism is enabled by default and consults an internally generated and stored database when app-filters fail to classify the traffic as one of the configured applications from the AppDB. Use the **configure application-assurance group ip-identification-assist admin-state** command to disable the administrative state of the IP identification assist feature.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of IP identification assist
Context	**configure** application-assurance group *number* ip-identification-assist admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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passive-dns

Synopsis	Enter the **passive-dns** context
Context	**configure** application-assurance group *number* ip-identification-assist passive-dns
Tree	passive-dns
Description	Commands in this context configure passive DNS monitoring for the IP identification assist feature.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

monitor *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use passive DNS monitoring to collect IP addresses
Context	**configure** application-assurance group *number* ip-identification-assist passive-dns monitor *boolean*
Tree	monitor
Description	When configured to **true**, the router collects IP addresses by passively monitoring DNS traffic. The router uses the collected IP addresses to build its internal database.
Default	true
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

trusted-server [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **trusted-server** list instance
Context	**configure** application-assurance group *number* ip-identification-assist passive-dns trusted-server *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	trusted-server
Description	Commands in this context configure a DNS server that the IP identification assist feature is allowed to passively monitor.
Max. Instances	64
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the DNS server
Context	**configure** application-assurance group *number* ip-identification-assist passive-dns trusted-server *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	trusted-server
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

comment *string*

Synopsis	Name or description to associate with the DNS server
Context	**configure** application-assurance group *number* ip-identification-assist passive-dns trusted-server *(ipv4-address-no-zone | ipv6-address-no-zone)* comment *string*
Tree	comment
String Length	0 to 32
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

partition [aa-partition-id] *number*

Synopsis	Enter the **partition** list instance
Context	**configure** application-assurance group *number* partition *number*
Tree	partition
Description	Commands in this context configure the AA partition-related policies.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**aa-partition-id**] *number*

Synopsis	Partition ID within the AA group
Context	**configure** application-assurance group *number* partition *number*
Tree	partition
Range	0 to 65535

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Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub-congestion-detection

Synopsis	Enter the **aa-sub-congestion-detection** context
Context	**configure** application-assurance group *number* partition *number* aa-sub-congestion-detection
Tree	aa-sub-congestion-detection
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of congestion detection
Context	**configure** application-assurance group *number* partition *number* aa-sub-congestion-detection admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rat-type [rat-type-name] *keyword*

Synopsis	Enter the **rat-type** list instance
Context	**configure** application-assurance group *number* partition *number* aa-sub-congestion-detection rat-type *keyword*
Tree	rat-type
Description	Commands in this context configure the RAT types for which unique RTT thresholds are configured.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**rat-type-name**] *keyword*

Synopsis	Mobile radio access technology (RAT) type
Context	**configure** application-assurance group *number* partition *number* aa-sub-congestion-detection rat-type *keyword*
Tree	rat-type
Options	utran, geran, wlan, gan, hspa-evol, eutran, virtual, eutran-nb, ehrpd, hrpd, cdma-1x, umb, wifi, nr, lte-m
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtt-threshold *(number | keyword)*

Synopsis	Round trip time congestion threshold for a RAT type
Context	**configure** application-assurance group *number* partition *number* aa-sub-congestion-detection rat-type *keyword* rtt-threshold *(number | keyword)*
Tree	rtt-threshold
Description	This command configures the maximum acceptable round trip time (RTT) under no congestion. Any measured RTT above the threshold is considered an indication of possible congestion.
Range	1 to 500
Units	milliseconds
Options	not-applicable
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtt-threshold *(number | keyword)*

Synopsis	Round trip time congestion threshold
Context	**configure** application-assurance group *number* partition *number* aa-sub-congestion-detection rtt-threshold *(number | keyword)*
Tree	rtt-threshold
Description	This command configures the default round trip delay threshold used by the DEM gateway algorithm to determine subscriber congestion for NLB-DEM. This default value is used when the current RAT-Type is not known, or has no associated configured RTT threshold.

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Range	1 to 500
Units	milliseconds
Options	not-applicable
Default	173
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtt-threshold-tolerance *number*

Synopsis	RTT threshold tolerance for congestion detection
Context	**configure** application-assurance group *number* partition *number* aa-sub-congestion-detection rtt-threshold-tolerance *number*
Tree	rtt-threshold-tolerance
Description	This command configures the round trip delay threshold tolerance used by the DEM gateway algorithm to determine subscriber-level congestion.
Range	0 to 100
Units	percent
Default	50
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub-remote *boolean*

Synopsis	Reverse subscriber traffic direction
Context	**configure** application-assurance group *number* partition *number* aa-sub-remote *boolean*
Tree	aa-sub-remote
Description	When configured to **true**, the direction of the from-subscriber and to-subscriber traffic is reversed for this group partition.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

access-network-location

Synopsis	Enter the **access-network-location** context

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Context	**configure** application-assurance group *number* partition *number* access-network-location
Tree	access-network-location
Description	Commands in this context configure parameters related to dynamic experience management, also known as Access Network Location (ANL).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source [source-type] *keyword*

Synopsis	Enter the **source** list instance
Context	**configure** application-assurance group *number* partition *number* access-network-location source *keyword*
Tree	source
Description	Commands in this context configure location sources for dynamic experience management.
Max. Instances	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**source-type**] *keyword*

Synopsis	Access network location source
Context	**configure** application-assurance group *number* partition *number* access-network-location source *keyword*
Tree	source
Description	This command specifies the location or access technology. AA supports access points for WLGW access points or ULI-2gpp for mobile (for example, FWA).
Options	mobile-3g, access-point, uli-3gpp
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rat-type [rat-type-name] *keyword*

Synopsis	Enter the **rat-type** list instance

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Context	**configure** application-assurance group *number* partition *number* access-network-location source *keyword* rat-type *keyword*
Tree	rat-type
Description	Commands in this context configure the RAT types for which unique RTT thresholds are configured.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**rat-type-name**] *keyword*

Synopsis	Access network location RAT type
Context	**configure** application-assurance group *number* partition *number* access-network-location source *keyword* rat-type *keyword*
Tree	rat-type
Options	utran, geran, wlan, gan, hspa-evol, eutran, virtual, eutran-nb, ehrpd, hrpd, cdma-1x, umb, wifi, nr, lte-m
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtt-threshold *(number | keyword)*

Synopsis	RTT congestion threshold for a RAT type
Context	**configure** application-assurance group *number* partition *number* access-network-location source *keyword* rat-type *keyword* rtt-threshold *(number | keyword)*
Tree	rtt-threshold
Description	This command specifies the maximum acceptable round trip time (RTT) under no congestion. Any measured RTT above the threshold is considered an indication of possible congestion.
Range	1 to 500
Units	milliseconds
Options	not-applicable
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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rtt-threshold *(number | keyword)*

Synopsis	Source round trip time congestion threshold
Context	**configure** application-assurance group *number* partition *number* access-network-location source *keyword* rtt-threshold *(number | keyword)*
Tree	rtt-threshold
Description	This command configures the default round trip delay threshold used by the DEM gateway algorithm to determine ANL congestion. This default value is used when either the ANL RAT-Type is not known or has no associated configured RTT threshold.
Range	1 to 500
Units	milliseconds
Options	not-applicable
Default	173
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtt-threshold-tolerance *number*

Synopsis	Source round trip time congestion threshold tolerance
Context	**configure** application-assurance group *number* partition *number* access-network-location source *keyword* rtt-threshold-tolerance *number*
Tree	rtt-threshold-tolerance
Description	This command configures the ANL round trip delay threshold tolerance used by the DEM gateway algorithm to determine ANL-level congestion.
Range	0 to 100
Units	percent
Default	50
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source-level *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Access network location source level

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Context	**configure** application-assurance group *number* partition *number* access-network-location source *keyword* source-level *keyword*
Tree	source-level
Options	cell, transport-network-link, mac-vlan
Default	cell
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aqp-initial-lookup *boolean*

Synopsis	Enable AQP initial lookup
Context	**configure** application-assurance group *number* partition *number* aqp-initial-lookup *boolean*
Tree	aqp-initial-lookup
Description	When configured to **true**, this command allows AA to perform application QoS policy (AQP) lookups on flows prior to complete application identification. As usual, AQP will be looked up again when identification is complete. Without this, AA executes AQPs that are part of the sub-default policy. The sub-default policy is formed by regular AQPs that contain ASOs, subID, or flow direction as matching conditions. This behavior is required, for example, to apply GTP and SCTP filtering on the first packet of a new GTP/SCTP flow (AQP matching conditions). When configured to **false**, AA only performs AQP lookups when identification is complete.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cflowd

Synopsis	Enter the **cflowd** context
Context	**configure** application-assurance group *number* partition *number* cflowd
Tree	cflowd
Description	Commands in this context configure the AA partition-based cflowd fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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export-type [flow-export-type] *keyword*

Synopsis	Enter the **export-type** list instance
Context	**configure** application-assurance group *number* partition *number* cflowd export-type *keyword*
Tree	export-type
Description	Commands in this context configure the scope of traffic subjected to AA cflowd export.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**flow-export-type**] *keyword*

Synopsis	Cflowd flow export type for the partition
Context	**configure** application-assurance group *number* partition *number* cflowd export-type *keyword*
Tree	export-type
Description	This command allows the operator to configure the scope of traffic that can be sampled for cflowd export for the configured cflowd template.
Options	volume, tcp-performance, rtp-performance, comprehensive
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of cflowd export
Context	**configure** application-assurance group *number* partition *number* cflowd export-type *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-group [app-group-name] *reference*

Synopsis	Enter the **app-group** list instance

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Context	**configure** application-assurance group *number* partition *number* cflowd export-type *keyword* app-group *reference*
Tree	app-group
Description	Commands in this context configure application groups for flow sampling and cflowd export.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**app-group-name**] *reference*

Synopsis	Application group name
Context	**configure** application-assurance group *number* partition *number* cflowd export-type *keyword* app-group *reference*
Tree	app-group
Reference	**configure** application-assurance group *number* partition *number* policy app-group *string*
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-choice *keyword*

Synopsis	Cflowd rate to use for sampling
Context	**configure** application-assurance group *number* partition *number* cflowd export-type *keyword* app-group *reference* rate-choice *keyword*
Tree	rate-choice
Options	flow-rate, flow-rate-2
Default	flow-rate
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

application [application-name] *reference*

Synopsis	Enter the **application** list instance
Context	**configure** application-assurance group *number* partition *number* cflowd export-type *keyword* application *reference*
Tree	application

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Description	Commands in this context configure applications for flow sampling and cflowd export.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**application-name**] *reference*

Synopsis	Application name
Context	**configure** application-assurance group *number* partition *number* cflowd export-type *keyword* application *reference*
Tree	application
Reference	**configure** application-assurance group *number* partition *number* policy application *string*
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-choice *keyword*

Synopsis	Cflowd rate to use for sampling
Context	**configure** application-assurance group *number* partition *number* cflowd export-type *keyword* application *reference* rate-choice *keyword*
Tree	rate-choice
Options	flow-rate, flow-rate-2
Default	flow-rate
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* partition *number* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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event-log [event-log-name] *string*

Synopsis	Enter the **event-log** list instance
Context	**configure** application-assurance group *number* partition *number* event-log *string*
Tree	event-log
Description	Commands in this context configure an event log.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**event-log-name**] *string*

Synopsis	Partition event log name
Context	**configure** application-assurance group *number* partition *number* event-log *string*
Tree	event-log
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the event log
Context	**configure** application-assurance group *number* partition *number* event-log *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

buffer-type *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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Synopsis	Event log buffer type
Context	**configure** application-assurance group *number* partition *number* event-log *string* buffer-type *keyword*
Tree	buffer-type
Options	linear, circular, syslog
Default	linear
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-entries *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of entries for the event log
Context	**configure** application-assurance group *number* partition *number* event-log *string* max-entries *number*
Tree	max-entries
Range	1 to 100000
Default	500
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

syslog

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **syslog** context
Context	**configure** application-assurance group *number* partition *number* event-log *string* syslog
Tree	syslog
Description	Commands in this context configure the syslog options for the partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Syslog host IP address
Context	**configure** application-assurance group *number* partition *number* event-log *string* syslog address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	address
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* partition *number* event-log *string* syslog description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

facility *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	AA syslog facility
Context	**configure** application-assurance group *number* partition *number* event-log *string* syslog facility *keyword*
Tree	facility
Description	This command configures the syslog facility. The syslog facility is an information field associated with a syslog message. It is defined by the syslog protocol and provides an indication of which part of the system originated the message.
Options	kernel, user, mail, systemd, auth, syslogd, printer, netnews, uucp, cron, authpriv, ftp, ntp, logaudit, logalert, cron2, local0, local1, local2, local3, local4, local5, local6, local7

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Default	local7
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	UDP port for syslog events
Context	**configure** application-assurance group *number* partition *number* event-log *string* syslog port *number*
Tree	port
Max. Range	0 to 65535
Default	514
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Syslog message severity level threshold
Context	**configure** application-assurance group *number* partition *number* event-log *string* syslog severity *keyword*
Tree	severity
Options	emergency, alert, critical, error, warning, notice, info, debug
Default	info
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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vlan-id *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA service port VLAN ID for sending syslog traffic
Context	**configure** application-assurance group *number* partition *number* event-log *string* syslog vlan-id *number*
Tree	vlan-id
Description	This command configures the service port VLAN ID to be used by application assurance to provide syslog events. This VLAN ID also needs to be configured for the application assurance interface.
Range	1 to 4094
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp

Synopsis	Enter the **gtp** context
Context	**configure** application-assurance group *number* partition *number* gtp
Tree	gtp
Description	Commands in this context configure GTP parameters.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of GTP
Context	**configure** application-assurance group *number* partition *number* gtp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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gtp-filter [gtp-filter-name] *string*

Synopsis	Enter the **gtp-filter** list instance
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string*
Tree	gtp-filter
Description	Commands in this context allow AA to treat traffic on UDP port number 2152 as GTP-U. Without further specifying any other parameters within this GTP context, AA performs basic GTP-U header sanity checks and discards packets that are malformed. This GTP context also allows the operator to configure various GTP filters.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**gtp-filter-name**] *string*

Synopsis	GTP filter name
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string*
Tree	gtp-filter
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp-in-gtp *keyword*

Synopsis	GTP in GTP packet filtering
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* gtp-in-gtp *keyword*

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Tree	gtp-in-gtp
Options	deny, permit
Default	permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp-tunnel-database

Synopsis	Enter the **gtp-tunnel-database** context
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* gtp-tunnel-database
Tree	gtp-tunnel-database
Description	Commands in this context configure GTP advanced firewall functions, such as validating GTP tunnels, sequence numbers, and source IP addresses).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-tunnel-endpoint-limit *number*

Synopsis	Default GTP tunnel endpoint limit
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* gtp-tunnel-database default-tunnel-endpoint-limit *number*
Tree	default-tunnel-endpoint-limit
Description	This command configures the maximum number of GTP endpoints requested in GTP-C messages by using, for example, the PDP Context Create message type. The **validate-gtp-tunnels** command must be enabled before using this command.
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

validate-gtp-tunnels *boolean*

Synopsis	Enable GTP tunnel validation
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* gtp-tunnel-database validate-gtp-tunnels *boolean*

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Tree	validate-gtp-tunnels
Description	When configured to **true**, this command configures GTP tunnel validation. This allows for the validation of TEIDs and is a prerequisite for sequence checking and UE IP address validation. This command is only applicable when AA GTP FW is deployed on S8/S5/Gp/Gn interfaces. The **gtpc-inspection** command in the **configure application-assurance group partition gtp** context must be configured to true before using this command. When configured to **false**, the GTP tunnels cannot be validated.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

validate-sequence-number *boolean*

Synopsis	Enable GTP sequence number checking
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* gtp-tunnel-database validate-sequence-number *boolean*
Tree	validate-sequence-number
Description	When configured to **true**, this command enables GTP sequence number checking. GTP packets that fail the sequence number check are discarded. The **validate-gtp-tunnels** command in the **configure application-assurance group partition gtp gtp-filter gtp-tunnel-database** context must be configured to **true** before using this command. When configured to **false**, the GTP packet sequence number cannot be checked.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

validate-source-ip-addr *boolean*

Synopsis	Validate source IP address in GTP frames
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* gtp-tunnel-database validate-source-ip-addr *boolean*
Tree	validate-source-ip-addr
Description	When configured to **true**, this command enables checking for spoofed or invalid UE IP addresses. Upstream GTP packets that contain invalid UE IP addresses are discarded. When a packet is dropped due to source-ip-address “invalid source IP add”, the statistics counter is updated.

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The **validate-gtp-tunnels** command in the **configure application-assurance group partition gtp gtp-filter gtp-tunnel-database** context must be configured to **true** before using this command.

When configured to **false**, the spoofed or invalid UE IP addresses cannot be checked.

Default false

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

imsi-apn-filter

Synopsis Enter the **imsi-apn-filter** context

Context **configure** application-assurance group *number* partition *number* gtp gtp-filter *string* imsi-apn-filter

Tree imsi-apn-filter

Description Commands in this context configure IMSI and APN filtering.

The **gtpc-inspection** command in the **configure application-assurance group partition gtp** context must be configured to true before using this command.

This command is only applicable to the GTP packets that contain IMSI or APN information elements (IEs).

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action *keyword*

Synopsis IMSI APN filter default action

Context **configure** application-assurance group *number* partition *number* gtp gtp-filter *string* imsi-apn-filter default-action *keyword*

Tree default-action

Options deny, permit

Default permit

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [entry-id] *number*

Synopsis Enter the **entry** list instance

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Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* imsi-apn-filter entry *number*
Tree	entry
Description	Commands in this context configure an entry within the IMSI-APN filter to allow for IMSI-APN match and action configuration.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**entry-id**] *number*

Synopsis	AA IMSI-APN filter entry ID
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* imsi-apn-filter entry *number*
Tree	entry
Description	This command specifies the index in the IMSI-APN list that defines a custom filtering action.
Range	1031 to 2030
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	IMSI APN filter entry action
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* imsi-apn-filter entry *number* action *keyword*
Tree	action
Options	deny, permit
Default	permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

apn *string*

Synopsis	APN as GTP filter match criterion
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* imsi-apn-filter entry *number* apn *string*

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Tree	apn
Description	This command configures a matching condition for an APN configured as a GTP filter. If no APN is specified, the entry is not checked for the APN IE in GTP-C packets. The values for this command are: • string:The extracted APN must match string exactly. • ^string: The extracted APN must start with string. • string$: The extracted APN must end with string. • WILDCARD_APN: Special string that indicates that the extracted APN must be “*” (that is, a length octet with value one, followed by the ASCII code for the asterisk) • EMPTY_APN: Special string that indicates that the extracted APN must be empty (that is, “”) • ANY_APN: Special string that indicates that the extracted APN IE must be present and can have any value in order for the filter entry to match
String Length	1 to 100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

imsi-mcc-mnc-prefix *string*

Synopsis	IMSI (MCC-MNC) prefix as GTP filter match criterion
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* imsi-apn-filter entry *number* imsi-mcc-mnc-prefix *string*
Tree	imsi-mcc-mnc-prefix
Description	This command configures a matching condition for the IMSI (MCC-MNC) prefix. This string represents the IMSI prefix to be matched against the IMSI IE of the packet, or the special value ANY_IMSI to indicate that an IMSI IE must be present as a matching condition regardless of the IMSI IE value. If no MCC-MNC prefix is specified, the entry will match GTP packets that have an IMSI IE containing any value.
String Length	1 to 8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

src-gsn

Synopsis	Enter the **src-gsn** context
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* imsi-apn-filter entry *number* src-gsn
Tree	src-gsn

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Description	Commands in this context configure a matching condition for the GSN IP address. The IP address value is checked only against the source IP address of the GTP packets that contain an APN IE or an IMSI IE.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix *(ipv4-prefix | ipv6-prefix)*

Synopsis	Source GSN IP address prefix as filter match criterion
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* imsi-apn-filter entry *number* src-gsn ip-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	ip-prefix
Description	This command specifies a valid unicast address associated with the IMSI-APN filter entry.
Notes	The following elements are part of a choice: **ip-prefix** or **ip-prefix-list**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	Source GSN IP address prefix list as match criterion
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* imsi-apn-filter entry *number* src-gsn ip-prefix-list *reference*
Tree	ip-prefix-list
Reference	**configure** application-assurance group *number* partition *number* ip-prefix-list *string*
Notes	The following elements are part of a choice: **ip-prefix** or **ip-prefix-list**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

log

Synopsis	Enter the **log** context
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* log
Tree	log
Description	Commands in this context configure the AA group partition GTP filter log.
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	GTP filter action to be logged
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* log action *keyword*
Tree	action
Options	deny, permit, all
Default	deny
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log *reference*

Synopsis	Event-log name to capture GTP filter events
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* log event-log *reference*
Tree	event-log
Reference	**configure** application-assurance group *number* partition *number* event-log *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-payload-length *number*

Synopsis	Maximum allowed GTP payload length
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* max-payload-length *number*
Tree	max-payload-length
Range	0 to 65535
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

message-type

Synopsis	Enter the **message-type** context

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Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* message-type
Tree	message-type
Description	Commands in this context configure the GTP message-type filtering. If no message type is specified within a filter, all GTP message types are allowed.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action *keyword*

Synopsis	GTP message type default action
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* message-type default-action *keyword*
Tree	default-action
Options	deny, permit
Default	permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* message-type entry *number*
Tree	entry
Description	Commands in this context configure an entry for a specific GTPv1 message type value.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**entry-id**] *number*

Synopsis	GTP filter entry ID
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* message-type entry *number*
Tree	entry
Description	This command specifies the index in the GTPv1 message value list that defines a custom message-type action.

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Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	GTPv1 filter message entry action
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* message-type entry *number* action *keyword*
Tree	action
Options	deny, permit
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value *(number | keyword)*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	GTPv1 filter message type value
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* message-type entry *number* value *(number | keyword)*
Tree	value
Range	1 to 255
Options	echo-request, echo-response, version-not-supported, node-alive-request, node-alive-response, redirection-request, redirection-response, create-pdp-context-request, create-pdp-context-response, update-pdp-context-request, update-pdp-context-response, delete-pdp-context-request, delete-pdp-context-response, initiate-pdp-context-activation-request, initiate-pdp-context-activation-response, error-indication, pdu-notification-request, pdu-notification-response, pdu-notification-reject-request, pdu-notification-reject-response, supported-extension-headers-notification, send-routing-information-for-gprs-request, send-routing-information-for-gprs-response, failure-report-request, failure-report-response, note-ms-gprs-present-request, note-ms-gprs-present-response, identification-request, identification-response, sgsn-context-request, sgsn-context-response, sgsn-context-acknowledge, forward-relocation-request, forward-relocation-response, forward-relocation-complete,

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relocation-cancel-request, relocation-cancel-response, forward-srns-context, forward-relocation-complete-acknowledge, forward-srns-context-acknowledge, ran-information-relay, mbms-notification-request, mbms-notification-response, mbms-notification-reject-request, mbms-notification-reject-response, create-mbms-context-request, create-mbms-context-response, update-mbms-context-request, update-mbms-context-response, delete-mbms-context-request, delete-mbms-context-response, mbms-registration-request, mbms-registration-response, mbms-de-registration-request, mbms-de-registration-response, mbms-session-start-request, mbms-session-start-response, mbms-session-stop-request, mbms-session-stop-response, mbms-session-update-request, mbms-session-update-response, ms-info-change-notification-request, ms-info-change-notification-response, data-record-transfer-request, data-record-transfer-response, end-marker, g-pdu

Notes This element is mandatory.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

message-type-gtp-v2

Synopsis Enter the **message-type-gtp-v2** context

Context **configure** application-assurance group *number* partition *number* gtp gtp-filter *string* message-type-gtp-v2

Tree message-type-gtp-v2

Description Commands in this context configure the GTPv2 message-type filtering.

If message-type GTPv2 is not specified within a filter, all GTP message types are allowed, except for the messages that are dropped by GTP-C inspection because they violate the expected GTP protocol for the deployment interface (for example, roaming deployment).

The **gtpc-inspection** command in the **configure application-assurance group partition gtp** context must be configured to true before configuring GTPv2 message-type filtering.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action *keyword*

Synopsis GTPv2 message type default action

Context **configure** application-assurance group *number* partition *number* gtp gtp-filter *string* message-type-gtp-v2 default-action *keyword*

Tree default-action

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Options	deny, permit
Default	permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* message-type-gtp-v2 entry *number*
Tree	entry
Description	Commands in this context configure an entry for a specific GTPv2 message type value.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**entry-id**] *number*

Synopsis	GTPv2 filter entry ID
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* message-type-gtp-v2 entry *number*
Tree	entry
Description	This command configures the index in the GTP message value list that defines a custom message-type action.
Range	516 to 770
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	GTPv2 filter message entry action
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* message-type-gtp-v2 entry *number* action *keyword*
Tree	action
Description	This command specifies the action to take for packets that match this GTPv2 filter message entry.

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Options	deny, permit
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value *(number | keyword)*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	GTPv2 filter message type value
Context	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string* message-type-gtp-v2 entry *number* value *(number | keyword)*
Tree	value
Range	1 to 255
Options	echo-request, echo-response, version-not-supported-indication, create-session-request, create-session-response, modify-bearer-request, modify-bearer-response, delete-session-request, delete-session-response, change-notification-request, change-notification-response, remote-ue-report-notification, remote-ue-report-acknowledge, modify-bearer-command, modify-bearer-failure-indication, delete-bearer-command, delete-bearer-failure-indication, bearer-resource-command, bearer-resource-failure-indication, downlink-data-notification-failure-indication, trace-session-activation, trace-session-deactivation, stop-paging-indication, create-bearer-request, create-bearer-response, update-bearer-request, update-bearer-response, delete-bearer-request, delete-bearer-response, delete-pdn-connection-set-request, delete-pdn-connection-set-response, pgw-downlink-triggering-notification, pgw-downlink-triggering-acknowledge, identification-request, identification-response, context-request, context-response, context-acknowledge, forward-relocation-request, forward-relocation-response, forward-relocation-complete-notification, forward-relocation-complete-acknowledge, forward-access-context-notification, forward-access-context-acknowledge, relocation-cancel-request, relocation-cancel-response, configuration-transfer-tunnel, detach-notification, detach-acknowledge, cs-paging-indication, ran-information-relay, alert-mme-notification, alert-mme-acknowledge, ue-activity-notification, ue-activity-acknowledge, isr-status-indication, create-forwarding-tunnel-request, create-forwarding-tunnel-response, suspend-notification, suspend-acknowledge, resume-notification, resume-acknowledge, create-indirect-data-forwarding-tunnel-request, create-indirect-data-forwarding-tunnel-response, delete-indirect-data-forwarding-tunnel-request, delete-indirect-data-forwarding-tunnel-response, release-access-bearers-request, release-access-bearers-response, downlink-data-notification, downlink-data-notification-acknowledge, pgw-restart-notification,

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	pgw-restart-notification-acknowledge, update-pdn-connection-set-request, update-pdn-connection-set-response, modify-access-bearers-request, modify-access-bearers-response, mbms-session-start-request, mbms-session-start-response, mbms-session-update-request, mbms-session-update-response, mbms-session-stop-request, mbms-session-stop-response
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtpc-inspection *boolean*

Synopsis	Enable inspection of GTP-C packets
Context	**configure** application-assurance group *number* partition *number* gtp gtpc-inspection *boolean*
Tree	gtpc-inspection
Description	When configured to **true**, this command enables the inspection of GTP-C packets. This is relevant only when AA GTP FW is deployed on S8/S5/Gp/Gn interfaces. This command must be enabled before configuring related features, such as APN filtering, GTP tunnel validation, message-type-v2 filtering, sequence number validation, and SRC IP validation. When configured to **false**, GTP-C packet inspection cannot be performed.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

log

Synopsis	Enter the **log** context
Context	**configure** application-assurance group *number* partition *number* gtp log
Tree	log
Description	Commands in this context configure the AA group partition GTP log.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	GTP log action

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Context	**configure** application-assurance group *number* partition *number* gtp log action *keyword*
Tree	action
Description	This command specifies the action on which the GTP log is raised.
Options	deny, permit, all
Default	deny
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log *reference*

Synopsis	Event log reference for logging GTP events
Context	**configure** application-assurance group *number* partition *number* gtp log event-log *reference*
Tree	event-log
Reference	**configure** application-assurance group *number* partition *number* event-log *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	GTP mode
Context	**configure** application-assurance group *number* partition *number* gtp mode *keyword*
Tree	mode
Options	filtering, untunneling
Default	filtering
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-match-all-requests *boolean*

Synopsis	Enable HTTP matching for all requests for an expression

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Context	**configure** application-assurance group *number* partition *number* http-match-all-requests *boolean*
Tree	http-match-all-requests
Description	When configured to **true**, this command enables HTTP matching for all requests for an HTTP expression. When configured to **false**, this command restores the default and removes the matching request for this particular expression.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-x-online-host *boolean*

Synopsis	Enable X-Online-Host header field
Context	**configure** application-assurance group *number* partition *number* http-x-online-host *boolean*
Tree	http-x-online-host
Description	When configured to **true**, this command enables the X-Online-Host header field as a replacement for the HTTP Host header field.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-identification-contribute *boolean*

Synopsis	Contribute traffic info from this partition to group
Context	**configure** application-assurance group *number* partition *number* ip-identification-contribute *boolean*
Tree	ip-identification-contribute
Description	When configured to **true**, the router collects information from traffic in this partition and contributes it to the database that is built by the IP identification assist feature at the group level.
Default	true
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ip-prefix-list [ip-prefix-list-name] *string*

Synopsis	Enter the **ip-prefix-list** list instance
Context	**configure** application-assurance group *number* partition *number* ip-prefix-list *string*
Tree	ip-prefix-list
Description	Commands in this context configure an IP prefix list.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**ip-prefix-list-name**] *string*

Synopsis	AA IP prefix list name
Context	**configure** application-assurance group *number* partition *number* ip-prefix-list *string*
Tree	ip-prefix-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* partition *number* ip-prefix-list *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix [ip-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **prefix** list instance
Context	**configure** application-assurance group *number* partition *number* ip-prefix-list *string* prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Description	Commands in this context configure an IP prefix within the list.

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**ip-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	AA IP prefix
Context	**configure** application-assurance group *number* partition *number* ip-prefix-list *string* prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	AA IP prefix name
Context	**configure** application-assurance group *number* partition *number* ip-prefix-list *string* prefix *(ipv4-prefix | ipv6-prefix)* name *string*
Tree	name
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy

Synopsis	Enter the **policy** context
Context	**configure** application-assurance group *number* partition *number* policy
Tree	policy
Description	Commands in this context configure the fields for the Application Assurance policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-filter

Synopsis	Enter the **app-filter** context
Context	**configure** application-assurance group *number* partition *number* policy app-filter

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Tree	app-filter
Description	Commands in this context configure an application filter for Application Assurance.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number*
Tree	entry
Description	Commands in this context create an application filter entry. Application filter entries are an ordered list. The lowest numerical entry that matches the flow defines the application for that flow. An application filter entry or entries configure match attributes of an application.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**entry-id**] *number*

Synopsis	Application filter entry ID
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number*
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the AA application filter entry
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable

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Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

application *reference*

Synopsis	Application name
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* application *reference*
Tree	application
Reference	**configure** application-assurance group *number* partition *number* policy application *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

expression [expr-index] *number*

Synopsis	Enter the **expression** list instance
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* expression *number*
Tree	expression
Description	Commands in this context configure string values to use in the application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**expr-index**] *number*

Synopsis	Application filter matching expression identifier
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* expression *number*
Tree	expression
Range	1 to 4
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *string*

Synopsis	Exact match for application filter matching expression
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* expression *number* eq *string*
Tree	eq
String Length	1 to 255
Notes	The following elements are part of a mandatory choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq *string*

Synopsis	Non-match for application filter matching expression
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* expression *number* neq *string*
Tree	neq
String Length	1 to 255
Notes	The following elements are part of a mandatory choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Application filter matching expression type

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Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* expression *number* type *keyword*
Tree	type
Options	http-host, http-uri, http-referer, sip-ua, sip-uri, sip-mt, citrix-app, http-user-agent, h323-product-id, tls-cert-subj-org-name, tls-cert-subj-common-name, rtsp-host, rtsp-uri, rtsp-ua, rtmp-page-host, rtmp-page-uri, rtmp-swf-host, rtmp-swf-uri, rtmp-tc-host, rtmp-tc-uri, dns-domain-name
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-setup-direction *keyword*

Synopsis	Traffic flow direction for the application filter entry
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* flow-setup-direction *keyword*
Tree	flow-setup-direction
Options	subscriber-to-network, network-to-subscriber, both
Default	both
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-match-all-requests *boolean*

Synopsis	Enable HTTP matching for all requests
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* http-match-all-requests *boolean*
Tree	http-match-all-requests
Description	When configured to **true**, this command enables HTTP matching for all requests for an HTTP expression. When configured to **false**, this command restores the default for this app-filter entry which matches the first request.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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http-port

Synopsis	Enter the **http-port** context
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* http-port
Tree	http-port
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq

Synopsis	Enter the **eq** context
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* http-port eq
Tree	eq
Description	Commands in this context configure the exact value as the match criterion.
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis	Port list name
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* http-port eq port-list *reference*
Tree	port-list
Reference	**configure** application-assurance group *number* partition *number* port-list *string*
Notes	The following elements are part of a choice: **port-list** or **port-number**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis	Server port number
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* http-port eq port-number *number*
Tree	port-number

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Range	0 | 1 to 65535
Default	0
Notes	The following elements are part of a choice: **port-list** or **port-number**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq

Synopsis	Enter the **neq** context
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* http-port neq
Tree	neq
Description	Commands in this context configure the non-match criterion used.
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis	Port list name
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* http-port neq port-list *reference*
Tree	port-list
Reference	**configure** application-assurance group *number* partition *number* port-list *string*
Notes	The following elements are part of a choice: **port-list** or **port-number**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis	Server port number
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* http-port neq port-number *number*
Tree	port-number
Range	0 | 1 to 65535

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Default	0
Notes	The following elements are part of a choice: **port-list** or **port-number**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-identification-assist *boolean*

Synopsis	Enable IP identification assist for this entry
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* ip-identification-assist *boolean*
Tree	ip-identification-assist
Description	When configured to **true**, the router performs a network IP address lookup that overrides the assigned application if it finds the network IP address in its internal application-IP database. If an IP match is found, the application assigned from the app-filter is overridden with the application from the IP lookup. This also affects the app-group and charging group. If an IP match is not found, the application assigned from the app-filter is not overridden and remains (including the app-group and charging group). When configured to **false**, this command disables the router from performing a network IP address lookup and overriding the assigned application.
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-protocol

Synopsis	Enter the **ip-protocol** context
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* ip-protocol
Tree	ip-protocol
Description	Commands in this context configure the IP protocol to use in the application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *(number | keyword)*

Synopsis	Exact match criterion used for the IP protocol number

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Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* ip-protocol eq *(number* | *keyword)*
Tree	eq
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq *(number* | *keyword)*

Synopsis	Non-match criterion used for the IP protocol number
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* ip-protocol neq *(number* | *keyword)*
Tree	neq
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

network-address

Synopsis	Enter the **network-address** context
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* network-address
Tree	network-address
Description	Commands in this context configure the network address to use for the application filter entry. The network address is the address on the network side of AA, independent of whether the subscriber is acting as a client or server and is not normally used in AA app-filters. The network address will match the destination IP address in a from-sub flow or the source IP address in a to-sub flow.
Notes	The following elements are part of a choice: **network-address** or **server-address**.
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq

Synopsis	Enter the **eq** context
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* network-address eq
Tree	eq
Description	Commands in this context specify an exact value as the match criterion for the network address.
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP prefix
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* network-address eq ip-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	ip-prefix
Notes	The following elements are part of a choice: **ip-prefix** or **ip-prefix-list**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	IP prefix list
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* network-address eq ip-prefix-list *reference*
Tree	ip-prefix-list
Reference	**configure** application-assurance group *number* partition *number* ip-prefix-list *string*
Notes	The following elements are part of a choice: **ip-prefix** or **ip-prefix-list**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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neq

Synopsis	Enter the **neq** context
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* network-address neq
Tree	neq
Description	Commands in this context specify the non-match criterion used for the network address.
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP prefix
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* network-address neq ip-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	ip-prefix
Notes	The following elements are part of a choice: **ip-prefix** or **ip-prefix-list**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	IP prefix list
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* network-address neq ip-prefix-list *reference*
Tree	ip-prefix-list
Reference	**configure** application-assurance group *number* partition *number* ip-prefix-list *string*
Notes	The following elements are part of a choice: **ip-prefix** or **ip-prefix-list**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocol

Synopsis	Enter the **protocol** context
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* protocol

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Tree	protocol
Description	Commands in this context configure the protocol signature in the application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *(string | named-item)*

Synopsis	Exact match criterion used for the AA protocol name
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* protocol eq *(string | named-item)*
Tree	eq
String Length	1 to 32
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq *(string | named-item)*

Synopsis	Non-match criterion used for the AA protocol name
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* protocol neq *(string | named-item)*
Tree	neq
String Length	1 to 32
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server-address

Synopsis	Enter the **server-address** context
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-address
Tree	server-address
Description	Commands in this context configure the server address to use for the application filter entry. The server address is the address on the server end of a client-server session.
Notes	The following elements are part of a choice: **network-address** or **server-address**.

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq

Synopsis	Enter the **eq** context
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-address eq
Tree	eq
Description	Commands in this context configure the attributes of the IP address used for the exact match criterion for the application flow.
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns-ip-cache *reference*

Synopsis	DNS IP cache name
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-address eq dns-ip-cache *reference*
Tree	dns-ip-cache
Reference	**configure** application-assurance group *number* dns-ip-cache *string*
Notes	The following elements are part of a choice: **dns-ip-cache**, **ip-prefix**, **ip-prefix-list**, or **masked-ip**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP prefix
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-address eq ip-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	ip-prefix
Notes	The following elements are part of a choice: **dns-ip-cache**, **ip-prefix**, **ip-prefix-list**, or **masked-ip**.
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	IP prefix list
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-address eq ip-prefix-list *reference*
Tree	ip-prefix-list
Reference	**configure** application-assurance group *number* partition *number* ip-prefix-list *string*
Notes	The following elements are part of a choice: **dns-ip-cache**, **ip-prefix**, **ip-prefix-list**, or **masked-ip**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

masked-ip

Synopsis	Enter the **masked-ip** context
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-address eq masked-ip
Tree	masked-ip
Description	Commands in this context configure the attributes of a masked IP address.
Notes	The following elements are part of a choice: **dns-ip-cache**, **ip-prefix**, **ip-prefix-list**, or **masked-ip**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IPv4 or IPv6 address mask
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-address eq masked-ip address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	address
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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netmask *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IPv4 or IPv6 address mask
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-address eq masked-ip netmask *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	netmask
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq

Synopsis	Enter the **neq** context
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-address neq
Tree	neq
Description	Commands in this context configure the attributes of the IP address used for non-matching criteria in the application flow.
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns-ip-cache *reference*

Synopsis	DNS IP cache name
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-address neq dns-ip-cache *reference*
Tree	dns-ip-cache
Reference	**configure** application-assurance group *number* dns-ip-cache *string*
Notes	The following elements are part of a choice: **dns-ip-cache**, **ip-prefix**, **ip-prefix-list**, or **masked-ip**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP prefix

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Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-address neq ip-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	ip-prefix
Notes	The following elements are part of a choice: **dns-ip-cache**, **ip-prefix**, **ip-prefix-list**, or **masked-ip**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	IP prefix list
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-address neq ip-prefix-list *reference*
Tree	ip-prefix-list
Reference	**configure** application-assurance group *number* partition *number* ip-prefix-list *string*
Notes	The following elements are part of a choice: **dns-ip-cache**, **ip-prefix**, **ip-prefix-list**, or **masked-ip**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

masked-ip

Synopsis	Enter the **masked-ip** context
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-address neq masked-ip
Tree	masked-ip
Description	Commands in this context configure the attributes of a masked IP address.
Notes	The following elements are part of a choice: **dns-ip-cache**, **ip-prefix**, **ip-prefix-list**, or **masked-ip**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IPv4 or IPv6 address mask

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Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-address neq masked-ip address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	address
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

netmask *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IPv4 or IPv6 address mask
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-address neq masked-ip netmask *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	netmask
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server-port

Synopsis	Enter the **server-port** context
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-port
Tree	server-port
Description	Commands in this context specify the server TCP or UDP port number to use in the application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq

Synopsis	Enter the **eq** context
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-port eq
Tree	eq
Description	Commands in this context configure the exact value as the match criterion for the server TCP or UDP number in the app-filter.
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **neq**.

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

first-packet-policy *keyword*

Synopsis	TCP/UDP port application to apply
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-port eq first-packet-policy *keyword*
Tree	first-packet-policy
Options	first-packet-trusted, first-packet-validate
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis	Port-list name used in application filter criteria
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-port eq port-list *reference*
Tree	port-list
Reference	**configure** application-assurance group *number* partition *number* port-list *string*
Notes	The following elements are part of a choice: **port-list**, **port-number**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis	Server port number used as match criterion
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-port eq port-number *number*
Tree	port-number
Range	0 | 1 to 65535
Default	0
Notes	The following elements are part of a choice: **port-list**, **port-number**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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range

Synopsis	Enter the **range** context
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-port eq range
Tree	range
Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: **port-list**, **port-number**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	TCP/UDP ending port number
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-port eq range end *number*
Tree	end
Range	0 | 1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	TCP/UDP starting port number
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-port eq range start *number*
Tree	start
Range	0 | 1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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gt

Synopsis	Enter the **gt** context
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-port gt
Tree	gt
Description	Commands in this context specify the greater than value as the match criterion for the server port number for the app-filter.
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis	Server port number used as match criterion
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-port gt port-number *number*
Tree	port-number
Range	0 | 1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lt

Synopsis	Enter the **lt** context
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-port lt
Tree	lt
Description	Commands in this context specify the less than value as the match criterion for the server port number for the app-filter.
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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port-number *number*

Synopsis	Server port number used as match criterion
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-port lt port-number *number*
Tree	port-number
Range	0 | 1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq

Synopsis	Enter the **neq** context
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-port neq
Tree	neq
Description	Commands in this context configure non-match criterion used for the server TCP or UDP number in the app-filter.
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis	Port-list name used in application filter criteria
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-port neq port-list *reference*
Tree	port-list
Reference	**configure** application-assurance group *number* partition *number* port-list *string*
Notes	The following elements are part of a choice: **port-list**, **port-number**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis	Server port number used as match criterion

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Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-port neq port-number *number*
Tree	port-number
Range	0 | 1 to 65535
Default	0
Notes	The following elements are part of a choice: **port-list**, **port-number**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enter the **range** context
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-port neq range
Tree	range
Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: **port-list**, **port-number**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	TCP/UDP ending port number
Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-port neq range end *number*
Tree	end
Range	0 | 1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	TCP/UDP starting port number

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Context	**configure** application-assurance group *number* partition *number* policy app-filter entry *number* server-port neq range start *number*
Tree	start
Range	0 | 1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-group [application-group-name] *string*

Synopsis	Enter the **app-group** list instance
Context	**configure** application-assurance group *number* partition *number* policy app-group *string*
Tree	app-group
Description	Commands in this context create an application group for an application assurance policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**application-group-name**] *string*

Synopsis	Application group name
Context	**configure** application-assurance group *number* partition *number* policy app-group *string*
Tree	app-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

charging-group *reference*

Synopsis	Charging group used in the AA application group policy
Context	**configure** application-assurance group *number* partition *number* policy app-group *string* charging-group *reference*
Tree	charging-group
Reference	**configure** application-assurance group *number* partition *number* policy charging-group *string*

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* partition *number* policy app-group *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-id *number*

Synopsis	App group export ID used in RADIUS accounting export
Context	**configure** application-assurance group *number* partition *number* policy app-group *string* export-id *number*
Tree	export-id
Description	This command assigns an export ID value to a charging group, an application group, or an application that RADIUS accounting uses for accounting export identification. This export ID is encoded in the top two bytes of the RADIUS accounting VSA to identify which charging group the counter value represents. If no export ID is assigned, the counter cannot be added to the AA subscriber stats RADIUS export-type. After a charging group index is referenced, it cannot be deleted without removing the reference.
Range	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-profile [app-profile-name] *string*

Synopsis	Enter the **app-profile** list instance
Context	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Tree	app-profile
Description	Commands in this context create an application profile and configure the profile parameters.

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**app-profile-name**] *string*

Synopsis	App-profile name
Context	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Tree	app-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub-suppressible *boolean*

Synopsis	Enable AA suppression for subs with this app profile
Context	**configure** application-assurance group *number* partition *number* policy app-profile *string* aa-sub-suppressible *boolean*
Tree	aa-sub-suppressible
Description	When configured to **true**, this command configures the ability to suppress Application Assurance for subscribers with this application profile. This function is used in the context of an SRRP group interface. If an SRRP group interface is configured as **configure service ies subscriber-interface group-interface suppress-aa-sub** or **configure service vprn subscriber-interface group-interface suppress-aa-sub**, subscribers with an application profile configured as suppressible are not diverted to Application Assurance.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

capacity-cost *number*

Synopsis	Application profile capacity cost
Context	**configure** application-assurance group *number* partition *number* policy app-profile *string* capacity-cost *number*
Tree	capacity-cost
Description	This command configures an application profile capacity cost.

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Capacity cost based load balancing allows a cost to be assigned to diverted SAPs (with the application profile). This allows for load balancing SAPs between ISAs and acts as a threshold to notify the operator if capacity planning is exceeded.

Range	1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

characteristic [characteristic-name] *reference*

Synopsis	Enter the **characteristic** list instance
Context	**configure** application-assurance group *number* partition *number* policy app-profile *string* characteristic *reference*
Tree	characteristic
Description	Commands in this context assign one of the existing values of an existing application service option characteristic to the application profile.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**characteristic-name**] *reference*

Synopsis	Application service option characteristic name
Context	**configure** application-assurance group *number* partition *number* policy app-profile *string* characteristic *reference*
Tree	characteristic
Reference	**configure** application-assurance group *number* partition *number* policy app-service-options characteristic *string*
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value *reference*

Synopsis	ASO characteristic value name
Context	**configure** application-assurance group *number* partition *number* policy app-profile *string* characteristic *reference* value *reference*
Tree	value

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Reference	**configure** application-assurance group *number* partition *number* policy app-service-options characteristic *string* value *string*
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* partition *number* policy app-profile *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

divert *boolean*

Synopsis	Enable traffic redirection to AA ISAs or ESA VMs
Context	**configure** application-assurance group *number* partition *number* policy app-profile *string* divert *boolean*
Tree	divert
Description	When configured to **true**, this command enables the redirection of traffic to AA ISAs or ESA VMs for the system-wide forwarding classes diverted to Application Assurance (**configure isa application-assurance-group divert-fc**) for AA subscribers using this application profile. When configured to **false**, this command stops the redirection of traffic to AA ISAs or ESA VMs for the AA subscribers using this application profile.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-qos-policy

Synopsis	Enter the **app-qos-policy** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy
Tree	app-qos-policy

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Description	Commands in this context configure an application QoS policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number*
Tree	entry
Description	Commands in this context create an application QoS policy (AQP) entry. A flow that matches multiple AQP entries will have multiple AQP entries actions applied. If a conflict occurs for two or more actions, the action from the AQP entry with the lowest numerical value takes precedence.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**entry-id**] *number*

Synopsis	AQP entry ID
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number*
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action

Synopsis	Enter the **action** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action
Tree	action
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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abandon-tcp-optimization *boolean*

Synopsis	Abandon TCPO for this entry
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action abandon-tcp-optimization *boolean*
Tree	abandon-tcp-optimization
Description	When configured to **true**, this command disables TCPO for flows matching this AQP entry.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bandwidth-policer

Synopsis	Enter the **bandwidth-policer** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action bandwidth-policer
Tree	bandwidth-policer
Description	Commands in this context assign an existing bandwidth policer as an action on flows matching this AQP entry. The match criteria for the AQP entry must specify a unidirectional traffic direction before a policer action can be configured. If a policer is used in one direction in an AQP match entry, the same policer name cannot be used by another AQP entry that uses different traffic direction match criteria. When multiple policers apply to a single flow, the final action on a packet is the worst case of all policer outcomes (for example, if one of the policers marks packet out of profile, the final marking will reflect that).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

anl *reference*

Synopsis	Access network locator bandwidth policer
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action bandwidth-policer anl *reference*
Tree	anl

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Description	This command creates an Application Assurance policy profile for a policer instance for each ANL that limits traffic bandwidth in the scope of that ANL. For ANL, only single-bucket bandwidth policers can be configured.
Reference	**configure** application-assurance group *number* policer anl-bandwidth-policer *string*
Notes	The following elements are part of a choice: **anl**, **dual-bucket**, or **single-bucket**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dual-bucket *reference*

Synopsis	Dual bucket bandwidth limiting policer
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action bandwidth-policer dual-bucket *reference*
Tree	dual-bucket
Description	This command creates an Application Assurance policy profile for a dual bucket (PIR) bandwidth limiting policer.
Reference	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string*
Notes	The following elements are part of a choice: **anl**, **dual-bucket**, or **single-bucket**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

single-bucket *reference*

Synopsis	Single bucket bandwidth limiting policer
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action bandwidth-policer single-bucket *reference*
Tree	single-bucket
Description	This command creates an Application Assurance policy profile for a single bucket (PIR) bandwidth limiting policer.
Reference	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string*
Notes	The following elements are part of a choice: **anl**, **dual-bucket**, or **single-bucket**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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dns-ip-cache *reference*

Synopsis	DNS IP cache name
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action dns-ip-cache *reference*
Tree	dns-ip-cache
Reference	**configure** application-assurance group *number* dns-ip-cache *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

drop *boolean*

Synopsis	Enable drop action for the AQP entry
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action drop *boolean*
Tree	drop
Description	When configured to **true**, all flow traffic matching this AQP entry is dropped. The drop action is performed first and no other action is invoked on that flow even if multiple other actions exist for the flow because of one or more AQP entry matches. When configured to **false**, this command disables the drop action on flows matching this AQP entry.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

error-drop

Synopsis	Enable the **error-drop** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action error-drop
Tree	error-drop
Description	Commands in this context configure a drop action for error flows (for instance, bad IP checksums or TCP/UDP port 0).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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event-log *reference*

Synopsis	Event log action for the AQP entry
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action error-drop event-log *reference*
Tree	event-log
Reference	**configure** application-assurance group *number* partition *number* event-log *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-count-limit-policer

Synopsis	Enter the **flow-count-limit-policer** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action flow-count-limit-policer
Tree	flow-count-limit-policer
Description	Commands in this context assign an existing flow count limit policer as an action on flows matching this AQP entry. The match criteria for the AQP entry must specify a unidirectional traffic direction before a policer action can be configured. If a policer is used in one direction in an AQP match entry, the same policer name cannot be used by another AQP entry that uses different traffic direction match criteria. When multiple policers are applied to a single flow, the final action on a packet is the worst case of all policer outcomes (for example, if one of the policers marks packet out of profile, the final marking will reflect that).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log *reference*

Synopsis	Event log name
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action flow-count-limit-policer event-log *reference*
Tree	event-log
Reference	**configure** application-assurance group *number* partition *number* event-log *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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policer-name *reference*

Synopsis	Policer name
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action flow-count-limit-policer policer-name *reference*
Tree	policer-name
Description	This command specifies the name of the flow count limit policer for flows matching the AQP entry. The policer name is configured in the **configure application-assurance group policer** context.
Reference	**configure** application-assurance group *number* policer flow-count-limit-policer *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-setup-rate-policer

Synopsis	Enter the **flow-setup-rate-policer** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action flow-setup-rate-policer
Tree	flow-setup-rate-policer
Description	Commands in this context assign an existing flow setup rate policer as an action on flows matching this AQP entry. The match criteria for the AQP entry must specify a unidirectional traffic direction before a policer action can be configured. If a policer is used in one direction in an AQP match entry, the same policer name cannot be used for another AQP entry that uses different traffic direction match criteria. When multiple policers are applied to a single flow, the final action on a packet is the worst case of all policer outcomes (for example, if one of the policers marks a packet out of profile, the final marking reflects that).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log *reference*

Synopsis	Events log name for flow-setup rate policer
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action flow-setup-rate-policer event-log *reference*
Tree	event-log
Reference	**configure** application-assurance group *number* partition *number* event-log *string*
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer-name *reference*

Synopsis	Policer name
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action flow-setup-rate-policer policer-name *reference*
Tree	policer-name
Description	This command specifies the name of the flow setup rate policer for flows matching this AQP entry.
Reference	**configure** application-assurance group *number* policer flow-setup-rate-policer *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fragment-drop

Synopsis	Enter the **fragment-drop** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action fragment-drop
Tree	fragment-drop
Description	Commands in this context specify the drop action options to apply to fragments.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

drop-scope *keyword*

Synopsis	Fragment-drop scope
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action fragment-drop drop-scope *keyword*
Tree	drop-scope
Description	This command specifies which fragments to drop as an action on flows matching this AQP entry.
Options	all, out-of-order
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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event-log *reference*

Synopsis	Event log name
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action fragment-drop event-log *reference*
Tree	event-log
Reference	**configure** application-assurance group *number* partition *number* event-log *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp-filter *reference*

Synopsis	GTP filter executed for flows matching this AQP entry
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action gtp-filter *reference*
Tree	gtp-filter
Reference	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-enrich *reference*

Synopsis	HTTP header enrichment action for the AQP entry
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action http-enrich *reference*
Tree	http-enrich
Description	This command configures the HTTP header enrichment template name that is applied as defined in the tmnxBsxHttpEnrichTable. An empty value specifies no HTTP header enrichment template.
Reference	**configure** application-assurance group *number* http-enrich *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-error-redirect *reference*

Synopsis	HTTP error redirect for the AQP entry

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Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action http-error-redirect *reference*
Tree	http-error-redirect
Description	This command specifies the HTTP error redirect that is applied as defined in the redirect table. An empty value specifies no HTTP error redirect.
Reference	**configure** application-assurance group *number* http-error-redirect *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-notification *reference*

Synopsis	HTTP notification to use for flows matching AQP entry
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action http-notification *reference*
Tree	http-notification
Reference	**configure** application-assurance group *number* http-notification *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect

Synopsis	Enter the **http-redirect** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action http-redirect
Tree	http-redirect
Description	Commands in this context assign an existing HTTP redirect policy as an action on flows matching this AQP entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-type *keyword*

Synopsis	Flow type for HTTP redirect of flows matching the entry
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action http-redirect flow-type *keyword*
Tree	flow-type

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Description	This command assigns an existing HTTP redirect policy as an action on flows matching this AQP entry. The redirect only takes effect if the matching flows are HTTP and the condition specified is met. The condition specified by dropped flows means the flow is dropped due to an AQP action, such as flow rate, count policers, or drop actions. The admitted flows condition allows the operator to redirect HTTP traffic to a web portal while allowing non-HTTP traffic matching the same AQP rule to be forwarded. No HTTP redirect takes place if the HTTP redirect action and a drop/flow-police action are part of the default AQP policy. In this case, any flow drop actions take place before identification of the application/application-group.
Options	dropped-flows, admitted-flows
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *reference*

Synopsis	HTTP redirect policy name
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action http-redirect name *reference*
Tree	name
Description	This command specifies the name of an existing HTTP policy redirect.
Reference	**configure** application-assurance group *number* http-redirect *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mirror-source

Synopsis	Enter the **mirror-source** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action mirror-source
Tree	mirror-source
Description	Commands in this context configure an application-based policy mirroring service that uses the AQP entry of this AA ISA as a mirror source. When configured, the AQP entry becomes a mirror source for IP packets seen by AA. The mirrored packet is an IP packet analyzed by AA and does not include encapsulations present on the incoming interfaces.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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all-inclusive *boolean*

Synopsis	Mirror flows matching the AQP subscriber default policy
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action mirror-source all-inclusive *boolean*
Tree	all-inclusive
Description	This command specifies that all packets during the identification phase that could match a given AQP rule are mirrored in addition to packets after an application identification completes that match the AQP rule. This ensures that all packets of a flow are mirrored at a cost of sending some unidentified packets, which after the application is identified no longer match this AQP entry.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mirror-service *reference*

Synopsis	Mirror source service ID for flows matching the entry
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action mirror-source mirror-service *reference*
Tree	mirror-service
Description	This command specifies the mirror source service ID to use for flows that match this policy.
Reference	**configure** mirror mirror-dest *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

overload-drop

Synopsis	Enable the **overload-drop** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action overload-drop
Tree	overload-drop
Description	Commands in this context configure a drop action for cases where flow records are not created (overload). This command is only applicable to ISA2 hardware.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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event-log *reference*

Synopsis	Event log name
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action overload-drop event-log *reference*
Tree	event-log
Reference	**configure** application-assurance group *number* partition *number* event-log *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remark

Synopsis	Enter the **remark** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action remark
Tree	remark
Description	Commands in this context configure the remark action on flows matching this AQP entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dscp

Synopsis	Enter the **dscp** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action remark dscp
Tree	dscp
Description	Commands in this context configure the DSCP remark action or actions on flows matching this AQP entry. All packets for all flows matching this AQP entry are remarked to the configured DSCP name. DSCP remark can only be applied when the entry remarks forwarding class or forwarding class and priority. In-profile and out-of-profile of a packet for DSCP remark is assessed after all AQP policing and priority remarking actions have taken place.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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in-profile *keyword*

Synopsis	DSCP name to remark matching in-profile flows
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action remark dscp in-profile *keyword*
Tree	in-profile
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

out-profile *keyword*

Synopsis	DSCP name to remark matching out-of-profile flows
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action remark dscp out-profile *keyword*
Tree	out-profile
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fc *keyword*

Synopsis	FC remark action for flows matching this entry
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action remark fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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priority *keyword*

Synopsis	Priority to use to remark flows matching this entry
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action remark priority *keyword*
Tree	priority
Options	low, high, auto
Default	auto
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sctp-filter *reference*

Synopsis	SCTP filter to use for flows matching the AQP entry
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action sctp-filter *reference*
Tree	sctp-filter
Reference	**configure** application-assurance group *number* partition *number* sctp-filter *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-filter *reference*

Synopsis	Session filter to use for flows matching the AQP entry
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action session-filter *reference*
Tree	session-filter
Reference	**configure** application-assurance group *number* partition *number* session-filter *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-mss-adjust *number*

Synopsis	TCP MSS adjustment traffic action and size
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action tcp-mss-adjust *number*
Tree	tcp-mss-adjust

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Range	160 to 10240
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-validate *reference*

Synopsis	TCP validation policy action for entry matching flows
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action tcp-validate *reference*
Tree	tcp-validate
Description	This command assigns an existing TCP validation policy as an action on flows matching this AQP entry. TCP validation can only be called from AQP entries that: • have no matching conditions that relate to information extracted from the incoming IP packets; for example, no application or IP address. • allow the following match conditions: none, aa-sub, characteristic, traffic-direction (both only), traffic-direction cannot be unidirectional (from or to sub). It can either be set to both or left unspecified.
Reference	**configure** application-assurance group *number* partition *number* tcp-validate *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tls-enrich *reference*

Synopsis	HTTP TLS enrichment action for the AQP entry
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action tls-enrich *reference*
Tree	tls-enrich
Reference	**configure** application-assurance group *number* http-enrich *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

url-filter

Synopsis	Enter the **url-filter** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action url-filter

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Tree	url-filter
Description	Commands in this context configure a URL filter action for flows matching this entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

characteristic *reference*

Synopsis	URL filter characteristic used for matching AQP entries
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action url-filter characteristic *reference*
Tree	characteristic
Reference	**configure** application-assurance group *number* partition *number* policy app-service-options characteristic *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *reference*

Synopsis	URL filter name
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* action url-filter name *reference*
Tree	name
Reference	**configure** application-assurance group *number* url-filter *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the AA AQP entry
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis	Enter the **match** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match
Tree	match
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub

Synopsis	Enter the **aa-sub** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match aa-sub
Tree	aa-sub
Description	Commands in this context specify a Service Access Point (SAP) or an Enhanced Subscriber Management (ESM) subscriber as matching criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esm

Synopsis	Enter the **esm** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match aa-sub esm
Tree	esm

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Description	Commands in this context configure the ESM fields for the AA subscriber match entry.
Notes	The following elements are part of a choice: **esm**, **esm-mac**, **sap**, **spoke-sdp**, or **transit**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *string*

Synopsis	Exact match criterion used for the ESM subscriber
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match aa-sub esm eq *string*
Tree	eq
String Length	1 to 32
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq *string*

Synopsis	Non-match criterion used for ESM subscriber
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match aa-sub esm neq *string*
Tree	neq
String Length	1 to 32
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esm-mac

Synopsis	Enter the **esm-mac** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match aa-sub esm-mac
Tree	esm-mac
Description	Commands in this context configure the ESM MAC fields for the AA subscriber match entry.

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Notes	The following elements are part of a choice: **esm**, **esm-mac**, **sap**, **spoke-sdp**, or **transit**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *string*

Synopsis	Exact match criterion used for ESM MAC subscriber
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match aa-sub esm-mac eq *string*
Tree	eq
String Length	1 to 32
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq *string*

Synopsis	Non-match criterion used for AA subscriber ESM MAC
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match aa-sub esm-mac neq *string*
Tree	neq
String Length	1 to 32
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap

Synopsis	Enter the **sap** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match aa-sub sap
Tree	sap
Description	Commands in this context configure the SAP fields for the AA subscriber match entry.
Notes	The following elements are part of a choice: **esm**, **esm-mac**, **sap**, **spoke-sdp**, or **transit**.

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *string*

Synopsis	Exact match criterion used for the SAP subscriber
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match aa-sub sap eq *string*
Tree	eq
String Length	1 to 45
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq *string*

Synopsis	Non-match criterion used for the SAP subscriber
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match aa-sub sap neq *string*
Tree	neq
String Length	1 to 45
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

spoke-sdp

Synopsis	Enter the **spoke-sdp** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match aa-sub spoke-sdp
Tree	spoke-sdp
Description	Commands in this context configure the spoke SDP fields for the AA subscriber match entry.
Notes	The following elements are part of a choice: **esm**, **esm-mac**, **sap**, **spoke-sdp**, or **transit**.
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *string*

Synopsis	Exact match criterion used for a spoke SDP subscriber
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match aa-sub spoke-sdp eq *string*
Tree	eq
String Length	3 to 16
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq *string*

Synopsis	Non-match criterion used for a spoke SDP subscriber
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match aa-sub spoke-sdp neq *string*
Tree	neq
String Length	3 to 16
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

transit

Synopsis	Enter the **transit** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match aa-sub transit
Tree	transit
Description	Commands in this context configure the transit fields for the AA subscriber match entry.
Notes	The following elements are part of a choice: **esm**, **esm-mac**, **sap**, **spoke-sdp**, or **transit**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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eq *string*

Synopsis	Exact match criterion used for a transit AA subscriber
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match aa-sub transit eq *string*
Tree	eq
String Length	1 to 32
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq *string*

Synopsis	Non-match criterion used for a transit AA subscriber
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match aa-sub transit neq *string*
Tree	neq
String Length	1 to 32
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub-tethering *keyword*

Synopsis	Tethering detection status for flow match criterion
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match aa-sub-tethering *keyword*
Tree	aa-sub-tethering
Description	This command configures the match criteria for subscribers in a tethering state.
Options	not-applicable, detected, not-detected
Default	not-applicable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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app-group

Synopsis	Enter the **app-group** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match app-group
Tree	app-group
Description	Commands in this context add an application group to the match criteria used by this AQP entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *reference*

Synopsis	Exact match criterion used for the application group
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match app-group eq *reference*
Tree	eq
Reference	**configure** application-assurance group *number* partition *number* policy app-group *string*
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq *reference*

Synopsis	Non-match criterion used for the application group
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match app-group neq *reference*
Tree	neq
Reference	**configure** application-assurance group *number* partition *number* policy app-group *string*
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

application

Synopsis	Enter the **application** context

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Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match application
Tree	application
Description	Commands in this context add an application to match criteria used by this AQP entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *reference*

Synopsis	Exact match criterion used for the application
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match application eq *reference*
Tree	eq
Reference	**configure** application-assurance group *number* partition *number* policy application *string*
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq *reference*

Synopsis	Non-match criterion used for the application
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match application neq *reference*
Tree	neq
Reference	**configure** application-assurance group *number* partition *number* policy application *string*
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

characteristic [characteristic-name] *reference*

Synopsis	Enter the **characteristic** list instance
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match characteristic *reference*

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Tree	characteristic
Description	Commands in this context configure an existing characteristic and its value to the match criteria used by this AQP entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**characteristic-name**] *reference*

Synopsis	ASO characteristic name for AQP entry matching
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match characteristic *reference*
Tree	characteristic
Reference	**configure** application-assurance group *number* partition *number* policy app-service-options characteristic *string*
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *reference*

Synopsis	Match criterion used for AQP match characteristic
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match characteristic *reference* eq *reference*
Tree	eq
Reference	**configure** application-assurance group *number* partition *number* policy app-service-options characteristic *string* value *string*
Notes	The following elements are part of a mandatory choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq *reference*

Synopsis	Non-match criterion used for AQP match characteristic
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match characteristic *reference* neq *reference*
Tree	neq

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Reference	**configure** application-assurance group *number* partition *number* policy app-service-options characteristic *string* value *string*
Notes	The following elements are part of a mandatory choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

charging-group

Synopsis	Enter the **charging-group** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match charging-group
Tree	charging-group
Description	Commands in this context add a charging group to match criteria used by this AQP entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *reference*

Synopsis	Match criterion used for the charging group
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match charging-group eq *reference*
Tree	eq
Reference	**configure** application-assurance group *number* partition *number* policy charging-group *string*
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq *reference*

Synopsis	Non-match criterion used for the charging group
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match charging-group neq *reference*
Tree	neq
Reference	**configure** application-assurance group *number* partition *number* policy charging-group *string*

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Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dscp

Synopsis	Enter the **dscp** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match dscp
Tree	dscp
Description	Commands in this context add a DSCP name to the match criteria used by this entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *keyword*

Synopsis	Exact match criterion used for the DSCP
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match dscp eq *keyword*
Tree	eq
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq *keyword*

Synopsis	Non-match criterion used for the DSCP
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match dscp neq *keyword*
Tree	neq
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef,

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	cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dst-ip

Synopsis	Enter the **dst-ip** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match dst-ip
Tree	dst-ip
Description	Commands in this context configure a destination IP address to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq

Synopsis	Enter the **eq** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match dst-ip eq
Tree	eq
Description	Commands in this context specify the exact match value as the match criterion. A successful match occurs when the flow matches the specified address or prefix.
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP address prefix used for match criterion
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match dst-ip eq ip-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	ip-prefix
Notes	The following elements are part of a choice: **ip-prefix** or **ip-prefix-list**.
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	IP address prefix list used for match criterion
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match dst-ip eq ip-prefix-list *reference*
Tree	ip-prefix-list
Reference	**configure** application-assurance group *number* partition *number* ip-prefix-list *string*
Notes	The following elements are part of a choice: **ip-prefix** or **ip-prefix-list**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq

Synopsis	Enter the **neq** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match dst-ip neq
Tree	neq
Description	Commands in this context specify the non-match value as the match criterion. A successful match occurs when the flow does not match the specified address or prefix.
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP address prefix used for match criterion
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match dst-ip neq ip-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	ip-prefix
Notes	The following elements are part of a choice: **ip-prefix** or **ip-prefix-list**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ip-prefix-list *reference*

Synopsis	IP address prefix list used for match criterion
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match dst-ip neq ip-prefix-list *reference*
Tree	ip-prefix-list
Reference	**configure** application-assurance group *number* partition *number* ip-prefix-list *string*
Notes	The following elements are part of a choice: **ip-prefix** or **ip-prefix-list**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dst-port

Synopsis	Enter the **dst-port** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match dst-port
Tree	dst-port
Description	Commands in this context configure a destination TCP/UDP port, a destination port list, or a destination range to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq

Synopsis	Enter the **eq** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match dst-port eq
Tree	eq
Description	Commands in this context specify the exact match criterion. A successful match occurs when the flow matches the specified port.
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis	IP port list used as match criterion

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Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match dst-port eq port-list *reference*
Tree	port-list
Reference	**configure** application-assurance group *number* partition *number* port-list *string*
Notes	The following elements are part of a choice: **port-list**, **port-number**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis	Server port number used as match criterion
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match dst-port eq port-number *number*
Tree	port-number
Range	0 | 1 to 65535
Default	0
Notes	The following elements are part of a choice: **port-list**, **port-number**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enter the **range** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match dst-port eq range
Tree	range
Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: **port-list**, **port-number**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	TCP/UDP ending port number

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Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match dst-port eq range end *number*
Tree	end
Range	0 | 1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	TCP/UDP starting port number
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match dst-port eq range start *number*
Tree	start
Range	0 | 1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq

Synopsis	Enter the **neq** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match dst-port neq
Tree	neq
Description	Commands in this context specify the non-match value as the match criterion. A successful match occurs when the flow does not match the specified port.
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis	IP port list used as match criterion
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match dst-port neq port-list *reference*

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Tree	port-list
Reference	**configure** application-assurance group *number* partition *number* port-list *string*
Notes	The following elements are part of a choice: **port-list**, **port-number**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis	Server port number used as match criterion
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match dst-port neq port-number *number*
Tree	port-number
Range	0 | 1 to 65535
Default	0
Notes	The following elements are part of a choice: **port-list**, **port-number**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enter the **range** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match dst-port neq range
Tree	range
Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: **port-list**, **port-number**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	TCP/UDP ending port number
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match dst-port neq range end *number*
Tree	end

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Range	0 | 1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	TCP/UDP starting port number
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match dst-port neq range start *number*
Tree	start
Range	0 | 1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-attribute [flow-attribute-name] *string*

Synopsis	Enter the **flow-attribute** list instance
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match flow-attribute *string*
Tree	flow-attribute
Description	Commands in this context configure a flow attribute to use as match criteria. The supported options are: • abr_service • audio • download • encrypted • esni • real_time_communication • upload • video
Max. Instances	10
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**flow-attribute-name**] *string*

Synopsis	Flow attribute name used as match criterion
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match flow-attribute *string*
Tree	flow-attribute
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

confidence

Synopsis	Enter the **confidence** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match flow-attribute *string* confidence
Tree	confidence
Description	Commands in this context configure the confidence level of the flow attribute for use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *number*

Synopsis	Exact match criterion for the flow-attribute confidence
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match flow-attribute *string* confidence eq *number*
Tree	eq
Range	0 to 100
Notes	The following elements are part of a choice: **eq**, **gte**, or **lt**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gte *number*

Synopsis	Greater than or equal to for confidence match criterion

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Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match flow-attribute *string* confidence gte *number*
Tree	gte
Range	0 to 100
Notes	The following elements are part of a choice: **eq**, **gte**, or **lt**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lt *number*

Synopsis	Less than value for confidence match criterion
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match flow-attribute *string* confidence lt *number*
Tree	lt
Range	1 to 100
Notes	The following elements are part of a choice: **eq**, **gte**, or **lt**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-protocol

Synopsis	Enter the **ip-protocol** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match ip-protocol
Tree	ip-protocol
Description	Commands in this context configure the IP protocol to use in the application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *(number | keyword)*

Synopsis	Exact match criterion used for the IP protocol
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match ip-protocol eq *(number | keyword)*
Tree	eq
Range	0 to 255

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Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq *(number | keyword)*

Synopsis	Non-match criterion used for the IP protocol
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match ip-protocol neq *(number | keyword)*
Tree	neq
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

src-ip

Synopsis	Enter the **src-ip** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match src-ip
Tree	src-ip
Description	Commands in this context configure a source IP address to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq

Synopsis	Enter the **eq** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match src-ip eq
Tree	eq

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Description	Commands in this context specify the exact match value as the match criterion. A successful match occurs when the flow matches the specified address or prefix.
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP address prefix used for match criterion
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match src-ip eq ip-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	ip-prefix
Notes	The following elements are part of a choice: **ip-prefix** or **ip-prefix-list**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	IP address prefix list used for match criterion
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match src-ip eq ip-prefix-list *reference*
Tree	ip-prefix-list
Reference	**configure** application-assurance group *number* partition *number* ip-prefix-list *string*
Notes	The following elements are part of a choice: **ip-prefix** or **ip-prefix-list**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq

Synopsis	Enter the **neq** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match src-ip neq
Tree	neq
Description	Commands in this context specify the non-match value as the match criterion. A successful match occurs when the flow does not match the specified address or prefix.
Notes	The following elements are part of a choice: **eq** or **neq**.

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP address prefix used for match criterion
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match src-ip neq ip-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	ip-prefix
Notes	The following elements are part of a choice: **ip-prefix** or **ip-prefix-list**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	IP address prefix list used for match criterion
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match src-ip neq ip-prefix-list *reference*
Tree	ip-prefix-list
Reference	**configure** application-assurance group *number* partition *number* ip-prefix-list *string*
Notes	The following elements are part of a choice: **ip-prefix** or **ip-prefix-list**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

src-port

Synopsis	Enter the **src-port** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match src-port
Tree	src-port
Description	Commands in this context specify a source IP port, a source port list, or a source range to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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eq

Synopsis	Enter the **eq** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match src-port eq
Tree	eq
Description	Commands in this context specify the exact match criterion. A successful match occurs when the flow matches the specified port.
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis	IP port list used as match criterion
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match src-port eq port-list *reference*
Tree	port-list
Reference	**configure** application-assurance group *number* partition *number* port-list *string*
Notes	The following elements are part of a choice: **port-list**, **port-number**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis	Server port number used as match criterion
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match src-port eq port-number *number*
Tree	port-number
Range	0 | 1 to 65535
Default	0
Notes	The following elements are part of a choice: **port-list**, **port-number**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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range

Synopsis	Enter the **range** context
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match src-port eq range
Tree	range
Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: **port-list**, **port-number**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	TCP/UDP ending port number
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match src-port eq range end *number*
Tree	end
Range	0 | 1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	TCP/UDP starting port number
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match src-port eq range start *number*
Tree	start
Range	0 | 1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq

Synopsis	Enter the **neq** context

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Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match src-port neq
Tree	neq
Description	Commands in this context specify the non-match value as the match criterion. A successful match occurs when the flow does not match the specified port.
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis	IP port list used as match criterion
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match src-port neq port-list *reference*
Tree	port-list
Reference	**configure** application-assurance group *number* partition *number* port-list *string*
Notes	The following elements are part of a choice: **port-list**, **port-number**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis	Server port number used as match criterion
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match src-port neq port-number *number*
Tree	port-number
Range	0 | 1 to 65535
Default	0
Notes	The following elements are part of a choice: **port-list**, **port-number**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enter the **range** context

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Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match src-port neq range
Tree	range
Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: **port-list**, **port-number**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	TCP/UDP ending port number
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match src-port neq range end *number*
Tree	end
Range	0 | 1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	TCP/UDP starting port number
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match src-port neq range start *number*
Tree	start
Range	0 | 1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

traffic-direction *keyword*

Synopsis	Traffic direction to which AQP match entry is applied
Context	**configure** application-assurance group *number* partition *number* policy app-qos-policy entry *number* match traffic-direction *keyword*

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Tree	traffic-direction
Options	subscriber-to-network, network-to-subscriber, both
Default	both
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-service-options

Synopsis	Enter the **app-service-options** context
Context	**configure** application-assurance group *number* partition *number* policy app-service-options
Tree	app-service-options
Description	Commands in this context configure application service option characteristics.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

characteristic [characteristic-name] *string*

Synopsis	Enter the **characteristic** list instance
Context	**configure** application-assurance group *number* partition *number* policy app-service-options characteristic *string*
Tree	characteristic
Description	Commands in this context create the characteristic of the application service options.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**characteristic-name**] *string*

Synopsis	ASO characteristic name
Context	**configure** application-assurance group *number* partition *number* policy app-service-options characteristic *string*
Tree	characteristic
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-value *string*

Synopsis	ASO characteristic default value
Context	**configure** application-assurance group *number* partition *number* policy app-service-options characteristic *string* default-value *string*
Tree	default-value
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value [value-name] *string*

Synopsis	Add a list entry for **value**
Context	**configure** application-assurance group *number* partition *number* policy app-service-options characteristic *string* value *string*
Tree	value
Description	Commands in this context configure a characteristic value.
Max. Instances	64
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**value-name**] *string*

Synopsis	ASO characteristic value name
Context	**configure** application-assurance group *number* partition *number* policy app-service-options characteristic *string* value *string*
Tree	value
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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application [application-name] *string*

Synopsis	Enter the **application** list instance
Context	**configure** application-assurance group *number* partition *number* policy application *string*
Tree	application
Description	Commands in this context configure the policy application of the Application Assurance group partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**application-name**] *string*

Synopsis	Application name
Context	**configure** application-assurance group *number* partition *number* policy application *string*
Tree	application
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-group *reference*

Synopsis	Application group associated with the application
Context	**configure** application-assurance group *number* partition *number* policy application *string* app-group *reference*
Tree	app-group
Reference	**configure** application-assurance group *number* partition *number* policy app-group *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

charging-group *reference*

Synopsis	Charging group associated with the application
Context	**configure** application-assurance group *number* partition *number* policy application *string* charging-group *reference*

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Tree	charging-group
Reference	**configure** application-assurance group *number* partition *number* policy charging-group *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* partition *number* policy application *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-id *number*

Synopsis	Application export ID used for RADIUS accounting
Context	**configure** application-assurance group *number* partition *number* policy application *string* export-id *number*
Tree	export-id
Range	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

charging-filter

Synopsis	Enter the **charging-filter** context
Context	**configure** application-assurance group *number* partition *number* policy charging-filter
Tree	charging-filter
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** application-assurance group *number* partition *number* policy charging-filter entry *number*
Tree	entry
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**entry-id**] *number*

Synopsis	Charging filter entry ID in the AA partition policy
Context	**configure** application-assurance group *number* partition *number* policy charging-filter entry *number*
Tree	entry
Description	This command defines a charging filter entry ID. Charging filter entries are an ordered list; the lowest numerical entry that matches the flow, defines the charging filter for this flow.
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the AA charging filter entry
Context	**configure** application-assurance group *number* partition *number* policy charging-filter entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

charging-group *reference*

Synopsis	Charging group to associate to flows matching the entry

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Context	**configure** application-assurance group *number* partition *number* policy charging-filter entry *number* charging-group *reference*
Tree	charging-group
Description	This command associates a charging group to the flows that match the charging filter entry.
Reference	**configure** application-assurance group *number* partition *number* policy charging-group *string*
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* partition *number* policy charging-filter entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis	Enter the **match** context
Context	**configure** application-assurance group *number* partition *number* policy charging-filter entry *number* match
Tree	match
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-group

Synopsis	Enter the **app-group** context
Context	**configure** application-assurance group *number* partition *number* policy charging-filter entry *number* match app-group
Tree	app-group
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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eq *reference*

Synopsis	Exact value as the match criterion
Context	**configure** application-assurance group *number* partition *number* policy charging-filter entry *number* match app-group eq *reference*
Tree	eq
Description	This command specifies that the value configured and the value in the flow must be equal for a match to occur.
Reference	**configure** application-assurance group *number* partition *number* policy app-group *string*
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq *reference*

Synopsis	Non-matching application to resolve to a charging group
Context	**configure** application-assurance group *number* partition *number* policy charging-filter entry *number* match app-group neq *reference*
Tree	neq
Description	This command specifies that the value configured and the value in the flow must differ for a match to occur.
Reference	**configure** application-assurance group *number* partition *number* policy app-group *string*
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

application

Synopsis	Enter the **application** context
Context	**configure** application-assurance group *number* partition *number* policy charging-filter entry *number* match application
Tree	application
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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eq *reference*

Synopsis	Exact value as the match criterion
Context	**configure** application-assurance group *number* partition *number* policy charging-filter entry *number* match application eq *reference*
Tree	eq
Description	This command specifies that the value configured and the value in the flow must be equal for a match to occur.
Reference	**configure** application-assurance group *number* partition *number* policy application *string*
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq *reference*

Synopsis	Non-matching application to resolve to a charging group
Context	**configure** application-assurance group *number* partition *number* policy charging-filter entry *number* match application neq *reference*
Tree	neq
Description	This command specifies that the value configured and the value in the flow must differ for a match to occur.
Reference	**configure** application-assurance group *number* partition *number* policy application *string*
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-attribute [flow-attribute-name] *string*

Synopsis	Enter the **flow-attribute** list instance
Context	**configure** application-assurance group *number* partition *number* policy charging-filter entry *number* match flow-attribute *string*
Tree	flow-attribute
Max. Instances	10
Introduced	22.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**flow-attribute-name**] *string*

Synopsis	Flow attribute name match criteria
Context	**configure** application-assurance group *number* partition *number* policy charging-filter entry *number* match flow-attribute *string*
Tree	flow-attribute
Description	This command adds a flow attribute to the match criteria used by this charging filter entry.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

confidence

Synopsis	Enter the **confidence** context
Context	**configure** application-assurance group *number* partition *number* policy charging-filter entry *number* match flow-attribute *string* confidence
Tree	confidence
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *number*

Synopsis	Exact value as the match criterion
Context	**configure** application-assurance group *number* partition *number* policy charging-filter entry *number* match flow-attribute *string* confidence eq *number*
Tree	eq
Description	This command specifies that a successful match occurs when the flow attribute confidence level is equal to the specified value.
Range	0 to 100
Notes	The following elements are part of a choice: **eq**, **gte**, or **lt**.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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gte *number*

Synopsis	Confidence value to resolve to a charging group
Context	**configure** application-assurance group *number* partition *number* policy charging-filter entry *number* match flow-attribute *string* confidence gte *number*
Tree	gte
Description	This command specifies that a successful match occurs when the flow attribute confidence level is greater than or equal to the specified value.
Range	0 to 100
Notes	The following elements are part of a choice: **eq**, **gte**, or **lt**.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lt *number*

Synopsis	Less than value as the match criterion
Context	**configure** application-assurance group *number* partition *number* policy charging-filter entry *number* match flow-attribute *string* confidence lt *number*
Tree	lt
Description	This command specifies that a successful match occurs when the flow attribute confidence level is less than the specified value.
Range	1 to 100
Notes	The following elements are part of a choice: **eq**, **gte**, or **lt**.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tethered-flow

Synopsis	Enable the **tethered-flow** context
Context	**configure** application-assurance group *number* partition *number* policy charging-filter entry *number* match tethered-flow
Tree	tethered-flow
Description	Commands in this context add the tethering status to the match criteria used by this charging filter entry.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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charging-group [charging-group-name] *string*

Synopsis	Enter the **charging-group** list instance
Context	**configure** application-assurance group *number* partition *number* policy charging-group *string*
Tree	charging-group
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**charging-group-name**] *string*

Synopsis	Charging group name
Context	**configure** application-assurance group *number* partition *number* policy charging-group *string*
Tree	charging-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* partition *number* policy charging-group *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-id *number*

Synopsis	Charging group export ID used for RADIUS accounting
Context	**configure** application-assurance group *number* partition *number* policy charging-group *string* export-id *number*
Tree	export-id

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Description	This command assigns an export ID value to a charging group, an app application group, or an application to be used for accounting export identification in RADIUS accounting. This ID is encoded in the top 2 bytes of the RADIUS accounting VSA to identify which charging group the counter value represents.
Range	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

notify-start-stop *keyword*

Synopsis	Start and stop notification for the charging group
Context	**configure** application-assurance group *number* partition *number* policy charging-group *string* notify-start-stop *keyword*
Tree	notify-start-stop
Options	none, flow, charging-group
Default	none
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

custom-protocol [custom-protocol-id] *string*

Synopsis	Enter the **custom-protocol** list instance
Context	**configure** application-assurance group *number* partition *number* policy custom-protocol *string*
Tree	custom-protocol
Description	Commands in this context configure custom protocols. Custom protocols allow the creation of TCP and UDP-based custom protocols that employ pattern-match at offset in the protocol signature definition. Operator-configurable custom protocols are evaluated ahead of any Nokia-provided protocol signature in order of custom protocol ID within the context the protocol is defined. The lower ID is matched first in case of flow matching multiple custom protocols. Custom protocols must be created before they can be used in an application definition but do not have to be enabled. To reference a custom protocol in an application definition, or any other CLI configuration one must use the protocol name that is a concatenation of “custom_” and, (for example, custom_01, custom_02 ... custom_10, and so on). This concatenation is also used when reporting custom protocol statistics.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**custom-protocol-id**] *string*

Synopsis	Custom protocol ID for the AA policy custom protocol
Context	**configure** application-assurance group *number* partition *number* policy custom-protocol *string*
Tree	custom-protocol
Description	This command configures the index into the protocol list that defines a custom protocol for Application Assurance.
String Length	9
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the custom protocol
Context	**configure** application-assurance group *number* partition *number* policy custom-protocol *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* partition *number* policy custom-protocol *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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expression [expr-index] *number*

Synopsis	Enter the **expression** list instance
Context	**configure** application-assurance group *number* partition *number* policy custom-protocol *string* expression *number*
Tree	expression
Description	Commands in this context configure an expression string value for pattern-based custom protocols match. A flow matches a custom protocol if the specified string is found at an offset of a TCP/UDP of the first payload packet.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**expr-index**] *number*

Synopsis	Expression substring index for custom protocol matching
Context	**configure** application-assurance group *number* partition *number* policy custom-protocol *string* expression *number*
Tree	expression
Range	1
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Flow direction for custom-protocol expression matching
Context	**configure** application-assurance group *number* partition *number* policy custom-protocol *string* expression *number* direction *keyword*
Tree	direction
Description	This command configures the protocol direction to match against for a custom protocol.
Options	client-to-server, server-to-client, any
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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eq *string*

Synopsis	Exact match criterion for custom protocol expression
Context	**configure** application-assurance group *number* partition *number* policy custom-protocol *string* expression *number* eq *string*
Tree	eq
String Length	1 to 255
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

offset *number*

Synopsis	Offset in protocol flow to start custom-protocol match
Context	**configure** application-assurance group *number* partition *number* policy custom-protocol *string* expression *number* offset *number*
Tree	offset
Description	This command configures the offset into the protocol payload where the expr-string match criteria starts.
Range	0 to 127
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-protocol *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP protocol number for custom-protocol match criterion
Context	**configure** application-assurance group *number* partition *number* policy custom-protocol *string* ip-protocol *keyword*
Tree	ip-protocol
Description	This command configures the IP protocol number of the TCP and UDP-based custom protocols.
Options	tcp, udp
Notes	This element is mandatory.

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-charging-group *reference*

Synopsis	Default charging group
Context	**configure** application-assurance group *number* partition *number* policy default-charging-group *reference*
Tree	default-charging-group
Description	This command associates a charging group with any applications or application groups that do not have an explicitly assigned charging group for the Application Assurance policy.
Reference	**configure** application-assurance group *number* partition *number* policy charging-group *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-tethered-charging-group *reference*

Synopsis	Default charging group for tethered traffic
Context	**configure** application-assurance group *number* partition *number* policy default-tethered-charging-group *reference*
Tree	default-tethered-charging-group
Description	This command configures the default charging group to be assigned to all flows which are classified as tethered. For flows that have been identified as tethered, the AA will replace the charging group configured at the application level with the charging group configured for tethered traffic (that is, configured with **default-tethered-charging-group**).
Reference	**configure** application-assurance group *number* partition *number* policy charging-group *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-override

Synopsis	Enter the **policy-override** context
Context	**configure** application-assurance group *number* partition *number* policy-override
Tree	policy-override

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Description	Commands in this context configure policy override parameters.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub

Synopsis	Enter the **aa-sub** context
Context	**configure** application-assurance group *number* partition *number* policy-override aa-sub
Tree	aa-sub
Description	Commands in this context configure the AA policy override subscriber fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap [sap-id] *string*

Synopsis	Enter the **sap** list instance
Context	**configure** application-assurance group *number* partition *number* policy-override aa-sub sap *string*
Tree	sap
Description	Commands in this context configure the Service Access Point (SAP) within the partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**sap-id**] *string*

Synopsis	AA subscriber SAP ID
Context	**configure** application-assurance group *number* partition *number* policy-override aa-sub sap *string*
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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characteristic [characteristic-name] *reference*

Synopsis	Enter the **characteristic** list instance
Context	**configure** application-assurance group *number* partition *number* policy-override aa-sub sap *string* characteristic *reference*
Tree	characteristic
Description	Commands in this context configure an override characteristic and value.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**characteristic-name**] *reference*

Synopsis	ASO characteristic name
Context	**configure** application-assurance group *number* partition *number* policy-override aa-sub sap *string* characteristic *reference*
Tree	characteristic
Reference	**configure** application-assurance group *number* partition *number* policy app-service-options characteristic *string*
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value *reference*

Synopsis	Characteristic value used in subscriber policy override
Context	**configure** application-assurance group *number* partition *number* policy-override aa-sub sap *string* characteristic *reference* value *reference*
Tree	value
Reference	**configure** application-assurance group *number* partition *number* policy app-service-options characteristic *string* value *string*
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

spoke-sdp [sdp-bind-id] *string*

Synopsis	Enter the **spoke-sdp** list instance

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Context	**configure** application-assurance group *number* partition *number* policy-override aa-sub spoke-sdp *string*
Tree	spoke-sdp
Description	Commands in this context configure the Service Distribution Point (SDP) for the policy override.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**sdp-bind-id**] *string*

Synopsis	Spoke SDP ID for an AA subscriber
Context	**configure** application-assurance group *number* partition *number* policy-override aa-sub spoke-sdp *string*
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

characteristic [characteristic-name] *reference*

Synopsis	Enter the **characteristic** list instance
Context	**configure** application-assurance group *number* partition *number* policy-override aa-sub spoke-sdp *string* characteristic *reference*
Tree	characteristic
Description	Commands in this context configure an override characteristic and value.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**characteristic-name**] *reference*

Synopsis	ASO characteristic name
Context	**configure** application-assurance group *number* partition *number* policy-override aa-sub spoke-sdp *string* characteristic *reference*
Tree	characteristic

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Reference	**configure** application-assurance group *number* partition *number* policy app-service-options characteristic *string*
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value *reference*

Synopsis	Characteristic value used in subscriber policy override
Context	**configure** application-assurance group *number* partition *number* policy-override aa-sub spoke-sdp *string* characteristic *reference* value *reference*
Tree	value
Reference	**configure** application-assurance group *number* partition *number* policy app-service-options characteristic *string* value *string*
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

transit [transit-sub-name] *string*

Synopsis	Enter the **transit** list instance
Context	**configure** application-assurance group *number* partition *number* policy-override aa-sub transit *string*
Tree	transit
Description	Commands in this context configure the AA transit subscriber fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**transit-sub-name**] *string*

Synopsis	Transit subscriber name
Context	**configure** application-assurance group *number* partition *number* policy-override aa-sub transit *string*
Tree	transit
String Length	1 to 32
Notes	This element is part of a list key.

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

characteristic [characteristic-name] *reference*

Synopsis	Enter the **characteristic** list instance
Context	**configure** application-assurance group *number* partition *number* policy-override aa-sub transit *string* characteristic *reference*
Tree	characteristic
Description	Commands in this context configure an override characteristic and value.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**characteristic-name**] *reference*

Synopsis	ASO characteristic name
Context	**configure** application-assurance group *number* partition *number* policy-override aa-sub transit *string* characteristic *reference*
Tree	characteristic
Reference	**configure** application-assurance group *number* partition *number* policy app-service-options characteristic *string*
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value *reference*

Synopsis	Characteristic value used in subscriber policy override
Context	**configure** application-assurance group *number* partition *number* policy-override aa-sub transit *string* characteristic *reference* value *reference*
Tree	value
Reference	**configure** application-assurance group *number* partition *number* policy app-service-options characteristic *string* value *string*
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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port-list [port-list-name] *string*

Synopsis	Enter the **port-list** list instance
Context	**configure** application-assurance group *number* partition *number* port-list *string*
Tree	port-list
Description	Commands in this context define an AA group or partition named port list, which contains a list of port numbers or port ranges. The port list is then referenced in AA policy application filters, allowing increased flexibility in the use of server ports or HTTP proxy ports for application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**port-list-name**] *string*

Synopsis	Port list name
Context	**configure** application-assurance group *number* partition *number* port-list *string*
Tree	port-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* partition *number* port-list *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port [port-number] *number*

Synopsis	Add a list entry for **port**

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Context	**configure** application-assurance group *number* partition *number* port-list *string* port *number*
Tree	port
Description	Commands in this context specify the server TCP or UDP port number to use in the port list definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**port-number**] *number*

Synopsis	Port number
Context	**configure** application-assurance group *number* partition *number* port-list *string* port *number*
Tree	port
Range	0 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range start *number* end *number*

Synopsis	Add a list entry for **range**
Context	**configure** application-assurance group *number* partition *number* port-list *string* range start *number* end *number*
Tree	range
Description	Commands in this context configure the AA group or partition named port-list range.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Start value for the port range in the AA port list
Context	**configure** application-assurance group *number* partition *number* port-list *string* range start *number* end *number*
Tree	range
Range	0 to 65534

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Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	End value for the port range in the AA port list
Context	**configure** application-assurance group *number* partition *number* port-list *string* range start *number* end *number*
Tree	range
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sctp-filter [sctp-filter-name] *string*

Synopsis	Enter the **sctp-filter** list instance
Context	**configure** application-assurance group *number* partition *number* sctp-filter *string*
Tree	sctp-filter
Description	Commands in this context configure the Stream Control Transmission Protocol (SCTP) fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**sctp-filter-name**] *string*

Synopsis	SCTP filter name
Context	**configure** application-assurance group *number* partition *number* sctp-filter *string*
Tree	sctp-filter
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* partition *number* sctp-filter *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log *reference*

Synopsis	Event log for packets dropped by the SCTP filter
Context	**configure** application-assurance group *number* partition *number* sctp-filter *string* event-log *reference*
Tree	event-log
Reference	**configure** application-assurance group *number* partition *number* event-log *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ppid

Synopsis	Enter the **ppid** context
Context	**configure** application-assurance group *number* partition *number* sctp-filter *string* ppid
Tree	ppid
Description	Commands in this context configure actions for specific or default Payload Protocol Identifiers (PPIDs).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action *keyword*

Synopsis	Default action for all SCTP PPIDs
Context	**configure** application-assurance group *number* partition *number* sctp-filter *string* ppid default-action *keyword*
Tree	default-action
Options	deny, permit

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Default	permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** application-assurance group *number* partition *number* sctp-filter *string* ppid entry *number*
Tree	entry
Description	Commands in this context specify SCTP PPID values and the corresponding action to apply.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**entry-id**] *number*

Synopsis	SCTP filter PPID entry ID
Context	**configure** application-assurance group *number* partition *number* sctp-filter *string* ppid entry *number*
Tree	entry
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	SCTP filter PPID entry action
Context	**configure** application-assurance group *number* partition *number* sctp-filter *string* ppid entry *number* action *keyword*
Tree	action
Options	deny, permit
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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value *(number | keyword)*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PPID entry value
Context	**configure** application-assurance group *number* partition *number* sctp-filter *string* ppid entry *number* value *(number | keyword)*
Tree	value
Range	0 to 4294967295
Options	iua, m2ua, m3ua, sua, m2pa, v5ua, h.248, bicc/q.2150.3, tali, dua, asap, enrp, h.323, q.ipc/q.2150.3, simco, ddp-segment-chunk, ddp-stream-session-control, s1-application-protocol, rua, hnbap, forces-hp, forces-mp, forces-lp, sbc-ap, nbap, x2ap, ircp, lcs-ap, mpich2, service-area-broadcast-protocol, fractal-generator-protocol, ping-pong-protocol, calcapp-protocol, scripting-service-protocol, netperfmeter-protocol-control-channel, netperfmeter-protocol-data-channel, echo, discard, daytime, character-generator, 3gpp-rna, 3gpp-m2ap, 3gpp-m3ap, ssh-over-sctp, diameter-in-a-sctp-data-chunk, diameter-in-a-dtls/sctp-data-chunk, r14p.-ber-encoded-asn.1-over-sctp, webrtc-control, domstring-last, binary-data-partial, binary-data-last, domstring-partial, 3gpp-pua, webrtc-string-empty, webrtc-binary-empty, 3gpp-xwap, 3gpp-xw-control-plane, 3gpp-ng-application-protocol, 3gpp-xn-application-protocol, 3gpp-f1-application-protocol, http-sctp, 3gpp-e1-application-protocol, ele2-lawful-interception, 3gpp-ngap-over-dtls-over-sctp, 3gpp-xnap-over-dtls-over-sctp, 3gpp-f1ap-over-dtls-over-sctp, 3gpp-e1ap-over-dtls-over-sctp, e2-cp, e2-up, e2-du, 3gpp-w1ap
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ppid-range

Synopsis	Enter the **ppid-range** context
Context	**configure** application-assurance group *number* partition *number* sctp-filter *string* ppid-range
Tree	ppid-range
Description	Commands in this context specify the range of PPID values that are allowed by the AA SCTP filter firewall.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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max *number*

Synopsis	Maximum PPID value
Context	**configure** application-assurance group *number* partition *number* sctp-filter *string* ppid-range max *number*
Tree	max
Description	This command configures the maximum SCTP Payload Protocol Identifier (PPID) to be permitted by the SCTP filter. The value must be greater or equal to the minimum PPID value.
Range	0 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

min *number*

Synopsis	Minimum PPID value
Context	**configure** application-assurance group *number* partition *number* sctp-filter *string* ppid-range min *number*
Tree	min
Description	This command configures the minimum SCTP Payload Protocol Identifier (PPID) to be permitted by the SCTP filter. The value must be less than or equal to the maximum PPID value.
Range	0 to 4294967295
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-filter [session-filter-name] *string*

Synopsis	Enter the **session-filter** list instance
Context	**configure** application-assurance group *number* partition *number* session-filter *string*
Tree	session-filter
Description	Commands in this context create a session filter.
Max. Instances	1000
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**session-filter-name**] *string*

Synopsis	Session filter name
Context	**configure** application-assurance group *number* partition *number* session-filter *string*
Tree	session-filter
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action

Synopsis	Enter the **default-action** context
Context	**configure** application-assurance group *number* partition *number* session-filter *string* default-action
Tree	default-action
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	Default action for packets not matching filter entries
Context	**configure** application-assurance group *number* partition *number* session-filter *string* default-action action *keyword*
Tree	action
Options	deny, permit
Default	deny
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log *reference*

Synopsis	Event logging of default action

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Context	**configure** application-assurance group *number* partition *number* session-filter *string* default-action event-log *reference*
Tree	event-log
Reference	**configure** application-assurance group *number* partition *number* event-log *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* partition *number* session-filter *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number*
Tree	entry
Description	Commands in this context configure an AA session filter match entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**entry-id**] *number*

Synopsis	Entry ID for the session filter entry
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number*
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action

Synopsis	Enter the **action** context
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* action
Tree	action
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

deny

Synopsis	Deny sessions matching the criteria
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* action deny
Tree	deny
Notes	The following elements are part of a choice: **deny**, **http-redirect**, **permit**, or **tcp-optimizer**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log *reference*

Synopsis	Event log name used to log the action
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* action event-log *reference*
Tree	event-log
Reference	**configure** application-assurance group *number* partition *number* event-log *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect *reference*

Synopsis	HTTP redirect for matching sessions
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* action http-redirect *reference*

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Tree	http-redirect
Reference	**configure** application-assurance group *number* http-redirect *string*
Notes	The following elements are part of a choice: **deny**, **http-redirect**, **permit**, or **tcp-optimizer**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

permit

Synopsis	Permit sessions that match the criteria
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* action permit
Tree	permit
Notes	The following elements are part of a choice: **deny**, **http-redirect**, **permit**, or **tcp-optimizer**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-optimizer *reference*

Synopsis	TCP optimizer to handle sessions matching the criteria
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* action tcp-optimizer *reference*
Tree	tcp-optimizer
Reference	**configure** application-assurance group *number* tcp-optimizer *string*
Notes	The following elements are part of a choice: **deny**, **http-redirect**, **permit**, or **tcp-optimizer**.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* description *string*
Tree	description

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String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis	Enter the **match** context
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* match
Tree	match
Description	Commands in this context configure session conditions for this entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dst-ip

Synopsis	Enter the **dst-ip** context
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* match dst-ip
Tree	dst-ip
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns-ip-cache *reference*

Synopsis	Destination IPs in specified DNS IP Cache
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* match dst-ip dns-ip-cache *reference*
Tree	dns-ip-cache
Reference	**configure** application-assurance group *number* dns-ip-cache *string*
Notes	The following elements are part of a choice: **dns-ip-cache**, **ip-prefix**, or **ip-prefix-list**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ip-prefix *(ipv4-prefix | ipv6-prefix)*

Synopsis	Destination IP address prefix as match criterion
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* match dst-ip ip-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	ip-prefix
Notes	The following elements are part of a choice: **dns-ip-cache**, **ip-prefix**, or **ip-prefix-list**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	IP address prefix list as match criterion
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* match dst-ip ip-prefix-list *reference*
Tree	ip-prefix-list
Reference	**configure** application-assurance group *number* partition *number* ip-prefix-list *string*
Notes	The following elements are part of a choice: **dns-ip-cache**, **ip-prefix**, or **ip-prefix-list**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dst-port

Synopsis	Enter the **dst-port** context
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* match dst-port
Tree	dst-port
Description	Commands in this context specify a destination TCP/UDP port, a destination port list, or a destination range to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *number*

Synopsis	Match criterion used for destination or source port
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* match dst-port eq *number*

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Tree	eq
Range	0 | 1 to 65535
Default	0
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gt *number*

Synopsis	Greater than match criterion for the port number
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* match dst-port gt *number*
Tree	gt
Range	0 | 1 to 65535
Default	0
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lt *number*

Synopsis	Less than match criterion for the port
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* match dst-port lt *number*
Tree	lt
Range	0 | 1 to 65535
Default	0
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis	Destination or source port list
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* match dst-port port-list *reference*

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Tree	port-list
Reference	**configure** application-assurance group *number* partition *number* port-list *string*
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the **range** context
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* match dst-port range
Tree	range
Description	Commands in this context specify a destination IP port, a destination port list, or a destination range to use as match criteria.
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the port range as match criterion
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* match dst-port range end *number*
Tree	end
Range	0 | 1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of the port range as match criterion
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* match dst-port range start *number*
Tree	start
Range	0 | 1 to 65535

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Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-protocol *(number | keyword)*

Synopsis	IP protocol as a match criterion
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* match ip-protocol *(number | keyword)*
Tree	ip-protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

src-ip

Synopsis	Enter the **src-ip** context
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* match src-ip
Tree	src-ip
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix *(ipv4-prefix | ipv6-prefix)*

Synopsis	Source IP address prefix as match criterion
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* match src-ip ip-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	ip-prefix
Notes	The following elements are part of a choice: **ip-prefix** or **ip-prefix-list**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ip-prefix-list *reference*

Synopsis	Source IP address prefix list as match criterion
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* match src-ip ip-prefix-list *reference*
Tree	ip-prefix-list
Reference	**configure** application-assurance group *number* partition *number* ip-prefix-list *string*
Notes	The following elements are part of a choice: **ip-prefix** or **ip-prefix-list**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

src-port

Synopsis	Enter the **src-port** context
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* match src-port
Tree	src-port
Description	Commands in this context specify a source IP port, a source port list, or a source range to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *number*

Synopsis	Match criterion used for destination or source port
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* match src-port eq *number*
Tree	eq
Range	0 | 1 to 65535
Default	0
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gt *number*

Synopsis	Greater than match criterion for the port number

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Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* match src-port gt *number*
Tree	gt
Range	0 | 1 to 65535
Default	0
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lt *number*

Synopsis	Less than match criterion for the port
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* match src-port lt *number*
Tree	lt
Range	0 | 1 to 65535
Default	0
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis	Destination or source port list
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* match src-port port-list *reference*
Tree	port-list
Reference	**configure** application-assurance group *number* partition *number* port-list *string*
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the **range** context

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Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* match src-port range
Tree	range
Description	Commands in this context specify a destination IP port, a destination port list, or a destination range to use as match criteria.
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the port range as match criterion
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* match src-port range end *number*
Tree	end
Range	0 | 1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of the port range as match criterion
Context	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number* match src-port range start *number*
Tree	start
Range	0 | 1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

shallow-inspection *boolean*

Synopsis	Enable shallow inspection
Context	**configure** application-assurance group *number* partition *number* shallow-inspection *boolean*

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Tree	shallow-inspection
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

statistics

Synopsis	Enter the **statistics** context
Context	**configure** application-assurance group *number* partition *number* statistics
Tree	statistics
Description	Commands in this context configure accounting and billing statistics for this AA group.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-admit-deny

Synopsis	Enter the **aa-admit-deny** context
Context	**configure** application-assurance group *number* partition *number* statistics aa-admit-deny
Tree	aa-admit-deny
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	Accounting policy
Context	**configure** application-assurance group *number* partition *number* statistics aa-admit-deny accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Collect statistics

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Context	**configure** application-assurance group *number* partition *number* statistics aa-admit-deny collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp-filter-stats *boolean*

Synopsis	Include GTP filter admit-deny statistics in records
Context	**configure** application-assurance group *number* partition *number* statistics aa-admit-deny gtp-filter-stats *boolean*
Tree	gtp-filter-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer-stats *boolean*

Synopsis	Include admit-deny policer statistics in records
Context	**configure** application-assurance group *number* partition *number* statistics aa-admit-deny policer-stats *boolean*
Tree	policer-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer-stats-resources *boolean*

Synopsis	Allocate resources for policer admit-deny statistics
Context	**configure** application-assurance group *number* partition *number* statistics aa-admit-deny policer-stats-resources *boolean*
Tree	policer-stats-resources
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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sctp-filter-stats *boolean*

Synopsis	Include SCTP filter admit-deny statistics in accounting
Context	**configure** application-assurance group *number* partition *number* statistics aa-admit-deny sctp-filter-stats *boolean*
Tree	sctp-filter-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-filter-stats *boolean*

Synopsis	Include session filter admit-deny statistics in records
Context	**configure** application-assurance group *number* partition *number* statistics aa-admit-deny session-filter-stats *boolean*
Tree	session-filter-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-validate-stats *boolean*

Synopsis	Include TCP validate admit-deny statistics in records
Context	**configure** application-assurance group *number* partition *number* statistics aa-admit-deny tcp-validate-stats *boolean*
Tree	tcp-validate-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-app-group

Synopsis	Enter the **aa-app-group** context
Context	**configure** application-assurance group *number* partition *number* statistics aa-app-group
Tree	aa-app-group
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	Accounting policy ID
Context	**configure** application-assurance group *number* partition *number* statistics aa-app-group accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Collect statistics
Context	**configure** application-assurance group *number* partition *number* statistics aa-app-group collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-application

Synopsis	Enter the **aa-application** context
Context	**configure** application-assurance group *number* partition *number* statistics aa-application
Tree	aa-application
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	Accounting policy ID
Context	**configure** application-assurance group *number* partition *number* statistics aa-application accounting-policy *reference*

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Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Collect statistics
Context	**configure** application-assurance group *number* partition *number* statistics aa-application collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-partition

Synopsis	Enter the **aa-partition** context
Context	**configure** application-assurance group *number* partition *number* statistics aa-partition
Tree	aa-partition
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	Accounting policy
Context	**configure** application-assurance group *number* partition *number* statistics aa-partition accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Collect statistics

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Context	**configure** application-assurance group *number* partition *number* statistics aa-partition collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tethering-stats *boolean*

Synopsis	Collect tethering statistics
Context	**configure** application-assurance group *number* partition *number* statistics aa-partition tethering-stats *boolean*
Tree	tethering-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

traffic-type-stats *boolean*

Synopsis	Collect traffic type statistics
Context	**configure** application-assurance group *number* partition *number* statistics aa-partition traffic-type-stats *boolean*
Tree	traffic-type-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-protocol

Synopsis	Enter the **aa-protocol** context
Context	**configure** application-assurance group *number* partition *number* statistics aa-protocol
Tree	aa-protocol
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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accounting-policy *reference*

Synopsis	Accounting policy ID
Context	**configure** application-assurance group *number* partition *number* statistics aa-protocol accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of protocol statistics
Context	**configure** application-assurance group *number* partition *number* statistics aa-protocol admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Collect statistics
Context	**configure** application-assurance group *number* partition *number* statistics aa-protocol collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub

Synopsis	Enter the **aa-sub** context
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub
Tree	aa-sub
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	Accounting policy ID
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aggregate-stats-export-using *keyword*

Synopsis	Method of statistics export to be used
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub aggregate-stats-export-using *keyword*
Tree	aggregate-stats-export-using
Options	accounting-policy, radius-accounting-policy
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-group [app-group-name] *reference*

Synopsis	Enter the **app-group** list instance
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub app-group *reference*
Tree	app-group
Description	Commands in this context configure accounting and statistics collection parameters for AA application groups for a specific AA group/partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**app-group-name**] *reference*

Synopsis	Application group name
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub app-group *reference*
Tree	app-group
Reference	**configure** application-assurance group *number* partition *number* policy app-group *string*
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-using *keyword*

Synopsis	Method used to export statistics
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub app-group *reference* export-using *keyword*
Tree	export-using
Options	accounting-policy, radius-accounting-policy
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

application [application-name] *reference*

Synopsis	Enter the **application** list instance
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub application *reference*
Tree	application
Description	Commands in this context configure the AA subscriber accounting statistics for the export of AA applications for an AA group/partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**application-name**] *reference*

Synopsis	Application name

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Context	**configure** application-assurance group *number* partition *number* statistics aa-sub application *reference*
Tree	application
Reference	**configure** application-assurance group *number* partition *number* policy application *string*
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-using *keyword*

Synopsis	Method used to export statistics
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub application *reference* export-using *keyword*
Tree	export-using
Options	accounting-policy, radius-accounting-policy
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

charging-group [charging-group-name] *reference*

Synopsis	Enter the **charging-group** list instance
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub charging-group *reference*
Tree	charging-group
Description	Commands in this context configure AA subscriber accounting statistics for the export of AA charging groups of an AA group/partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**charging-group-name**] *reference*

Synopsis	Charging group name
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub charging-group *reference*

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Tree	charging-group
Description	This command specifies the AA charging group to be included in the exported accounting records.
Reference	**configure** application-assurance group *number* partition *number* policy charging-group *string*
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-using *keyword*

Synopsis	Method used to export statistics
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub charging-group *reference* export-using *keyword*
Tree	export-using
Options	accounting-policy, radius-accounting-policy
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Collect statistics
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

exclude-tcp-retrans *boolean*

Synopsis	Exclude TCP retransmission and error statistics
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub exclude-tcp-retrans *boolean*
Tree	exclude-tcp-retrans

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Description	When configured to **true**, TCP errors and retransmission packets are not counted for the purpose of content-based billing. **Note:** This command is only applicable to EPC.This setting has no impact on app/app-group aggregate AA stats.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-throughput-stats *boolean*

Synopsis	Collect maximum throughput statistics
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub max-throughput-stats *boolean*
Tree	max-throughput-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocol [protocol-name] *string*

Synopsis	Enter the **protocol** list instance
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub protocol *string*
Tree	protocol
Description	Commands in this context configure AA subscriber accounting statistics for the export of aa-sub protocols of an AA group/partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**protocol-name**] *string*

Synopsis	AA protocol name
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub protocol *string*
Tree	protocol
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-using *keyword*

Synopsis	Method used to export statistics
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub protocol *string* export-using *keyword*
Tree	export-using
Options	accounting-policy, radius-accounting-policy
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy *reference*

Synopsis	RADIUS accounting policy name
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub radius-accounting-policy *reference*
Tree	radius-accounting-policy
Reference	**configure** application-assurance radius-accounting-policy *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

usage-monitoring *boolean*

Synopsis	Collect usage monitoring statistics
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub usage-monitoring *boolean*
Tree	usage-monitoring
Description	When configured to **true**, this command allows the system to activate Gx usage monitoring at AA group/partition level, if enough usage monitoring resources exist for all existing subs. When configured to **false**, this command silently removes all monitoring instances (no PCRF notifications) for AA subscribers and all subsequent AA Gx usage monitoring messages are ignored.
Default	false

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub-study [study-type] *keyword*

Synopsis	Enter the **aa-sub-study** list instance
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub-study *keyword*
Tree	aa-sub-study
Description	Commands in this context configure accounting and statistics collection parameters per AA special study subscribers.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**study-type**] *keyword*

Synopsis	Statistic type that the study is using
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub-study *keyword*
Tree	aa-sub-study
Options	protocol, application
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub

Synopsis	Enter the **aa-sub** context
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub-study *keyword* aa-sub
Tree	aa-sub
Description	Commands in this context add an existing subscriber identification to a group of special study subscribers. Identifying a group of special study subscribers allows statistics and accounting records for those subscribers to be collected for protocols and applications through Application Assurance. When adding a subscriber to the special study group, accounting records and statistics generation commence immediately. When removing a subscriber from the

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group, special study statistics and accounting records for that subscriber in the current interval are lost.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esm [esm-sub-name] *string*

Synopsis Add a list entry for **esm**

Context **configure** application-assurance group *number* partition *number* statistics aa-sub-study *keyword* aa-sub esm *string*

Tree esm

Description Commands in this context configure the ESM fields.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**esm-sub-name**] *string*

Synopsis ESM subscriber name

Context **configure** application-assurance group *number* partition *number* statistics aa-sub-study *keyword* aa-sub esm *string*

Tree esm

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esm-mac [esm-mac-sub-name] *string*

Synopsis Add a list entry for **esm-mac**

Context **configure** application-assurance group *number* partition *number* statistics aa-sub-study *keyword* aa-sub esm-mac *string*

Tree esm-mac

Description Commands in this context configure the ESM MAC fields.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**esm-mac-sub-name**] *string*

Synopsis	ESM MAC subscriber name
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub-study *keyword* aa-sub esm-mac *string*
Tree	esm-mac
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap [sap-id] *string*

Synopsis	Add a list entry for **sap**
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub-study *keyword* aa-sub sap *string*
Tree	sap
Description	Commands in this context configure the Service Access Point (SAP) for the purpose of enabling special study statistics.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**sap-id**] *string*

Synopsis	AA subscriber SAP ID
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub-study *keyword* aa-sub sap *string*
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

spoke-sdp [sdp-bind-id] *string*

Synopsis	Add a list entry for **spoke-sdp**

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Context	**configure** application-assurance group *number* partition *number* statistics aa-sub-study *keyword* aa-sub spoke-sdp *string*
Tree	spoke-sdp
Description	Commands in this context specify the spoke SDP ID and VC ID for the purpose of including the subscriber into AA special study statistics.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**sdp-bind-id**] *string*

Synopsis	Spoke SDP ID for an AA subscriber
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub-study *keyword* aa-sub spoke-sdp *string*
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

transit [transit-sub-name] *string*

Synopsis	Add a list entry for **transit**
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub-study *keyword* aa-sub transit *string*
Tree	transit
Description	Commands in the context specify an existing transit subscriber to be included in AA sub special study statistics.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**transit-sub-name**] *string*

Synopsis	Transit subscriber name
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub-study *keyword* aa-sub transit *string*
Tree	transit
String Length	1 to 32

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Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	Accounting policy ID
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub-study *keyword* accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Collect statistics
Context	**configure** application-assurance group *number* partition *number* statistics aa-sub-study *keyword* collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-validate [tcp-validate-name] *string*

Synopsis	Enter the **tcp-validate** list instance
Context	**configure** application-assurance group *number* partition *number* tcp-validate *string*
Tree	tcp-validate
Description	Commands in this context configure a TCP validation policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**tcp-validate-name**] *string*

Synopsis	TCP validation policy name

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Context	**configure** application-assurance group *number* partition *number* tcp-validate *string*
Tree	tcp-validate
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* partition *number* tcp-validate *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

log

Synopsis	Enter the **log** context
Context	**configure** application-assurance group *number* partition *number* tcp-validate *string* log
Tree	log
Description	Commands in this context enable event logging of traffic dropped by TCP validation.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

all *boolean*

Synopsis	Enable logging of all dropped TCP packets
Context	**configure** application-assurance group *number* partition *number* tcp-validate *string* log all *boolean*
Tree	all
Description	When configured to **true**, all dropped TCP packets are logged, including the following: • packets received after an RST and discarded • packets received before TCP session establishment (before SYN) and discarded An event log must also be configured to enable logging of all dropped packets.

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When configured to **false**, discards related to the described cases are not captured in any event log.

Default false

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log *reference*

Synopsis Event log name

Context **configure** application-assurance group *number* partition *number* tcp-validate *string* log event-log *reference*

Tree event-log

Reference **configure** application-assurance group *number* partition *number* event-log *string*

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

strict *boolean*

Synopsis Enable strict checking of TCP traffic

Context **configure** application-assurance group *number* partition *number* tcp-validate *string* strict *boolean*

Tree strict

Description When configured to **true**, the command specifies whether enforcement of TCP sequence and acknowledgment numbers are applied. If a packet does not meet the expected sequence or acknowledgment number, it is dropped. This command should only be enabled if the expected bit error rate or packet loss is low.

For example, if acknowledgments are lost before being detected by AA, the server timeouts are triggered and retransmissions occur. If strict is enabled, these retransmissions resemble a reply attack and are dropped by AA.

When configured to **false**, the command removes the TCP sequence and acknowledgment number enforcement.

Default false

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tethering-detection

Synopsis Enter the **tethering-detection** context

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Context	**configure** application-assurance group *number* partition *number* tethering-detection
Tree	tethering-detection
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of tethering detection
Context	**configure** application-assurance group *number* partition *number* tethering-detection admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

single-device

Synopsis	Enter the **single-device** context
Context	**configure** application-assurance group *number* partition *number* tethering-detection single-device
Tree	single-device
Description	Commands in this context configure the single-device fields and expected TTL values for flow-level tethering detection.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

expected-ttl [ttl] *number*

Synopsis	Add a list entry for **expected-ttl**
Context	**configure** application-assurance group *number* partition *number* tethering-detection single-device expected-ttl *number*
Tree	expected-ttl
Description	Commands in this context configure the TTL values for single-device tethering detection.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**ttl**] *number*

Synopsis	Expected TTL traffic value from host devices
Context	**configure** application-assurance group *number* partition *number* tethering-detection single-device expected-ttl *number*
Tree	expected-ttl
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

invert-match *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Mark flows with expected TTL values as tethered
Context	**configure** application-assurance group *number* partition *number* tethering-detection single-device invert-match *boolean*
Tree	invert-match
Description	When configured to **true**, AA classifies flows with expected TTL values as coming from a connected device (tethered). When configured to **false**, AA classifies flows with expected TTL values as coming from the host device (untethered).
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ttl-monitor

Synopsis	Enter the **ttl-monitor** context
Context	**configure** application-assurance group *number* partition *number* tethering-detection ttl-monitor
Tree	ttl-monitor
Description	Commands in this context configure the scope of analysis for TCP and UDP traffic for tethering detection.

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Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-protocols *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Scope of analysis for TCP traffic
Context	**configure** application-assurance group *number* partition *number* tethering-detection ttl-monitor tcp-protocols *keyword*
Tree	tcp-protocols
Description	This command configures whether AA analyzes all TCP traffic or only traffic from standard applications that generate consistent TTL values. Configuring AA to analyze all TCP traffic is typically recommended.
Options	standard – Protocols with reliable TTL-tethering state association all – All protocols
Default	standard
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp-protocols *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Scope of analysis for UDP traffic
Context	**configure** application-assurance group *number* partition *number* tethering-detection ttl-monitor udp-protocols *keyword*
Tree	udp-protocols
Description	This command configures whether AA analyzes all UDP traffic or only traffic from standard applications that generate consistent TTL values. Configuring AA to analyze only standard UDP traffic is recommended.
Options	standard – Protocols with reliable TTL-tethering state association all – All protocols
Default	standard
Introduced	23.3.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

threshold-crossing-alert

Synopsis	Enter the **threshold-crossing-alert** context
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert
Tree	threshold-crossing-alert
Description	Commands in this context configure the generation of threshold crossing alerts (TCAs).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

criteria [criteria-id] *keyword* direction *keyword*

Synopsis	Enter the **criteria** list instance
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert criteria *keyword* direction *keyword*
Tree	criteria
Description	Commands in this context configure the TCA criteria for the partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**criteria-id**] *keyword*

Synopsis	Statistics TCA criteria ID
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert criteria *keyword* direction *keyword*
Tree	criteria
Options	error-drop, fragment-drop-out-of-order, fragment-drop-all, overload-drop, gtp-sanity-drop
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of traffic for the criteria statistics TCA

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Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert criteria *keyword* direction *keyword*
Tree	criteria
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark threshold
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert criteria *keyword* direction *keyword* high-watermark *number*
Tree	high-watermark
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark threshold
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert criteria *keyword* direction *keyword* low-watermark *number*
Tree	low-watermark
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp-filter [gtp-filter-name] *reference* criteria *keyword* direction *keyword*

Synopsis	Enter the **gtp-filter** list instance
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert gtp-filter *reference* criteria *keyword* direction *keyword*
Tree	gtp-filter

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Description	Commands in this context configure TCA generation for a GTP filter.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**gtp-filter-name**] *reference*

Synopsis	GTP filter name for TCA generation
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert gtp-filter *reference* criteria *keyword* direction *keyword*
Tree	gtp-filter
Reference	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string*
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

criteria *keyword*

Synopsis	Criteria ID for GTP filter TCA
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert gtp-filter *reference* criteria *keyword* direction *keyword*
Tree	gtp-filter
Options	max-payload-length, message-type-default-action, header-sanity, message-type-gtpv2-default-action, imsi-apn-filter-default-action, validate-gtp-tunnels, validate-sequence-number, validate-src-ip-addr, missing-mandatory-ie, gtp-in-gtp, gtp-tunnel-database-full, gtp-tunnel-endpoint-limit
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of traffic for the GTP filter TCA
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert gtp-filter *reference* criteria *keyword* direction *keyword*
Tree	gtp-filter
Options	from-sub, to-sub

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Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark threshold
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert gtp-filter *reference* criteria *keyword* direction *keyword* high-watermark *number*
Tree	high-watermark
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark threshold
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert gtp-filter *reference* criteria *keyword* direction *keyword* low-watermark *number*
Tree	low-watermark
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp-filter-entry [gtp-filter-name] *reference* entry-id *number* direction *keyword*

Synopsis	Enter the **gtp-filter-entry** list instance
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert gtp-filter-entry *reference* entry-id *number* direction *keyword*
Tree	gtp-filter-entry
Description	Commands in this context configure the AA GTP filter entry TCA fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**gtp-filter-name**] *reference*

Synopsis	AA GTP filter name for TCA configuration
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert gtp-filter-entry *reference* entry-id *number* direction *keyword*
Tree	gtp-filter-entry
Reference	**configure** application-assurance group *number* partition *number* gtp gtp-filter *string*
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry-id *number*

Synopsis	Entry ID
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert gtp-filter-entry *reference* entry-id *number* direction *keyword*
Tree	gtp-filter-entry
Description	This command configures the identifier for the statistics TCA GTP filter V1 message type entry, V2 message type entry, or imsi-apn filter entry.
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Traffic direction for GTP filter entry TCA
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert gtp-filter-entry *reference* entry-id *number* direction *keyword*
Tree	gtp-filter-entry
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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high-watermark *number*

Synopsis	High watermark threshold
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert gtp-filter-entry *reference* entry-id *number* direction *keyword* high-watermark *number*
Tree	high-watermark
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark threshold
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert gtp-filter-entry *reference* entry-id *number* direction *keyword* low-watermark *number*
Tree	low-watermark
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer [policer-name] *string* direction *keyword*

Synopsis	Enter the **policer** list instance
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert policer *string* direction *keyword*
Tree	policer
Description	Commands in this context configure a TCA for the counter capturing drops or admit events.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**policer-name**] *string*

Synopsis	Policer name for TCA generation

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Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert policer *string* direction *keyword*
Tree	policer
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of traffic for the policer TCA
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert policer *string* direction *keyword*
Tree	policer
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark threshold
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert policer *string* direction *keyword* high-watermark *number*
Tree	high-watermark
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark threshold
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert policer *string* direction *keyword* low-watermark *number*
Tree	low-watermark

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Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sctp-filter [sctp-filter-name] *reference* criteria *keyword* direction *keyword*

Synopsis	Enter the **sctp-filter** list instance
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert sctp-filter *reference* criteria *keyword* direction *keyword*
Tree	sctp-filter
Description	Commands in this context configure TCA generation for an SCTP filter.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**sctp-filter-name**] *reference*

Synopsis	SCTP filter name for TCA generation
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert sctp-filter *reference* criteria *keyword* direction *keyword*
Tree	sctp-filter
Reference	**configure** application-assurance group *number* partition *number* sctp-filter *string*
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

criteria *keyword*

Synopsis	Criteria ID for SCTP filter TCA
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert sctp-filter *reference* criteria *keyword* direction *keyword*
Tree	sctp-filter
Options	ppid-default-action, packet-sanity, ppid-range
Notes	This element is part of a list key.
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of traffic for SCTP filter TCA
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert sctp-filter *reference* criteria *keyword* direction *keyword*
Tree	sctp-filter
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark threshold
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert sctp-filter *reference* criteria *keyword* direction *keyword* high-watermark *number*
Tree	high-watermark
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark threshold
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert sctp-filter *reference* criteria *keyword* direction *keyword* low-watermark *number*
Tree	low-watermark
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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sctp-filter-entry [sctp-filter-name] *reference* entry-id *reference* direction *keyword*

Synopsis	Enter the **sctp-filter-entry** list instance
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert sctp-filter-entry *reference* entry-id *reference* direction *keyword*
Tree	sctp-filter-entry
Description	Commands in this context configure the AA SCTP filter PPID entry TCA fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**sctp-filter-name**] *reference*

Synopsis	AA SCTP filter name for TCA configuration
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert sctp-filter-entry *reference* entry-id *reference* direction *keyword*
Tree	sctp-filter-entry
Reference	**configure** application-assurance group *number* partition *number* sctp-filter *string*
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry-id *reference*

Synopsis	ID for SCTP filter entry TCA
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert sctp-filter-entry *reference* entry-id *reference* direction *keyword*
Tree	sctp-filter-entry
Reference	**configure** application-assurance group *number* partition *number* sctp-filter *string* ppid entry *number*
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of traffic for TCA configuration

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Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert sctp-filter-entry *reference* entry-id *reference* direction *keyword*
Tree	sctp-filter-entry
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark threshold
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert sctp-filter-entry *reference* entry-id *reference* direction *keyword* high-watermark *number*
Tree	high-watermark
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark threshold
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert sctp-filter-entry *reference* entry-id *reference* direction *keyword* low-watermark *number*
Tree	low-watermark
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-filter [session-filter-name] *reference* criteria *keyword* direction *keyword*

Synopsis	Enter the **session-filter** list instance
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert session-filter *reference* criteria *keyword* direction *keyword*

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Tree	session-filter
Description	Commands in this context configure TCA generation for a session filter.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**session-filter-name**] *reference*

Synopsis	AA session filter name for TCA configuration
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert session-filter *reference* criteria *keyword* direction *keyword*
Tree	session-filter
Reference	**configure** application-assurance group *number* partition *number* session-filter *string*
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

criteria *keyword*

Synopsis	ID for session filter entry TCA
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert session-filter *reference* criteria *keyword* direction *keyword*
Tree	session-filter
Options	default-action
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of traffic for TCA configuration
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert session-filter *reference* criteria *keyword* direction *keyword*
Tree	session-filter
Options	from-sub, to-sub
Notes	This element is part of a list key.

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark threshold
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert session-filter *reference* criteria *keyword* direction *keyword* high-watermark *number*
Tree	high-watermark
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark threshold
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert session-filter *reference* criteria *keyword* direction *keyword* low-watermark *number*
Tree	low-watermark
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-filter-entry [session-filter-name] *reference* entry-id *reference* direction *keyword*

Synopsis	Enter the **session-filter-entry** list instance
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert session-filter-entry *reference* entry-id *reference* direction *keyword*
Tree	session-filter-entry
Description	Commands in this context configure the AA session filter entry TCA fields for the partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**session-filter-name**] *reference*

Synopsis	AA session filter name for TCA configuration
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert session-filter-entry *reference* entry-id *reference* direction *keyword*
Tree	session-filter-entry
Reference	**configure** application-assurance group *number* partition *number* session-filter *string*
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry-id *reference*

Synopsis	ID for session filter entry TCA
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert session-filter-entry *reference* entry-id *reference* direction *keyword*
Tree	session-filter-entry
Reference	**configure** application-assurance group *number* partition *number* session-filter *string* entry *number*
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of traffic for TCA configuration
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert session-filter-entry *reference* entry-id *reference* direction *keyword*
Tree	session-filter-entry
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark threshold

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Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert session-filter-entry *reference* entry-id *reference* direction *keyword* high-watermark *number*
Tree	high-watermark
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark threshold
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert session-filter-entry *reference* entry-id *reference* direction *keyword* low-watermark *number*
Tree	low-watermark
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-validate [tcp-validate-name] *reference* direction *keyword*

Synopsis	Enter the **tcp-validate** list instance
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert tcp-validate *reference* direction *keyword*
Tree	tcp-validate
Description	Commands in this context configure TCP validation policy TCA fields for the partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**tcp-validate-name**] *reference*

Synopsis	AA TCP validate name for configuration
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert tcp-validate *reference* direction *keyword*
Tree	tcp-validate

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Reference	**configure** application-assurance group *number* partition *number* tcp-validate *string*
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of traffic for TCA configuration
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert tcp-validate *reference* direction *keyword*
Tree	tcp-validate
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark threshold
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert tcp-validate *reference* direction *keyword* high-watermark *number*
Tree	high-watermark
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark threshold
Context	**configure** application-assurance group *number* partition *number* threshold-crossing-alert tcp-validate *reference* direction *keyword* low-watermark *number*
Tree	low-watermark
Range	0 to 4294967294
Default	0
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

transit-ip-policy [ip-policy-id] *number*

Synopsis	Enter the **transit-ip-policy** list instance
Context	**configure** application-assurance group *number* partition *number* transit-ip-policy *number*
Tree	transit-ip-policy
Description	Commands in this context define a transit AA subscriber IP policy. Transit AA subscribers are managed by the system through the use of this policy assigned to services, which determines how transit subs are created and removed for that service.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**ip-policy-id**] *number*

Synopsis	IP transit policy ID
Context	**configure** application-assurance group *number* partition *number* transit-ip-policy *number*
Tree	transit-ip-policy
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-app-profile *reference*

Synopsis	Default AA application profile
Context	**configure** application-assurance group *number* partition *number* transit-ip-policy *number* default-app-profile *reference*
Tree	default-app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* partition *number* transit-ip-policy *number* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

detect-seen-ip *boolean*

Synopsis	Detect transit subscribers based on IP address
Context	**configure** application-assurance group *number* partition *number* transit-ip-policy *number* detect-seen-ip *boolean*
Tree	detect-seen-ip
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp

Synopsis	Enter the **dhcp** context
Context	**configure** application-assurance group *number* partition *number* transit-ip-policy *number* dhcp
Tree	dhcp
Description	Commands in this context enable dynamic DHCP-based management of transit aa-subs for the transit IP policy. Dynamic DHCP-based management and other types of management of transit subs for a transit IP policy are mutually exclusive.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state for learning DHCP dynamic transits
Context	**configure** application-assurance group *number* partition *number* transit-ip-policy *number* dhcp admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

diameter

Synopsis	Enter the **diameter** context
Context	**configure** application-assurance group *number* partition *number* transit-ip-policy *number* diameter
Tree	diameter
Description	Commands in this context configure dynamic Diameter-based management of transit AA subs for the transit IP policy. This is mutually exclusive to other types of management of transit subs for a given transit IP policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state for Diameter dynamic transits
Context	**configure** application-assurance group *number* partition *number* transit-ip-policy *number* diameter admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

application-policy *reference*

Synopsis	Diameter application policy name for IP transit policy
Context	**configure** application-assurance group *number* partition *number* transit-ip-policy *number* diameter application-policy *reference*
Tree	application-policy
Reference	**configure** subscriber-mgmt diameter-gx-policy *string*
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-address-prefix-length *number*

Synopsis	Length of the AA transit IP policy IPv6 address prefix
Context	**configure** application-assurance group *number* partition *number* transit-ip-policy *number* ipv6-address-prefix-length *number*
Tree	ipv6-address-prefix-length
Range	32 to 64
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius

Synopsis	Enter the **radius** context
Context	**configure** application-assurance group *number* partition *number* transit-ip-policy *number* radius
Tree	radius
Description	Commands in this context enable dynamic RADIUS-based management of transit aa-subs for the transit IP policy. This is mutually exclusive to other types of management of transit subs for a given transit IP policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of learning RADIUS dynamic transit
Context	**configure** application-assurance group *number* partition *number* transit-ip-policy *number* radius admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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authentication-policy *reference*

Synopsis	RADIUS authentication policy
Context	**configure** application-assurance group *number* partition *number* transit-ip-policy *number* radius authentication-policy *reference*
Tree	authentication-policy
Reference	**configure** subscriber-mgmt radius-authentication-policy *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

seen-ip-radius-acct-policy *reference*

Synopsis	RADIUS accounting policy to enable seen-IP notification
Context	**configure** application-assurance group *number* partition *number* transit-ip-policy *number* radius seen-ip-radius-acct-policy *reference*
Tree	seen-ip-radius-acct-policy
Reference	**configure** application-assurance radius-accounting-policy *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

static-aa-sub [transit-aa-sub-name] *string*

Synopsis	Enter the **static-aa-sub** list instance
Context	**configure** application-assurance group *number* partition *number* transit-ip-policy *number* static-aa-sub *string*
Tree	static-aa-sub
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**transit-aa-sub-name**] *string*

Synopsis	Static transit subscriber name
Context	**configure** application-assurance group *number* partition *number* transit-ip-policy *number* static-aa-sub *string*
Tree	static-aa-sub
String Length	1 to 32
Notes	This element is part of a list key.

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Application profile name
Context	**configure** application-assurance group *number* partition *number* transit-ip-policy *number* static-aa-sub *string* app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip [address] *(ipv4-unicast-address | ipv6-prefix)*

Synopsis	Add a list entry for **ip**
Context	**configure** application-assurance group *number* partition *number* transit-ip-policy *number* static-aa-sub *string* ip *(ipv4-unicast-address | ipv6-prefix)*
Tree	ip
Description	Commands in this context configure the IP address for a static transit aa-sub.
Max. Instances	32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**address**] *(ipv4-unicast-address | ipv6-prefix)*

Synopsis	IP address for an AA static transit subscriber
Context	**configure** application-assurance group *number* partition *number* transit-ip-policy *number* static-aa-sub *string* ip *(ipv4-unicast-address | ipv6-prefix)*
Tree	ip
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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sub-ident-policy *reference*

Synopsis	Subscriber identification policy
Context	**configure** application-assurance group *number* partition *number* transit-ip-policy *number* sub-ident-policy *reference*
Tree	sub-ident-policy
Description	This command defines the subscriber identification policy for the transit IP policy that will be associated with a SAP. The subscriber identification policy must be defined prior to associating the profile with a SAP in the **configure subscriber-mgmt sub-ident-policy** context. Subscribers are managed by the system through the use of subscriber identification strings. A subscriber identification string uniquely identifies a subscriber. For static hosts, the subscriber identification string is explicitly defined with each static subscriber host. For dynamic hosts, the subscriber identification string must be derived from the DHCP ACK message sent to the subscriber host. The default value for the string is the content of Option 82 CIRCUIT-ID and REMOTE-ID fields interpreted as an octet string. As an option, the DHCP ACK message may be processed by a subscriber identification policy which has the capability to parse the message into an alternative ASCII or octet string value. When multiple hosts on the same port are associated with the same subscriber identification string, they are considered to be host members of the same subscriber. A subscriber identification policy can also be used for identifying dynamic transit subscriber names.
Reference	**configure** subscriber-mgmt sub-ident-policy *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

transit-auto-create

Synopsis	Enter the **transit-auto-create** context
Context	**configure** application-assurance group *number* partition *number* transit-ip-policy *number* transit-auto-create
Tree	transit-auto-create
Description	Commands in this context enable the seen-IP auto creation of transit subscribers using the transit IP policy name and subscriber IP address as the aa-sub name. The default app-profile configured against the transit IP policy is applied to these subscribers.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of the automatic dynamic transits
Context	**configure** application-assurance group *number* partition *number* transit-ip-policy *number* transit-auto-create admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inactivity-monitor *boolean*

Synopsis	Monitor inactivity on auto-created transit subscribers
Context	**configure** application-assurance group *number* partition *number* transit-ip-policy *number* transit-auto-create inactivity-monitor *boolean*
Tree	inactivity-monitor
Description	When configured to **true**, this command enables the auto-removal of inactive transit subscribers. Periodically, AA removes any inactive auto-created subscribers. An inactive subscriber is defined as having no active flows in the last period. When configured to **false**, this command disables the auto-removal of inactive transit subscribers.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

transit-prefix-policy [prefix-policy-id] *number*

Synopsis	Enter the **transit-prefix-policy** list instance
Context	**configure** application-assurance group *number* partition *number* transit-prefix-policy *number*
Tree	transit-prefix-policy
Description	Commands in this context define a transit AA subscriber prefix policy. Transit AA subscribers are managed by the system through the use of this policy assigned to services, which determines how transit subscribers are created and removed for that service.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**prefix-policy-id**] *number*

Synopsis	Transit prefix policy ID
Context	**configure** application-assurance group *number* partition *number* transit-prefix-policy *number*
Tree	transit-prefix-policy
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* partition *number* transit-prefix-policy *number* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** application-assurance group *number* partition *number* transit-prefix-policy *number* entry *number*
Tree	entry
Description	Commands in this context configure the index to a specific entry of a transit prefix policy.
Max. Instances	4095
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**entry-id**] *number*

Synopsis	ID for a transit prefix policy entry

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Context	**configure** application-assurance group *number* partition *number* transit-prefix-policy *number* entry *number*
Tree	entry
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub *reference*

Synopsis	Name of the transit prefix AA subscriber
Context	**configure** application-assurance group *number* partition *number* transit-prefix-policy *number* entry *number* aa-sub *reference*
Tree	aa-sub
Reference	**configure** application-assurance group *number* partition *number* transit-prefix-policy *number* static-aa-sub *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis	Enter the **match** context
Context	**configure** application-assurance group *number* partition *number* transit-prefix-policy *number* entry *number* match
Tree	match
Description	Commands in this context configure transit prefix policy entry match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub-ip *(ipv4-prefix | ipv6-prefix)*

Synopsis	AA subscriber IP address prefix
Context	**configure** application-assurance group *number* partition *number* transit-prefix-policy *number* entry *number* match aa-sub-ip *(ipv4-prefix | ipv6-prefix)*
Tree	aa-sub-ip
Description	This command configures a transit prefix subscriber IP address prefix. It is used when the site is on the local side, the same side of the system as the parent SAP. The local

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aa-sub-ip addresses represent the source IP in the from-SAP direction and destination IP in the to-SAP direction.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

network-ip *(ipv4-prefix | ipv6-prefix)*

Synopsis	Network IP address prefix
Context	**configure** application-assurance group *number* partition *number* transit-prefix-policy *number* entry *number* match network-ip *(ipv4-prefix | ipv6-prefix)*
Tree	network-ip
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

static-aa-sub [transit-aa-sub-name] *string*

Synopsis	Enter the **static-aa-sub** list instance
Context	**configure** application-assurance group *number* partition *number* transit-prefix-policy *number* static-aa-sub *string*
Tree	static-aa-sub
Max. Instances	4095
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**transit-aa-sub-name**] *string*

Synopsis	Static transit subscriber name
Context	**configure** application-assurance group *number* partition *number* transit-prefix-policy *number* static-aa-sub *string*
Tree	static-aa-sub
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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app-profile *reference*

Synopsis	Application profile name
Context	**configure** application-assurance group *number* partition *number* transit-prefix-policy *number* static-aa-sub *string* app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

is-remote *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Set transit subscriber as remote
Context	**configure** application-assurance group *number* partition *number* transit-prefix-policy *number* static-aa-sub *string* is-remote *boolean*
Tree	is-remote
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wap1x

Synopsis	Enter the **wap1x** context
Context	**configure** application-assurance group *number* partition *number* wap1x
Tree	wap1x
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of WAP1x detection

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Context	**configure** application-assurance group *number* partition *number* wap1x admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer

Synopsis	Enter the **policer** context
Context	**configure** application-assurance group *number* policer
Tree	policer
Description	Commands in this context create application assurance policer profiles of a specified type. Policers can be bandwidth or flow-limiting and can have a granularity of system scope (limits traffic entering AA ISA for all or a subset of AA subscribers) or a subscriber scope (limits apply to each AA subscriber traffic). The policer type and granularity can only be configured during creation. They cannot be modified. The policer profile must be removed from all AQPs to be removed. Changes to policer profile parameters take effect immediately for policers instantiated as a result of AQP actions using this profile.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

anl-bandwidth-policer [policer-name] *string*

Synopsis	Enter the **anl-bandwidth-policer** list instance
Context	**configure** application-assurance group *number* policer anl-bandwidth-policer *string*
Tree	anl-bandwidth-policer
Description	Commands in this context configure the AA ANL policer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[policer-name] *string*

Synopsis	Policer name
Context	**configure** application-assurance group *number* policer anl-bandwidth-policer *string*

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Tree	anl-bandwidth-policer
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	Action for packets violating configured policer rate
Context	**configure** application-assurance group *number* policer anl-bandwidth-policer *string* action *keyword*
Tree	action
Description	This command configures the action to be performed by single-bucket bandwidth policers for non-conformant traffic. Dual bucket bandwidth policers cannot have their action configured and always mark traffic below CIR as in-profile, between CIR and PIR as out-of-profile, and drop traffic above PIR. Flow policers always discard non-conformant traffic. When multiple application assurance policers are configured against a single flow (including policers at both subscriber and system), the flow/packet is dropped if one of the policers requires the packet to be discarded. This occurs regardless of the action of the other policers.
Options	permit-deny, priority-mark
Default	permit-deny
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** application-assurance group *number* policer anl-bandwidth-policer *string* adaptation-rule
Tree	adaptation-rule
Description	Commands in this context configure the AA policer adaptation rule fields and define the method used by the system to derive the operational CIR and PIR values when the queue is provisioned. For the CIR and PIR values individually, the system attempts to find the best operational rate depending on the defined option. To change the CIR adaptation rule only, the current PIR rule must be part of the command executed.
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir *keyword*

Synopsis	Peak information rate value for the adaptation rule
Context	**configure** application-assurance group *number* policer anl-bandwidth-policer *string* adaptation-rule pir *keyword*
Tree	pir
Description	This command configures the adaptation rule to be used while computing the operational PIR value. The adaptation rule specifies the rules to compute the operational values while maintaining minimum offset.
Options	max, min, closest
Default	closest
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* policer anl-bandwidth-policer *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs *number*

Synopsis	ANL bandwidth policer maximum burst size
Context	**configure** application-assurance group *number* policer anl-bandwidth-policer *string* mbs *number*
Tree	mbs
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071

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Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-percentage *number*

Synopsis	Rate used by Access-Network-Location policers
Context	**configure** application-assurance group *number* policer anl-bandwidth-policer *string* rate-percentage *number*
Tree	rate-percentage
Description	This command configures the stage 1 congestion percentage used by Access-Network-Location (ANL) policers. Because ANL total bandwidth is dynamically measured and estimated by AA, this command allows the operator to configure the ratio of that measured bandwidth to be used by the ANL policer as the policer rate. No limiting is performed if not specified.
Range	0 to 200
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-percentage-stage-2 *number*

Synopsis	Rate used by Access-Network-Location policers
Context	**configure** application-assurance group *number* policer anl-bandwidth-policer *string* rate-percentage-stage-2 *number*
Tree	rate-percentage-stage-2
Description	This command configures the stage 2 congestion percentage rate used by Access-Network-Location (ANL) policers. Because ANL stage2 total bandwidth is dynamically measured and estimated by AA, this command allows the operator to configure the ratio of that measured bandwidth to be used by the ANL stage2 policer as the policer rate. When unconfigured, limiting is not performed.
Range	0 to 200
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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dual-bucket-bandwidth-policer [policer-name] *string*

Synopsis	Enter the **dual-bucket-bandwidth-policer** list instance
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string*
Tree	dual-bucket-bandwidth-policer
Description	Commands in this context configure the dual-bucket bandwidth policer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**policer-name**] *string*

Synopsis	Policer name
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string*
Tree	dual-bucket-bandwidth-policer
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* adaptation-rule
Tree	adaptation-rule
Description	Commands in this context configure the AA policer adaptation rule fields and define the method used by the system to derive the operational CIR and PIR values when the queue is provisioned. For the CIR and PIR values individually, the system attempts to find the best operational rate depending on the defined option. To change the CIR adaptation rule only, the current PIR rule must be part of the command executed.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cir *keyword*

Synopsis	Committed information rate value for adaptation rule

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Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* adaptation-rule cir *keyword*
Tree	cir
Description	This command configures the CIR for the dual-bucket-bandwidth-policer adaptation rule policer. Nokia recommends configuring CIR larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. The CIR is configurable for dual-bucket bandwidth policers only.
Options	max, min, closest
Default	closest
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir *keyword*

Synopsis	Peak information rate value for the adaptation rule
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* adaptation-rule pir *keyword*
Tree	pir
Description	This command configures the adaptation rule to be used while computing the operational PIR value. The adaptation rule specifies the rules to compute the operational values while maintaining minimum offset.
Options	max, min, closest
Default	closest
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cbs *number*

Synopsis	Committed burst size when in congested state
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* cbs *number*
Tree	cbs
Description	This command configures the committed burst size (CBS) for a policer. Nokia recommends that CBS is configured larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. CBS is configurable for dual-bucket bandwidth policers only.
Range	0 to 131071
Units	kilobytes

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Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cir *(number | keyword)*

Synopsis	Committed information rate value for the policer
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* cir *(number | keyword)*
Tree	cir
Description	This command configures the CIR for the dual-bucket-bandwidth-policer policer. Nokia recommends that the CIR is configured larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. The CIR is configurable for dual-bucket bandwidth policers only.
Range	0 to 100000000
Units	kilobps
Options	max
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

congestion-override

Synopsis	Enter the **congestion-override** context
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* congestion-override
Tree	congestion-override
Description	Commands in this context configure the congestion bandwidth policer override rates.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cbs *number*

Synopsis	Committed burst size in a congested stage 2 state
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* congestion-override cbs *number*
Tree	cbs

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Description	This command configures the committed burst size for a policer. The configured CBS should be larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. CBS is configurable for dual-bucket bandwidth policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cir *(number | keyword)*

Synopsis	Committed information rate value for policer override
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* congestion-override cir *(number | keyword)*
Tree	cir
Description	This command configures the CIR for the dual-bucket bandwidth policer congestion override. Nokia recommends that the CIR is configured larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. The CIR is configurable for dual-bucket bandwidth policers only.
Range	0 to 100000000
Units	kilobps
Options	max
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs *number*

Synopsis	Maximum burst size when in a congested state
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* congestion-override mbs *number*
Tree	mbs
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071

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Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir *(number | keyword)*

Synopsis	Peak information rate value for the congestion override
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* congestion-override pir *(number | keyword)*
Tree	pir
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

congestion-override-stage-2

Synopsis	Enter the **congestion-override-stage-2** context
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* congestion-override-stage-2
Tree	congestion-override-stage-2
Description	This command enables the context to configure per-subscriber stage 2 congestion bandwidth policer override rates.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cbs *number*

Synopsis	Committed burst size in a congested stage 2 state
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* congestion-override-stage-2 cbs *number*
Tree	cbs
Description	This command configures the committed burst size for a policer. The configured CBS should be larger than twice the maximum MTU for the traffic handled by the policer to

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	allow for some burstiness of the traffic. CBS is configurable for dual-bucket bandwidth policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cir *(number | keyword)*

Synopsis	Committed information rate value for policer override
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* congestion-override-stage-2 cir *(number | keyword)*
Tree	cir
Description	This command configures the CIR for the dual-bucket bandwidth policer congestion override. Nokia recommends that the CIR is configured larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. The CIR is configurable for dual-bucket bandwidth policers only.
Range	0 to 100000000
Units	kilobps
Options	max
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs *number*

Synopsis	Maximum burst size when in a congested state
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* congestion-override-stage-2 mbs *number*
Tree	mbs
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Units	kilobytes

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Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir *(number | keyword)*

Synopsis	Peak information rate value for the congestion override
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* congestion-override-stage-2 pir *(number | keyword)*
Tree	pir
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs *number*

Synopsis	Bandwidth policer maximum burst size
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* mbs *number*
Tree	mbs
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.

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Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir *(number | keyword)*

Synopsis	Peak information rate value for the bandwidth policer
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* pir *(number | keyword)*
Tree	pir
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-of-day-override [tod-override-id] *number*

Synopsis	Enter the **time-of-day-override** list instance
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* time-of-day-override *number*
Tree	time-of-day-override
Description	Commands in this context configure the time of day override policy for a given policer. Rate/mbs/cbs/flow-rate/flow-count configured in each override-id will override the default policer values at the specified time of day configured in the override.
Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**tod-override-id**] *number*

Synopsis	ID for time of day override

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Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* time-of-day-override *number*
Tree	time-of-day-override
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of this time of day policer
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* time-of-day-override *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cbs *number*

Synopsis	Committed burst size for time of day override policer
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* time-of-day-override *number* cbs *number*
Tree	cbs
Description	This command configures the committed burst size (CBS) for a policer. Nokia recommends configuring CBS larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. CBS is configurable for dual-bucket bandwidth policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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cir *(number | keyword)*

Synopsis	Committed information rate for time of day override
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* time-of-day-override *number* cir *(number | keyword)*
Tree	cir
Description	This command configures the committed information rate (CIR) for the dual-bucket-bandwidth-policer policer time of day override. Nokia recommends that the CIR is configured larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. The CIR is configurable for dual-bucket bandwidth policers only.
Range	0 to 100000000
Units	kilobps
Options	max
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* time-of-day-override *number* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs *number*

Synopsis	Maximum burst size for the policer time of day override
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* time-of-day-override *number* mbs *number*
Tree	mbs
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends that MBS is configured larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071

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Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir *(number | keyword)*

Synopsis	Peak information rate value for time of day override
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* time-of-day-override *number* pir *(number | keyword)*
Tree	pir
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-range

Synopsis	Enter the **time-range** context
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* time-of-day-override *number* time-range
Tree	time-range
Description	Commands in this context configure the days of the week policer override is enabled as well as the time policer override starts and ends. When using a daily override the operator can select which days during the week from Sunday to Saturday it is applicable along with the start/end hour/min time range repeated over these days.When using a weekly override the operator can select between which days in the week the policy start up to the hours/min for both start day and end day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

daily

Synopsis	Enable the **daily** context

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Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* time-of-day-override *number* time-range daily
Tree	daily
Description	Commands in this context configure the daily start and end times for policer override.
Notes	The following elements are part of a choice: **daily** or **weekly**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

all-days

Synopsis	Enable policer override on every day
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* time-of-day-override *number* time-range daily all-days
Tree	all-days
Notes	The following elements are part of a choice: **all-days** or **on**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *string*

Synopsis	Daily end time
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* time-of-day-override *number* time-range daily end *string*
Tree	end
Description	This command configures the daily end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

on *keyword*

Synopsis	Policer override on selected days

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Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* time-of-day-override *number* time-range daily on *keyword*
Tree	on
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Max. Instances	6
Notes	The following elements are part of a choice: **all-days** or **on**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start *string*

Synopsis	Daily start time
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* time-of-day-override *number* time-range daily start *string*
Tree	start
Description	This command configures the daily start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

weekly

Synopsis	Enable the **weekly** context
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* time-of-day-override *number* time-range weekly
Tree	weekly
Description	Commands in this context configure the weekly start and end times for policer override.
Notes	The following elements are part of a choice: **daily** or **weekly**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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end

Synopsis	Enable the **end** context
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* time-of-day-override *number* time-range weekly end
Tree	end
Description	Commands in this context configure the weekly end time for policer override.When using a weekly override, the operator can select between which days in the week the policy ends up to the hours or minutes for both start of the day and end of the day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

day *keyword*

Synopsis	Weekly end day
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* time-of-day-override *number* time-range weekly end day *keyword*
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time *string*

Synopsis	Weekly end time
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* time-of-day-override *number* time-range weekly end time *string*
Tree	time
Description	This command configures the weekly end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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start

Synopsis	Enable the **start** context
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* time-of-day-override *number* time-range weekly start
Tree	start
Description	Commands in this context configure the weekly start time for policer override.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

day *keyword*

Synopsis	Weekly start day
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* time-of-day-override *number* time-range weekly start day *keyword*
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time *string*

Synopsis	Weekly start time
Context	**configure** application-assurance group *number* policer dual-bucket-bandwidth-policer *string* time-of-day-override *number* time-range weekly start time *string*
Tree	time
Description	This command configures the weekly start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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flow-count-limit-policer [policer-name] *string*

Synopsis	Enter the **flow-count-limit-policer** list instance
Context	**configure** application-assurance group *number* policer flow-count-limit-policer *string*
Tree	flow-count-limit-policer
Description	Commands in this context configure the AA flow count limit policer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**policer-name**] *string*

Synopsis	Policer name
Context	**configure** application-assurance group *number* policer flow-count-limit-policer *string*
Tree	flow-count-limit-policer
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	Action for packets violating configured policer rate
Context	**configure** application-assurance group *number* policer flow-count-limit-policer *string* action *keyword*
Tree	action
Description	This command configures the action to be performed by single-bucket bandwidth policers for non-conformant traffic. Dual bucket bandwidth policers cannot have their action configured and always mark traffic below CIR as in-profile, between CIR and PIR as out-of-profile, and drop traffic above PIR. Flow policers always discard non-conformant traffic. When multiple application assurance policers are configured against a single flow (including policers at both subscriber and system), the flow/packet is dropped if one of the policers requires the packet to be discarded. This occurs regardless of the action of the other policers.
Options	permit-deny, priority-mark
Default	permit-deny
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* policer flow-count-limit-policer *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

granularity *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Policer granularity
Context	**configure** application-assurance group *number* policer flow-count-limit-policer *string* granularity *keyword*
Tree	granularity
Options	system, subscriber
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

limit-gtp-flows *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Limit concurrent GTP flows
Context	**configure** application-assurance group *number* policer flow-count-limit-policer *string* limit-gtp-flows *boolean*
Tree	limit-gtp-flows
Default	false

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peak-flow-count *(number | keyword)*

Synopsis	Peak flow count limit
Context	**configure** application-assurance group *number* policer flow-count-limit-policer *string* peak-flow-count *(number | keyword)*
Tree	peak-flow-count
Range	0 to 100000000
Units	flows
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-of-day-override [tod-override-id] *number*

Synopsis	Enter the **time-of-day-override** list instance
Context	**configure** application-assurance group *number* policer flow-count-limit-policer *string* time-of-day-override *number*
Tree	time-of-day-override
Description	Commands in this context configure the time of day override policy for a specific policer. Rate/mbs/cbs/flow-rate/flow-count configured in each override ID overrides the default policer values at the specified time of day configured in the override.
Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**tod-override-id**] *number*

Synopsis	ID for time of day override
Context	**configure** application-assurance group *number* policer flow-count-limit-policer *string* time-of-day-override *number*
Tree	time-of-day-override
Range	1 to 255

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Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of this time of day policer
Context	**configure** application-assurance group *number* policer flow-count-limit-policer *string* time-of-day-override *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* policer flow-count-limit-policer *string* time-of-day-override *number* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peak-flow-count *(number | keyword)*

Synopsis	Peak flow count limit
Context	**configure** application-assurance group *number* policer flow-count-limit-policer *string* time-of-day-override *number* peak-flow-count *(number | keyword)*
Tree	peak-flow-count
Range	0 to 100000000
Units	flows
Options	max
Default	max
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-range

Synopsis	Enter the **time-range** context
Context	**configure** application-assurance group *number* policer flow-count-limit-policer *string* time-of-day-override *number* time-range
Tree	time-range
Description	Commands in this context configure the days of the week policer override is enabled as well as the time policer override starts and ends. When using a daily override the operator can select which days during the week from Sunday to Saturday it is applicable along with the start/end hour/min time range repeated over these days.When using a weekly override the operator can select between which days in the week the policy start up to the hours/min for both start day and end day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

daily

Synopsis	Enable the **daily** context
Context	**configure** application-assurance group *number* policer flow-count-limit-policer *string* time-of-day-override *number* time-range daily
Tree	daily
Description	Commands in this context configure the daily start and end times for policer override.
Notes	The following elements are part of a choice: **daily** or **weekly**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

all-days

Synopsis	Enable policer override on every day
Context	**configure** application-assurance group *number* policer flow-count-limit-policer *string* time-of-day-override *number* time-range daily all-days
Tree	all-days
Notes	The following elements are part of a choice: **all-days** or **on**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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end *string*

Synopsis	Daily end time
Context	**configure** application-assurance group *number* policer flow-count-limit-policer *string* time-of-day-override *number* time-range daily end *string*
Tree	end
Description	This command configures the daily end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

on *keyword*

Synopsis	Policer override on selected days
Context	**configure** application-assurance group *number* policer flow-count-limit-policer *string* time-of-day-override *number* time-range daily on *keyword*
Tree	on
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Max. Instances	6
Notes	The following elements are part of a choice: **all-days** or **on**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start *string*

Synopsis	Daily start time
Context	**configure** application-assurance group *number* policer flow-count-limit-policer *string* time-of-day-override *number* time-range daily start *string*
Tree	start
Description	This command configures the daily start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.

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String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

weekly

Synopsis	Enable the **weekly** context
Context	**configure** application-assurance group *number* policer flow-count-limit-policer *string* time-of-day-override *number* time-range weekly
Tree	weekly
Description	Commands in this context configure the weekly start and end times for policer override.
Notes	The following elements are part of a choice: **daily** or **weekly**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end

Synopsis	Enable the **end** context
Context	**configure** application-assurance group *number* policer flow-count-limit-policer *string* time-of-day-override *number* time-range weekly end
Tree	end
Description	Commands in this context configure the weekly end time for policer override.When using a weekly override, the operator can select between which days in the week the policy ends up to the hours or minutes for both start of the day and end of the day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

day *keyword*

Synopsis	Weekly end day
Context	**configure** application-assurance group *number* policer flow-count-limit-policer *string* time-of-day-override *number* time-range weekly end day *keyword*
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time *string*

Synopsis	Weekly end time
Context	**configure** application-assurance group *number* policer flow-count-limit-policer *string* time-of-day-override *number* time-range weekly end time *string*
Tree	time
Description	This command configures the weekly end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start

Synopsis	Enable the **start** context
Context	**configure** application-assurance group *number* policer flow-count-limit-policer *string* time-of-day-override *number* time-range weekly start
Tree	start
Description	Commands in this context configure the weekly start time for policer override.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

day *keyword*

Synopsis	Weekly start day
Context	**configure** application-assurance group *number* policer flow-count-limit-policer *string* time-of-day-override *number* time-range weekly start day *keyword*
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time *string*

Synopsis	Weekly start time
Context	**configure** application-assurance group *number* policer flow-count-limit-policer *string* time-of-day-override *number* time-range weekly start time *string*
Tree	time
Description	This command configures the weekly start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-setup-rate-policer [policer-name] *string*

Synopsis	Enter the **flow-setup-rate-policer** list instance
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string*
Tree	flow-setup-rate-policer
Description	Commands in this context configure the flow setup rate policer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**policer-name**] *string*

Synopsis	Policer name
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string*
Tree	flow-setup-rate-policer
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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action *keyword*

Synopsis	Action for packets violating configured policer rate
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string* action *keyword*
Tree	action
Description	This command configures the action to be performed by single-bucket bandwidth policers for non-conformant traffic. Dual bucket bandwidth policers cannot have their action configured and always mark traffic below CIR as in-profile, between CIR and PIR as out-of-profile, and drop traffic above PIR. Flow policers always discard non-conformant traffic. When multiple application assurance policers are configured against a single flow (including policers at both subscriber and system), the flow/packet is dropped if one of the policers requires the packet to be discarded. This occurs regardless of the action of the other policers.
Options	permit-deny, priority-mark
Default	permit-deny
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string* adaptation-rule
Tree	adaptation-rule
Description	Commands in this context configure the AA policer adaptation rule fields and define the method used by the system to derive the operational CIR and PIR values when the queue is provisioned. For the CIR and PIR values individually, the system attempts to find the best operational rate depending on the defined option. To change the CIR adaptation rule only, the current PIR rule must be part of the command executed.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peak-flow-setup-rate *keyword*

Synopsis	Peak flow setup rate adaptation rule
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string* adaptation-rule peak-flow-setup-rate *keyword*
Tree	peak-flow-setup-rate

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Options	max, min, closest
Default	closest
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-setup-rate-burst-size *number*

Synopsis	Maximum flow setup rate burst size
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string* flow-setup-rate-burst-size *number*
Tree	flow-setup-rate-burst-size
Range	0 to 131071
Units	flows
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

granularity *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Policer granularity
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string* granularity *keyword*
Tree	granularity

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Options	system, subscriber
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peak-flow-setup-rate *(number | keyword)*

Synopsis	Peak flow setup rate
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string* peak-flow-setup-rate *(number | keyword)*
Tree	peak-flow-setup-rate
Range	1 to 100000000
Units	flows per second
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-of-day-override [tod-override-id] *number*

Synopsis	Enter the **time-of-day-override** list instance
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string* time-of-day-override *number*
Tree	time-of-day-override
Description	Commands in this context configure the time of day override policy for a given policer. Rate/mbs/cbs/flow-rate/flow-count configured in each override-id will override the default policer values at the specified time of day configured in the override.
Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**tod-override-id**] *number*

Synopsis	ID for time of day override
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string* time-of-day-override *number*

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Tree	time-of-day-override
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of this time of day policer
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string* time-of-day-override *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string* time-of-day-override *number* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-setup-rate-burst-size *number*

Synopsis	Maximum flow setup rate burst size
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string* time-of-day-override *number* flow-setup-rate-burst-size *number*
Tree	flow-setup-rate-burst-size
Range	0 to 131071
Units	flows
Default	0

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peak-flow-setup-rate *(number | keyword)*

Synopsis	Peak flow setup rate
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string* time-of-day-override *number* peak-flow-setup-rate *(number | keyword)*
Tree	peak-flow-setup-rate
Range	1 to 100000000
Units	flows per second
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-range

Synopsis	Enter the **time-range** context
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string* time-of-day-override *number* time-range
Tree	time-range
Description	Commands in this context configure the days of the week policer override is enabled as well as the time policer override starts and ends. When using a daily override the operator can select which days during the week from Sunday to Saturday it is applicable along with the start/end hour/min time range repeated over these days.When using a weekly override the operator can select between which days in the week the policy start up to the hours/min for both start day and end day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

daily

Synopsis	Enable the **daily** context
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string* time-of-day-override *number* time-range daily
Tree	daily

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Description	Commands in this context configure the daily start and end times for policer override.
Notes	The following elements are part of a choice: **daily** or **weekly**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

all-days

Synopsis	Enable policer override on every day
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string* time-of-day-override *number* time-range daily all-days
Tree	all-days
Notes	The following elements are part of a choice: **all-days** or **on**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *string*

Synopsis	Daily end time
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string* time-of-day-override *number* time-range daily end *string*
Tree	end
Description	This command configures the daily end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

on *keyword*

Synopsis	Policer override on selected days
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string* time-of-day-override *number* time-range daily on *keyword*
Tree	on
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday

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Max. Instances	6
Notes	The following elements are part of a choice: **all-days** or **on**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start *string*

Synopsis	Daily start time
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string* time-of-day-override *number* time-range daily start *string*
Tree	start
Description	This command configures the daily start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

weekly

Synopsis	Enable the **weekly** context
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string* time-of-day-override *number* time-range weekly
Tree	weekly
Description	Commands in this context configure the weekly start and end times for policer override.
Notes	The following elements are part of a choice: **daily** or **weekly**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end

Synopsis	Enable the **end** context
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string* time-of-day-override *number* time-range weekly end

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Tree	end
Description	Commands in this context configure the weekly end time for policer override.When using a weekly override, the operator can select between which days in the week the policy ends up to the hours or minutes for both start of the day and end of the day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

day *keyword*

Synopsis	Weekly end day
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string* time-of-day-override *number* time-range weekly end day *keyword*
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time *string*

Synopsis	Weekly end time
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string* time-of-day-override *number* time-range weekly end time *string*
Tree	time
Description	This command configures the weekly end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start

Synopsis	Enable the **start** context
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string* time-of-day-override *number* time-range weekly start

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Tree	start
Description	Commands in this context configure the weekly start time for policer override.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

day *keyword*

Synopsis	Weekly start day
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string* time-of-day-override *number* time-range weekly start day *keyword*
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time *string*

Synopsis	Weekly start time
Context	**configure** application-assurance group *number* policer flow-setup-rate-policer *string* time-of-day-override *number* time-range weekly start time *string*
Tree	time
Description	This command configures the weekly start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

single-bucket-bandwidth-policer [policer-name] *string*

Synopsis	Enter the **single-bucket-bandwidth-policer** list instance
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string*
Tree	single-bucket-bandwidth-policer

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Description	Commands in this context configure the single-bucket bandwidth policer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**policer-name**] *string*

Synopsis	Policer name
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string*
Tree	single-bucket-bandwidth-policer
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	Action for packets violating configured policer rate
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* action *keyword*
Tree	action
Description	This command configures the action to be performed by single-bucket bandwidth policers for non-conformant traffic. Dual bucket bandwidth policers cannot have their action configured and always mark traffic below CIR as in-profile, between CIR and PIR as out-of-profile, and drop traffic above PIR. Flow policers always discard non-conformant traffic. When multiple application assurance policers are configured against a single flow (including policers at both subscriber and system), the flow/packet is dropped if one of the policers requires the packet to be discarded. This occurs regardless of the action of the other policers.
Options	permit-deny, priority-mark
Default	permit-deny
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* adaptation-rule
Tree	adaptation-rule
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir *keyword*

Synopsis	Peak information rate value for the adaptation rule
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* adaptation-rule pir *keyword*
Tree	pir
Description	This command configures the adaptation rule to be used while computing the operational PIR value. The adaptation rule specifies the rules to compute the operational values while maintaining minimum offset.
Options	max, min, closest
Default	closest
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

congestion-override

Synopsis	Enter the **congestion-override** context
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* congestion-override
Tree	congestion-override
Description	Commands in this context configure the congestion bandwidth policer override rates.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs *number*

Synopsis	Maximum burst size when in a congested state
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* congestion-override mbs *number*

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Tree	mbs
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir *(number | keyword)*

Synopsis	Peak information rate value for the congestion override
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* congestion-override pir *(number | keyword)*
Tree	pir
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

congestion-override-stage-2

Synopsis	Enter the **congestion-override-stage-2** context
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* congestion-override-stage-2
Tree	congestion-override-stage-2
Description	Commands in this context configure per-subscriber stage 2 congestion bandwidth policer override rates.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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mbs *number*

Synopsis	Maximum burst size when in a congested state
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* congestion-override-stage-2 mbs *number*
Tree	mbs
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir *(number | keyword)*

Synopsis	Peak information rate value for the congestion override
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* congestion-override-stage-2 pir *(number | keyword)*
Tree	pir
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

granularity *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Policer granularity
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* granularity *keyword*
Tree	granularity
Options	system, subscriber
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs *number*

Synopsis	Bandwidth policer maximum burst size
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* mbs *number*
Tree	mbs
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir *(number | keyword)*

Synopsis	Peak information rate value for the bandwidth policer
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* pir *(number | keyword)*

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Tree	pir
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-of-day-override [tod-override-id] *number*

Synopsis	Enter the **time-of-day-override** list instance
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* time-of-day-override *number*
Tree	time-of-day-override
Description	Commands in this context configure the time of day override policy for a given policer. Rate/mbs/cbs/flow-rate/flow-count configured in each override-id will override the default policer values at the specified time of day configured in the override.
Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**tod-override-id**] *number*

Synopsis	ID for time of day override
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* time-of-day-override *number*
Tree	time-of-day-override
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of this time of day policer

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Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* time-of-day-override *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* time-of-day-override *number* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs *number*

Synopsis	Bandwidth policer MBS for time of day override
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* time-of-day-override *number* mbs *number*
Tree	mbs
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir *(number | keyword)*

Synopsis	Peak information rate value for time of day override

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Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* time-of-day-override *number* pir *(number | keyword)*
Tree	pir
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-range

Synopsis	Enter the **time-range** context
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* time-of-day-override *number* time-range
Tree	time-range
Description	Commands in this context configure the days of the week policer override is enabled as well as the time policer override starts and ends. When using a daily override the operator can select which days during the week from Sunday to Saturday it is applicable along with the start/end hour/min time range repeated over these days.When using a weekly override the operator can select between which days in the week the policy start up to the hours/min for both start day and end day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

daily

Synopsis	Enable the **daily** context
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* time-of-day-override *number* time-range daily
Tree	daily
Description	Commands in this context configure the daily start and end times for policer override.
Notes	The following elements are part of a choice: **daily** or **weekly**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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all-days

Synopsis	Enable policer override on every day
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* time-of-day-override *number* time-range daily all-days
Tree	all-days
Notes	The following elements are part of a choice: **all-days** or **on**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *string*

Synopsis	Daily end time
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* time-of-day-override *number* time-range daily end *string*
Tree	end
Description	This command configures the daily end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

on *keyword*

Synopsis	Policer override on selected days
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* time-of-day-override *number* time-range daily on *keyword*
Tree	on
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Max. Instances	6
Notes	The following elements are part of a choice: **all-days** or **on**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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start *string*

Synopsis	Daily start time
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* time-of-day-override *number* time-range daily start *string*
Tree	start
Description	This command configures the daily start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

weekly

Synopsis	Enable the **weekly** context
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* time-of-day-override *number* time-range weekly
Tree	weekly
Description	Commands in this context configure the weekly start and end times for policer override.
Notes	The following elements are part of a choice: **daily** or **weekly**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end

Synopsis	Enable the **end** context
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* time-of-day-override *number* time-range weekly end
Tree	end
Description	Commands in this context configure the weekly end time for policer override.When using a weekly override, the operator can select between which days in the week the policy ends up to the hours or minutes for both start of the day and end of the day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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day *keyword*

Synopsis	Weekly end day
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* time-of-day-override *number* time-range weekly end day *keyword*
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time *string*

Synopsis	Weekly end time
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* time-of-day-override *number* time-range weekly end time *string*
Tree	time
Description	This command configures the weekly end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start

Synopsis	Enable the **start** context
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* time-of-day-override *number* time-range weekly start
Tree	start
Description	Commands in this context configure the weekly start time for policer override.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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day *keyword*

Synopsis	Weekly start day
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* time-of-day-override *number* time-range weekly start day *keyword*
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time *string*

Synopsis	Weekly start time
Context	**configure** application-assurance group *number* policer single-bucket-bandwidth-policer *string* time-of-day-override *number* time-range weekly start time *string*
Tree	time
Description	This command configures the weekly start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-optimizer [tcp-optimizer-name] *string*

Synopsis	Enter the **tcp-optimizer** list instance
Context	**configure** application-assurance group *number* tcp-optimizer *string*
Tree	tcp-optimizer
Description	Commands in this context configure the TCP optimizer policy. When a TCP optimizer policy is removed or deleted, the existing flows using this policy are abandoned, and optimization is stopped.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**tcp-optimizer-name**] *string*

Synopsis	TCP optimizer name
Context	**configure** application-assurance group *number* tcp-optimizer *string*
Tree	tcp-optimizer
Description	This command configures the name of the TCP optimizer policy.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dack-timeout *number*

Synopsis	Delayed acknowledgment timeout for client and server
Context	**configure** application-assurance group *number* tcp-optimizer *string* dack-timeout *number*
Tree	dack-timeout
Description	This command configures a delay ACK (DACK) timeout for the TCP optimizer. By entering this command a default of 200 ms timeout is enabled for delayed acknowledgment. This value is not configurable.
Range	200
Units	milliseconds
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* tcp-optimizer *string* description *string*
Tree	description
String Length	1 to 80
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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initial-cwnd *number*

Synopsis	Initial congestion window of the TCP optimizer
Context	**configure** application-assurance group *number* tcp-optimizer *string* initial-cwnd *number*
Tree	initial-cwnd
Description	This command configures the initial TCP congestion window (cwnd) used during the TCP Slow Start (SS) period.
Range	1 to 256
Default	8
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial-ss-threshold *(number | keyword)*

Synopsis	Initial TCP Slow Start threshold for client and server
Context	**configure** application-assurance group *number* tcp-optimizer *string* initial-ss-threshold *(number | keyword)*
Tree	initial-ss-threshold
Description	This command configures the initial Slow Start (SS) threshold for a specific TCP optimizer policy. Nokia recommends setting the threshold close to the access network Bandwidth Delay Product (BDP).
Range	0 to 1000000
Units	kilobytes
Options	auto
Default	1000000
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

network-rtt-threshold *number*

Synopsis	Network round trip time threshold
Context	**configure** application-assurance group *number* tcp-optimizer *string* network-rtt-threshold *number*
Tree	network-rtt-threshold
Description	This command configures the threshold of the Round Trip Time (RTT) delay of the network side (between AA and the content provider) above which TCP Optimization (TCPO) is performed. This enables the operator to disable optimization for content that is served from a location close to the TCP optimizer.

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Range	1 to 100
Units	milliseconds
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-stack *keyword*

Synopsis	TCP stack congestion control algorithm
Context	**configure** application-assurance group *number* tcp-optimizer *string* tcp-stack *keyword*
Tree	tcp-stack
Description	This command configures the TCP stack used toward the subscriber. **Note:** The TCP stack used toward the core network is new-reno, and it is not configurable. TCP BBR, TCP Illinois, and TCP Westwood implement a sender-side modification of the TCP congestion window algorithm that improves the performance of TCP Reno in wireless networks with lossy links.
Options	westwood, illinois, new-reno, bbr
Default	westwood
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

url-filter [url-filter-name] *string*

Synopsis	Enter the **url-filter** list instance
Context	**configure** application-assurance group *number* url-filter *string*
Tree	url-filter
Description	Commands in this context configure a URL filter action for flows of a specific type matching this entry. If no URL filters are specified, then no URL filters are evaluated.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**url-filter-name**] *string*

Synopsis	URL filter name
Context	**configure** application-assurance group *number* url-filter *string*
Tree	url-filter
String Length	1 to 32

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Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the AA URL filter
Context	**configure** application-assurance group *number* url-filter *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

apply-function-specific-behaviour *boolean*

Synopsis	Use function-specific behavior for action or redirect
Context	**configure** application-assurance group *number* url-filter *string* apply-function-specific-behaviour *boolean*
Tree	apply-function-specific-behaviour
Description	When configured to **true**, the function-specific configurations for URL list, ICAP, and web service (**url-list**, **icap**, and **web-service)** are used for default action (**default-action**) and HTTP redirect (**http-redirect**). When configured to **false**, the configuration at the URL filter level (**url-filter**) is used for default action and HTTP redirect.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action

Synopsis	Enter the **default-action** context
Context	**configure** application-assurance group *number* url-filter *string* default-action
Tree	default-action
Description	Commands in this context configure the default action to take effect when the URL filter cannot be used. This may occur in the following cases:

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- for the local URL list when the URL list is shut down or the file is not loaded due to an error.
- in the case of ICAP or web filtering when all TCP connections are busy or down.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

allow

Synopsis Allow all requests as the default URL filter action

Context **configure** application-assurance group *number* url-filter *string* default-action allow

Tree allow

Description When configured, the router allows all requests as the default URL filter action when the URL filter cannot be used.

Notes The following elements are part of a choice: **allow**, **block-all**, or **block-http-redirect**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-all

Synopsis Block all requests as the default URL filter action

Context **configure** application-assurance group *number* url-filter *string* default-action block-all

Tree block-all

Description When configured, the router blocks all requests as the default URL filter action when the URL filter cannot be used.

Notes The following elements are part of a choice: **allow**, **block-all**, or **block-http-redirect**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-http-redirect *reference*

Synopsis HTTP URL name for block and redirect request action

Context **configure** application-assurance group *number* url-filter *string* default-action block-http-redirect *reference*

Tree block-http-redirect

Description This command specifies the URL that the user is directed to when the router blocks traffic. The information page can be different from the page the user is redirected to when the site that the user tried to access is found in the URL filter. This page is

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configured using the **configure application-assurance group url-filter http-redirect** command.

Reference	**configure** application-assurance group *number* http-redirect *string*
Notes	The following elements are part of a choice: **allow**, **block-all**, or **block-http-redirect**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* url-filter *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect *reference*

Synopsis	HTTP redirect for a blocked HTTP request
Context	**configure** application-assurance group *number* url-filter *string* http-redirect *reference*
Tree	http-redirect
Reference	**configure** application-assurance group *number* http-redirect *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-request-filtering *keyword*

Synopsis	HTTP filtering for all HTTP requests
Context	**configure** application-assurance group *number* url-filter *string* http-request-filtering *keyword*
Tree	http-request-filtering
Options	all, first
Default	all
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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icap

Synopsis	Enter the **icap** context
Context	**configure** application-assurance group *number* url-filter *string* icap
Tree	icap
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

custom-x-header *string*

Synopsis	Custom x-header field name to include in ICAP requests
Context	**configure** application-assurance group *number* url-filter *string* icap custom-x-header *string*
Tree	custom-x-header
Description	This command configures the URL filter ICAP policy to include a new x-header field; the content of the x-header is populated based on the AQP URL filter action which can optionally specify the ASO characteristic value to include in the x-header.
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action

Synopsis	Enter the **default-action** context
Context	**configure** application-assurance group *number* url-filter *string* icap default-action
Tree	default-action
Description	Commands in this context configure a default action for the URL filter. The default action takes effect when the URL filter cannot be used. This may happen when all TCP connections are busy or down.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

allow

Synopsis	Allow all requests as the default action
Context	**configure** application-assurance group *number* url-filter *string* icap default-action allow

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Tree	allow
Description	When configured, this command allows all traffic when the URL filter cannot be used.
Notes	The following elements are part of a choice: **allow**, **block-all**, or **block-http-redirect**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-all

Synopsis	Block all requests as the default action
Context	**configure** application-assurance group *number* url-filter *string* icap default-action block-all
Tree	block-all
Description	When configured, this command blocks all traffic when the URL filter cannot be used.
Notes	The following elements are part of a choice: **allow**, **block-all**, or **block-http-redirect**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-http-redirect *reference*

Synopsis	HTTP URL for redirection when URL filter cannot be used
Context	**configure** application-assurance group *number* url-filter *string* icap default-action block-http-redirect *reference*
Tree	block-http-redirect
Description	This command blocks traffic and redirects the user to an information page, which can be different than the page the user is redirected to when the site they attempted to access was found in the URL filter; this page is configured using the **configure application-assurance group url-filter http-redirect** command.
Reference	**configure** application-assurance group *number* http-redirect *string*
Notes	The following elements are part of a choice: **allow**, **block-all**, or **block-http-redirect**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect *reference*

Synopsis	HTTP redirect object used when ICAP blocks HTTP request

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Context	**configure** application-assurance group *number* url-filter *string* icap http-redirect *reference*
Tree	http-redirect
Reference	**configure** application-assurance group *number* http-redirect *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number*

Synopsis	Enter the **server** list instance
Context	**configure** application-assurance group *number* url-filter *string* icap server *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number*
Tree	server
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	ICAP server IP address
Context	**configure** application-assurance group *number* url-filter *string* icap server *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number*
Tree	server
Description	This command configures the ICAP server address. In the current release, the system supports IPv4 addresses only for the ICAP server.
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port *number*

Synopsis	ICAP server port
Context	**configure** application-assurance group *number* url-filter *string* icap server *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number*
Tree	server
Range	1 to 65535
Notes	This element is part of a list key.

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of this URL filter ICAP server
Context	**configure** application-assurance group *number* url-filter *string* icap server *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* url-filter *string* icap server *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vlan-id *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VLAN ID of the ICAP server service port
Context	**configure** application-assurance group *number* url-filter *string* icap vlan-id *number*
Tree	vlan-id
Range	1 to 4094
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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local-filtering

Synopsis	Enter the **local-filtering** context
Context	**configure** application-assurance group *number* url-filter *string* local-filtering
Tree	local-filtering
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

allow-list *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local filtering URL list for allowed URLs
Context	**configure** application-assurance group *number* url-filter *string* local-filtering allow-list *reference*
Tree	allow-list
Reference	**configure** application-assurance group *number* url-list *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

deny-list [url-list-name] *reference*

Synopsis	Enter the **deny-list** list instance
Context	**configure** application-assurance group *number* url-filter *string* local-filtering deny-list *reference*
Tree	deny-list
Description	Commands in this context configure a list of denied URLs to be added to the local URL filter policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**url-list-name**] *reference*

Synopsis	URL list name

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Context	**configure** application-assurance group *number* url-filter *string* local-filtering deny-list *reference*
Tree	deny-list
Description	This command adds a deny-list URL list to the local URL filter policy.
Reference	**configure** application-assurance group *number* url-list *string*
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action

Synopsis	Enter the **default-action** context
Context	**configure** application-assurance group *number* url-filter *string* local-filtering deny-list *reference* default-action
Tree	default-action
Description	Commands in this context configure a default action for the URL filter. The default action takes effect when the URL filter cannot be used. This may happen in the case of a local URL list when the URL list is disabled or the file is not loaded due to an error.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

allow

Synopsis	Allow all requests as the default action
Context	**configure** application-assurance group *number* url-filter *string* local-filtering deny-list *reference* default-action allow
Tree	allow
Description	This command allows all traffic when the URL filter cannot be used.
Notes	The following elements are part of a choice: **allow**, **block-all**, or **block-http-redirect**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-all

Synopsis	Block all requests as the default action

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Context	**configure** application-assurance group *number* url-filter *string* local-filtering deny-list *reference* default-action block-all
Tree	block-all
Description	This command blocks all traffic when the URL filter cannot be used.
Notes	The following elements are part of a choice: **allow**, **block-all**, or **block-http-redirect**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-http-redirect *reference*

Synopsis	HTTP URL for redirection when URL filter cannot be used
Context	**configure** application-assurance group *number* url-filter *string* local-filtering deny-list *reference* default-action block-http-redirect *reference*
Tree	block-http-redirect
Description	This command blocks traffic and redirects the user to an information page, which can be different than the page the user is redirected to when the site they attempted to access was found in the URL filter; this page is configured using the **configure application-assurance group url-filter http-redirect** command.
Reference	**configure** application-assurance group *number* http-redirect *string*
Notes	The following elements are part of a choice: **allow**, **block-all**, or **block-http-redirect**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect *reference*

Synopsis	HTTP redirect object applied to blocked HTTP requests
Context	**configure** application-assurance group *number* url-filter *string* local-filtering deny-list *reference* http-redirect *reference*
Tree	http-redirect
Reference	**configure** application-assurance group *number* http-redirect *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

web-service

Synopsis	Enter the **web-service** context

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Context	**configure** application-assurance group *number* url-filter *string* web-service
Tree	web-service
Description	Commands in this context configure the URL filter policy using web-service filtering. The operator must configure the web service, hostname, DNS server to use, the AA interface VLAN ID, and provision the category profiles.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

category-set *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Web service category ID
Context	**configure** application-assurance group *number* url-filter *string* web-service category-set *number*
Tree	category-set
Range	1 to 65535
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

classification-overrides

Synopsis	Enter the **classification-overrides** context
Context	**configure** application-assurance group *number* url-filter *string* web-service classification-overrides
Tree	classification-overrides
Description	Commands in this context create a classification override and allow the operator to manually set the category of a hostname.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** application-assurance group *number* url-filter *string* web-service classification-overrides entry *number*

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Tree	entry
Description	Commands in this context configure a classification override, manually setting the category of a hostname.
Max. Instances	200
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**entry-id**] *number*

Synopsis	Classification override entry ID
Context	**configure** application-assurance group *number* url-filter *string* web-service classification-overrides entry *number*
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

category-name *string*

Synopsis	Web service category name
Context	**configure** application-assurance group *number* url-filter *string* web-service classification-overrides entry *number* category-name *string*
Tree	category-name
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

expression *string*

Synopsis	Hostname of the configured override category
Context	**configure** application-assurance group *number* url-filter *string* web-service classification-overrides entry *number* expression *string*
Tree	expression
String Length	1 to 255

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Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

classifier *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Web service classifier
Context	**configure** application-assurance group *number* url-filter *string* web-service classifier *keyword*
Tree	classifier
Options	web-service-1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action

Synopsis	Enter the **default-action** context
Context	**configure** application-assurance group *number* url-filter *string* web-service default-action
Tree	default-action
Description	Commands in this context configure a default action for the URL filter. The default action takes effect when the URL filter cannot be used. This may happen when all TCP connections are busy or down.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

allow

Synopsis	Allow all requests as the default action
Context	**configure** application-assurance group *number* url-filter *string* web-service default-action allow
Tree	allow
Description	This command allows all traffic when the web service is unavailable.

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Notes	The following elements are part of a choice: **allow**, **block-all**, or **block-http-redirect**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-all

Synopsis	Block all requests as the default action
Context	**configure** application-assurance group *number* url-filter *string* web-service default-action block-all
Tree	block-all
Description	This command blocks all traffic when the web service is unavailable.
Notes	The following elements are part of a choice: **allow**, **block-all**, or **block-http-redirect**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-http-redirect *reference*

Synopsis	HTTP URL for redirection when traffic is blocked
Context	**configure** application-assurance group *number* url-filter *string* web-service default-action block-http-redirect *reference*
Tree	block-http-redirect
Description	This command specifies the HTTP URL to be redirected to when traffic is blocked. This URL can be different than the URL the user is redirected to when the site they attempted to access was found in the URL filter (which is configured in the **configure application-assurance group url-filter http-redirect** command).
Reference	**configure** application-assurance group *number* http-redirect *string*
Notes	The following elements are part of a choice: **allow**, **block-all**, or **block-http-redirect**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-profile *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Web service default profile

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Context	**configure** application-assurance group *number* url-filter *string* web-service default-profile *reference*
Tree	default-profile
Reference	**configure** application-assurance group *number* url-filter *string* web-service profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns-server *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Web service DNS server
Context	**configure** application-assurance group *number* url-filter *string* web-service dns-server *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	dns-server
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fqdn *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Web service fully qualified domain name
Context	**configure** application-assurance group *number* url-filter *string* web-service fqdn *string*
Tree	fqdn
String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect *reference*

Synopsis	Web service HTTP redirect
Context	**configure** application-assurance group *number* url-filter *string* web-service http-redirect *reference*

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Tree	http-redirect
Reference	**configure** application-assurance group *number* http-redirect *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

profile [profile-name] *string*

Synopsis	Enter the **profile** list instance
Context	**configure** application-assurance group *number* url-filter *string* web-service profile *string*
Tree	profile
Description	Commands in this context configure the category profiles of the web service.
Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**profile-name**] *string*

Synopsis	Web service profile name
Context	**configure** application-assurance group *number* url-filter *string* web-service profile *string*
Tree	profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block

Synopsis	Enter the **block** context
Context	**configure** application-assurance group *number* url-filter *string* web-service profile *string* block
Tree	block
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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category [category-name] *string*

Synopsis	Add a list entry for **category**
Context	**configure** application-assurance group *number* url-filter *string* web-service profile *string* block category *string*
Tree	category
Description	Commands in this context configure the category that is blocked in the category profile.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**category-name**] *string*

Synopsis	Web service profile category name to be blocked
Context	**configure** application-assurance group *number* url-filter *string* web-service profile *string* block category *string*
Tree	category
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* url-filter *string* web-service profile *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number*

Synopsis	Enter the **server** list instance
Context	**configure** application-assurance group *number* url-filter *string* web-service server *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number*
Tree	server

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Max. Instances	4
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	AA web service server IP address
Context	**configure** application-assurance group *number* url-filter *string* web-service server *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number*
Tree	server
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port *number*

Synopsis	AA web service server port
Context	**configure** application-assurance group *number* url-filter *string* web-service server *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number*
Tree	server
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of URL filter web service server
Context	**configure** application-assurance group *number* url-filter *string* web-service server *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* url-filter *string* web-service server *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* description *string*
Tree	description
String Length	1 to 80
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vlan-id *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Web-service VLAN ID
Context	**configure** application-assurance group *number* url-filter *string* web-service vlan-id *number*
Tree	vlan-id
Description	This command configures the VLAN ID on which the AA ISA emits the traffic mapping to a preconfigured AA interface.
Range	1 to 4094
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

url-list [url-list-name] *string*

Synopsis	Enter the **url-list** list instance
Context	**configure** application-assurance group *number* url-list *string*
Tree	url-list
Description	Commands in this context configure a URL list object. The URL list points to a file containing a list of URLs located on the system Compact Flash and is then referenced in a URL filter object to filter and redirect subscribers when a URL from this file is accessed.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**url-list-name**] *string*

Synopsis	URL list name
Context	**configure** application-assurance group *number* url-list *string*
Tree	url-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the URL list
Context	**configure** application-assurance group *number* url-list *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance group *number* url-list *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

file *string*

Synopsis	File name of the URL list on compact flash
Context	**configure** application-assurance group *number* url-list *string* file *string*
Tree	file
String Length	1 to 180

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

host-expressions *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow URL list to contain hostnames with wildcards
Context	**configure** application-assurance group *number* url-list *string* host-expressions *boolean*
Tree	host-expressions
Description	When configured to **true**, this command adds hostnames with wildcards to the URL list. When configured to **false**, the URL list containing hostnames with wildcards is removed from the configuration.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

key *string*

Synopsis	URL list decryption key
Context	**configure** application-assurance group *number* url-list *string* key *string*
Tree	key
Description	This command configures the secret key for decrypting the URL list.
String Length	1 to 115
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

size *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Size limit of the URL list
Context	**configure** application-assurance group *number* url-list *string* size *keyword*

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Tree	size
Options	standard, extended
Default	standard
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-enrich

Synopsis	Enter the **http-enrich** context
Context	**configure** application-assurance http-enrich
Tree	http-enrich
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the **application-assurance group** context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field [field-name] *string*

Synopsis	Enter the **field** list instance
Context	**configure** application-assurance http-enrich field *string*
Tree	field
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the **application-assurance group** context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**field-name**] *string*

Synopsis	HTTP enrich field name (void, do not use)
Context	**configure** application-assurance http-enrich field *string*
Tree	field
Description	This command should not be used by the operators. Configuring it has no effect. Operators should use the commands in the **application-assurance group** context.
String Length	1 to 32

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Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

comment *string*

Synopsis	User information comment
Context	**configure** application-assurance http-enrich field *string* comment *string*
Tree	comment
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-error-redirect

Synopsis	Enter the **http-error-redirect** context
Context	**configure** application-assurance http-error-redirect
Tree	http-error-redirect
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the **application-assurance group** context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

error-code [error-code-number] *number*

Synopsis	Enter the **error-code** list instance
Context	**configure** application-assurance http-error-redirect error-code *number*
Tree	error-code
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the **application-assurance group** context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**error-code-number**] *number*

Synopsis	Error code for HTTP error redirection
Context	**configure** application-assurance http-error-redirect error-code *number*
Tree	error-code
Range	400 to 999
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

comment *string*

Synopsis	User information comment
Context	**configure** application-assurance http-error-redirect error-code *number* comment *string*
Tree	comment
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template [template-id] *number*

Synopsis	Enter the **template** list instance
Context	**configure** application-assurance http-error-redirect template *number*
Tree	template
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the **application-assurance group** context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**template-id**] *number*

Synopsis	HTTP error redirect template ID
Context	**configure** application-assurance http-error-redirect template *number*
Tree	template
Max. Range	0 to 4294967295

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Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

comment *string*

Synopsis	User information comment
Context	**configure** application-assurance http-error-redirect template *number* comment *string*
Tree	comment
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-notification

Synopsis	Enter the **http-notification** context
Context	**configure** application-assurance http-notification
Tree	http-notification
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the **application-assurance group** context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template [template-id] *number*

Synopsis	Enter the **template** list instance
Context	**configure** application-assurance http-notification template *number*
Tree	template
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the **application-assurance group** context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**template-id**] *number*

Synopsis	HTTP notification template ID
Context	**configure** application-assurance http-notification template *number*
Tree	template
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

comment *string*

Synopsis	User information comment
Context	**configure** application-assurance http-notification template *number* comment *string*
Tree	comment
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect

Synopsis	Enter the **http-redirect** context
Context	**configure** application-assurance http-redirect
Tree	http-redirect
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the **application-assurance group** context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template [template-id] *number*

Synopsis	Enter the **template** list instance
Context	**configure** application-assurance http-redirect template *number*
Tree	template

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Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the **application-assurance group** context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**template-id**] *number*

Synopsis	HTTP redirect template ID
Context	**configure** application-assurance http-redirect template *number*
Tree	template
Description	This command specifies the HTTP policy redirect template ID. The available options are: **1** - JavaScript based redirect embedded in HTTP 200 OK response with a predefined number of arguments automatically appended to the redirect URL **2** - HTTP 302 redirect with a predefined number of arguments automatically appended to the redirect URL **3** - HTTP 302 redirect with no parameters appended to the URL (empty) **4** - Empty redirect format using JavaScript **5** - Redirect supporting macro substitution using HTTP 302 **6** - Redirect supporting macro substitution using JavaScript
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

comment *string*

Synopsis	User information comment
Context	**configure** application-assurance http-redirect template *number* comment *string*
Tree	comment
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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protocol [protocol-name] *string*

Synopsis	Enter the **protocol** list instance
Context	**configure** application-assurance protocol *string*
Tree	protocol
Description	Commands in this context configure the administrative state of system-wide protocols.Some protocols are always enabled and cannot be disabled. These are "base protocols" that were present in R1 of the release.Some protocols are disabled by default and can be enabled. There are protocols that were introduced post R1, which are all enabled by default but may be disabled if not desired.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**protocol-name**] *string*

Synopsis	AA protocol name
Context	**configure** application-assurance protocol *string*
Tree	protocol
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the protocol
Context	**configure** application-assurance protocol *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy [rad-acct-plcy-name] *string*

Synopsis	Enter the **radius-accounting-policy** list instance
Context	**configure** application-assurance radius-accounting-policy *string*
Tree	radius-accounting-policy

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Description	Commands in this context configure an existing subscriber RADIUS-based accounting policy to use for AA. RADIUS accounting policies are configured in the **configure application-assurance radius-accounting-policy** context.
Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**rad-acct-plcy-name**] *string*

Synopsis	AA RADIUS accounting policy name
Context	**configure** application-assurance radius-accounting-policy *string*
Tree	radius-accounting-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** application-assurance radius-accounting-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interim-update-interval *number*

Synopsis	AA RADIUS accounting policy interim update interval
Context	**configure** application-assurance radius-accounting-policy *string* interim-update-interval *number*
Tree	interim-update-interval
Range	5 to 1080
Units	minutes
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-server

Synopsis	Enter the **radius-accounting-server** context
Context	**configure** application-assurance radius-accounting-policy *string* radius-accounting-server
Tree	radius-accounting-server
Description	Commands in this context configure an existing subscriber RADIUS-based accounting policy to use for AA. RADIUS accounting policies are configured in the **configure application-assurance radius-accounting-policy** context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

access-algorithm *keyword*

Synopsis	Access algorithm for the list of RADIUS servers
Context	**configure** application-assurance radius-accounting-policy *string* radius-accounting-server access-algorithm *keyword*
Tree	access-algorithm
Options	direct, round-robin
Default	direct
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

retry *number*

Synopsis	Number of retries for contacting the RADIUS server
Context	**configure** application-assurance radius-accounting-policy *string* radius-accounting-server retry *number*
Tree	retry
Range	1 to 10
Default	3
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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router-instance *string*

Synopsis	Router or VPRN service name
Context	**configure** application-assurance radius-accounting-policy *string* radius-accounting-server router-instance *string*
Tree	router-instance
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server [server-index] *number*

Synopsis	Enter the **server** list instance
Context	**configure** application-assurance radius-accounting-policy *string* radius-accounting-server server *number*
Tree	server
Description	Commands in this context configure the RADIUS server and the RADIUS server IP address, index, and key values. RADIUS servers are accessed in order from lowest to highest index for authentication requests until a response from a server is received. A higher indexed server is only queried if no response is received from a lower indexed server (which implies that the server is not available). If a response from a server is received, no other RADIUS servers are queried.
Max. Instances	5
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**server-index**] *number*

Synopsis	RADIUS accounting server index
Context	**configure** application-assurance radius-accounting-policy *string* radius-accounting-server server *number*
Tree	server
Description	This command configures the index for the RADIUS server. The index determines the sequence in which the servers are queried for authentication requests. Servers are queried in order from lowest to highest index.
Range	1 to 5
Notes	This element is part of a list key.
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis	RADIUS server IP address
Context	**configure** application-assurance radius-accounting-policy *string* radius-accounting-server server *number* address *string*
Tree	address
Description	This command configures the IP address of the RADIUS server. Two RADIUS servers cannot have the same IP address. An error message is generated if the server address is a duplicate.
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port *number*

Synopsis	RADIUS server UDP port used for authentication
Context	**configure** application-assurance radius-accounting-policy *string* radius-accounting-server server *number* port *number*
Tree	port
Range	1 to 65535
Default	1813
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

secret *string*

Synopsis	RADIUS server secret key
Context	**configure** application-assurance radius-accounting-policy *string* radius-accounting-server server *number* secret *string*
Tree	secret
Description	This command configures the secret key to access the RADIUS server. This secret key must match the password on the RADIUS server.
String Length	1 to 54
Notes	This element is mandatory.

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source-address *string*

Synopsis	Source IP address of RADIUS packets
Context	**configure** application-assurance radius-accounting-policy *string* radius-accounting-server source-address *string*
Tree	source-address
Description	This command configures the source IP address of the RADIUS packet. The system IP address must be configured for the RADIUS client to work. The system IP address must only be configured if the source address is not specified. When this command reverts to its default, the source address is determined at the moment the request is sent. This address is also used in the **nas-ip-address** command in the **configure aaa radius isa-policy accounting include-attributes** and **configure aaa radius isa-policy authentication include-attributes** contexts as it is set to the system IP address if no source address was given.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	RADIUS accounting server response timeout
Context	**configure** application-assurance radius-accounting-policy *string* radius-accounting-server timeout *number*
Tree	timeout
Range	1 to 90
Units	seconds
Default	5
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

significant-change *number*

Synopsis	Change delta for RADIUS accounting record updates
Context	**configure** application-assurance radius-accounting-policy *string* significant-change *number*

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Tree	significant-change
Description	This command configures the number of changes required to generate the record.
Range	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

usage-alert-thresholds

Synopsis	Enter the **usage-alert-thresholds** context
Context	**configure** application-assurance usage-alert-thresholds
Tree	usage-alert-thresholds
Description	Commands in this context configure the AA performance monitoring alerts.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit-rate-high-wmark *(number | keyword)*

Synopsis	High watermark for bit rate alarms
Context	**configure** application-assurance usage-alert-thresholds bit-rate-high-wmark *(number | keyword)*
Tree	bit-rate-high-wmark
Description	This command configures the high watermark for bit rate alarms. The value must be larger than or equal to the low watermark value.
Range	1 to 100000
Units	megabps
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit-rate-low-wmark *number*

Synopsis	Low watermark for bit rate alarms
Context	**configure** application-assurance usage-alert-thresholds bit-rate-low-wmark *number*
Tree	bit-rate-low-wmark

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Description	This command configures the utilization of the flow records on the ISA-AA group when the full alarm is cleared by the agent.
Range	0 to 99999
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

datapath-cpu-high-wmark *(number | keyword)*

Synopsis	High watermark for datapath CPU alarms
Context	**configure** application-assurance usage-alert-thresholds datapath-cpu-high-wmark *(number | keyword)*
Tree	datapath-cpu-high-wmark
Description	This command configures the system-wide high watermark threshold as a percentage of the per-ISA datapath core CPU utilization, where an alarm is raised by the agent. CPU usage is the average usage across all datapath cores.
Range	0 to 100
Units	percent
Options	max
Default	95
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

datapath-cpu-low-wmark *number*

Synopsis	Low watermark for datapath CPU alarms
Context	**configure** application-assurance usage-alert-thresholds datapath-cpu-low-wmark *number*
Tree	datapath-cpu-low-wmark
Description	This command configures the system-wide low watermark threshold as a percentage of the per-ISA datapath core CPU utilization, where an alarm is raised by the agent. CPU usage is the average usage across all datapath cores.
Range	0 to 100
Units	percent
Default	90
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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flow-setup-rate-high-wmark *(number | keyword)*

Synopsis	High watermark for flow setup rate
Context	**configure** application-assurance usage-alert-thresholds flow-setup-rate-high-wmark *(number | keyword)*
Tree	flow-setup-rate-high-wmark
Description	This command configures the system-wide high watermark threshold for per-ISA throughput in packets/second when an alarm is raised by the agent. The value must be larger than or equal to the **packet-rate-low-wmark** value.
Range	1 to 2000000
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-setup-rate-low-wmark *number*

Synopsis	Low watermark for flow setup rate
Context	**configure** application-assurance usage-alert-thresholds flow-setup-rate-low-wmark *number*
Tree	flow-setup-rate-low-wmark
Description	This command configures the flow setup rate on the ISA-AA when a flow setup alarm is raised by the agent.
Range	0 to 1999999
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-table-high-wmark *number*

Synopsis	Flow table high watermark
Context	**configure** application-assurance usage-alert-thresholds flow-table-high-wmark *number*
Tree	flow-table-high-wmark
Description	This command configures the system-wide high watermark threshold as a percentage of the flow table size for the per-ISA utilization of the flow records when a full alarm is raised by the agent.
Range	0 to 100

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Units	percent
Default	95
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-table-low-wmark *number*

Synopsis	Flow table low watermark
Context	**configure** application-assurance usage-alert-thresholds flow-table-low-wmark *number*
Tree	flow-table-low-wmark
Description	This command configures the system-wide low watermark threshold as a percentage of the flow table size for per-ISA.
Range	0 to 100
Units	percent
Default	90
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packet-rate-high-wmark *(number | keyword)*

Synopsis	Packet rate high watermark
Context	**configure** application-assurance usage-alert-thresholds packet-rate-high-wmark *(number | keyword)*
Tree	packet-rate-high-wmark
Description	This command configures the packet rate on the ISA-AA when a packet rate alarm is raised by the agent.
Range	1 to 148809524
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packet-rate-low-wmark *number*

Synopsis	Packet rate low watermark
Context	**configure** application-assurance usage-alert-thresholds packet-rate-low-wmark *number*

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Tree	packet-rate-low-wmark
Description	This command configures the packet rate on the ISA-AA when a packet rate alarm is cleared by the agent.
Range	0 to 148809523
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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3.4 aps commands

```
configure
   –  aps number
      –  advertise-interval number
      –  annexb
         –  wait-to-restore-time number
         –  working-circuit reference
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  hold-time number
      –  neighbor (ipv4-address-no-zone | ipv6-address-no-zone)
      –  protect-circuit reference
      –  revert
         –  time number
      –  switching-mode keyword
      –  working-circuit reference
```


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3.4.1 aps command descriptions

aps [group-id] *number*

Synopsis	Enter the **aps** list instance
Context	**configure** aps *number*
Tree	aps
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[**group-id**] *number*

Synopsis	APS group ID
Context	**configure** aps *number*
Tree	aps
Range	1 to 128
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

advertise-interval *number*

Synopsis	Time between subsequent advertisement messages
Context	**configure** aps *number* advertise-interval *number*
Tree	advertise-interval
Range	10 to 650
Units	deciseconds
Default	10
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

annexb

Synopsis	Enable the **annexb** context
Context	**configure** aps *number* annexb

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Tree	annexb
Notes	The following elements are part of a choice: **annexb** or (**neighbor**, **protect-circuit**, **revert**, and **working-circuit**).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

wait-to-restore-time *number*

Synopsis	Annex B mode operation wait to restore time
Context	**configure** aps *number* annexb wait-to-restore-time *number*
Tree	wait-to-restore-time
Description	This command specifies the delay after which the newly active section becomes the primary section after a switchover from the primary section to the secondary section occurs and the switch request clears normally.
Range	0 to 3600
Units	seconds
Default	300
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

working-circuit *reference*

Synopsis	Working circuit port for the APS group
Context	**configure** aps *number* annexb working-circuit *reference*
Tree	working-circuit
Reference	**configure** port *string*
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

hold-time *number*

Synopsis	Time to wait for an advertisement packet
Context	**configure** aps *number* hold-time *number*

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Tree	hold-time
Range	10 to 650
Units	deciseconds
Default	30
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

neighbor *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Neighbor IP address for multi-chassis APS
Context	**configure** aps *number* neighbor *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	neighbor
Notes	The following elements are part of a choice: **annexb** or (**neighbor**, **protect-circuit**, **revert**, and **working-circuit**).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

protect-circuit *reference*

Synopsis	Protection circuit port for the APS group
Context	**configure** aps *number* protect-circuit *reference*
Tree	protect-circuit
Reference	**configure** port *string*
Notes	The following elements are part of a choice: **annexb** or (**neighbor**, **protect-circuit**, **revert**, and **working-circuit**).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

revert

Synopsis	Enable the **revert** context
Context	**configure** aps *number* revert
Tree	revert
Notes	The following elements are part of a choice: **annexb** or (**neighbor**, **protect-circuit**, **revert**, and **working-circuit**).

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Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

time *number*

Synopsis	Wait time before switching back to the working circuit
Context	**configure** aps *number* revert time *number*
Tree	time
Range	0 | 60 to 3600
Units	seconds
Default	300
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

switching-mode *keyword*

Synopsis	Switching mode for the APS port
Context	**configure** aps *number* switching-mode *keyword*
Tree	switching-mode
Options	uni-directional, bi-directional
Default	bi-directional
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

working-circuit *reference*

Synopsis	Working circuit port for the APS group
Context	**configure** aps *number* working-circuit *reference*
Tree	working-circuit
Reference	**configure** port *string*
Notes	The following elements are part of a choice: **annexb** or (**neighbor**, **protect-circuit**, **revert**, and **working-circuit**).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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3.5 bfd commands

```
configure
   - bfd
      - apply-groups reference
      - apply-groups-exclude reference
      - bfd-template string
         - apply-groups reference
         - apply-groups-exclude reference
         - echo-receive number
         - multiplier number
         - receive-interval number
         - transmit-interval number
         - type keyword
      - seamless-bfd
         - reflector string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - discriminator number
            - local-state keyword
```


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3.5.1 bfd command descriptions

bfd

Synopsis	Enter the **bfd** context
Context	**configure** bfd
Tree	bfd
Introduced	16.0.R1
Platforms	All

bfd-template [name] *string*

Synopsis	Enter the **bfd-template** list instance
Context	**configure** bfd bfd-template *string*
Tree	bfd-template
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	BFD template name
Context	**configure** bfd bfd-template *string*
Tree	bfd-template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

echo-receive *number*

Synopsis	Echo receive interval
Context	**configure** bfd bfd-template *string* echo-receive *number*
Tree	echo-receive
Range	100 to 100000
Units	milliseconds

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Default	100
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Detection multiplier
Context	**configure** bfd bfd-template *string* multiplier *number*
Tree	multiplier
Range	1 to 20
Default	3
Introduced	16.0.R1
Platforms	All

receive-interval *number*

Synopsis	Receive interval
Context	**configure** bfd bfd-template *string* receive-interval *number*
Tree	receive-interval
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

transmit-interval *number*

Synopsis	Transmit interval
Context	**configure** bfd bfd-template *string* transmit-interval *number*
Tree	transmit-interval
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

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type *keyword*

Synopsis	Local termination point for the BFD session
Context	**configure** bfd bfd-template *string* type *keyword*
Tree	type
Options	cpm-np, fp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

seamless-bfd

Synopsis	Enter the **seamless-bfd** context
Context	**configure** bfd seamless-bfd
Tree	seamless-bfd
Introduced	19.7.R1
Platforms	All

reflector [name] *string*

Synopsis	Enter the **reflector** list instance
Context	**configure** bfd seamless-bfd reflector *string*
Tree	reflector
Max. Instances	1
Introduced	19.7.R1
Platforms	All

[**name**] *string*

Synopsis	S-BFD reflector name
Context	**configure** bfd seamless-bfd reflector *string*
Tree	reflector
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1

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Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the seamless BFD reflector
Context	**configure** bfd seamless-bfd reflector *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.7.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** bfd seamless-bfd reflector *string* description *string*
Tree	description
String Length	1 to 80
Introduced	19.7.R1
Platforms	All

discriminator *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Discriminator of the seamless BFD reflector
Context	**configure** bfd seamless-bfd reflector *string* discriminator *number*
Tree	discriminator
Range	524288 to 526335
Introduced	19.7.R1
Platforms	All

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local-state *keyword*

Synopsis	Local state of the seamless BFD reflector
Context	**configure** bfd seamless-bfd reflector *string* local-state *keyword*
Tree	local-state
Options	admin-down, up
Default	up
Introduced	19.7.R1
Platforms	All

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3.6 bmp commands

```
configure
   –  bmp
      –  admin-state keyword
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  collector
         –  admin-state keyword
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  connection
            –  ipv4
               –  address string
               –  port number
            –  ipv6
               –  address string
               –  port number
      –  station string
         –  admin-state keyword
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  connection
            –  connect-retry number
            –  local-address (ipv4-address-no-zone | ipv6-address-no-zone)
            –  router-instance string
            –  station-address
               –  ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
               –  port number
            –  tcp-keepalive
               –  admin-state keyword
               –  keep-count number
               –  keep-idle number
               –  keep-interval number
         –  description string
         –  family
            –  evpn boolean
            –  ipv4 boolean
            –  ipv6 boolean
            –  l2-vpn boolean
            –  label-ipv4 boolean
            –  label-ipv6 boolean
            –  mcast-ipv4 boolean
            –  mcast-ipv6 boolean
            –  mcast-vpn-ipv4 boolean
            –  mcast-vpn-ipv6 boolean
            –  sr-policy-ipv4 boolean
            –  sr-policy-ipv6 boolean
            –  vpn-ipv4 boolean
            –  vpn-ipv6 boolean
         –  initiation-message string
         –  report-local-routes boolean
         –  stats-report-interval number
```


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3.6.1 bmp command descriptions

bmp

Synopsis	Enter the **bmp** context
Context	**configure** bmp
Tree	bmp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the BMP operation
Context	**configure** bmp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

collector

Synopsis	Enter the **collector** context
Context	**configure** bmp collector
Tree	collector
Introduced	19.10.R1
Platforms	VSR-NRC

admin-state *keyword*

Synopsis	Administrative state of the BMP collector
Context	**configure** bmp collector admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable

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Introduced	19.10.R1
Platforms	VSR-NRC

connection

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **connection** context
Context	**configure** bmp collector connection
Tree	connection
Introduced	19.10.R1
Platforms	VSR-NRC

ipv4

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **ipv4** context
Context	**configure** bmp collector connection ipv4
Tree	ipv4
Introduced	19.10.R1
Platforms	VSR-NRC

address *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 address
Context	**configure** bmp collector connection ipv4 address *string*
Tree	address
Introduced	19.10.R1

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Platforms	VSR-NRC

port *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 TCP destination port number
Context	**configure** bmp collector connection ipv4 port *number*
Tree	port
Range	1 to 65535
Default	4210
Introduced	19.10.R1
Platforms	VSR-NRC

ipv6

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **ipv6** context
Context	**configure** bmp collector connection ipv6
Tree	ipv6
Introduced	19.10.R1
Platforms	VSR-NRC

address *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 address
Context	**configure** bmp collector connection ipv6 address *string*
Tree	address
Introduced	19.10.R1

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Platforms	VSR-NRC

port *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 TCP destination port
Context	**configure** bmp collector connection ipv6 port *number*
Tree	port
Range	1 to 65535
Default	4210
Introduced	19.10.R1
Platforms	VSR-NRC

station [name] *string*

Synopsis	Enter the **station** list instance
Context	**configure** bmp station *string*
Tree	station
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	BMP monitoring station name
Context	**configure** bmp station *string*
Tree	station
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the BMP monitoring station
Context	**configure** bmp station *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

connection

Synopsis	Enter the **connection** context
Context	**configure** bmp station *string* connection
Tree	connection
Introduced	16.0.R1
Platforms	All

connect-retry *number*

Synopsis	Maximum time between connection attempts
Context	**configure** bmp station *string* connection connect-retry *number*
Tree	connect-retry
Range	1 to 65535
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	All

local-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Local IP address to communicate with monitoring station
Context	**configure** bmp station *string* connection local-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	local-address

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Introduced	16.0.R1
Platforms	All

router-instance *string*

Synopsis	Router instance used to reach the BMP station
Context	**configure** bmp station *string* connection router-instance *string*
Tree	router-instance
Default	Base
Introduced	16.0.R4
Platforms	All

station-address

Synopsis	Enter the **station-address** context
Context	**configure** bmp station *string* connection station-address
Tree	station-address
Introduced	16.0.R1
Platforms	All

ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the remote BMP monitoring station
Context	**configure** bmp station *string* connection station-address ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-address
Introduced	16.0.R1
Platforms	All

port *number*

Synopsis	BMP monitoring station port
Context	**configure** bmp station *string* connection station-address port *number*
Tree	port
Range	1 to 65535
Introduced	16.0.R1

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Platforms	All

tcp-keepalive

Synopsis	Enter the **tcp-keepalive** context
Context	**configure** bmp station *string* connection tcp-keepalive
Tree	tcp-keepalive
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the TCP keepalive
Context	**configure** bmp station *string* connection tcp-keepalive admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

keep-count *number*

Synopsis	Keepalive threshold before connection is declared down
Context	**configure** bmp station *string* connection tcp-keepalive keep-count *number*
Tree	keep-count
Range	3 to 100
Default	4
Introduced	16.0.R1
Platforms	All

keep-idle *number*

Synopsis	Time until the first TCP keepalive probe is sent
Context	**configure** bmp station *string* connection tcp-keepalive keep-idle *number*
Tree	keep-idle

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Range	1 to 100000
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	All

keep-interval *number*

Synopsis	Time between two TCP keepalive probes
Context	**configure** bmp station *string* connection tcp-keepalive keep-interval *number*
Tree	keep-interval
Range	1 to 100000
Units	seconds
Default	15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** bmp station *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

family

Synopsis	Enter the **family** context
Context	**configure** bmp station *string* family
Tree	family
Description	Commands in this context specify the address families that are reported to a BMP monitoring station.
Introduced	16.0.R1
Platforms	All

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evpn *boolean*

Synopsis	Support EVPN address family
Context	**configure** bmp station *string* family evpn *boolean*
Tree	evpn
Default	false
Introduced	16.0.R4
Platforms	All

ipv4 *boolean*

Synopsis	Support IPv4 address family
Context	**configure** bmp station *string* family ipv4 *boolean*
Tree	ipv4
Default	true
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Support IPv6 address family
Context	**configure** bmp station *string* family ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

l2-vpn *boolean*

Synopsis	Support L2 VPN address family
Context	**configure** bmp station *string* family l2-vpn *boolean*
Tree	l2-vpn
Default	false
Introduced	16.0.R4
Platforms	All

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label-ipv4 *boolean*

Synopsis	Support labeled IPv4 address family
Context	**configure** bmp station *string* family label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Support labeled IPv6 address family
Context	**configure** bmp station *string* family label-ipv6 *boolean*
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv4 *boolean*

Synopsis	Support IPv4 multicast address family
Context	**configure** bmp station *string* family mcast-ipv4 *boolean*
Tree	mcast-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

mcast-ipv6 *boolean*

Synopsis	Support IPv6 multicast address family
Context	**configure** bmp station *string* family mcast-ipv6 *boolean*
Tree	mcast-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

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mcast-vpn-ipv4 *boolean*

Synopsis	Support IPv4 VPN multicast address family
Context	**configure** bmp station *string* family mcast-vpn-ipv4 *boolean*
Tree	mcast-vpn-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

mcast-vpn-ipv6 *boolean*

Synopsis	Support IPv6 VPN multicast address family
Context	**configure** bmp station *string* family mcast-vpn-ipv6 *boolean*
Tree	mcast-vpn-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

sr-policy-ipv4 *boolean*

Synopsis	Support SR policy IPv4 address family
Context	**configure** bmp station *string* family sr-policy-ipv4 *boolean*
Tree	sr-policy-ipv4
Default	false
Introduced	22.5.R1
Platforms	All

sr-policy-ipv6 *boolean*

Synopsis	Support SR policy IPv6 address family
Context	**configure** bmp station *string* family sr-policy-ipv6 *boolean*
Tree	sr-policy-ipv6
Default	false
Introduced	22.5.R1
Platforms	All

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vpn-ipv4 *boolean*

Synopsis	Support VPN IPv4 address family
Context	**configure** bmp station *string* family vpn-ipv4 *boolean*
Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Support VPN IPv6 address family
Context	**configure** bmp station *string* family vpn-ipv6 *boolean*
Tree	vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

initiation-message *string*

Synopsis	Free form initiation message sent to monitoring station
Context	**configure** bmp station *string* initiation-message *string*
Tree	initiation-message
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

report-local-routes *boolean*

Synopsis	Allow local route reporting to BMP monitoring station
Context	**configure** bmp station *string* report-local-routes *boolean*
Tree	report-local-routes
Default	false
Introduced	16.0.R1
Platforms	All

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stats-report-interval *number*

Synopsis	Frequency of reports sent to the BMP monitoring station
Context	**configure** bmp station *string* stats-report-interval *number*
Tree	stats-report-interval
Range	15 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

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3.7 bof commands

```
bof
   –  auto-boot
      –  dhcp
         –  client-id (keyword | hex-string | string)
         –  inband
            –  disabled boolean
            –  null-encapsulation boolean
            –  vlan number
            –  vlan-discovery boolean
         –  include-user-class boolean
         –  ipv4 boolean
         –  ipv6 boolean
         –  management-port boolean
      –  ospf
         –  mtu number
         –  neid string
         –  neip-ipv4 string
         –  neip-ipv6 string
         –  vendor-id number
      –  port-mtu number
      –  timeout number
   –  auto-configure
      –  ipv4
         –  dhcp
            –  client-id (hex-string | string)
            –  include-user-class boolean
            –  timeout number
      –  ipv6
         –  dhcp
            –  client-id (hex-string | string)
            –  client-type keyword
            –  include-user-class boolean
            –  timeout number
   –  configuration
      –  encrypt boolean
      –  encryption-key string
      –  password string
      –  primary-location string
      –  secondary-location string
      –  tertiary-location string
   –  console
      –  speed number
      –  wait-time number
   –  dns
      –  domain string
      –  primary-server (ipv4-address-no-zone | ipv6-address-no-zone)
      –  secondary-server (ipv4-address-no-zone | ipv6-address-no-zone)
      –  tertiary-server (ipv4-address-no-zone | ipv6-address-no-zone)
   –  image
      –  primary-location string
      –  secondary-location string
      –  tertiary-location string
   –  li
      –  local-save boolean
      –  separate boolean
   –  license
      –  primary-location string
   –  port string
      –  autonegotiate keyword
```


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bof port duplex

```
      –  duplex keyword
      –  speed number
   –  router string
      –  interface string
         –  cpm keyword
            –  ipv4
               –  ip-address string
               –  prefix-length number
            –  ipv6
               –  ipv6-address string
               –  prefix-length number
         –  ip-mtu number
      –  static-routes
         –  route (ipv4-prefix | ipv6-prefix)
            –  next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
   –  system
      –  base-mac-address string
      –  persistent-indices boolean
      –  profile keyword
```


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3.7.1 bof command descriptions

bof

Synopsis	Configure system boot options
Context	bof
Tree	bof
Description	This command creates or edits the boot option file (BOF) for the specified local storage device. A BOF file specifies where the system searches for runtime images, configuration files, and other operational parameters during system initialization. BOF parameters can be modified. Changes can be saved to a specified compact flash. The BOF must be located in the root directory of either an internal or external compact flash local to the system and have the mandatory filename of bof.cfg. When modifications are made to in-memory parameters that are currently in use or operating, the changes are effective immediately. For example, if the IP address of the management port is changed, the change takes place immediately. Only one entry of the BOF configuration command statement can be saved once the statement has been found to be syntactically correct. When opening an existing BOF that is not the BOF used in the most recent boot, a message is issued notifying the user that the parameters will not affect the operation of the node. No default boot option file exists. The router boots with the factory default boot sequence and options.
Introduced	20.10.R1
Platforms	All

auto-boot

Note:
The new value of this element takes effect when the router boots.

Synopsis	Enable the **auto-boot** context
Context	bof auto-boot
Tree	auto-boot
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

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dhcp

Note:
The new value of this element takes effect when the router boots.

Synopsis	Enable the **dhcp** context
Context	bof auto-boot dhcp
Tree	dhcp
Notes	The following elements are part of a choice: **dhcp** or **ospf**.
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

client-id *(keyword | hex-string | string)*

Note:
The new value of this element takes effect when the router boots.

Synopsis	DHCP client ID
Context	bof auto-boot dhcp client-id *(keyword | hex-string | string)*
Tree	client-id
String Length	3 to 118
Options	use-chassis-mac-address
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

inband

Note:
The new value of this element takes effect when the router boots.

Synopsis	Enable the **inband** context
Context	bof auto-boot dhcp inband
Tree	inband
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

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disabled *boolean*

Note:
The new value of this element takes effect when the router boots.

Synopsis	Do not use in-band ports
Context	bof auto-boot dhcp inband disabled *boolean*
Tree	disabled
Default	true
Notes	The following elements are part of a choice: **disabled**, **null-encapsulation**, **vlan**, or **vlan-discovery**.
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

null-encapsulation *boolean*

Note:
The new value of this element takes effect when the router boots.

Synopsis	Use null encapsulation
Context	bof auto-boot dhcp inband null-encapsulation *boolean*
Tree	null-encapsulation
Default	true
Notes	The following elements are part of a choice: **disabled**, **null-encapsulation**, **vlan**, or **vlan-discovery**.
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

vlan *number*

Note:
The new value of this element takes effect when the router boots.

Synopsis	In-band VLAN ID
Context	bof auto-boot dhcp inband vlan *number*
Tree	vlan
Range	1 to 4094

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Notes	The following elements are part of a choice: **disabled**, **null-encapsulation**, **vlan**, or **vlan-discovery**.
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

vlan-discovery *boolean*

Note:
The new value of this element takes effect when the router boots.

Synopsis	Use VLAN discovery
Context	bof auto-boot dhcp inband vlan-discovery *boolean*
Tree	vlan-discovery
Default	true
Notes	The following elements are part of a choice: **disabled**, **null-encapsulation**, **vlan**, or **vlan-discovery**.
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

include-user-class *boolean*

Note:
The new value of this element takes effect when the router boots.

Synopsis	Include user class in auto boot provisioning
Context	bof auto-boot dhcp include-user-class *boolean*
Tree	include-user-class
Default	true
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

ipv4 *boolean*

Note:
The new value of this element takes effect when the router boots.

Synopsis	Use auto boot with IPv4

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Context	bof auto-boot dhcp ipv4 *boolean*
Tree	ipv4
Default	true
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

ipv6 *boolean*

Note:
The new value of this element takes effect when the router boots.

Synopsis	Use auto boot with IPv6
Context	bof auto-boot dhcp ipv6 *boolean*
Tree	ipv6
Default	true
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

management-port *boolean*

Note:
The new value of this element takes effect when the router boots.

Synopsis	Use auto boot on the management port
Context	bof auto-boot dhcp management-port *boolean*
Tree	management-port
Default	true
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

ospf

Note:
The new value of this element takes effect when the router boots.

Synopsis	Enable the **ospf** context
Context	bof auto-boot ospf

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Tree	ospf
Notes	The following elements are part of a choice: **dhcp** or **ospf**.
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

mtu *number*

Note:
The new value of this element takes effect when the router boots.

Synopsis	OSPF MTU
Context	bof auto-boot ospf mtu *number*
Tree	mtu
Range	512 to 9786
Units	bytes
Default	1500
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

neid *string*

Note:
The new value of this element takes effect when the router boots.

Synopsis	Network element ID
Context	bof auto-boot ospf neid *string*
Tree	neid
String Length	3
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

neip-ipv4 *string*

Note:
The new value of this element takes effect when the router boots.

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Synopsis	Network element IPv4 address
Context	bof auto-boot ospf neip-ipv4 *string*
Tree	neip-ipv4
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

neip-ipv6 *string*

Note:
The new value of this element takes effect when the router boots.

Synopsis	Network element IPv6 address
Context	bof auto-boot ospf neip-ipv6 *string*
Tree	neip-ipv6
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

vendor-id *number*

Note:
The new value of this element takes effect when the router boots.

Synopsis	Vendor ID
Context	bof auto-boot ospf vendor-id *number*
Tree	vendor-id
Range	1 to 254
Default	140
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

port-mtu *number*

Note:
The new value of this element takes effect when the router boots.

Synopsis	Port MTU setting
Context	bof auto-boot port-mtu *number*

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Tree	port-mtu
Range	512 to 9800
Units	bytes
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

timeout *number*

Note:
The new value of this element takes effect when the router boots.

Synopsis	ZTP timeout
Context	bof auto-boot timeout *number*
Tree	timeout
Description	This command configures the Zero Touch Provisioning timeout, which is the total time allowed for the ZTP process to execute successfully. If the ZTP process is unsuccessful (in the case of auto-boot using OSPF, if no OSPF adjacency is found), the node is first rebooted, then the ZTP process is retried.
Range	30 to 1440
Units	minutes
Introduced	22.7.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

auto-configure

Synopsis	Enter the **auto-configure** context
Context	bof auto-configure
Tree	auto-configure
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

ipv4

Synopsis	Enter the **ipv4** context
Context	bof auto-configure ipv4
Tree	ipv4

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Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

dhcp

Note:
The new value of this element takes effect when the router boots.

Synopsis	Enable the **dhcp** context
Context	bof auto-configure ipv4 dhcp
Tree	dhcp
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

client-id *(hex-string | string)*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Note:
The new value of this element takes effect when the router boots.

Synopsis	DHCP client ID
Context	bof auto-configure ipv4 dhcp client-id *(hex-string | string)*
Tree	client-id
String Length	3 to 256
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

include-user-class *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

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Note:
The new value of this element takes effect when the router boots.

Synopsis	Include user class information
Context	bof auto-configure ipv4 dhcp include-user-class *boolean*
Tree	include-user-class
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

timeout *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Note:
The new value of this element takes effect when the router boots.

Synopsis	DHCP timeout
Context	bof auto-configure ipv4 dhcp timeout *number*
Tree	timeout
Range	1 to 65535
Default	30
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

ipv6

Synopsis	Enter the **ipv6** context
Context	bof auto-configure ipv6
Tree	ipv6
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

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dhcp

Note:
The new value of this element takes effect when the router boots.

Synopsis	Enable the **dhcp** context
Context	bof auto-configure ipv6 dhcp
Tree	dhcp
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

client-id *(hex-string | string)*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Note:
The new value of this element takes effect when the router boots.

Synopsis	DHCP client ID
Context	bof auto-configure ipv6 dhcp client-id *(hex-string | string)*
Tree	client-id
String Length	3 to 250
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

client-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Note:
The new value of this element takes effect when the router boots.

Synopsis	DHCP client type
Context	bof auto-configure ipv6 dhcp client-type *keyword*
Tree	client-type

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Options	duid-enterprise, duid-link-local
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

include-user-class *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Note:
The new value of this element takes effect when the router boots.

Synopsis	Include user class information
Context	bof auto-configure ipv6 dhcp include-user-class *boolean*
Tree	include-user-class
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

timeout *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Note:
The new value of this element takes effect when the router boots.

Synopsis	DHCP timeout
Context	bof auto-configure ipv6 dhcp timeout *number*
Tree	timeout
Range	1 to 65535
Default	30
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

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configuration

Synopsis	Enter the **configuration** context
Context	bof configuration
Tree	configuration
Introduced	20.10.R1
Platforms	All

encrypt *boolean*

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Enable encryption of BOF configuration files
Context	bof configuration encrypt *boolean*
Tree	encrypt
Description	When configured to **true**, this command enables encryption of the BOF using AES256 and SHA256. When the BOF is encrypted on the compact flash, it is still reachable using the BOF interactive menu during node startup, and fields can be modified using the BOF interactive menu.
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

encryption-key *string*

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Secret key for encryption of configuration files
Context	bof configuration encryption-key *string*
Tree	encryption-key
Description	This command creates a key to be used by AES256 and SHA256 for configuration file encryption and hashing. This key is used for all configuration files (primary, secondary, and tertiary). After creating or deleting a key, save the configuration file with the current encryption key state.

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String Length	1 to 71
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Password for boot-time modification of boot options
Context	bof configuration password *string*
Tree	password
String Length	1 to 71
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

primary-location *string*

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Primary configuration location
Context	bof configuration primary-location *string*
Tree	primary-location
String Length	1 to 180
Introduced	20.10.R1
Platforms	All

secondary-location *string*

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Secondary configuration location
Context	bof configuration secondary-location *string*
Tree	secondary-location
String Length	1 to 180

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Introduced	20.10.R1
Platforms	All

tertiary-location *string*

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Tertiary configuration location
Context	bof configuration tertiary-location *string*
Tree	tertiary-location
String Length	1 to 180
Introduced	20.10.R1
Platforms	All

console

Synopsis	Enter the **console** context
Context	bof console
Tree	console
Introduced	20.10.R1
Platforms	All

speed *number*

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Console port speed
Context	bof console speed *number*
Tree	speed
Range	9600 | 19200 | 38400 | 57600 | 115200
Units	bps
Default	115200
Introduced	20.10.R1

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Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR

wait-time *number*

Note:
The new value of this element takes effect when the router boots.

Synopsis	Wait time for interrupt to change boot parameters
Context	bof console wait-time *number*
Tree	wait-time
Range	1 to 10
Units	seconds
Default	3
Introduced	20.10.R1
Platforms	All

dns

Synopsis	Enter the **dns** context
Context	bof dns
Tree	dns
Introduced	20.10.R1
Platforms	All

domain *string*

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	System DNS domain name for DNS address resolution
Context	bof dns domain *string*
Tree	domain
String Length	1 to 178
Introduced	20.10.R1
Platforms	All

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primary-server *(ipv4-address-no-zone | ipv6-address-no-zone)*

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Primary DNS server
Context	bof dns primary-server *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	primary-server
Introduced	20.10.R1
Platforms	All

secondary-server *(ipv4-address-no-zone | ipv6-address-no-zone)*

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Secondary DNS server
Context	bof dns secondary-server *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	secondary-server
Introduced	20.10.R1
Platforms	All

tertiary-server *(ipv4-address-no-zone | ipv6-address-no-zone)*

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Tertiary DNS server
Context	bof dns tertiary-server *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	tertiary-server
Introduced	20.10.R1
Platforms	All

image

Synopsis	Enter the **image** context
Context	bof image

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Tree	image
Introduced	20.10.R1
Platforms	All

primary-location *string*

Note:
The new value of this element takes effect when the router boots.

Synopsis	Primary image location
Context	bof image primary-location *string*
Tree	primary-location
String Length	1 to 180
Introduced	20.10.R1
Platforms	All

secondary-location *string*

Note:
The new value of this element takes effect when the router boots.

Synopsis	Secondary image location
Context	bof image secondary-location *string*
Tree	secondary-location
String Length	1 to 180
Introduced	20.10.R1
Platforms	All

tertiary-location *string*

Note:
The new value of this element takes effect when the router boots.

Synopsis	Tertiary image location
Context	bof image tertiary-location *string*
Tree	tertiary-location
String Length	1 to 180

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Introduced	20.10.R1
Platforms	All

li

Synopsis	Enter the **li** context
Context	bof li
Tree	li
Introduced	20.10.R1
Platforms	All

local-save *boolean*

Note:
The new value of this element takes effect when the router boots.

Synopsis	Save the LI configuration locally
Context	bof li local-save *boolean*
Tree	local-save
Introduced	20.10.R1
Platforms	All

separate *boolean*

Note:
The new value of this element takes effect when the router boots.

Synopsis	Separate access to the LI information
Context	bof li separate *boolean*
Tree	separate
Introduced	20.10.R1
Platforms	All

license

Synopsis	Enter the **license** context

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Context	bof license
Tree	license
Introduced	20.10.R1
Platforms	All

primary-location *string*

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Primary license file location
Context	bof license primary-location *string*
Tree	primary-location
String Length	1 to 180
Introduced	20.10.R1
Platforms	All

port [router-name] *string*

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the **port** list instance
Context	bof port *string*
Tree	port
Max. Instances	1
Introduced	20.10.R1
Platforms	All

[**router-name**] *string*

Synopsis	Administrative router name
Context	bof port *string*
Tree	port
String Length	1 to 64

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Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

autonegotiate *keyword*

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Auto-negotiate speed and duplex type on Ethernet port
Context	bof port *string* autonegotiate *keyword*
Tree	autonegotiate
Options	false, true
Default	true
Introduced	20.10.R1
Platforms	All

duplex *keyword*

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Duplex type for the Ethernet port
Context	bof port *string* duplex *keyword*
Tree	duplex
Options	full, half
Default	full
Introduced	20.10.R1
Platforms	All

speed *number*

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Speed of the Ethernet port

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Context	bof port *string* speed *number*
Tree	speed
Range	10 | 100 | 1000
Units	megabps
Default	100
Introduced	20.10.R1
Platforms	All

router [router-name] *string*

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the **router** list instance
Context	bof router *string*
Tree	router
Max. Instances	1
Introduced	20.10.R1
Platforms	All

[**router-name**] *string*

Synopsis	Administrative router name
Context	bof router *string*
Tree	router
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

interface [interface-name] *string*

Note:
The new value of this element takes effect when the candidate is committed.

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Synopsis	Enter the **interface** list instance
Context	bof router *string* interface *string*
Tree	interface
Max. Instances	1
Introduced	20.10.R1
Platforms	All

[**interface-name**] *string*

Synopsis	Router interface name
Context	bof router *string* interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

cpm [cpm-type] *keyword*

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the **cpm** list instance
Context	bof router *string* interface *string* cpm *keyword*
Tree	cpm
Introduced	20.10.R1
Platforms	All

[**cpm-type**] *keyword*

Synopsis	CPM type
Context	bof router *string* interface *string* cpm *keyword*
Tree	cpm
Options	active, standby, a, b, c, d
Notes	This element is part of a list key.

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Introduced	20.10.R1
Platforms	All

ipv4

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Enable the **ipv4** context
Context	bof router *string* interface *string* cpm *keyword* ipv4
Tree	ipv4
Introduced	20.10.R1
Platforms	All

ip-address *string*

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	IPv4 address assigned to the interface
Context	bof router *string* interface *string* cpm *keyword* ipv4 ip-address *string*
Tree	ip-address
Description	This command assigns an IP address to the management Ethernet port on a CPM. The active and standby IP addresses mut be on the same subnet.
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

prefix-length *number*

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	IPv4 address prefix length
Context	bof router *string* interface *string* cpm *keyword* ipv4 prefix-length *number*
Tree	prefix-length
Range	0 to 32

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Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

ipv6

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Enable the **ipv6** context
Context	bof router *string* interface *string* cpm *keyword* ipv6
Tree	ipv6
Introduced	20.10.R1
Platforms	All

ipv6-address *string*

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	IPv6 address assigned to the interface
Context	bof router *string* interface *string* cpm *keyword* ipv6 ipv6-address *string*
Tree	ipv6-address
Description	This command assigns an IP address to the management Ethernet port on a CPM. The active and standby IP addresses mut be on the same subnet.
Introduced	20.10.R1
Platforms	All

prefix-length *number*

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	IPv6 address prefix length
Context	bof router *string* interface *string* cpm *keyword* ipv6 prefix-length *number*
Tree	prefix-length
Range	0 to 128

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Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

ip-mtu *number*

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Interface IP MTU
Context	bof router *string* interface *string* ip-mtu *number*
Tree	ip-mtu
Description	This command configures the MTU for IP packets transmitted out the interface of the management router instance associated to the management port. The operational MTU for the port is set to the lesser of the values configured with this command and the management port MTU. If the interface supports IPv6 packets, the command value must be set to 1280 or higher.
Range	512 to 9786
Units	bytes
Introduced	20.10.R1
Platforms	All

static-routes

Synopsis	Enter the **static-routes** context
Context	bof router *string* static-routes
Tree	static-routes
Introduced	20.10.R1
Platforms	All

route [ip-prefix] *(ipv4-prefix* | *ipv6-prefix)*

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the **route** list instance

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Context	bof router *string* static-routes route *(ipv4-prefix | ipv6-prefix)*
Tree	route
Introduced	20.10.R1
Platforms	All

[**ip-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP prefix for the static route
Context	bof router *string* static-routes route *(ipv4-prefix | ipv6-prefix)*
Tree	route
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Next-hop IP address
Context	bof router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	next-hop
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

system

Synopsis	Enter the **system** context
Context	bof system
Tree	system

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Introduced	20.10.R1
Platforms	All

base-mac-address *string*

Note:
The new value of this element takes effect when the router boots.

Synopsis	Base system MAC address
Context	bof system base-mac-address *string*
Tree	base-mac-address
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS-20, 7950 XRS-20e, VSR

persistent-indices *boolean*

Note:
The new value of this element takes effect when the router boots.

Synopsis	Classic and mixed management mode persistent indices
Context	bof system persistent-indices *boolean*
Tree	persistent-indices
Introduced	20.10.R1
Platforms	All

profile *keyword*

Note:
The new value of this element takes effect when the router boots.

Synopsis	System capabilities profile
Context	bof system profile *keyword*
Tree	profile
Options	profile-a, profile-b
Introduced	20.10.R1
Platforms	All

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3.8 call-trace commands

```
configure
   –  call-trace
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  buffering boolean
      –  location keyword
         –  admin-state keyword
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  size-limit (number | keyword)
      –  max-files-number number
      –  primary-cf keyword
      –  trace-profile string
         –  applications
            –  connectivity-management boolean
            –  gx boolean
            –  gy boolean
            –  ludb boolean
            –  msap boolean
            –  nasreq boolean
            –  ppp-event boolean
            –  python boolean
            –  radius-acct boolean
            –  radius-auth boolean
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  description string
         –  events keyword
         –  output
            –  debug
            –  live
               –  fqdn string
               –  ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
               –  port number
               –  router-instance string
            –  local-storage
         –  size-limit number
         –  time-limit number
```


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3.8.1 call-trace command descriptions

call-trace

Synopsis	Enter the **call-trace** context
Context	**configure** call-trace
Tree	call-trace
Description	Commands in this context configure the attributes of the call trace debugging functionality.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

buffering *boolean*

Synopsis	Buffer messages until the trace key is known
Context	**configure** call-trace buffering *boolean*
Tree	buffering
Description	When configured to **true**, the router buffers initial messages for sessions where the trace key is not yet known, for example, a username for a PPP session. When the trace key, for example, a username, indicates a match for a traced session, the router sends the buffered messages immediately. If the key does not match a trace, the router discards the buffered messages. When configured to **false**, the router does not buffer any messages and therefore initial messages may not be traced.
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

location [location-type] *keyword*

Synopsis	Enter the **location** list instance
Context	**configure** call-trace location *keyword*
Tree	location
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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[**location-type**] *keyword*

Synopsis	Compact flash card to be used
Context	**configure** call-trace location *keyword*
Tree	location
Options	cf1, cf2
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of compact flash for log storage
Context	**configure** call-trace location *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

size-limit *(number | keyword)*

Synopsis	Maximum cumulative size of call trace files on the card
Context	**configure** call-trace location *keyword* size-limit *(number | keyword)*
Tree	size-limit
Range	1 to 65536
Options	unlimited
Default	1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-files-number *number*

Synopsis	Maximum number of files call trace can create
Context	**configure** call-trace max-files-number *number*

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Tree	max-files-number
Range	1 to 1024
Default	200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

primary-cf *keyword*

Synopsis	Primary CF card as local storage location
Context	**configure** call-trace primary-cf *keyword*
Tree	primary-cf
Options	cf1, cf2
Default	cf1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

trace-profile [name] *string*

Synopsis	Enter the **trace-profile** list instance
Context	**configure** call-trace trace-profile *string*
Tree	trace-profile
Description	Commands in this context configure the attributes of the call-trace profile list.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Call trace profile name
Context	**configure** call-trace trace-profile *string*
Tree	trace-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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applications

Synopsis	Enter the **applications** context
Context	**configure** call-trace trace-profile *string* applications
Tree	applications
Description	Commands in this context configure call trace attributes for the specified application.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

connectivity-management *boolean*

Synopsis	Trace messages used for connectivity protocols
Context	**configure** call-trace trace-profile *string* applications connectivity-management *boolean*
Tree	connectivity-management
Description	When configured to **true**, this command enables call trace for connectivity protocols, such as DHCP, ARP, and DHCPv6, and events related to connectivity management; for example, migrant or data-triggered host creation, idling, or session timeout. When configured to **false**, connectivity protocols are not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gx *boolean*

Synopsis	Trace Diameter messages used for the Gx application
Context	**configure** call-trace trace-profile *string* applications gx *boolean*
Tree	gx
Description	When configured to **true**, this command enables call trace for Diameter messages used for the Gx application. When configured to **false**, Diameter Gx messages are not traced.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gy *boolean*

Synopsis	Trace Diameter messages used for the Gy application

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Context	**configure** call-trace trace-profile *string* applications gy *boolean*
Tree	gy
Description	When configured to **true**, this command enables call trace for Diameter messages used for the Gy application. When configured to **false**, Diameter Gy messages are not traced.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ludb *boolean*

Synopsis	Trace local user database lookups
Context	**configure** call-trace trace-profile *string* applications ludb *boolean*
Tree	ludb
Description	When configured to **true**, this command enables call trace for Local User Data Base (LUDB) lookups. When configured to **false**, LUDB lookups are not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

msap *boolean*

Synopsis	Trace MSAP creation events
Context	**configure** call-trace trace-profile *string* applications msap *boolean*
Tree	msap
Description	When configured to **true**, this command enables tracing of Managed Service Access Point (MSAP) creation events. When configured to **false**, MSAP create events are not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nasreq *boolean*

Synopsis	Trace Diameter messages used for NASREQ application
Context	**configure** call-trace trace-profile *string* applications nasreq *boolean*

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Tree	nasreq
Description	When configured to **true**, this command enables call trace for Diameter messages used for the Diameter Network Access Server Requirements (NASREQ) application. When configured to **false**, Diameter NASREQ messages are not traced.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-event *boolean*

Synopsis	Allow tracing for PPP state machine related events
Context	**configure** call-trace trace-profile *string* applications ppp-event *boolean*
Tree	ppp-event
Description	When configured to **true**, events related to the PPP state machine are traced. This configuration may result in a large amount of event messages. When configured to **false**, tracing is not activated for PPP state machine events.
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python *boolean*

Synopsis	Trace Python script execution
Context	**configure** call-trace trace-profile *string* applications python *boolean*
Tree	python
Description	When configured to **true**, this command enables tracing of Python script execution. When configured to **false**, Python script execution is not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-acct *boolean*

Synopsis	Trace messages and events for RADIUS-based accounting
Context	**configure** call-trace trace-profile *string* applications radius-acct *boolean*
Tree	radius-acct

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Description	When configured to **true**, this command enables tracing of messages and events related to RADIUS-based accounting. When configured to **false**, RADIUS-based accounting messages and events are not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-auth *boolean*

Synopsis	Trace RADIUS authentication messages and events
Context	**configure** call-trace trace-profile *string* applications radius-auth *boolean*
Tree	radius-auth
Description	When configured to **true**, this command enables tracing of messages and events related to RADIUS authentication, including CoA and Disconnect. When configured to **false**, messages and events related to RADIUS authentication are not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** call-trace trace-profile *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

events *keyword*

Synopsis	Events to include in the captured trace
Context	**configure** call-trace trace-profile *string* events *keyword*
Tree	events
Options	public-only, all

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

output

Synopsis	Enter the **output** context
Context	**configure** call-trace trace-profile *string* output
Tree	output
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

debug

Synopsis	Enable output to the debug log
Context	**configure** call-trace trace-profile *string* output debug
Tree	debug
Notes	The following elements are part of a choice: **debug**, **live**, or **local-storage**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

live

Synopsis	Enable the **live** context
Context	**configure** call-trace trace-profile *string* output live
Tree	live
Notes	The following elements are part of a choice: **debug**, **live**, or **local-storage**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fqdn *string*

Synopsis	Fully qualified domain name of live output destination
Context	**configure** call-trace trace-profile *string* output live fqdn *string*
Tree	fqdn
String Length	1 to 255

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Notes	The following elements are part of a mandatory choice: **fqdn** or **ip-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the live output destination server
Context	**configure** call-trace trace-profile *string* output live ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-address
Notes	The following elements are part of a mandatory choice: **fqdn** or **ip-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

port *number*

Synopsis	TCP IP port
Context	**configure** call-trace trace-profile *string* output live port *number*
Tree	port
Range	1 to 65536
Default	29770
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Router instance or VPRN service name
Context	**configure** call-trace trace-profile *string* output live router-instance *string*
Tree	router-instance
Default	Base
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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local-storage

Synopsis	Destination for output
Context	**configure** call-trace trace-profile *string* output local-storage
Tree	local-storage
Notes	The following elements are part of a choice: **debug**, **live**, or **local-storage**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

size-limit *number*

Synopsis	Maximum data output for a single call trace operation
Context	**configure** call-trace trace-profile *string* size-limit *number*
Tree	size-limit
Range	1 to 1000
Units	megabytes
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time-limit *number*

Synopsis	Maximum time for a single call trace job
Context	**configure** call-trace trace-profile *string* time-limit *number*
Tree	time-limit
Range	1 to 604800
Units	seconds
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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3.9 card commands

```
configure
   –  card number
      –  admin-state keyword
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  card-type keyword
      –  fail-on-error boolean
      –  filter-profile keyword
      –  fp number
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  egress
            –  hs-fixed-high-thresh-delta number
            –  hs-pool-policy reference
            –  wred-queue-control
               –  admin-state keyword
               –  buffer-allocation decimal-number
               –  reserved-cbs decimal-number
               –  slope-policy reference
         –  fp-resource-policy reference
         –  hi-bw-mcast-src
            –  alarm boolean
            –  default-paths-only boolean
            –  group number
         –  ingress
            –  access
               –  queue-group reference instance-id number
                  –  accounting-policy reference
                  –  apply-groups reference
                  –  apply-groups-exclude reference
                  –  collect-stats boolean
                  –  description string
                  –  policer-control-policy
                     –  overrides
                        –  apply-groups reference
                        –  apply-groups-exclude reference
                        –  max-rate (number | keyword)
                        –  priority-mbs-thresholds
                           –  min-threshold-separation (number | keyword)
                           –  priority number
                              –  apply-groups reference
                              –  apply-groups-exclude reference
                              –  mbs-contribution (number | keyword)
                     –  policy-name reference
                  –  policer-overrides
                     –  policer reference
                        –  apply-groups reference
                        –  apply-groups-exclude reference
                        –  cbs (number | keyword)
                        –  mbs (number | keyword)
                        –  packet-byte-offset number
                        –  rate
                           –  cir (number | keyword)
                           –  pir (number | keyword)
                        –  stat-mode keyword
            –  dist-cpu-protection
               –  dynamic-enforcement-policer-pool number
            –  mcast-path-management
               –  admin-state keyword
```


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configure card fp ingress mcast-path-management bandwidth-policy

```
            - bandwidth-policy reference
         - network
            - pool string
               - amber-alarm-threshold number
               - apply-groups reference
               - apply-groups-exclude reference
               - red-alarm-threshold number
               - resv-cbs
                  - amber-alarm-action
                     - max number
                     - step number
                  - cbs number
               - slope-policy reference
            - queue-group reference instance-id number
               - accounting-policy reference
               - apply-groups reference
               - apply-groups-exclude reference
               - collect-stats boolean
               - description string
               - policer-control-policy
                  - overrides
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - max-rate (number | keyword)
                     - priority-mbs-thresholds
                        - min-threshold-separation (number | keyword)
                        - priority number
                           - apply-groups reference
                           - apply-groups-exclude reference
                           - mbs-contribution (number | keyword)
                  - policy-name reference
               - policer-overrides
                  - policer reference
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - cbs (number | keyword)
                     - mbs (number | keyword)
                     - packet-byte-offset number
                     - rate
                        - cir (number | keyword)
                        - pir (number | keyword)
                     - stat-mode keyword
            - queue-policy reference
         - policy-accounting
            - classes number
            - policers number
      - ingress-buffer-allocation decimal-number
      - init-extract-prio-mode keyword
      - stable-pool-sizing boolean
   - level keyword
   - mda number
      - access
         - apply-groups reference
         - apply-groups-exclude reference
         - egress
            - apply-groups reference
            - apply-groups-exclude reference
         - ingress
            - apply-groups reference
            - apply-groups-exclude reference
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - egress-xpl
```


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```
            - threshold number
            - window number
         - event keyword
            - action keyword
            - apply-groups reference
            - apply-groups-exclude reference
         - fail-on-error boolean
         - ingress-xpl
            - threshold number
            - window number
         - level keyword
         - mda-type keyword
         - network
            - apply-groups reference
            - apply-groups-exclude reference
            - egress
               - apply-groups reference
               - apply-groups-exclude reference
            - ingress
               - apply-groups reference
               - apply-groups-exclude reference
         - power-priority-level number
         - reset-on-recoverable-error boolean
         - sync-e keyword
         - upgrade number
            - apply-groups reference
            - apply-groups-exclude reference
            - path keyword
         - xconnect
            - mac number
               - apply-groups reference
               - apply-groups-exclude reference
               - description string
               - loopback number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - bandwidth number
                  - description string
      - power-save boolean
      - reset-on-recoverable-error boolean
      - upgrade number
         - apply-groups reference
         - apply-groups-exclude reference
         - path keyword
      - virtual-scheduler-adjustment
         - apply-groups reference
         - apply-groups-exclude reference
         - internal-scheduler-weight-mode keyword
         - interval
            - rate-calculation-minimum
               - fast-queue decimal-number
               - slow-queue decimal-number
            - scheduler-run-minimum decimal-number
            - task-scheduling decimal-number
         - slow-queue-threshold-rate number
      - xiom string
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - fail-on-error boolean
         - level keyword
         - mda number
            - admin-state keyword
            - apply-groups reference
```


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configure card xiom mda apply-groups-exclude

```
            - apply-groups-exclude reference
            - mda-type keyword
            - power-priority-level number
            - sync-e keyword
            - xconnect
               - mac number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - description string
                  - loopback number
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - bandwidth number
                     - description string
         - reset-on-recoverable-error boolean
         - upgrade number
            - apply-groups reference
            - apply-groups-exclude reference
            - path keyword
         - xiom-type keyword
```


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3.9.1 card command descriptions

card [slot-number] *number*

Synopsis	Enter the **card** list instance
Context	**configure** card *number*
Tree	card
Description	Commands in this context cover attributes for specific chassis slots for physical cards. Cards include IOM, IMM, and XCM. In SR OS, cards cover IOM, IMM, and XCM.
Introduced	16.0.R1
Platforms	All

[**slot-number**] *number*

Synopsis	Slot number within the chassis
Context	**configure** card *number*
Tree	card
Description	This command configures a unique value that identifies the card slot within a chassis in the system.
Range	1 to 20
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the card
Context	**configure** card *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

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card-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Card type
Context	**configure** card *number* card-type *keyword*
Tree	card-type
Description	This command adds an IOM, IMM, XCM to the device configuration for the slot. The card type can be pre-provisioned, meaning that the card does not need to be installed in the chassis. A card must be provisioned before any contained object can be configured: MDA, XIOM, XMA, MDA-s, connector, or port. A card can only be provisioned in a slot if the card type is allowed in the slot. An error message is generated if an attempt is made to provision a card type that is not allowed. If a card is inserted that does not match the configured card type for the slot, a log event and facility alarm is raised. The alarm is cleared when the correct card type is installed or the configuration is modified. A log event and facility alarm are raised if an administratively enabled card is removed from the chassis. The alarm is cleared when the correct card type is installed or the configuration is modified. A log event is issued when a card is removed that is administratively disabled. Because IMMs do not have the capability to install separate MDAs, the configuration of the MDAs is automatic. This configuration only includes the default options such as default buffer policies. Commands to manage the MDA remain in the MDA configuration context. Some card hardware can support two different firmware loads. One load includes the base Ethernet functionality, including 10G WAN mode, but does not include 1588 port-based timestamping. The second load includes the base Ethernet functionality and 1588 port-based timestamping, but does not include 10G WAN mode. These are identified as two card types that are the same, except for a “-ptp” suffix to indicate the second loadset. A hard reset of the card occurs when switching between the two provisioned types. An appropriate alarm is raised if a partial or complete card failure is detected. The alarm is cleared when the error condition ceases.
Options	xcm-x20, imm40-10gb-sfp, imm4-100gb-cxp, iom4-e, iom-a, imm-1pac-fp3, imm-2pac-fp3, iom4-e-hs, imm4-100gb-cfp4, iom-e, iom-v, iom4-e-b, iom-sar-hm, xcm2-x20, iom-1, xcm-14s, imm40-10gb-sfp-ptp, iom-ixr-r6, imm36-100g-qsfp28, imm48-sfp+2-qsfp28, iom5-e, xcm-7s, imm48-sfp++6-qsfp28, xcm-1s, xcm-2s, imm24-sfp++8-sfp28+2-qsfp28, iom-sar-hmc, imm14-10g-sfp++4-1g-tx, iom-ixr-r4, imm6-qsfpdd+48-sfp56, imm32-qsfp28+4-qsfpdd, i48-800g-qsfpdd-1x, imm36-qsfpdd, imm4-1g-tx+20-1g-sfp+6-10g-sfp+, iom-ixr-r6d, xcm2-7s, i24-800g-qsfpdd-1, imm36-800g-qsfpdd, xcm2-14s, i48-400g-qsfpdd-1, i80-200g-sfpdd+12-400g-qsfpdd-1, i40-200g-sfpdd+6-800g-qsfpdd-1, i80-200g-sfpdd+12-800g-qsfpdd-1x, xcm-2se, xcm-14s-b, xcm-7s-b, imm2-qsfpdd+2-qsfp28+24-sfp28, xcmc-2se

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Introduced	16.0.R1
Platforms	All

fail-on-error *boolean*

Synopsis	Set operational state of the card to Failed upon error
Context	**configure** card *number* fail-on-error *boolean*
Tree	fail-on-error
Description	When configured to **true**, this command controls the behavior of the card when any one of a specific set of card level errors is encountered in the system. When this command is set to **true**, and any one (or more) of the specific errors is detected, the operational state of the card is set to failed. This failed state persists until the **clear card** command is issued (reset) or the card is removed and reinserted (reseated). If the condition persists after reseating the card, contact Nokia support to investigate more. Nokia only recommends configuring this command to **true** when the network is designed to be able to route traffic around a failed card (redundant cards, nodes, or other paths exist). The list of specific errors includes the following: CHASSIS event ID# 2063 - tmnxEqCardPChipMemoryEvent CHASSIS event ID# 2076 - tmnxEqCardPChipCamEvent CHASSIS event ID# 2059 - tmnxEqCardPChipError (for ingress Ethernet only) CHASSIS event ID# 2098 - tmnxEqCardQChipBufMemoryEvent CHASSIS event ID# 2099 - tmnxEqCardQChipStatsMemoryEvent CHASSIS event ID# 2101 - tmnxEqCardQChipIntMemoryEvent CHASSIS event ID# 2103 - tmnxEqCardChipIfCellEvent On platforms with integrated CPM and IOM, IMM, or XCM, the node is rebooted if this command is set to **true** and one of the card level errors is encountered. The tmnx EqCardPChipError is only considered as a trigger for this command for ingress FCS errors (not egress FCS errors). **Note:** On the detection of the event or error in the system, the reporting of the event (logs) and the fail-on-error behavior of the card are independent. Log event control configuration determines whether the events are reported in logs (or SNMP traps, and so on) and the fail-on-error configuration determines the behavior of the card. This implies that the card can be configured to fail-on-error even if the events are suppressed (some may be suppressed in the system by default). To facilitate post-failure analysis, Nokia recommends reporting the specific events or errors and that **configure log log-events** be enabled when this command is set to **true**.
Default	false
Introduced	16.0.R1

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Platforms	All

filter-profile *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Filter profile for the card
Context	**configure** card *number* filter-profile *keyword*
Tree	filter-profile
Description	This command controls the resources allocated to ingress and egress IPv4 and IPv6 filters on a per-line card basis on the SR-a platform.
Options	none, profile-a
Default	none
Introduced	19.10.R1
Platforms	7750 SR-a

fp [fp-number] *number*

Synopsis	Enter the **fp** list instance
Context	**configure** card *number* fp *number*
Tree	fp
Description	Commands in this context configure forwarding plane (FP) specific options on the card.
Introduced	16.0.R1
Platforms	All

[**fp-number**] *number*

Synopsis	Forwarding plane within the card
Context	**configure** card *number* fp *number*
Tree	fp
Range	1 to 12
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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egress

Synopsis	Enter the **egress** context
Context	**configure** card *number* fp *number* egress
Tree	egress
Introduced	16.0.R1
Platforms	All

hs-fixed-high-thresh-delta *number*

Synopsis	High threshold delta on the forwarding plane
Context	**configure** card *number* fp *number* egress hs-fixed-high-thresh-delta *number*
Tree	hs-fixed-high-thresh-delta
Description	This command specifies the egress aggregate shaper high burst limit threshold delta for this HSQ IOM FP. An aggregate rate can be applied to each egress HSQ queue group, HS secondary shaper, and (for subscribers configured with HS SLA expanded mode) primary shaper that manages the maximum burst limit over a specified shaping rate. Each aggregate shaper supports two thresholds that are used in conjunction with the low burst class setting. The system uses the lowest value attainable for each low threshold aggregate burst limit without causing shaper under run conditions. The high burst limit threshold is determined by adding the configured value of this command to the aggregate low burst limit threshold value. An operator must set this configured value to at least two times the maximum frame size to prevent lower threshold class forwarding from also affecting the higher threshold classes when forwarding larger packet sizes. An insufficiently high threshold delta defeats the intended purpose of mapping classes to the higher threshold.
Range	0 to 65536
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-pool-policy *reference*

Synopsis	HS pool policy
Context	**configure** card *number* fp *number* egress hs-pool-policy *reference*
Tree	hs-pool-policy
Description	This command specifies the HS pool policy for the FP.

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An HS pool policy contains the required parameters to create and size root and mid-tier buffer pools on an HSQ IOM, and applies a slope policy to each. A single HS pool policy is supported per port FP.

This command is only applicable to the HSQ IOM (iom4-e-hs) and fails if configured on other card types.

Reference	**configure** qos hs-pool-policy *string*
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

wred-queue-control

Synopsis	Enter the **wred-queue-control** context
Context	**configure** card *number* fp *number* egress wred-queue-control
Tree	wred-queue-control
Description	Commands in this context configure the aggregate Weighted Random Early Detection (WRED) queue options for all WRED queues on an egress forwarding plane.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the WRED queue control function
Context	**configure** card *number* fp *number* egress wred-queue-control admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

buffer-allocation *decimal-number*

Synopsis	Buffer allocation for WRED queue buffer pools
Context	**configure** card *number* fp *number* egress wred-queue-control buffer-allocation *decimal-number*
Tree	buffer-allocation
Description	This command defines the percentage of buffers to set aside for WRED queue buffer pools.

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Range	0.01 to 99.99
Units	percent
Default	25.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

reserved-cbs *decimal-number*

Synopsis	Buffers for queues operating within CBS thresholds
Context	**configure** card *number* fp *number* egress wred-queue-control reserved-cbs *decimal-number*
Tree	reserved-cbs
Description	This command specifies the percentage of buffers within the WRED mega-pool to set aside for WRED queues operating within the configured CBS thresholds. The forwarding plane protects against WRED queue buffer starvation by setting aside a portion of the buffers within the WRED mega-pool. This threshold defines when a WRED queue requests buffers from the reserved portion of the WRED mega-pool and when it starts requesting buffers from the shared portion of the mega-pool. With proper oversubscription provisioning, a seldom active queue is not denied a buffer from the mega-pool when the shared portion of the mega-pool is congested.
Range	0.01 to 99.99
Units	percent
Default	25.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

slope-policy *reference*

Synopsis	Slope policy for the forwarding plane
Context	**configure** card *number* fp *number* egress wred-queue-control slope-policy *reference*
Tree	slope-policy
Reference	**configure** qos slope-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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fp-resource-policy *reference*

WARNING:
Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Resource policy to manage resources on the FP
Context	**configure** card *number* fp *number* fp-resource-policy *reference*
Tree	fp-resource-policy
Description	This command configures an FP resource policy used to manage resources on a forwarding plane that is FP4-based and later. The system creates a default policy that applies to all FP4 and later FPs. If an FP resource policy is removed from an FP, the system automatically applies the default policy to that FP. The system prevents the modification or deletion of the default policy, and the deletion of any user-created policy that is applied to an FP.
Reference	**configure** qos fp-resource-policy *string*
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

hi-bw-mcast-src

Synopsis	Enable the **hi-bw-mcast-src** context
Context	**configure** card *number* fp *number* hi-bw-mcast-src
Tree	hi-bw-mcast-src
Description	Commands in this context configure the attributes to designate the FP as a high-bandwidth IP multicast source, expecting the ingress traffic to include high-bandwidth IP multicast traffic. When configured, the system attempts to allocate a dedicated multicast switch fabric plane (MSFP) to the forwarding plane. When a group is specified, all FPs in the group share the same MSFP.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS

alarm *boolean*

Synopsis	Raise an alarm when multiple traffic taps share a plane
Context	**configure** card *number* fp *number* hi-bw-mcast-src alarm *boolean*

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Tree	alarm
Description	When configured to **true**, the router generates an event if the MDA must share an MSFP with another MDA in a different group. MDAs within the same group that share an MSFP do not generate an event. Additionally, if a failure occurs during normal operation or resources are removed, the system generates an event if it cannot maintain separation of MSFPs for the MDAs. When configured to **false**, the router does not generate events.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS

default-paths-only *boolean*

Synopsis	Allocate the default paths to dedicated MSFPs
Context	**configure** card *number* fp *number* hi-bw-mcast-src default-paths-only *boolean*
Tree	default-paths-only
Description	When configured to **true**, the system only attempts to allocate the two default paths (one high priority and one low priority) to dedicated MSFPs. When configured to **false**, the default path allocation is disabled.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS

group *number*

Synopsis	Logical MSFP group for the MDA
Context	**configure** card *number* fp *number* hi-bw-mcast-src group *number*
Tree	group
Description	This command specifies the logical MSFP group for the MDA. If a group is specified, all FPs in the group share the same MSFP.
Range	0 to 32
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS

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ingress

Synopsis	Enter the **ingress** context
Context	**configure** card *number* fp *number* ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

access

Synopsis	Enter the **access** context
Context	**configure** card *number* fp *number* ingress access
Tree	access
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue-group [queue-group-name] *reference* instance-id *number*

Synopsis	Enter the **queue-group** list instance
Context	**configure** card *number* fp *number* ingress access queue-group *reference* instance-id *number*
Tree	queue-group
Description	Commands in this context create a named queue group template on the ingress forwarding plane of an IOM or IMM.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**queue-group-name**] *reference*

Synopsis	Queue group name
Context	**configure** card *number* fp *number* ingress access queue-group *reference* instance-id *number*
Tree	queue-group
Reference	**configure** qos queue-group-templates ingress queue-group *string*
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

instance-id *number*

Synopsis	Instance ID
Context	**configure** card *number* fp *number* ingress access queue-group *reference* instance-id *number*
Tree	queue-group
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

accounting-policy *reference*

Synopsis	Accounting policy for the FP ingress queue group
Context	**configure** card *number* fp *number* ingress access queue-group *reference* instance-id *number* accounting-policy *reference*
Tree	accounting-policy
Description	This command configures an accounting policy for the FP ingress queue group. You can only apply accounting policies associated with service billing to SAPs. Only associate the accounting policy with one interface at a time.
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

collect-stats *boolean*

Synopsis	Collect statistics on FP ingress queue group
Context	**configure** card *number* fp *number* ingress access queue-group *reference* instance-id *number* collect-stats *boolean*
Tree	collect-stats
Description	When configured to **true**, the system collects accounting and statistical data for the queue group on the FP. When configured to **false**, the system still accumulates the statistics; however, the CPU does not obtain the results and write them to the billing file.

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If this command is set to **true** (after it had previously been set to **false**), the counters written to the billing file include the traffic collected when the command was set to **false**.

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

description *string*

Synopsis	Text description
Context	**configure** card *number* fp *number* ingress access queue-group *reference* instance-id *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policer-control-policy

Synopsis	Enter the **policer-control-policy** context
Context	**configure** card *number* fp *number* ingress access queue-group *reference* instance-id *number* policer-control-policy
Tree	policer-control-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis	Enable the **overrides** context
Context	**configure** card *number* fp *number* ingress access queue-group *reference* instance-id *number* policer-control-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate *(number | keyword)*

Synopsis	Maximum rate override

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Context **configure** card *number* fp *number* ingress access queue-group *reference* instance-id *number* policer-control-policy overrides max-rate *(number | keyword)*

Tree max-rate

Description This command defines the PIR leaky bucket decrement rate of the parent policer. Each time you apply the policer control policy to a SAP or subscriber instance a parent policer is created. Packets not discarded by the child policer associated with the SAP or subscriber instance are evaluated against the leaky bucket of the parent policer.

For each packet, the system first decrements the bucket by the correct amount based on the decrement rate to derive the current bucket depth. The system compares the current depth to one of two discard thresholds associated with the packet. The first discard threshold is applied if the Fair Information Rate (FIR) leaky bucket of the child policer is in the confirming state. The second discard threshold is applied if the FIR leaky bucket of the child policer is in the exceed state.

Only one of the two thresholds is applied per packet. If the current depth of the parent policer PIR bucket is less than the threshold value, the parent PIR bucket is in the conform state for that particular packet. If the depth is equal to or greater than the applied threshold, the bucket is in the violate state for the packet.

If the result is conform, the bucket depth is increased by the size of the packet (plus or minus the per-packet offset setting in the child policer) and the parent policer does not discard the packet. If the result is violate, the bucket depth is not increased and the parent policer discards the packet. When the parent policer discards a packet, the bucket depth increases (PIR, CIR, and FIR) in the parent policer are canceled. This prevents packets that the parent policer discards from consuming the PIR, CIR, and FIR bandwidth of the child policers.

Range 1 to 2000000000

Units kilobps

Options max

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis Enter the **priority-mbs-thresholds** context

Context **configure** card *number* fp *number* ingress access queue-group *reference* instance-id *number* policer-control-policy overrides priority-mbs-thresholds

Tree priority-mbs-thresholds

Description Commands in this context configure the derivative for the shared portion and fair portion for each priority level.

The system uses the shared portion and fair portion values to calculate the discard-unfair and discard-all MBS thresholds that enforce priority-sensitive rate-based discards within the root arbiter parent policer.

Introduced 16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-threshold-separation *(number | keyword)*

Synopsis	Minimum separation between any two active thresholds
Context	**configure** card *number* fp *number* ingress access queue-group *reference* instance-id *number* policer-control-policy overrides priority-mbs-thresholds min-threshold-separation *(number | keyword)*
Tree	min-threshold-separation
Description	This command configures the minimum separation between any two active thresholds in the parent policer.
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [level] *number*

Synopsis	Enter the **priority** list instance
Context	**configure** card *number* fp *number* ingress access queue-group *reference* instance-id *number* policer-control-policy overrides priority-mbs-thresholds priority *number*
Tree	priority
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**level**] *number*

Synopsis	Priority level, higher number is stricter
Context	**configure** card *number* fp *number* ingress access queue-group *reference* instance-id *number* policer-control-policy overrides priority-mbs-thresholds priority *number*
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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mbs-contribution *(number | keyword)*

Synopsis	MBS contribution size override
Context	**configure** card *number* fp *number* ingress access queue-group *reference* instance-id *number* policer-control-policy overrides priority-mbs-thresholds priority *number* mbs-contribution *(number | keyword)*
Tree	mbs-contribution
Description	This command specifies the packet burst capacity required at the parent policer for a specified priority level with at least one child, and where the total capacity also includes the capacity of all lower thresholds.
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	**configure** card *number* fp *number* ingress access queue-group *reference* instance-id *number* policer-control-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos policer-control-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policer-overrides

Synopsis	Enter the **policer-overrides** context
Context	**configure** card *number* fp *number* ingress access queue-group *reference* instance-id *number* policer-overrides
Tree	policer-overrides
Description	Commands in this context configure specific overrides to one or more policers created on the SAP through SAP ingress QoS policies.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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policer [policer-id] *reference*

Synopsis	Enter the **policer** list instance
Context	**configure** card *number* fp *number* ingress access queue-group *reference* instance-id *number* policer-overrides policer *reference*
Tree	policer
Description	Commands in this context create, modify, or delete a policer. Policers are created and used in a similar manner to queues. Unlike queues that have dedicated counters, policers allow various stat-mode settings that define the counters to be associated with the policer. Packet byte offset provides a policer with the ability to modify the size of each packet based on a defined number of bytes. All policers must be created within the QoS policies. After a policer is created, it cannot be deleted from the QoS policy unless all forwarding classes mapped to the policer are first moved to other policers or queues. The system allows a policer to be created on a SAP QoS policy regardless of the ability to support policers on objects where the policy is currently applied. The system only scans the current objects for policer support and sufficient resources to create the policer when a forwarding class is first mapped to the policer ID. If the policer cannot be created because one or more instances of the policy do not support policing or have insufficient resources to create the policer, the forwarding class mapping fails.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**policer-id**] *reference*

Synopsis	Policer ID
Context	**configure** card *number* fp *number* ingress access queue-group *reference* instance-id *number* policer-overrides policer *reference*
Tree	policer
Reference	**configure** qos queue-group-templates ingress queue-group *string* policer *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs *(number | keyword)*

Synopsis	CBS tolerance allowed by the policer
Context	**configure** card *number* fp *number* ingress access queue-group *reference* instance-id *number* policer-overrides policer *reference* cbs *(number | keyword)*

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Tree	cbs
Description	This command configures the CIR leaky bucket exceed threshold of the policer. If the forwarding rate of the policer is equal to or less than the defined CIR, the CIR bucket depth hovers around the 0 depth, with spikes up to the maximum packet size in the offered load. If the forwarding rate increases beyond the profiling rate, the threshold caps the amount of data allowed to be in-profile above the rate.
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs *(number | keyword)*

Synopsis	Maximum burst tolerance allowed by the policer
Context	**configure** card *number* fp *number* ingress access queue-group *reference* instance-id *number* policer-overrides policer *reference* mbs *(number | keyword)*
Tree	mbs
Description	This command configures the PIR leaky bucket violate threshold of the policer. Ingress, trusted in-profile packets and untrusted high priority packets use the high priority violate threshold and trusted out-of-profile. Untrusted low priority packets use the low priority violate threshold. If the offered rate of the policer is equal to or less than the defined rate, the PIR bucket depth hovers around the 0 depth, with spikes up to the maximum packet size in the offered load. If the offered rate increases beyond the metering rate, the threshold caps the amount of data allowed above the rate. The low priority violate threshold provides a smaller burst size for the lower priority traffic associated with the policer. Because all lower priority traffic is discarded at the lower burst tolerance size, the remaining burst tolerance is available for higher priority traffic.
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size adjustment

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Context	**configure** card *number* fp *number* ingress access queue-group *reference* instance-id *number* policer-overrides policer *reference* packet-byte-offset *number*
Tree	packet-byte-offset
Description	This command modifies the size of each packet handled by the policer by adding or subtracting a number of bytes. The actual packet size is not modified; only the size used to determine the bucket depth impact is changed. Use this command to add downstream frame encapsulation or remove portions of packet headers. When child policers add to or subtract from the packet size, the minimum threshold separation value of the parent policer must be modified by the same amount.
Range	-32 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis	Enter the **rate** context
Context	**configure** card *number* fp *number* ingress access queue-group *reference* instance-id *number* policer-overrides policer *reference* rate
Tree	rate
Description	Commands in this context configure the metering and optional profiling rates of the policer. The metering rate is used by the system to configure the PIR leaky bucket decrement rate and the profiling rate configures the CIR leaky bucket decrement rate. The decrement function empties the bucket; packets applied to the bucket attempt to fill it based on its packet size. If the bucket fills faster than the rate that it empties, the bucket depth eventually reaches its exceeded (CIR) or violate (PIR) threshold.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *(number | keyword)*

Synopsis	CIR for the policer
Context	**configure** card *number* fp *number* ingress access queue-group *reference* instance-id *number* policer-overrides policer *reference* rate cir *(number | keyword)*
Tree	cir
Description	This command overrides the default CIR rate of the policer. When the policer is first created, the profiling rate defaults to 0 kb/s.

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When **max** is configured, the maximum policer rate used is equal to the maximum capacity of the card that the policer is configured for. If the policer rate is set to a value larger than the maximum rate possible for the card, the CIR used is equivalent to maximum.

Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *(number | keyword)*

Synopsis	PIR for the policer
Context	**configure** card *number* fp *number* ingress access queue-group *reference* instance-id *number* policer-overrides policer *reference* rate pir *(number | keyword)*
Tree	pir
Description	This command configures the metering rate of the policer for the PIR leaky bucket. When the policer is first created, the metering rate defaults to max. When **max** is configured, the maximum policer rate used is equal to the maximum capacity of the card that the policer is configured for. If the policer rate is set to a value larger than the maximum rate possible for the card, the PIR used is equivalent to maximum.
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis	Stat mode for the policer
Context	**configure** card *number* fp *number* ingress access queue-group *reference* instance-id *number* policer-overrides policer *reference* stat-mode *keyword*
Tree	stat-mode
Description	This command specifies the forwarding plane counters that allow offered, output, and discard accounting to occur for the policer.

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Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

dist-cpu-protection

Synopsis	Enter the **dist-cpu-protection** context
Context	**configure** card *number* fp *number* ingress dist-cpu-protection
Tree	dist-cpu-protection
Description	Commands in this context configure the distributed CPU protection forwarding plane settings.
Introduced	21.2.R1
Platforms	All

dynamic-enforcement-policer-pool *number*

Synopsis	Number of policers reserved as enforcement policers use
Context	**configure** card *number* fp *number* ingress dist-cpu-protection dynamic-enforcement-policer-pool *number*
Tree	dynamic-enforcement-policer-pool
Description	This command reserves a set of policers for use as dynamic enforcement policers for the Distributed CPU Protection (DCP) feature. Policers are allocated from this pool and instantiated as per-object per-protocol dynamic enforcement policers after a local monitor is triggered for an object, such as a SAP or network interface. A change to this configured value automatically clears the high water mark, timestamp, and failed allocation count. If the command is configured to a value below the currently used or allocated number, all dynamic policers are returned to the free pool (and traffic returns to the local monitors).
Range	1000 to 32000
Introduced	21.2.R1
Platforms	All

mcast-path-management

Synopsis	Enter the **mcast-path-management** context

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Context	**configure** card *number* fp *number* ingress mcast-path-management
Tree	mcast-path-management
Description	Commands in this context configure the IOM ingress multicast path management forwarding plane settings.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis	Administrative state of multicast path management
Context	**configure** card *number* fp *number* ingress mcast-path-management admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

bandwidth-policy *reference*

Synopsis	Bandwidth policy for ingress multicast path management
Context	**configure** card *number* fp *number* ingress mcast-path-management bandwidth-policy *reference*
Tree	bandwidth-policy
Description	This command specifies the bandwidth policy associated with the forwarding plane. The bandwidth policy defines the dynamic rate table and the multicast paths bandwidth and queuing parameters. If a bandwidth policy is not explicitly associated with a forwarding plane, the default bandwidth policy is used with ingress multicast path management.
Reference	**configure** multicast-management bandwidth-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

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network

Synopsis	Enter the **network** context
Context	**configure** card *number* fp *number* ingress network
Tree	network
Description	Commands in this context configure the IOM ingress network forwarding plane settings.
Introduced	16.0.R1
Platforms	All

pool [name] *string*

Synopsis	Enter the **pool** list instance
Context	**configure** card *number* fp *number* ingress network pool *string*
Tree	pool
Description	Commands in this context configure the list of forwarding plane ingress network pool settings.
Introduced	19.5.R1
Platforms	All

[**name**] *string*

Synopsis	Network ingress pool name for the FP
Context	**configure** card *number* fp *number* ingress network pool *string*
Tree	pool
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

amber-alarm-threshold *number*

Synopsis	Amber alarm threshold allowed on oversubscription
Context	**configure** card *number* fp *number* ingress network pool *string* amber-alarm-threshold *number*
Tree	amber-alarm-threshold
Description	This command configures the threshold for the amber alarm on oversubscription.

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If both amber and red alarm thresholds are configured, the amber alarm threshold must be equal to or less than the red alarm threshold.

Range	1 to 1000
Units	percent
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

red-alarm-threshold *number*

Synopsis	Red alarm threshold allowed on oversubscription
Context	**configure** card *number* fp *number* ingress network pool *string* red-alarm-threshold *number*
Tree	red-alarm-threshold
Description	This command configures the threshold for the red alarm on oversubscription. If both amber and red alarm thresholds are configured, the red alarm threshold must be equal to or exceed the amber alarm threshold.
Range	1 to 1000
Units	percent
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

resv-cbs

Synopsis	Enter the **resv-cbs** context
Context	**configure** card *number* fp *number* ingress network pool *string* resv-cbs
Tree	resv-cbs
Description	Commands in this context specify the pool buffer settings. The commands do not set aside buffers within the buffer pool for CBS reservation. The CBS value per queue only determines the point at which enqueuing packets are subject to a RED slope. CBS oversubscription can result in a queue operating within its CBS configuration and still being unable to enqueue a packet due to unavailable buffers.
Introduced	19.5.R1
Platforms	All

amber-alarm-action

Synopsis	Enter the **amber-alarm-action** context

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Context	**configure** card *number* fp *number* ingress network pool *string* resv-cbs amber-alarm-action
Tree	amber-alarm-action
Description	Commands in this context specify settings for the reserved Committed Burst Size (CBS) and step change when the amber alert threshold is exceeded. The reserved CBS defines the amount of buffer space within the pool that is not considered shared.
Introduced	19.5.R1
Platforms	All

max *number*

Synopsis	Maximum reserved CBS size of the pool
Context	**configure** card *number* fp *number* ingress network pool *string* resv-cbs amber-alarm-action max *number*
Tree	max
Description	This command configures the maximum reserved CBS size of the pool. To enable adaptive CBS sizing, this command and the **step** command must be configured. The value for this command must not be more than the **configure card fp ingress network pool resv-cbs cbs** command. When the **configure card fp ingress network pool resv-cbs cbs** command is set to a value of zero (0), adaptive CBS sizing is disabled.
Range	1 to 100
Units	percent
Introduced	19.5.R1
Platforms	All

step *number*

Synopsis	Step-size percentage for reserved CBS size of the pool
Context	**configure** card *number* fp *number* ingress network pool *string* resv-cbs amber-alarm-action step *number*
Tree	step
Description	This command configures the step-size percentage for the reserved CBS size of the pool. To enable adaptive CBS sizing, this command and the **max** command must be configured.

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When the **configure card fp ingress network pool resv-cbs cbs** command is set to a value of zero (0), adaptive CBS sizing is disabled.

Range	1 to 100
Units	percent
Introduced	19.5.R1
Platforms	All

cbs *number*

Synopsis	Pool size reserved for CBS
Context	**configure** card *number* fp *number* ingress network pool *string* resv-cbs cbs *number*
Tree	cbs
Description	This command configures the percentage of pool size reserved for CBS. For network, the default value is computed as the sum of the CBS request by the entities using the pool. For access, the default value is 30%.
Range	0 to 100
Units	percent
Introduced	19.5.R1
Platforms	All

slope-policy *reference*

Synopsis	Slope policy
Context	**configure** card *number* fp *number* ingress network pool *string* slope-policy *reference*
Tree	slope-policy
Description	This command specifies the slope policy that defines the high and low priority RED slope parameters and the time average factor.
Reference	**configure** qos slope-policy *string*
Introduced	19.5.R1
Platforms	All

queue-group [queue-group-name] *reference* instance-id *number*

Synopsis	Enter the **queue-group** list instance
Context	**configure** card *number* fp *number* ingress network queue-group *reference* instance-id *number*

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Tree	queue-group
Description	Commands in this context configure IOM ingress network forwarding plane queue-group settings.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**queue-group-name**] *reference*

Synopsis	Queue group name
Context	**configure** card *number* fp *number* ingress network queue-group *reference* instance-id *number*
Tree	queue-group
Reference	**configure** qos queue-group-templates ingress queue-group *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

instance-id *number*

Synopsis	Instance ID
Context	**configure** card *number* fp *number* ingress network queue-group *reference* instance-id *number*
Tree	queue-group
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

accounting-policy *reference*

Synopsis	Accounting policy for the FP ingress queue group
Context	**configure** card *number* fp *number* ingress network queue-group *reference* instance-id *number* accounting-policy *reference*
Tree	accounting-policy

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Description	This command configures an accounting policy for the FP ingress queue group. You can only apply accounting policies associated with service billing to SAPs. Only associate the accounting policy with one interface at a time.
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

collect-stats *boolean*

Synopsis	Collect statistics on FP ingress queue group
Context	**configure** card *number* fp *number* ingress network queue-group *reference* instance-id *number* collect-stats *boolean*
Tree	collect-stats
Description	When configured to **true**, the system collects accounting and statistical data for the queue group on the FP. When configured to **false**, the system still accumulates the statistics; however, the CPU does not obtain the results and write them to the billing file. If this command is set to **true** (after it had previously been set to **false**), the counters written to the billing file include the traffic collected when the command was set to **false**.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

description *string*

Synopsis	Text description
Context	**configure** card *number* fp *number* ingress network queue-group *reference* instance-id *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policer-control-policy

Synopsis	Enter the **policer-control-policy** context

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Context	**configure** card *number* fp *number* ingress network queue-group *reference* instance-id *number* policer-control-policy
Tree	policer-control-policy
Description	Commands in this context configure the IOM ingress network forwarding plane queue-group policer control policy settings.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis	Enable the **overrides** context
Context	**configure** card *number* fp *number* ingress network queue-group *reference* instance-id *number* policer-control-policy overrides
Tree	overrides
Description	Commands in this context configure the IOM ingress network forwarding plane queue-group policer control policy override settings.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate *(number | keyword)*

Synopsis	Maximum rate override
Context	**configure** card *number* fp *number* ingress network queue-group *reference* instance-id *number* policer-control-policy overrides max-rate *(number | keyword)*
Tree	max-rate
Description	This command defines the PIR leaky bucket decrement rate of the parent policer. Each time you apply the policer control policy to a SAP or subscriber instance a parent policer is created. Packets not discarded by the child policer associated with the SAP or subscriber instance are evaluated against the leaky bucket of the parent policer. For each packet, the system first decrements the bucket by the correct amount based on the decrement rate to derive the current bucket depth. The system compares the current depth to one of two discard thresholds associated with the packet. The first discard threshold is applied if the Fair Information Rate (FIR) leaky bucket of the child policer is in the confirming state. The second discard threshold is applied if the FIR leaky bucket of the child policer is in the exceed state. Only one of the two thresholds is applied per packet. If the current depth of the parent policer PIR bucket is less than the threshold value, the parent PIR bucket is in the conform state for that particular packet. If the depth is equal to or greater than the applied threshold, the bucket is in the violate state for the packet.

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If the result is conform, the bucket depth is increased by the size of the packet (plus or minus the per-packet offset setting in the child policer) and the parent policer does not discard the packet. If the result is violate, the bucket depth is not increased and the parent policer discards the packet. When the parent policer discards a packet, the bucket depth increases (PIR, CIR, and FIR) in the parent policer are canceled. This prevents packets that the parent policer discards from consuming the PIR, CIR, and FIR bandwidth of the child policers.

Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis	Enter the **priority-mbs-thresholds** context
Context	**configure** card *number* fp *number* ingress network queue-group *reference* instance-id *number* policer-control-policy overrides priority-mbs-thresholds
Tree	priority-mbs-thresholds
Description	Commands in this context configure settings to derive the shared portion and fair portion for each priority level. The system uses the shared portion and fair portion values to calculate the discard-unfair and discard-all MBS thresholds that enforce priority-sensitive rate-based discards within the root arbiter parent policer.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-threshold-separation *(number | keyword)*

Synopsis	Minimum separation between any two active thresholds
Context	**configure** card *number* fp *number* ingress network queue-group *reference* instance-id *number* policer-control-policy overrides priority-mbs-thresholds min-threshold-separation *(number | keyword)*
Tree	min-threshold-separation
Description	This command configures the minimum separation between any two active thresholds in the parent policer.
Range	0 to 16777216
Units	bytes
Options	auto

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [level] *number*

Synopsis	Enter the **priority** list instance
Context	**configure** card *number* fp *number* ingress network queue-group *reference* instance-id *number* policer-control-policy overrides priority-mbs-thresholds priority *number*
Tree	priority
Description	Commands in this context configure the list of priority MBS threshold priority settings for IOM ingress network forwarding plane queue-group policer control policy overrides.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**level**] *number*

Synopsis	Priority level, higher number is stricter
Context	**configure** card *number* fp *number* ingress network queue-group *reference* instance-id *number* policer-control-policy overrides priority-mbs-thresholds priority *number*
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution *(number | keyword)*

Synopsis	MBS contribution size override
Context	**configure** card *number* fp *number* ingress network queue-group *reference* instance-id *number* policer-control-policy overrides priority-mbs-thresholds priority *number* mbs-contribution *(number | keyword)*
Tree	mbs-contribution
Description	This command specifies the packet burst capacity required at the parent policer for a specified priority level with at least one child, and where the total capacity also includes the capacity of all lower thresholds.
Range	0 to 16777216
Units	bytes

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Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	**configure** card *number* fp *number* ingress network queue-group *reference* instance-id *number* policer-control-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos policer-control-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policer-overrides

Synopsis	Enter the **policer-overrides** context
Context	**configure** card *number* fp *number* ingress network queue-group *reference* instance-id *number* policer-overrides
Tree	policer-overrides
Description	Commands in this context configure the policer overrides for the IOM ingress network forwarding plane queue-groups.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policer [policer-id] *reference*

Synopsis	Enter the **policer** list instance
Context	**configure** card *number* fp *number* ingress network queue-group *reference* instance-id *number* policer-overrides policer *reference*
Tree	policer
Description	Commands in this context configure the list of policer override parameters for IOM ingress network forwarding plane queue-groups.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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[**policer-id**] *reference*

Synopsis	Policer ID
Context	**configure** card *number* fp *number* ingress network queue-group *reference* instance-id *number* policer-overrides policer *reference*
Tree	policer
Reference	**configure** qos queue-group-templates ingress queue-group *string* policer *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs *(number | keyword)*

Synopsis	CBS tolerance allowed by the policer
Context	**configure** card *number* fp *number* ingress network queue-group *reference* instance-id *number* policer-overrides policer *reference* cbs *(number | keyword)*
Tree	cbs
Description	This command configures the CIR leaky bucket exceed threshold of the policer. If the forwarding rate of the policer is equal to or less than the defined CIR, the CIR bucket depth hovers around the 0 depth, with spikes up to the maximum packet size in the offered load. If the forwarding rate increases beyond the profiling rate, the threshold caps the amount of data allowed to be in-profile above the rate.
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs *(number | keyword)*

Synopsis	Maximum burst tolerance allowed by the policer
Context	**configure** card *number* fp *number* ingress network queue-group *reference* instance-id *number* policer-overrides policer *reference* mbs *(number | keyword)*
Tree	mbs
Description	This command configures the PIR leaky bucket violate threshold of the policer. Ingress, trusted in-profile packets and untrusted high priority packets use the high priority violate threshold and trusted out-of-profile. Untrusted low priority packets use the low priority violate threshold.

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If the offered rate of the policer is equal to or less than the defined rate, the PIR bucket depth hovers around the 0 depth, with spikes up to the maximum packet size in the offered load. If the offered rate increases beyond the metering rate, the threshold caps the amount of data allowed above the rate.

The low priority violate threshold provides a smaller burst size for the lower priority traffic associated with the policer. Because all lower priority traffic is discarded at the lower burst tolerance size, the remaining burst tolerance is available for higher priority traffic.

Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size adjustment
Context	**configure** card *number* fp *number* ingress network queue-group *reference* instance-id *number* policer-overrides policer *reference* packet-byte-offset *number*
Tree	packet-byte-offset
Description	This command modifies the size of each packet handled by the policer by adding or subtracting a number of bytes. The actual packet size is not modified; only the size used to determine the bucket depth impact is changed. Use this command to add downstream frame encapsulation or remove portions of packet headers. When child policers add to or subtract from the packet size, the minimum threshold separation value of the parent policer must be modified by the same amount.
Range	-32 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis	Enter the **rate** context
Context	**configure** card *number* fp *number* ingress network queue-group *reference* instance-id *number* policer-overrides policer *reference* rate
Tree	rate
Description	Commands in this context configure the metering and optional profiling rates of the policer.

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The metering rate is used by the system to configure the PIR leaky bucket decrement rate and the profiling rate configures the CIR leaky bucket decrement rate. The decrement function empties the bucket; packets applied to the bucket attempt to fill it based on its packet size. If the bucket fills faster than the rate that it empties, the bucket depth eventually reaches its exceeded (CIR) or violate (PIR) threshold.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *(number | keyword)*

Synopsis CIR for the policer

Context **configure** card *number* fp *number* ingress network queue-group *reference* instance-id *number* policer-overrides policer *reference* rate cir *(number | keyword)*

Tree cir

Description This command overrides the default CIR rate of the policer.

When the policer is first created, the profiling rate defaults to 0 kb/s.

When **max** is configured, the maximum policer rate used is equal to the maximum capacity of the card that the policer is configured for. If the policer rate is set to a value larger than the maximum rate possible for the card, the CIR used is equivalent to maximum.

Range 0 to 2000000000

Units kilobps

Options max

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *(number | keyword)*

Synopsis PIR for the policer

Context **configure** card *number* fp *number* ingress network queue-group *reference* instance-id *number* policer-overrides policer *reference* rate pir *(number | keyword)*

Tree pir

Description This command configures the metering rate of the policer for the PIR leaky bucket.

When the policer is first created, the metering rate defaults to max.

When **max** is configured, the maximum policer rate used is equal to the maximum capacity of the card that the policer is configured for. If the policer rate is set to a value larger than the maximum rate possible for the card, the PIR used is equivalent to maximum.

Range 1 to 2000000000

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Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis	Stat mode for the policer
Context	**configure** card *number* fp *number* ingress network queue-group *reference* instance-id *number* policer-overrides policer *reference* stat-mode *keyword*
Tree	stat-mode
Description	This command specifies the forwarding plane counters that allow offered, output, and discard accounting to occur for the policer.
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue-policy *reference*

Synopsis	Network queue policy
Context	**configure** card *number* fp *number* ingress network queue-policy *reference*
Tree	queue-policy
Reference	**configure** qos network-queue *string*
Introduced	19.5.R1
Platforms	All

policy-accounting

Synopsis	Enter the **policy-accounting** context
Context	**configure** card *number* fp *number* ingress policy-accounting
Tree	policy-accounting
Description	Commands in this context configure policy accounting. Use policy accounting to collect statistics about the amount of traffic matching particular routes or to police traffic associated with certain routes as destinations of the traffic.

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Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

classes *number*

Synopsis	Number of accounting classes for the forwarding plane
Context	**configure** card *number* fp *number* ingress policy-accounting classes *number*
Tree	classes
Description	This command specifies the maximum number of source and destination classes that can be instantiated for accounting purposes on the interfaces of a specific card or FP. When unconfigured, resources are not reserved for source or destination classes.
Range	1000 to 128000
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

policers *number*

Synopsis	Number of policer resources for policy accounting
Context	**configure** card *number* fp *number* ingress policy-accounting policers *number*
Tree	policers
Range	1 to 64000
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

ingress-buffer-allocation *decimal-number*

Synopsis	Ingress buffer pool allocation for the forwarding plane
Context	**configure** card *number* fp *number* ingress-buffer-allocation *decimal-number*
Tree	ingress-buffer-allocation
Description	This command configures an ingress buffer allocation for the FP. Ingress buffer allocation applies to user-accessible buffers (total buffers less those reserved for system use). The ingress buffer allocation determines how much of the user-accessible buffers are available for ingress purposes. The remaining buffers are available for egress purposes.
Range	20.00 to 80.00
Units	percent

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Default	50.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

init-extract-prio-mode *keyword*

Synopsis	Initial drop priority mode of extracted traffic
Context	**configure** card *number* fp *number* init-extract-prio-mode *keyword*
Tree	init-extract-prio-mode
Description	This command specifies the scheme to select the initial drop priority of extracted control plane traffic. The initial drop priority of extracted packets can be either low or high priority. The drop priority can be altered subsequently by mechanisms such as CPU protection. High priority traffic receives preferential treatment in control plane congestion situations over low priority traffic.
Options	uniform, l3-classify
Default	uniform
Introduced	16.0.R1
Platforms	All

stable-pool-sizing *boolean*

Synopsis	Enable stable pool sizing for the forwarding plane
Context	**configure** card *number* fp *number* stable-pool-sizing *boolean*
Tree	stable-pool-sizing
Description	When configured to **true**, the router provides a stable buffer pool allocation environment for all default port buffer pools on the forwarding plane. This stable environment is provided at the expense of optimal buffer allocation between the various port buffer pools. When configured to **false**, the router disables stable pool sizing on the forwarding plane. Existing buffer pools are resized according to normal pool sizing behavior.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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level *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	License level of the card
Context	**configure** card *number* level *keyword*
Tree	level
Description	This command configures the license level of the card. New generations of cards include variants controlled by hardware and software licensing. For these cards, the license level must be provisioned in addition to the card type. A card cannot become operational unless the provisioned license level matches the license level of the card installed into the slot.The set of license levels varies by card type. The provisioned level controls aspects related to connector provisioning and the consumption of hardware egress user queues and egress policers. Changes to the provisioned license level may be blocked if configuration exists that would not be permitted with the new target license level. If the license level is not specified, the level is set to the highest license level for that card.
Options	unrestricted, he, er, cr, he1200g+, er1200g+, cr1200g+, he400g, er400g, cr400g, he400g+, er400g+, cr400g+, he800g+, er800g+, cr800g+, he4800g+, er4800g+, cr4800g+, he4800g, er4800g, cr4800g, he2400g+, er2400g+, cr2400g+, he2400g, er2400g, cr2400g, he9600g, er9600g, cr9600g, he14400g, er14400g, cr14400g, he14400g+, er14400g+, cr14400g+, he2800g+, er2800g+, cr2800g+, he6000g+, er6000g+, cr6000g+, he18000g+, er18000g+, cr18000g+, he19200g, er19200g, cr19200g
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1se

mda [mda-slot] *number*

Synopsis	Enter the **mda** list instance
Context	**configure** card *number* mda *number*
Tree	mda
Description	Commands in this context cover attributes for specific MDA and XMA.
Introduced	16.0.R1
Platforms	All

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[**mda-slot**] *number*

Synopsis	MDA or XMA slot
Context	**configure** card *number* mda *number*
Tree	mda
Range	1 to 6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

access

Synopsis	Enter the **access** context
Context	**configure** card *number* mda *number* access
Tree	access
Description	Commands in this context configure egress and ingress pool policy parameters. Access egress and ingress pools are only allocated on channelized MDAs.
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** card *number* mda *number* access egress
Tree	egress
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the **ingress** context
Context	**configure** card *number* mda *number* access ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the MDA
Context	**configure** card *number* mda *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

egress-xpl

Synopsis	Enter the **egress-xpl** context
Context	**configure** card *number* mda *number* egress-xpl
Tree	egress-xpl
Description	Commands in this context specify settings for the fail-on-error feature.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

threshold *number*

Synopsis	Threshold value for XPL errors
Context	**configure** card *number* mda *number* egress-xpl threshold *number*
Tree	threshold
Description	This command configures the threshold for XPL errors. If the number of XPL errors exceeds the threshold value defined by the **window** *value* command, the MDA is placed in the failed state.
Range	1 to 1000000
Units	xpl errors
Default	1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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window *number*

Synopsis	Time interval to measure XPL error frequency
Context	**configure** card *number* mda *number* egress-xpl window *number*
Tree	window
Description	This command configures the time interval used to measure the frequency of XPL errors for the fail-on-error feature. If the number of XPL errors exceeds the threshold value in defined by this command, the MDA is placed in the Failed state.
Range	1 to 1440
Units	minutes
Default	60
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

event [type] *keyword*

Synopsis	Enter the **event** list instance
Context	**configure** card *number* mda *number* event *keyword*
Tree	event
Description	Commands in this context allow the user to control the action taken when a specific hardware error event is raised against the target MDA. If no event action has been created for a specific event type, the management plane of the router ignores the hardware errors related to that event type.
Introduced	19.7.R1
Platforms	All

[**type**] *keyword*

Synopsis	MDA event type being monitored
Context	**configure** card *number* mda *number* event *keyword*
Tree	event
Description	This command configures the type of event to be acted upon. • soft-error — Defines the action to take when soft errors are detected on the MDA. • internal-frame-loss — Provides system detected frame loss in the traffic transiting the MDA. • memory-error — Provides the user options to handle MDA memory error events on MDAs. This feature is supported on FP2- and FP3-based Ethernet MDAs and IMMs.

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- data-link-error — Provides the user options to handle datapath link errors on an MDA.

Options soft-error, internal-frame-loss, memory-error, datapath-link-error

Notes This element is part of a list key.

Introduced 19.7.R1

Platforms All

action *keyword*

Synopsis Action when a specific hardware error event is raised

Context **configure** card *number* mda *number* event *keyword* action *keyword*

Tree action

Description This command defines the action taken when a specific hardware error event is detected on the target MDA.

When no event action is specified for an event type, the hardware errors related to the event type are ignored by the management plane of the router.

Actions include the following:

- log-only — Pass the log event to log management. No other action is taken.
- reset-mda — Reset the MDA.
- fail-mda — Set the operational state of the MDA to Failed. This Failed state persists until the clear mda command is issued (reset) or the MDA is removed and reinserted (re-seated).

Options none, log-only, reset, fail

Introduced 19.7.R1

Platforms All

fail-on-error *boolean*

Synopsis Set operational state to Failed if an error is detected

Context **configure** card *number* mda *number* fail-on-error *boolean*

Tree fail-on-error

Description When configured to **true**, the fail-on-error feature is enabled on the MDA. When a defined rate of egress or ingress XPL errors occur on an MDA within a specified time interval, the MDA is placed in the Failed state. This can force an APS switchover or traffic to be rerouted.

The purpose of this feature is to avoid situations where traffic is forced to use a physical link that suffers from errors but is still technically operational. The feature uses values configured in the **configure card mda egress-xpl** and **configure card mda ingress-xpl** contexts.

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	See "Fail-on-error overview" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR Troubleshooting Guide* for more information.
Default	false
Introduced	16.0.R1
Platforms	All

ingress-xpl

Synopsis	Enter the **ingress-xpl** context
Context	**configure** card *number* mda *number* ingress-xpl
Tree	ingress-xpl
Description	Commands in this context specify settings for ingress XPL error occurrences.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

threshold *number*

Synopsis	Threshold value for XPL errors
Context	**configure** card *number* mda *number* ingress-xpl threshold *number*
Tree	threshold
Description	This command configures the threshold for XPL errors. If the number of XPL errors exceeds the threshold value defined by the **window** *value* command, the MDA is placed in the failed state.
Range	1 to 1000000
Units	xpl errors
Default	1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

window *number*

Synopsis	Time interval to measure XPL error frequency
Context	**configure** card *number* mda *number* ingress-xpl window *number*
Tree	window

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Description	This command configures the time interval used to measure the frequency of XPL errors for the fail-on-error feature. If the number of XPL errors exceeds the threshold value in defined by this command, the MDA is placed in the Failed state.
Range	1 to 1440
Units	minutes
Default	60
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

level *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MDA card level
Context	**configure** card *number* mda *number* level *keyword*
Tree	level
Options	unrestricted, he2400g, he1600g, he1200g, er2400g, er1600g, er1200g, cr2400g, cr1600g, cr1200g, he2400g+, er2400g+, cr2400g+, he3600g, er3600g, cr3600g, he3600gdd, er3600gdd, cr3600gdd, he4800g, er4800g, cr4800g, he4800g+, er4800g+, cr4800g+, he600g, er600g, cr600g, he1200g+, er1200g+, cr1200g+, he2400g+4t, er2400g+4t, cr2400g+4t, he9600g, er9600g, cr9600g, he9600g+, er9600g+, cr9600g+, he14400g, er14400g, cr14400g, he14400g+, er14400g+, cr14400g+, he12000g+, er12000g+, cr12000g+, he18000g+, er18000g+, cr18000g+
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mda-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MDA type for the slot
Context	**configure** card *number* mda *number* mda-type *keyword*
Tree	mda-type
Description	This command provisions a specific MDA type to the device configuration for the slot. The MDA can be pre-provisioned and an MDA must be provisioned before connectors or ports can be configured.

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A maximum of two MDAs can be provisioned on an IOM or XCM. XMAs are provisioned using MDA commands.

A medium severity alarm is generated if an MDA is inserted that does not match the MDA type configured for the slot. This alarm is cleared when the correct MDA is inserted or the configuration is modified. A high severity alarm is raised when an administratively enabled MDA is removed from the chassis. This alarm is cleared if either the correct MDA type is inserted or the configuration is modified. A low severity alarm is issued if an MDA is removed that is administratively disabled.

An MDA can only be provisioned in a slot if the MDA type is allowed in the MDA slot. An error message is generated when an MDA is provisioned in a slot where it is not allowed.

Some MDA hardware can support two different firmware loads. One load includes the base Ethernet functionality, including 10G WAN mode, but does not include 1588 port-based timestamping. The second load includes the base Ethernet functionality and 1588 port-based timestamping, but does not include 10G WAN mode. These are identified as two MDA types that are the same, except for a “-ptp” suffix to indicate the second loadset. A hard reset of the MDA occurs when switching between the two provisioned types.

An alarm is raised if partial or complete MDA failure is detected. The alarm is cleared when the error condition ceases.

New generations of XMAs include variants controlled through hardware and software licensing. For these XMAs, the license level must be provisioned in addition to the MDA type. An XMA cannot become operational unless the provisioned license level matches the license level of the XMA installed into the slot.

The set of license levels varies by MDA type. The provisioned level controls aspects related to connector provisioning and the consumption of hardware egress queues and egress policers. Changes to the provisioned license level may be blocked if configuration that would not be permitted with the new target license level exists. If the license level is not specified, the level is set to the highest license level for that XMA.

Options

x12-400g-qsfpdd, x6-200g-cfp2-dco, cx20-10g-sfp, cx2-100g-cfp, p10-10g-sfp, p1-100g-cfp, p3-40g-qsfp, p6-10g-sfp, x40-10g-sfp, m40-10g-sfp, x4-100g-cxp, cx6-40g-qsfp, m4-100g-cxp, p20-1gb-sfp, s36-100gb-qsfp28-3.6t, p-isa2-ms, p-isa2-ms-e, isa2-aa, isa2-tunnel, isa2-bb, x4-100g-cfp2, cx72-1g-csfp, maxp1-100gb-cfp, ma4-10gb-sfp+, maxp10-10gb-sfp+, me10-10gb-sfp+, ma2-10gb-sfp+12-1gb-sfp, maxp6-10gb-sfp+1-40gb-qsfp+, ma44-1gb-csfp, ma20-1gb-tx, m20-10g-sfp+, me1-100gb-cfp2, m4-100g-cfp4, p1-100g-tun-b, maxp1-100gb-cfp2, maxp1-100gb-cfp4, isa-ms-v, isa-aa-v, isa-tunnel-v, isa-bb-v, m20-v, me-isa2-ms, me-isa2-ms-e, me40-1gb-csfp, m4-1g-tx+20-1g-sfp+6-10g-sfp+, me2-100gb-cfp4, me6-10gb-sfp+, isa2-video, me2-100gb-qsfp28, i6-10/100eth-tx, x2-100g-tun, i2-sdi, i2-cellular, me12-10/1gb-sfp+, me16-25gb-sfp28+2-100gb-qsfp28, me6-100gb-qsfp28, x6-400g-cfp8, me2-100gb-ms-qsfp28, s18-100gb-qsfp28, x40-10g-sfp-ptp, m40-10g-sfp-ptp, m36-100g-qsfp28, m48-sfp+2-qsfp28, m10-10g-sfp+, m20-1g-csfp, m6-10g-sfp++1-100g-qsfp28, me3-200gb-cfp2-dco, x24-100g-qsfp28, me12-100gb-qsfp28, i1-wlan, s36-400gb-qsfpdd, m24-sfp++8-sfp28+2-qsfp28, s36-100gb-qsfp28, a32-chds1v2, m48-sfp++6-qsfp28, maxp10-10/1gb-msec-sfp+, m4-10g-sfp++1-100g-cfp2, i3-10/100eth-tx, me3-400gb-qsfpdd, m18-25g-sfp28, m14-10g-sfp++4-1g-tx, m6-10g-sfp++4-25g-sfp28, me6-400gb-qsfpdd, me8-10/25gb-sfp28, m10-1g-sfp+2-10g-sfp+, m6-qsfpdd+48-sfp56,

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	m32-qsfp28+4-qsfpdd, m36-qsfpdd, m1-400g-qsfpdd+1-100g-qsfp28, m5-100g-qsfp28, m48-800g-qsfpdd-1x, m24-800g-qsfpdd-1, ms36-800g-qsfpdd, x2-s36-800g-qsfpdd-18.0t, m48-400g-qsfpdd-1, m80-200g-sfpdd+12-800g-qsfpdd-1x, m40-200g-sfpdd+6-800g-qsfpdd-1, m80-200g-sfpdd+12-400g-qsfpdd-1, m46-10g-sfp+, m2-cfp2, m2-qsfpdd+2-qsfp28+24-sfp28, x2-s36-800g-qsfpdd-12.0t, me16-25gb-sfp28+2-100gb-qsfp-b, m10-50g-sfp56
Introduced	16.0.R1
Platforms	All

network

Synopsis	Enter the **network** context
Context	**configure** card *number* mda *number* network
Tree	network
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** card *number* mda *number* network egress
Tree	egress
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the **ingress** context
Context	**configure** card *number* mda *number* network ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

power-priority-level *number*

Synopsis	Power priority level for the MDA
Context	**configure** card *number* mda *number* power-priority-level *number*

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Tree	power-priority-level
Range	1 to 200
Default	150
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

reset-on-recoverable-error *boolean*

Synopsis	Reset MDA for fatal memory parity error on a Q-chip
Context	**configure** card *number* mda *number* reset-on-recoverable-error *boolean*
Tree	reset-on-recoverable-error
Description	When configured to **true**, the MDA resets when a fatal memory parity error is detected on a Q-chip of the MDA, regardless of the setting of the **fail-on-error** configuration for the MDA. When configured to **false**, the recovery action is taken instead of resetting the MDA.
Default	false
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

sync-e *keyword*

Synopsis	Synchronous Ethernet capability
Context	**configure** card *number* mda *number* sync-e *keyword*
Tree	sync-e
Description	This command enables synchronous Ethernet on the MDA. When enabled, any port on the MDA can be used as a source port in the central frequency clock configuration, under the **configure system central-frequency-clock** context.
Options	true, false
Introduced	16.0.R1
Platforms	All

upgrade [upgrade-index] *number*

Synopsis	Enter the **upgrade** list instance
Context	**configure** card *number* mda *number* upgrade *number*
Tree	upgrade

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Description	Commands in this context configure the license level upgrade for the MDA. You can apply multiple upgrades to an MDA. The first upgrade must use index 1, then index 2, and so on. When removing upgrades, remove the largest index first, followed by the next largest, and so on. Some upgrades require a hard reset of the MDA to take effect. In general, this is required when the full duplex bandwidth changes as a result of the upgrade.
Introduced	16.0.R4
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

[**upgrade-index**] *number*

Synopsis	Order of the upgrade instance
Context	**configure** card *number* mda *number* upgrade *number*
Tree	upgrade
Range	1 to 6
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

path *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upgrade path of the MDA for the slot
Context	**configure** card *number* mda *number* upgrade *number* path *keyword*
Tree	path
Description	This command configures the upgrade path for the MDA in the slot. The path indicates the starting level and the new level that is applied due to the upgrade.
Options	cr1200g-cr1600g, cr1600g-cr2400g, er1200g-er1600g, er1600g-er2400g, he1200g-he1600g, he1600g-he2400g, cr1200g-er1200g, er1200g-he1200g, cr1600g-er1600g, er1600g-he1600g, cr2400g-er2400g, er2400g-he2400g, any2400g-2400g+, cr3600g-cr4800g, er3600g-er4800g, he3600g-he4800g, cr3600g-er3600g, er3600g-he3600g, cr4800g-er4800g, er4800g-he4800g, any3600g-3600gdd, any4800g-4800g+, cr600g-cr1200g, er600g-er1200g, he600g-he1200g, cr600g-er600g, er600g-he600g, any1200g-1200g+, any2400g-2400g+4t, cr-er9600g, er-he9600g, any9600g-9600g+, cr-er14400g, er-he14400g, any14400g-14400g+, he9600g-he12000g+, er9600g-er12000g+,

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	cr9600g-cr12000g+, he14400g-he18000g+, er14400g-er18000g+, cr14400g-cr18000g+, cr-er12000g+, er-he12000g+, cr-er18000g+, er-he18000g+
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

xconnect

Synopsis	Enter the **xconnect** context
Context	**configure** card *number* mda *number* xconnect
Tree	xconnect
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

mac [mac-id] *number*

Synopsis	Enter the **mac** list instance
Context	**configure** card *number* mda *number* xconnect mac *number*
Tree	mac
Description	Commands in this context configure the attributes of the MDA loopback (cross-connect) in the MAC chip.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

[**mac-id**] *number*

Synopsis	MAC ID for the MDA cross-connect
Context	**configure** card *number* mda *number* xconnect mac *number*
Tree	mac
Range	1 to 12
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

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description *string*

Synopsis	Text description
Context	**configure** card *number* mda *number* xconnect mac *number* description *string*
Tree	description
String Length	0 to 255
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

loopback [loopback-id] *number*

Synopsis	Enter the **loopback** list instance
Context	**configure** card *number* mda *number* xconnect mac *number* loopback *number*
Tree	loopback
Description	Commands in this context configure the attributes of the loopback on a MAC chip. The system and services can start using the loopback only when a port is associated with it (for example, port 1/1/m1/1, where m1 represents the MAC ID).
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

[**loopback-id**] *number*

Synopsis	Loopback ID for the MDA cross-connect
Context	**configure** card *number* mda *number* xconnect mac *number* loopback *number*
Tree	loopback
Range	1 to 2
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

bandwidth *number*

WARNING:
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Synopsis	Maximum bandwidth for a Layer 2 rate for MAC loopback

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Context	**configure** card *number* mda *number* xconnect mac *number* loopback *number* bandwidth *number*
Tree	bandwidth
Range	10 | 25 | 40 | 100 | 400 | 800
Units	gigabps
Default	100
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** card *number* mda *number* xconnect mac *number* loopback *number* description *string*
Tree	description
String Length	0 to 255
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

power-save *boolean*

Synopsis	Place card in power-save mode when not in use
Context	**configure** card *number* power-save *boolean*
Tree	power-save
Description	When configured to **true**, this command enables the power-save mode on the card when it is not in use. The power-save mode allows the card to be installed and configured in a platform for future use, while having minimal impact on the overall power consumption. A card placed in the power-save mode is reset, forced into an idle state, and consumes minimal power. In power save mode, the download of a software image to the card is not allowed. The card must be administratively disabled before it is placed in the power-save mode. Cards in the power save mode do not count in the intelligent power management budget and they also do not pass traffic. When configured to **false**, this command removes the card from power-save mode.
Default	false
Introduced	19.5.R1

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Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a8, 7750 SR-2e, 7750 SR-3e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

reset-on-recoverable-error *boolean*

Synopsis	Reset card for fatal memory parity error on a Q-chip
Context	**configure** card *number* reset-on-recoverable-error *boolean*
Tree	reset-on-recoverable-error
Description	When configured to **true**, the card is reset when a fatal memory parity error is detected on a Q-chip of the card, regardless of the setting of the **fail-on-error** configuration for the card. When configured to **false**, the recovery action is taken instead of resetting the card.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

upgrade [upgrade-index] *number*

Synopsis	Enter the **upgrade** list instance
Context	**configure** card *number* upgrade *number*
Tree	upgrade
Description	Commands in this context assign a license level upgrade to the card, XIOM, or XMA. There can be multiple upgrades applied to a card, XIOM, or XMA. The first upgrade must use index 1, and then next index 2, and so on. Also, when removing upgrades, the largest index must be removed first, and then the next largest removed, and so on. The path indicates the starting level and the new level that will apply due to the upgrade. For example, "cr1200g-cr1600g" can be applied to an XMA that is currently at the cr1200g level and after application of the upgrade, the operational level of the XMA will be cr1600g. There must be an upgrade license available for the path specified. Available upgrades can be checked using the **show licensing entitlements** command. Some upgrades require a hard reset of the card or MDA to take effect. In general, this is required when the Full Duplex bandwidth is being changed.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-1se

[**upgrade-index**] *number*

Synopsis	Order of the upgrade value

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Context	**configure** card *number* upgrade *number*
Tree	upgrade
Range	1 to 6
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-1se

path *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upgrade path of the target module for the slot
Context	**configure** card *number* upgrade *number* path *keyword*
Tree	path
Description	This command configures the upgrade path associated with the upgrade instance for the target module in the slot. The path indicates the starting level and the new level that applies during the upgrade.
Options	cr-er, er-he, cr400g-cr1200g+, er400g-er1200g+, he400g-he1200g+, cr-er1200g+, er-he1200g+, cr-er400g+, er-he400g+, cr-er800g+, er-he800g+, cr400g-cr800g+, er400g-er800g+, he400g-he800g+, cr800g-cr1200g+, er800g-er1200g+, he800g-he1200g+, cr-er2400g, er-he2400g, any2400g-2400g+, cr-er4800g, er-he4800g, any4800g-4800g+, cr-er9600g, er-he9600g, cr-er14400g, er-he14400g, he9600g-he14400g, er9600g-er14400g, cr9600g-cr14400g, any14400g-14400g+, any2400g-2800g+, any4800g-6000g+, any14400g-18000g+, he2400g-he2800g+, er2400g-er2800g+, cr2400g-cr2800g+, he4800g-he6000g+, er4800g-er6000g+, cr4800g-cr6000g+, he14400g-he19200g, er14400g-er19200g, cr14400g-cr19200g, cr-er2800g+, er-he2800g+, cr-er6000g+, er-he6000g+, cr-er19200g, er-he19200g
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-1se

virtual-scheduler-adjustment

Synopsis	Enter the **virtual-scheduler-adjustment** context
Context	**configure** card *number* virtual-scheduler-adjustment
Tree	virtual-scheduler-adjustment
Introduced	16.0.R1

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Platforms	All

internal-scheduler-weight-mode *keyword*

Synopsis	Internal scheduler weight mode
Context	**configure** card *number* virtual-scheduler-adjustment internal-scheduler-weight-mode *keyword*
Tree	internal-scheduler-weight-mode
Description	This command specifies the internal scheduler (tier 0) weight mode for all ingress queues on a LAG on the card on which it is applied.
Options	auto, force-equal, offered-load, capped-offered-load
Default	auto
Introduced	16.0.R1
Platforms	All

interval

Synopsis	Enter the **interval** context
Context	**configure** card *number* virtual-scheduler-adjustment interval
Tree	interval
Introduced	16.0.R1
Platforms	All

rate-calculation-minimum

Synopsis	Enter the **rate-calculation-minimum** context
Context	**configure** card *number* virtual-scheduler-adjustment interval rate-calculation-minimum
Tree	rate-calculation-minimum
Description	Commands in this context override the default minimum time that must elapse before a policer or queue's offered rate can be recalculated. A minimum time between offered rate calculations is enforced to both prevent inaccurate estimation of the offered rate and excessive input to the virtual scheduler process. To smooth out rapidly fluctuating offered rates, the system averages the measured offered rate with a window of previously measured offered traffic statistics and knowledge of the time between the samples.
Introduced	16.0.R1
Platforms	All

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fast-queue *decimal-number*

Synopsis	Minimum rate calculation time for fast queues
Context	**configure** card *number* virtual-scheduler-adjustment interval rate-calculation-minimum fast-queue *decimal-number*
Tree	fast-queue
Range	0.01 to 1000.00
Units	percent
Default	100.00
Introduced	16.0.R1
Platforms	All

slow-queue *decimal-number*

Synopsis	Minimum rate calculation time for slow queues
Context	**configure** card *number* virtual-scheduler-adjustment interval rate-calculation-minimum slow-queue *decimal-number*
Tree	slow-queue
Range	0.01 to 1000.00
Units	percent
Default	100.00
Introduced	16.0.R1
Platforms	All

scheduler-run-minimum *decimal-number*

Synopsis	Minimum time of the scheduler run
Context	**configure** card *number* virtual-scheduler-adjustment interval scheduler-run-minimum *decimal-number*
Tree	scheduler-run-minimum
Description	This command overrides the default minimum time that must elapse before a virtual scheduler can redistribute bandwidth based on changes to the offered rates of member policers or queues. A minimum run interval is enforced to manage the number of batched queue changes before reacting to the changed rates. Because the periodic function of determining policer or queue offered rates is performed sequentially, the interval allows the policer and queue rates to be determined before the bandwidth distribution to the policers and queues.

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Range	0.01 to 1000.00
Units	percent
Default	100.00
Introduced	16.0.R1
Platforms	All

task-scheduling *decimal-number*

Synopsis	Task scheduling interval
Context	**configure** card *number* virtual-scheduler-adjustment interval task-scheduling *decimal-number*
Tree	task-scheduling
Description	This command overrides the system default time interval for scheduling the hierarchical virtual scheduler task. By default, the system wakes the virtual scheduler task every 50 ms which is equivalent to five 10 ms timer ticks.
Range	0.01 to 1000.00
Units	percent
Default	100.00
Introduced	16.0.R1
Platforms	All

slow-queue-threshold-rate *number*

Synopsis	Slow queue threshold rate
Context	**configure** card *number* virtual-scheduler-adjustment slow-queue-threshold-rate *number*
Tree	slow-queue-threshold-rate
Description	This command overrides the system default threshold rate used to place policers and queues in the slow queue category. Slow rate policers and queues use a different minimum rate calculation interval time than fast rate queues. The fast rate threshold is derived by multiplying the adjusted slow rate threshold by a factor of 1.5. Configuring a value of zero (0) forces all policers and queues to be treated as fast rate queues.
Range	0 to 1000000
Units	kilobps
Default	1000

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Introduced	16.0.R1
Platforms	All

xiom [xiom-slot] *string*

Synopsis	Enter the **xiom** list instance
Context	**configure** card *number* xiom *string*
Tree	xiom
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

[**xiom-slot**] *string*

Synopsis	XIOM slot ID
Context	**configure** card *number* xiom *string*
Tree	xiom
String Length	2
Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

admin-state *keyword*

Synopsis	Administrative state of the XIOM
Context	**configure** card *number* xiom *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

fail-on-error *boolean*

Synopsis	Set operational state of the card to failed on error
Context	**configure** card *number* xiom *string* fail-on-error *boolean*

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Tree	fail-on-error
Description	When configured to **true**, the operational state of the card is set to failed when at least one of a specific set of card-level errors is detected. The failed state persists until the operator reseats the card or resets it using the **clear** command.
Default	false
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

level *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	License level of the XIOM
Context	**configure** card *number* xiom *string* level *keyword*
Tree	level
Description	This command provisions the license level of the XIOM, which controls aspects related to connector provisioning and consumption of hardware egress queues and policers. An XIOM only becomes operational if the provisioned license level matches the license level of the card installed into the slot. The set of license levels varies by XIOM type. Changes to the provisioned license level may be blocked if a configuration exists that is not permitted with the new target license level. If the license level is not specified, the level is set to the highest license level for the XIOM.
Options	unrestricted, he800g+, er800g+, cr800g+, he1500g+, er1500g+, cr1500g+, he1600g+, er1600g+, cr1600g+, he2400g+, er2400g+, cr2400g+, he3000g+, er3000g+, cr3000g+, he2400g, er2400g, cr2400g, he4800g, er4800g, cr4800g, he6000g+, er6000g+, cr6000g+
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

mda [mda-slot] *number*

Synopsis	Enter the **mda** list instance
Context	**configure** card *number* xiom *string* mda *number*
Tree	mda
Introduced	20.2.R1

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Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

[**mda-slot**] *number*

Synopsis	MDA slot number
Context	**configure** card *number* xiom *string* mda *number*
Tree	mda
Range	1 to 2
Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

admin-state *keyword*

Synopsis	Administrative state of the MDA
Context	**configure** card *number* xiom *string* mda *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

mda-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MDA-s type provisioned for the XIOM slot
Context	**configure** card *number* xiom *string* mda *number* mda-type *keyword*
Tree	mda-type
Description	This command provisions the MDA-s type for the XIOM slot. The MDA-s type can be preprovisioned, which means that the MDA-s does not have to be installed in the chassis. You can preprovision the MDA type before you install the MDA in the chassis. An MDA-s can only be provisioned in a slot that is vacant. No other MDA-s can be provisioned

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(configured) for that particular slot. An error message or log event is generated if the wrong MDA type is provisioned or inserted.

Options ms6-200gb-cfp2-dco, ms3-200gb-cfp2-dco, ms16-100gb-sfpdd+4-100gb-qsfp28, ms18-100gb-qsfp28, ms4-400gb-qsfpdd+4-100gb-qsfp28, ms24-10/100gb-sfpdd, ms2-400gb-qsfpdd+2-100gb-qsfp28, ms8-100gb-sfpdd+2-100gb-qsfp28, ms16-sdd+4-qsfp28-b, ms8-sdd+2-qsfp28-b, mse24-200g-sfpdd, mse14-800g+4-400g, m36-800g-qsfpdd, mse6-800g-qsfpdd

Introduced 20.2.R1

Platforms 7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

power-priority-level *number*

Synopsis Power priority level for the XIOM MDA-s

Context **configure** card *number* xiom *string* mda *number* power-priority-level *number*

Tree power-priority-level

Description This command configures the power-priority level for the XIOM MDA-s.

Consider the following suggestions when configuring the power-priority level:

- The lowest number has the highest priority.
- Use the priority numbers from 1 to 100 for modules that are essential for system operation.
- Use the priority numbers from 101 to 200 for non-essential modules.

Range 1 to 200

Default 150

Introduced 20.2.R1

Platforms 7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

sync-e *keyword*

Synopsis Synchronous Ethernet capability

Context **configure** card *number* xiom *string* mda *number* sync-e *keyword*

Tree sync-e

Options true, false

Introduced 20.2.R1

Platforms 7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

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xconnect

Synopsis	Enter the **xconnect** context
Context	**configure** card *number* xiom *string* mda *number* xconnect
Tree	xconnect
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

mac [mac-id] *number*

Synopsis	Enter the **mac** list instance
Context	**configure** card *number* xiom *string* mda *number* xconnect mac *number*
Tree	mac
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

[**mac-id**] *number*

Synopsis	MAC ID for the MDA cross-connect
Context	**configure** card *number* xiom *string* mda *number* xconnect mac *number*
Tree	mac
Range	1 to 12
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	**configure** card *number* xiom *string* mda *number* xconnect mac *number* description *string*
Tree	description
String Length	0 to 255
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

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loopback [loopback-id] *number*

Synopsis	Enter the **loopback** list instance
Context	**configure** card *number* xiom *string* mda *number* xconnect mac *number* loopback *number*
Tree	loopback
Description	Commands in this context configure a MAC loopback on a MAC chip. The system and services only start using the loopback when a port is associated with it. For example, port 1/1/m1/1, where m1 represents the MAC ID.
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

[**loopback-id**] *number*

Synopsis	Loopback ID for the MDA cross-connect
Context	**configure** card *number* xiom *string* mda *number* xconnect mac *number* loopback *number*
Tree	loopback
Range	1 to 2
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

bandwidth *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maximum bandwidth for a Layer 2 rate for MAC loopback
Context	**configure** card *number* xiom *string* mda *number* xconnect mac *number* loopback *number* bandwidth *number*
Tree	bandwidth
Range	10 | 25 | 40 | 100 | 400 | 800
Units	gigabps
Default	100
Introduced	21.5.R1

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Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	**configure** card *number* xiom *string* mda *number* xconnect mac *number* loopback *number* description *string*
Tree	description
String Length	0 to 255
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

reset-on-recoverable-error *boolean*

Synopsis	Reset XIOM for fatal memory parity error on a Q-chip
Context	**configure** card *number* xiom *string* reset-on-recoverable-error *boolean*
Tree	reset-on-recoverable-error
Description	When configured to **true**, the XIOM is reset when a fatal memory parity error is detected on a Q-chip of the XIOM, regardless of the setting of the **fail-on-error** configuration for the XIOM. When configured to **false**, the recovery action is taken instead of resetting the XIOM.
Default	false
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

upgrade [upgrade-index] *number*

Synopsis	Enter the **upgrade** list instance
Context	**configure** card *number* xiom *string* upgrade *number*
Tree	upgrade
Description	Commands in this context assign a license level upgrade to the XIOM. Multiple upgrades can be applied to an XIOM. The first upgrade must use index 1, then index 2, and so on. When removing upgrades, the largest index must be removed first, followed by the next largest, and so on. Some upgrades require a hard reset of the XIOM to take effect. In general, this is required when the Full Duplex bandwidth is changed as a result of the upgrade.
Introduced	20.2.R1

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Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

[**upgrade-index**] *number*

Synopsis	Order of the upgrade value
Context	**configure** card *number* xiom *string* upgrade *number*
Tree	upgrade
Range	1 to 6
Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

path *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upgrade name
Context	**configure** card *number* xiom *string* upgrade *number* path *keyword*
Tree	path
Description	This command specifies the upgrade name. An upgrade license must be available for the specified path. Available upgrades can be checked using the **show licensing entitlements** command.
Options	cr800g-cr1500g+, er800g-er1500g+, he800g-he1500g+, cr1600g-cr2400g+, er1600g-er2400g+, he1600g-he2400g+, cr2400g-cr3000g+, er2400g-er3000g+, he2400g-he3000g+, cr-er800g+, er-he800g+, cr-er1500g+, er-he1500g+, cr-er1600g+, er-he1600g+, cr-er2400g+, er-he2400g+, cr-er3000g+, er-he3000g+, cr4800g-cr6000g+, er4800g-er6000g+, he4800g-he6000g+, cr-er2400g, er-he2400g, cr-er4800g, er-he4800g, cr-er6000g+, er-he6000g+
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

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xiom-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	XIOM type
Context	**configure** card *number* xiom *string* xiom-type *keyword*
Tree	xiom-type
Description	This command associates the XIOM type with the slot. The XIOM type can be preprovisioned, which means that the XIOM does not have to be installed in the chassis. An XIOM must be provisioned before an MDA-s, a connector, or a port can be configured. An XIOM can only be provisioned in a slot that is vacant. After an XIOM is provisioned in the slot, no other XIOM can be provisioned (configured) for the slot. An XIOM can only be provisioned in a slot if the XIOM type is allowed in the slot. An error message is generated if an attempt is made to provision an XIOM type that is not allowed. If an XIOM is inserted that does not match the configured XIOM type for the slot, then a log event and a facility alarm are raised. The alarm is cleared when the correct XIOM type is installed or the configuration is modified. A log event and a facility alarm are raised if an administratively enabled XIOM is removed from the chassis. The alarm is cleared when the correct XIOM type is installed or the configuration is modified. A log event is issued when an XIOM is removed that is administratively disabled. XIOMs are controlled by hardware and software licensing. In addition to the XIOM type, the license level must be provisioned using the **level** command.
Options	iom-s-3.0t, iom-s-1.5t, iom2-se-6.0t, iom2-se-3.0t, x2-s36-800g-qsfpdd-6.0t
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

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3.10 cflowd commands

```
configure
   –  cflowd
      –  active-flow-timeout number
      –  admin-state keyword
      –  analyze-gre-payload boolean
      –  analyze-l2tp-traffic boolean
      –  analyze-v4overv6-traffic boolean
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  cache-size number
      –  collector (ipv4-address-no-zone | ipv6-address-no-zone) port number
         –  admin-state keyword
         –  aggregation
            –  as-matrix boolean
            –  destination-prefix boolean
            –  protocol-port boolean
            –  raw boolean
            –  source-destination-prefix boolean
            –  source-prefix boolean
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  autonomous-system-type keyword
         –  description string
         –  export-filter
            –  family
               –  ipv4 boolean
               –  ipv6 boolean
               –  l2-ip boolean
               –  mcast-ipv4 boolean
               –  mcast-ipv6 boolean
               –  mpls boolean
            –  interface-list
               –  router reference interface-name reference
                  –  apply-groups reference
                  –  apply-groups-exclude reference
               –  service
                  –  ies-group-interface service-name reference subscriber-interface-
name reference group-interface-name reference
                     –  apply-groups reference
                     –  apply-groups-exclude reference
                  –  ies-interface service-name reference interface-name reference
                     –  apply-groups reference
                     –  apply-groups-exclude reference
                  –  vprn-group-interface service-name reference subscriber-interface-
name reference group-interface-name reference
                     –  apply-groups reference
                     –  apply-groups-exclude reference
                  –  vprn-interface service-name reference interface-name reference
                     –  apply-groups reference
                     –  apply-groups-exclude reference
                  –  vprn-network-interface service-name reference network-interface-
name reference
                     –  apply-groups reference
                     –  apply-groups-exclude reference
            –  router string
         –  router-instance string
         –  template-set keyword
         –  version number
      –  enhanced-distribution boolean
```


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configure cflowd export-mode

```
    - export-mode keyword
    - inactive-flow-timeout number
    - inband-collector-export-only boolean
    - overflow number
    - sample-profile number
      - apply-groups reference
      - apply-groups-exclude reference
      - metering-process keyword
      - sample-rate number
    - template-retransmit number
    - use-vrtr-if-index boolean
```


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3.10.1 cflowd command descriptions

cflowd

Synopsis	Enable the **cflowd** context
Context	**configure** cflowd
Tree	cflowd
Introduced	16.0.R1
Platforms	All

active-flow-timeout *number*

Synopsis	Maximum time before an active flow is exported
Context	**configure** cflowd active-flow-timeout *number*
Tree	active-flow-timeout
Description	This command configures the maximum time before an active flow is aged out of the active cache. If an individual flow is active for the configured time, the flow is exported and a new flow is created on the next packet sampled for the flow. This value is set for a flow when the flow is initially created in the active cache table and does not change dynamically.
Range	30 to 36000
Units	seconds
Default	1800
Introduced	20.2.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of cflowd
Context	**configure** cflowd admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

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analyze-gre-payload *boolean*

Synopsis	Perform cflowd analysis on the inner IP packet
Context	**configure** cflowd analyze-gre-payload *boolean*
Tree	analyze-gre-payload
Default	false
Introduced	16.0.R1
Platforms	All

analyze-l2tp-traffic *boolean*

Synopsis	Analyze the inner IP header of an L2TP packet
Context	**configure** cflowd analyze-l2tp-traffic *boolean*
Tree	analyze-l2tp-traffic
Description	When configured to **true**, cflowd looks for and analyzes the inner IP header of an L2TPv2 frame. L2TPv2 traffic is identified by either the source or destination UDP port numbering that is set to 1701. When configured to **false**, the analysis is not performed.
Default	false
Introduced	19.10.R1
Platforms	All

analyze-v4overv6-traffic *boolean*

Synopsis	Analyze the inner IPv4 packet within an IPv6 packet
Context	**configure** cflowd analyze-v4overv6-traffic *boolean*
Tree	analyze-v4overv6-traffic
Description	When configured to **true**, cflowd looks for and analyzes the inner IPv4 header of IPv4overIPv6 frames that include MAP-E as well as DSLite and SAM traffic. When configured to **false**, the analysis is not performed.
Default	false
Introduced	19.10.R1
Platforms	All

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cache-size *number*

Synopsis	Maximum number of active flows in the flow cache table
Context	**configure** cflowd cache-size *number*
Tree	cache-size
Range	1000 to 2000000
Units	flows
Introduced	16.0.R1
Platforms	All

collector [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number*

Synopsis	Enter the **collector** list instance
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number*
Tree	collector
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the remote cflowd collector host
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number*
Tree	collector
Description	This command specifies the IP address of the remote cflowd collector host to receive the exported cflowd data.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

port *number*

Synopsis	UDP port number of the remote cflowd collector host
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number*
Tree	collector

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Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the cflowd collector
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

aggregation

Synopsis	Enter the **aggregation** context
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* aggregation
Tree	aggregation
Introduced	16.0.R1
Platforms	All

as-matrix *boolean*

Synopsis	Base aggregation data based on AS information
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* aggregation as-matrix *boolean*
Tree	as-matrix
Default	false
Introduced	16.0.R1
Platforms	All

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destination-prefix *boolean*

Synopsis	Aggregate data based on destination prefix information
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* aggregation destination-prefix *boolean*
Tree	destination-prefix
Default	false
Introduced	16.0.R1
Platforms	All

protocol-port *boolean*

Synopsis	Aggregate flows based on the IP protocol and ports
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* aggregation protocol-port *boolean*
Tree	protocol-port
Default	false
Introduced	16.0.R1
Platforms	All

raw *boolean*

Synopsis	Export flow data without aggregation
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* aggregation raw *boolean*
Tree	raw
Default	false
Introduced	16.0.R1
Platforms	All

source-destination-prefix *boolean*

Synopsis	Aggregate data based on prefix information
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* aggregation source-destination-prefix *boolean*
Tree	source-destination-prefix
Default	false

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Introduced	16.0.R1
Platforms	All

source-prefix *boolean*

Synopsis	Aggregate flows based on the source prefix information
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* aggregation source-prefix *boolean*
Tree	source-prefix
Default	false
Introduced	16.0.R1
Platforms	All

autonomous-system-type *keyword*

Synopsis	Basis of the AS information included in flow data
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* autonomous-system-type *keyword*
Tree	autonomous-system-type
Options	origin, peer
Default	origin
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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export-filter

Synopsis	Enter the **export-filter** context
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter
Tree	export-filter
Introduced	16.0.R1
Platforms	All

family

Synopsis	Enter the **family** context
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter family
Tree	family
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Filter IPv4 flow data from being sent to the collector
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter family ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Filter IPv6 flow data from being sent to the collector
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter family ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

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l2-ip *boolean*

Synopsis	Filter L2 IP flow data from being sent to the collector
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter family l2-ip *boolean*
Tree	l2-ip
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv4 *boolean*

Synopsis	Filter multicast IPv4 data from going to the collector
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter family mcast-ipv4 *boolean*
Tree	mcast-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv6 *boolean*

Synopsis	Filter multicast IPv6 data from going to the collector
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter family mcast-ipv6 *boolean*
Tree	mcast-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mpls *boolean*

Synopsis	Filter MPLS flow data from being sent to the collector
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter family mpls *boolean*
Tree	mpls

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Default	false
Introduced	16.0.R1
Platforms	All

interface-list

Synopsis	Enter the **interface-list** context
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter interface-list
Tree	interface-list
Introduced	16.0.R4
Platforms	All

router [router-name] *reference* interface-name *reference*

Synopsis	Enter the **router** list instance
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter interface-list router *reference* interface-name *reference*
Tree	router
Introduced	16.0.R4
Platforms	All

[**router-name**] *reference*

Synopsis	Administrative router name
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter interface-list router *reference* interface-name *reference*
Tree	router
Reference	**configure** router *string*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

interface-name *reference*

Synopsis	Name for the router to the service interface or SAP

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Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter interface-list router *reference* interface-name *reference*
Tree	router
Reference	**configure** router *string* interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

service

Synopsis	Enter the **service** context
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter interface-list service
Tree	service
Introduced	16.0.R4
Platforms	All

ies-group-interface service-name *reference* subscriber-interface-name *reference* group-interface-name *reference*

Synopsis	Enter the **ies-group-interface** list instance
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter interface-list service ies-group-interface service-name *reference* subscriber-interface-name *reference* group-interface-name *reference*
Tree	ies-group-interface
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-name *reference*

Synopsis	Administrative service name
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter interface-list service ies-group-interface service-name *reference* subscriber-interface-name *reference* group-interface-name *reference*
Tree	ies-group-interface
Reference	**configure** service ies *string*
Notes	This element is part of a list key.

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Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-interface-name *reference*

Synopsis	Subscriber interface name
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter interface-list service ies-group-interface service-name *reference* subscriber-interface-name *reference* group-interface-name *reference*
Tree	ies-group-interface
Reference	**configure** service ies *string* subscriber-interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface-name *reference*

Synopsis	Group interface name
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter interface-list service ies-group-interface service-name *reference* subscriber-interface-name *reference* group-interface-name *reference*
Tree	ies-group-interface
Reference	**configure** service ies *string* subscriber-interface *string* group-interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ies-interface service-name *reference* interface-name *reference*

Synopsis	Enter the **ies-interface** list instance
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter interface-list service ies-interface service-name *reference* interface-name *reference*
Tree	ies-interface
Introduced	16.0.R4
Platforms	All

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service-name *reference*

Synopsis	Administrative service name
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter interface-list service ies-interface service-name *reference* interface-name *reference*
Tree	ies-interface
Reference	**configure** service ies *string*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

interface-name *reference*

Synopsis	IP interface name
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter interface-list service ies-interface service-name *reference* interface-name *reference*
Tree	ies-interface
Reference	**configure** service ies *string* interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

vprn-group-interface service-name *reference* subscriber-interface-name *reference* group-interface-name *reference*

Synopsis	Enter the **vprn-group-interface** list instance
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter interface-list service vprn-group-interface service-name *reference* subscriber-interface-name *reference* group-interface-name *reference*
Tree	vprn-group-interface
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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service-name *reference*

Synopsis	Administrative service name
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter interface-list service vprn-group-interface service-name *reference* subscriber-interface-name *reference* group-interface-name *reference*
Tree	vprn-group-interface
Reference	**configure** service vprn *string*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-interface-name *reference*

Synopsis	Subscriber interface name
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter interface-list service vprn-group-interface service-name *reference* subscriber-interface-name *reference* group-interface-name *reference*
Tree	vprn-group-interface
Reference	**configure** service vprn *string* subscriber-interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface-name *reference*

Synopsis	Group interface name
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter interface-list service vprn-group-interface service-name *reference* subscriber-interface-name *reference* group-interface-name *reference*
Tree	vprn-group-interface
Reference	**configure** service vprn *string* subscriber-interface *string* group-interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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vprn-interface service-name *reference* interface-name *reference*

Synopsis	Enter the **vprn-interface** list instance
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter interface-list service vprn-interface service-name *reference* interface-name *reference*
Tree	vprn-interface
Introduced	16.0.R4
Platforms	All

service-name *reference*

Synopsis	Administrative service name
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter interface-list service vprn-interface service-name *reference* interface-name *reference*
Tree	vprn-interface
Reference	**configure** service vprn *string*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

interface-name *reference*

Synopsis	IP interface name
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter interface-list service vprn-interface service-name *reference* interface-name *reference*
Tree	vprn-interface
Reference	**configure** service vprn *string* interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

vprn-network-interface service-name *reference* network-interface-name *reference*

Synopsis	Enter the **vprn-network-interface** list instance

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Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter interface-list service vprn-network-interface service-name *reference* network-interface-name *reference*
Tree	vprn-network-interface
Introduced	16.0.R4
Platforms	All

service-name *reference*

Synopsis	Administrative service name
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter interface-list service vprn-network-interface service-name *reference* network-interface-name *reference*
Tree	vprn-network-interface
Reference	**configure** service vprn *string*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

network-interface-name *reference*

Synopsis	Network interface name
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter interface-list service vprn-network-interface service-name *reference* network-interface-name *reference*
Tree	vprn-network-interface
Description	This command specifies the network interface name. Interface names must be unique within the group of defined IP interfaces for the **configure router interface** and **configure service ies interface** commands. An interface name cannot be in the form of an IP address. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes and must start with a letter.
Reference	**configure** service vprn *string* network-interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

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router [router-instance] *string*

Synopsis	Add a list entry for **router**
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter router *string*
Tree	router
Introduced	16.0.R1
Platforms	All

[**router-instance**] *string*

Synopsis	Router instance name
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* export-filter router *string*
Tree	router
Description	This command specifies the router instance name. Only "Base" is supported.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

router-instance *string*

Synopsis	Router or service name
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* router-instance *string*
Tree	router-instance
Description	This command specifies the routing instance used to route traffic to the associated collector IP address. The "Base" routing instance is the fallback if no route is found. No fallback mechanism is supported for "Base" and "VPRN".
Default	management
Introduced	16.0.R1
Platforms	All

template-set *keyword*

Synopsis	Templates sent to the collector

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Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* template-set *keyword*
Tree	template-set
Description	This command specifies the set of templates sent to the collector when using cflowd Version 9 or Version 10.
Options	not-applicable, basic, mpls-ip, l2-ip, mpls-transport, compact, fastpath
Introduced	16.0.R1
Platforms	All

version *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Flow data collector version
Context	**configure** cflowd collector *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* version *number*
Tree	version
Range	5 | 8 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

enhanced-distribution *boolean*

Synopsis	Include ingress port ID in hashing algorithm for cflowd
Context	**configure** cflowd enhanced-distribution *boolean*
Tree	enhanced-distribution
Default	false
Introduced	16.0.R1
Platforms	7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

export-mode *keyword*

Synopsis	Export mode for flow data
Context	**configure** cflowd export-mode *keyword*

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Tree	export-mode
Options	automatic, manual
Default	automatic
Introduced	16.0.R1
Platforms	All

inactive-flow-timeout *number*

Synopsis	Time without matching packet before flow is inactive
Context	**configure** cflowd inactive-flow-timeout *number*
Tree	inactive-flow-timeout
Description	This command configures the time interval that must elapse without a packet matching a flow before the flow is considered inactive. This value is set for a flow when the flow is initially created in the active cache table and does not change dynamically.
Range	10 to 600
Units	seconds
Default	15
Introduced	20.2.R1
Platforms	All

inband-collector-export-only *boolean*

Synopsis	Export the traffic to all collectors only via in-band interfaces
Context	**configure** cflowd inband-collector-export-only *boolean*
Tree	inband-collector-export-only
Default	false
Introduced	16.0.R1
Platforms	All

overflow *number*

Synopsis	Percentage of entries to remove from Cflowd cache when the maximum number of entries is exceeded
Context	**configure** cflowd overflow *number*
Tree	overflow

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Range	1 to 50
Units	percent
Default	1
Introduced	16.0.R1
Platforms	All

sample-profile [profile-id] *number*

Synopsis	Enter the **sample-profile** list instance
Context	**configure** cflowd sample-profile *number*
Tree	sample-profile
Max. Instances	5
Introduced	19.5.R1
Platforms	All

[**profile-id**] *number*

Synopsis	The unique specifier of this sample-profile
Context	**configure** cflowd sample-profile *number*
Tree	sample-profile
Range	1 to 5
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

metering-process *keyword*

Synopsis	Metering process for samples taken
Context	**configure** cflowd sample-profile *number* metering-process *keyword*
Tree	metering-process
Description	This command specifies the type of metering process to use for the samples taken from the associated interfaces.
Options	standard, fp-accelerated
Default	standard

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Introduced	21.10.R1
Platforms	7750 SR-7s, 7750 SR-14s

sample-rate *number*

Synopsis	Cflowd sampling rate for sample profile ID
Context	**configure** cflowd sample-profile *number* sample-rate *number*
Tree	sample-rate
Description	This command defines the cflowd sampling rate for the sample profile ID. The sample rate indicates that the associated interface samples 1 in N packets for cflowd analysis. You can only associate one rate profile below 1:256 with a specific IOM, IMM, or XMA.
Range	1 to 60000
Default	1000
Introduced	19.5.R1
Platforms	All

template-retransmit *number*

Synopsis	Time to resend template information
Context	**configure** cflowd template-retransmit *number*
Tree	template-retransmit
Range	10 to 600
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	All

use-vrtr-if-index *boolean*

Synopsis	Export flow data using virtual router interface indexes
Context	**configure** cflowd use-vrtr-if-index *boolean*
Tree	use-vrtr-if-index
Default	false
Introduced	16.0.R1

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Platforms All

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3.11 chassis commands

```
configure
   –  chassis keyword chassis-number number
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  monitor-filter-door boolean
      –  peq number
         –  admin-state keyword
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  input-power-mode number
         –  peq-type keyword
      –  power-connection-module number
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  pcm-type keyword
      –  power-shelf number
         –  admin-state keyword
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  description string
         –  power-module number
            –  admin-state keyword
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  power-module-type keyword
         –  power-shelf-type keyword
      –  power-supply number
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  power-supply-type keyword
```


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3.11.1 chassis command descriptions

chassis [chassis-class] *keyword* chassis-number *number*

Synopsis	Enter the **chassis** list instance
Context	**configure** chassis *keyword* chassis-number *number*
Tree	chassis
Introduced	16.0.R1
Platforms	All

[**chassis-class**] *keyword*

Synopsis	Functional use of the physical chassis
Context	**configure** chassis *keyword* chassis-number *number*
Tree	chassis
Options	router
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

chassis-number *number*

Synopsis	Unique index to identify this physical chassis
Context	**configure** chassis *keyword* chassis-number *number*
Tree	chassis
Range	1 to 100
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

monitor-filter-door *boolean*

Synopsis	Allow filter door monitoring
Context	**configure** chassis *keyword* chassis-number *number* monitor-filter-door *boolean*

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Tree	monitor-filter-door
Default	false
Introduced	16.0.R1
Platforms	7750 SR-7s, 7750 SR-14s

peq [peq-slot] *number*

Synopsis	Enter the **peq** list instance
Context	**configure** chassis *keyword* chassis-number *number* peq *number*
Tree	peq
Introduced	16.0.R1
Platforms	7750 SR-12e, 7950 XRS

[**peq-slot**] *number*

Synopsis	Unique identifier index for a power supply tray in the chassis
Context	**configure** chassis *keyword* chassis-number *number* peq *number*
Tree	peq
Range	1 to 31
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-12e, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the PEQ
Context	**configure** chassis *keyword* chassis-number *number* peq *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7750 SR-12e, 7950 XRS

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input-power-mode *number*

Synopsis	Input power mode of the PEQ
Context	**configure** chassis *keyword* chassis-number *number* peq *number* input-power-mode *number*
Tree	input-power-mode
Range	60 | 80
Units	amperes
Introduced	16.0.R1
Platforms	7750 SR-12e, 7950 XRS

peq-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	APEQ type
Context	**configure** chassis *keyword* chassis-number *number* peq *number* peq-type *keyword*
Tree	peq-type
Options	apeq-dc-2000, apeq-dc-2200-2800, apeq-ac-3000, apeq-hvdc-3000, apeq-dc-4275, ixr-ac-hvdc-3000, ixr-dc-3000, apeq-ac-4400
Introduced	16.0.R1
Platforms	7750 SR-12e, 7950 XRS

power-connection-module [pcm-slot] *number*

Synopsis	Enter the **power-connection-module** list instance
Context	**configure** chassis *keyword* chassis-number *number* power-connection-module *number*
Tree	power-connection-module
Introduced	16.0.R1
Platforms	7950 XRS-20e

[**pcm-slot**] *number*

Synopsis	Unique identifier index for a power control module in the chassis
Context	**configure** chassis *keyword* chassis-number *number* power-connection-module *number*

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Tree	power-connection-module
Range	1 to 12
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7950 XRS-20e

pcm-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PCM type
Context	**configure** chassis *keyword* chassis-number *number* power-connection-module *number* pcm-type *keyword*
Tree	pcm-type
Options	dual, quad
Introduced	16.0.R1
Platforms	7950 XRS-20e

power-shelf [power-shelf-id] *number*

Synopsis	Enter the **power-shelf** list instance
Context	**configure** chassis *keyword* chassis-number *number* power-shelf *number*
Tree	power-shelf
Introduced	16.0.R1
Platforms	7750 SR-s

[**power-shelf-id**] *number*

Synopsis	Unique identifier index for a power shelf in chassis
Context	**configure** chassis *keyword* chassis-number *number* power-shelf *number*
Tree	power-shelf
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of the power shelf
Context	**configure** chassis *keyword* chassis-number *number* power-shelf *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7750 SR-s

description *string*

Synopsis	Text description
Context	**configure** chassis *keyword* chassis-number *number* power-shelf *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR-s

power-module [power-module-id] *number*

Synopsis	Enter the **power-module** list instance
Context	**configure** chassis *keyword* chassis-number *number* power-shelf *number* power-module *number*
Tree	power-module
Introduced	16.0.R1
Platforms	7750 SR-s

[**power-module-id**] *number*

Synopsis	Unique identifier for a power module in chassis
Context	**configure** chassis *keyword* chassis-number *number* power-shelf *number* power-module *number*

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Tree	power-module
Range	1 to 12
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of the power module
Context	**configure** chassis *keyword* chassis-number *number* power-shelf *number* power-module *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7750 SR-s

power-module-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Power module type
Context	**configure** chassis *keyword* chassis-number *number* power-shelf *number* power-module *number* power-module-type *keyword*
Tree	power-module-type
Options	ps-b-ac/hv-6000, ps-a-dc-4400, ps-a-dc-6000, ixr-ac-hvdc-3000, ixr-dc-3000
Introduced	16.0.R1
Platforms	7750 SR-s

power-shelf-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

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Synopsis	Power shelf type
Context	**configure** chassis *keyword* chassis-number *number* power-shelf *number* power-shelf-type *keyword*
Tree	power-shelf-type
Options	ps-a10-shelf-dc, ps-b10-shelf-ac/hv, ps-a4-shelf-dc, ps-b3-shelf-ac/hv
Introduced	16.0.R1
Platforms	7750 SR-s

power-supply [power-supply-id] *number*

Synopsis	Enter the **power-supply** list instance
Context	**configure** chassis *keyword* chassis-number *number* power-supply *number*
Tree	power-supply
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**power-supply-id**] *number*

Synopsis	Unique identifier index for a power supply tray in the chassis
Context	**configure** chassis *keyword* chassis-number *number* power-supply *number*
Tree	power-supply
Range	1 to 31
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

power-supply-type *keyword*

Synopsis	Power supply type
Context	**configure** chassis *keyword* chassis-number *number* power-supply *number* power-supply-type *keyword*
Tree	power-supply-type
Options	none, dc-single, ac-single, ac-multiple, auto, dc-multiple
Default	auto
Introduced	16.0.R1

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Platforms 7450 ESS, 7750 SR-7/12

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3.12 connection-profile commands

```
configure
   –  connection-profile
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  vlan number
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  description string
         –  qtag-range number
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  end number
```


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3.12.1 connection-profile command descriptions

connection-profile

Synopsis	Enter the **connection-profile** context
Context	**configure** connection-profile
Tree	connection-profile
Introduced	16.0.R1
Platforms	All

vlan [connection-profile-id] *number*

Synopsis	Enter the **vlan** list instance
Context	**configure** connection-profile vlan *number*
Tree	vlan
Introduced	16.0.R7
Platforms	All

[**connection-profile-id**] *number*

Synopsis	Identifier of this connection profile
Context	**configure** connection-profile vlan *number*
Tree	vlan
Range	1 to 8000
Notes	This element is part of a list key.
Introduced	16.0.R7
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** connection-profile vlan *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R7

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Platforms	All

qtag-range [start] *number*

Synopsis	Enter the **qtag-range** list instance
Context	**configure** connection-profile vlan *number* qtag-range *number*
Tree	qtag-range
Introduced	16.0.R7
Platforms	All

[**start**] *number*

Synopsis	Lower bound of VLAN range for connection profile
Context	**configure** connection-profile vlan *number* qtag-range *number*
Tree	qtag-range
Range	1 to 4094
Notes	This element is part of a list key.
Introduced	16.0.R7
Platforms	All

end *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of VLAN range for connection profile
Context	**configure** connection-profile vlan *number* qtag-range *number* end *number*
Tree	end
Range	1 to 4094
Introduced	16.0.R7
Platforms	All

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3.13 debug commands

```
debug
   –  aaa
      –  diameter
         –  application
            –  failures boolean
            –  policy string
               –  failures boolean
               –  messages boolean
         –  node string
            –  failures boolean
            –  peer number
               –  failures boolean
               –  messages boolean
            –  relayed-messages boolean
   –  call-trace
      –  ipoe
         –  trace string
            –  circuit-id string
            –  mac string
            –  max-jobs number
            –  profile string
            –  remote-id string
            –  sap string
            –  trace-existing-sessions boolean
      –  pppoe
         –  trace string
            –  circuit-id string
            –  mac string
            –  max-jobs number
            –  profile string
            –  remote-id string
            –  sap string
            –  trace-existing-sessions boolean
            –  user-name string
      –  wlan-gw
         –  ue string
            –  mac string
            –  profile string
   –  l2tp
      –  predictable-id-assignment boolean
   –  lag string
      –  bfd boolean
      –  config boolean
      –  iom-updates boolean
      –  lacp-packets boolean
      –  multi-chassis boolean
      –  multi-chassis-packets boolean
      –  port string
         –  bfd boolean
         –  config boolean
         –  lacp-packets boolean
         –  multi-chassis boolean
         –  port-states boolean
         –  redundancy boolean
         –  selection-logic boolean
         –  state-machine boolean
         –  timers boolean
      –  port-states boolean
      –  redundancy boolean
```


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```
      – selection-logic boolean
      – state-machine boolean
      – timers boolean
   – nat
      – l2-aware
         – subscriber string
         – upnp
            – subscriber string
               – events boolean
               – packets
                  – detail boolean
      – large-scale
         – dual-stack-lite
            – subscriber inside-router string b4-address string
         – nat44
            – subscriber inside-router string ip-address string
         – nat64
            – subscriber inside-router string ipv6-prefix string
      – nat-import
         – route (ipv4-unicast-address | keyword) inside-router string
      – pcp
         – router string
            – server string
               – packets
                  – detail boolean
                  – direction keyword
   – router string
      – dhcp
         – all-packets
            – detail-level keyword
            – mode keyword
         – interface string
            – detail-level keyword
            – mode keyword
         – mac string
            – detail-level keyword
            – mode keyword
         – sap string
            – detail-level keyword
            – mode keyword
      – igmp
         – group-interface
            – all-group-interfaces
            – forwarding-service string
            – group-interface-name string
         – host
            – group-interface
               – forwarding-service string
               – group-interface-name string
            – ip-address string
         – interface
            – all-interfaces
            – interface-name string
         – mcs
            – all-interfaces
            – interface-name string
         – miscellaneous boolean
         – packet
            – all-origins
            – dropped boolean
            – egress boolean
            – group-interface-name string
            – host-ip-address string
            – ingress boolean
```


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debug router igmp packet interface-ip-address

```
            – interface-ip-address string
            – interface-name string
            – type keyword
      – ip
         – icmp
            – all-packets
            – interface string
         – icmp6
            – all-packets
            – interface string
         – interface-events
            – all-events
            – interface string
         – neighbor
            – all-events
               – address-family keyword
            – interface string
               – address-family keyword
         – packet
            – all-packets
               – address-family keyword
               – headers boolean
               – protocol-id number
            – interface string
               – address-family keyword
               – headers boolean
               – protocol-id number
         – route-table
            – all
            – filter
               – ipv4
                  – prefix string
                     – longest-prefix-match boolean
               – ipv6
                  – prefix string
                     – longest-prefix-match boolean
         – tunnel-table
            – all
            – filter
               – id
                  – sdp-id number
                  – tunnel-id number
               – ipv4
                  – prefix string
                     – longest-prefix-match boolean
                     – tunnel-type (keyword | keyword)
               – ipv6
                  – prefix string
                     – longest-prefix-match boolean
                     – tunnel-type (keyword | keyword)
      – l2tp
         – assignment-id string
            – events
               – all
               – call-disconnect-notification boolean
               – finite-state-machine boolean
               – lac
                  – state-recovery boolean
                  – state-recovery-failed boolean
               – lns
                  – ppp
                     – terminate-only boolean
               – stop-control-connection-notification boolean
            – packets
```


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debug router l2tp assignment-id packets all

```
            - all
            - detail-level keyword
            - direction keyword
            - l2tp boolean
            - lns
               - dhcp-client boolean
               - ppp
                  - all
                  - chap boolean
                  - ipcp boolean
                  - ipv6cp boolean
                  - lcp boolean
                  - other boolean
                  - pap boolean
      - events
         - all
         - call-disconnect-notification boolean
         - finite-state-machine boolean
         - lac
            - state-recovery boolean
            - state-recovery-failed boolean
         - lns
            - ppp
               - terminate-only boolean
         - session-setup
            - attempted-tunnels boolean
            - skipped-tunnels boolean
         - stop-control-connection-notification boolean
      - group string
         - events
            - all
            - call-disconnect-notification boolean
            - finite-state-machine boolean
            - lac
               - state-recovery boolean
               - state-recovery-failed boolean
            - lns
               - ppp
                  - terminate-only boolean
            - session-setup
               - attempted-tunnels boolean
               - skipped-tunnels boolean
            - stop-control-connection-notification boolean
         - packets
            - all
            - detail-level keyword
            - direction keyword
            - l2tp boolean
            - lns
               - dhcp-client boolean
               - ppp
                  - all
                  - chap boolean
                  - ipcp boolean
                  - ipv6cp boolean
                  - lcp boolean
                  - other boolean
                  - pap boolean
      - ip-peer (ipv4-address-no-zone | ipv6-address-no-zone)
         - events
            - all
            - call-disconnect-notification boolean
            - finite-state-machine boolean
            - lac
```


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```
                  - state-recovery boolean
                  - state-recovery-failed boolean
               - lns
                  - ppp
                     - terminate-only boolean
               - stop-control-connection-notification boolean
            - packets
               - all
               - detail-level keyword
               - direction keyword
               - l2tp boolean
               - lns
                  - dhcp-client boolean
                  - ppp
                     - all
                     - chap boolean
                     - ipcp boolean
                     - ipv6cp boolean
                     - lcp boolean
                     - other boolean
                     - pap boolean
         - packets
            - all
            - detail-level keyword
            - direction keyword
            - l2tp boolean
            - lns
               - dhcp-client boolean
               - ppp
                  - all
                  - chap boolean
                  - ipcp boolean
                  - ipv6cp boolean
                  - lcp boolean
                  - other boolean
                  - pap boolean
         - tunnel number
            - events
               - all
               - call-disconnect-notification boolean
               - finite-state-machine boolean
               - lac
                  - state-recovery boolean
                  - state-recovery-failed boolean
               - lns
                  - ppp
                     - terminate-only boolean
               - stop-control-connection-notification boolean
            - packets
               - all
               - detail-level keyword
               - direction keyword
               - l2tp boolean
               - lns
                  - dhcp-client boolean
                  - ppp
                     - all
                     - chap boolean
                     - ipcp boolean
                     - ipv6cp boolean
                     - lcp boolean
                     - other boolean
                     - pap boolean
         - udp-peer (ipv4-address-no-zone | ipv6-address-no-zone) udp-port number
```


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```
            – events
               – all
               – call-disconnect-notification boolean
               – finite-state-machine boolean
               – lac
                  – state-recovery boolean
                  – state-recovery-failed boolean
               – lns
                  – ppp
                     – terminate-only boolean
               – stop-control-connection-notification boolean
            – packets
               – all
               – detail-level keyword
               – direction keyword
               – l2tp boolean
               – lns
                  – dhcp-client boolean
                  – ppp
                     – all
                     – chap boolean
                     – ipcp boolean
                     – ipv6cp boolean
                     – lcp boolean
                     – other boolean
                     – pap boolean
      – ldp
         – interface string
            – ipv4
               – event
                  – messages
               – packet
                  – hello
                     – detail boolean
            – ipv6
               – event
                  – messages
               – packet
                  – hello
                     – detail boolean
         – peer (ipv4-address-no-zone | ipv6-address-no-zone)
            – event
               – bindings
               – messages
            – packet
               – hello
                  – detail boolean
               – init
                  – detail boolean
               – keepalive
               – label
                  – detail boolean
      – mld
         – group-interface
            – all-group-interfaces
            – forwarding-service string
            – group-interface-name string
         – host
            – group-interface
               – forwarding-service string
               – group-interface-name string
            – ip-address string
         – interface
            – all-interfaces
```


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debug router mld interface interface-name

```
            - interface-name string
         - mcs
            - all-interfaces
            - interface-name string
         - miscellaneous boolean
         - packet
            - all-origins
            - dropped boolean
            - egress boolean
            - group-interface-name string
            - host-ip-address string
            - ingress boolean
            - interface-ip-address string
            - interface-name string
            - type keyword
      - msdp
         - packet
            - all-packet-types
            - packet-types
               - keep-alive
                  - peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
               - sa-request
                  - peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
               - sa-response
                  - peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
               - source-active
                  - peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
         - pim
            - group-address string
         - rtm
            - rp-address string
         - sa-db
            - group-address string
            - rp-address string
            - source-address string
      - mtrace
         - miscellaneous
         - packet
            - all-packet-types
            - packet-types
               - query boolean
               - request boolean
               - response boolean
      - mtrace2
         - miscellaneous
         - packet
            - all-packet-types
            - packet-types
               - query boolean
               - request boolean
               - response boolean
      - pim
         - events
            - adjacency
            - all
               - detail boolean
               - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
               - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
            - assert
               - detail boolean
               - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
               - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
            - auto-rp
            - bgp
```


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debug router pim events bgp group-address

```
                - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
                - peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
                - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
            - bier-inband
                - detail boolean
            - bsr
                - detail boolean
            - data
                - detail boolean
                - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
                - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
            - db
                - detail boolean
                - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
                - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
            - dynmldp
                - detail boolean
            - extranet
                - detail boolean
            - graft
                - detail boolean
                - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
                - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
            - interface
                - interface-name string
            - jp
                - detail boolean
                - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
                - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
            - mofrr
            - mrib
                - detail boolean
                - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
                - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
            - msg
            - mvpn-rtcache
                - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
                - peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
            - red
                - detail boolean
            - register
                - detail boolean
                - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
                - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
            - rpfv
                - detail boolean
            - rtm
                - detail boolean
            - s-pmsi
                - detail boolean
                - vpn-source-address (ipv4-address-no-zone | ipv6-address-no-zone)
            - tunnel-interface
                - ldp-p2mp-id number
                - rsvp-p2mp string
                - sender-address string
        - packet
            - all-origins
            - all-packet-types
            - egress boolean
            - ingress boolean
            - interface-name string
            - ipv4 boolean
            - ipv6 boolean
            - packet-types
```


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debug router pim packet packet-types assert

```
            – assert
              – all-origins
              – interface-name string
            – auto-rp-announcement
              – all-origins
              – interface-name string
            – auto-rp-mapping
              – all-origins
              – interface-name string
            – bsr
              – all-origins
              – interface-name string
            – crp
              – all-origins
              – interface-name string
            – graft
              – all-origins
              – interface-name string
            – graft-ack
              – all-origins
              – interface-name string
            – hello
              – all-origins
              – interface-name string
            – jp
              – all-origins
              – interface-name string
            – mdt-tlv
              – all-origins
              – interface-name string
            – register
              – all-origins
              – interface-name string
            – register-stop
              – all-origins
              – interface-name string
  – radius
    – proxy string
      – all-packet-types
      – client-address (ipv4-address-no-zone | ipv6-address-no-zone)
      – detail-level keyword
      – direction keyword
      – dropped-only boolean
      – packet-types
        – access-accept boolean
        – access-challenge boolean
        – access-reject boolean
        – access-request boolean
        – accounting-request boolean
        – accounting-response boolean
        – other boolean
    – servers
      – attribute string
        – extended-type number
        – transaction boolean
        – type number
        – value
          – address (ipv4-address-no-zone | ipv6-address-no-zone)
          – hex string
          – integer number
          – prefix (ipv4-prefix | ipv6-prefix)
          – string string
        – vendor-specific
          – encoding
```


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debug router radius servers attribute vendor-specific encoding length-size

```
                    – length-size number
                    – type-size number
                  – vendor (number | keyword)
                  – vendor-type number
            – detail-level keyword
            – packet-types
               – accounting boolean
               – authentication boolean
               – coa boolean
            – server-address (ipv4-address-no-zone | ipv6-address-no-zone)
      – vrrp
         – events
            – all-events
            – interface string
               – all-vrids
               – ipv4
                  – vrid number
               – ipv6
                  – vrid number
         – packet
            – all-packets
            – interface string
               – all-vrids
               – ipv4
                  – vrid number
               – ipv6
                  – vrid number
      – wpp
         – packets
            – detail-level keyword
         – portal string
            – packets
               – detail-level keyword
   – service
      – ies string
         – ppp
            – circuit-id string
            – events
               – all
               – dhcp-client
                  – terminate-only boolean
               – l2tp
                  – terminate-only boolean
               – local-address-assignment
                  – terminate-only boolean
               – ppp
                  – terminate-only boolean
            – mac string
            – packets
               – all
               – detail-level keyword
               – dhcp-client boolean
               – discovery
                  – all
                  – padi boolean
                  – pado boolean
                  – padr boolean
                  – pads boolean
                  – padt boolean
               – mode keyword
               – ppp-session
                  – all
                  – chap boolean
                  – ipcp boolean
```


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debug service ies ppp packets ppp-session ipv6cp

```
                  - ipv6cp boolean
                  - lcp boolean
                  - pap boolean
            - remote-id string
            - sap string
            - user-name string
      - vpls string
         - igmp-snooping
            - packet
               - detail keyword
               - dropped boolean
               - egress boolean
               - evpn-mpls boolean
               - evpn-vxlan (ipv4-address-no-zone | ipv6-address-no-zone) vni number
               - ingress boolean
               - mac string
               - sap string
               - sdp-bind string
         - mld-snooping
            - packet
               - detail keyword
               - dropped boolean
               - egress boolean
               - evpn-mpls boolean
               - evpn-vxlan (ipv4-address-no-zone | ipv6-address-no-zone) vni number
               - ingress boolean
               - mac string
               - sap string
               - sdp-bind string
         - pim-snooping
            - events
               - adjacency
               - all
                  - detail boolean
                  - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
                  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
               - db
                  - detail boolean
                  - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
                  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
               - jp
                  - detail boolean
                  - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
                  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
               - mcs
                  - detail boolean
               - port
                  - detail boolean
                  - evpn-mpls
                  - sap-id string
                  - sdp-bind-id string
                  - vni number
                  - vtep (ipv4-address-no-zone | ipv6-address-no-zone)
               - red
                  - detail boolean
            - packet
               - all-origins
               - all-packet-types
               - packet-types
                  - hello boolean
                  - jp boolean
               - port
                  - evpn-mpls
                  - sap-id string
```


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debug service vpls pim-snooping packet port sdp-bind-id

```
                  -  sdp-bind-id string
                  -  vni number
                  -  vtep (ipv4-address-no-zone | ipv6-address-no-zone)
         -  ppp
            -  circuit-id string
            -  events
               -  all
               -  dhcp-client
                  -  terminate-only boolean
               -  l2tp
                  -  terminate-only boolean
               -  local-address-assignment
                  -  terminate-only boolean
               -  ppp
                  -  terminate-only boolean
            -  mac string
            -  packets
               -  all
               -  detail-level keyword
               -  dhcp-client boolean
               -  discovery
                  -  all
                  -  padi boolean
                  -  pado boolean
                  -  padr boolean
                  -  pads boolean
                  -  padt boolean
               -  mode keyword
               -  ppp-session
                  -  all
                  -  chap boolean
                  -  ipcp boolean
                  -  ipv6cp boolean
                  -  lcp boolean
                  -  pap boolean
            -  remote-id string
            -  sap string
            -  user-name string
      -  vprn string
         -  ppp
            -  circuit-id string
            -  events
               -  all
               -  dhcp-client
                  -  terminate-only boolean
               -  l2tp
                  -  terminate-only boolean
               -  local-address-assignment
                  -  terminate-only boolean
               -  ppp
                  -  terminate-only boolean
            -  mac string
            -  packets
               -  all
               -  detail-level keyword
               -  dhcp-client boolean
               -  discovery
                  -  all
                  -  padi boolean
                  -  pado boolean
                  -  padr boolean
                  -  pads boolean
                  -  padt boolean
               -  mode keyword
```


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debug service vprn ppp packets ppp-session

```
                - ppp-session
                  - all
                  - chap boolean
                  - ipcp boolean
                  - ipv6cp boolean
                  - lcp boolean
                  - pap boolean
            - remote-id string
            - sap string
            - user-name string
  - subscriber-mgmt
    - gtp
      - events boolean
      - imsi string
      - packets
        - detail-level keyword
        - mode keyword
      - peer (ipv4-address-no-zone | ipv6-address-no-zone) router string
        - udp-port number
  - system
    - grpc
      - client
        - all
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - type keyword
    - grpc-tunnel
      - tunnel
        - all
        - name string
    - http-connections
      - client-ip-prefix (ipv4-prefix | ipv6-prefix | keyword)
    - management-interface
      - netconf keyword
      - remote-management
        - manager
          - all
          - manager-name string
        - service boolean
  - wlan-gw
    - group number
      - learn-ap-mac
        - tunnel-remote-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - statistic keyword name string
        - capture-packet boolean
      - ue
        - bridge-domain number
        - mac-address string
        - protocols
          - arp boolean
          - dhcp4 boolean
          - dhcp6 boolean
          - icmp4 boolean
          - icmp6 boolean
          - radius boolean
```


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3.13.1 debug command descriptions

debug

Synopsis	Configure application or protocol tracing
Context	debug
Tree	debug
Description	Commands in this context enable detailed debugging information for various protocols and router functions.
Introduced	21.5.R1
Platforms	All

aaa

Synopsis	Enter the **aaa** context
Context	debug aaa
Tree	aaa
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

diameter

Synopsis	Enter the **diameter** context
Context	debug aaa diameter
Tree	diameter
Description	Commands in this context configure Diameter Base parameters.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

application

Synopsis	Enter the **application** context
Context	debug aaa diameter application
Tree	application

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Description	Commands in this context configure debugging for Diameter session-aware application messages and application message processing failures, for example, in the case of an unknown Diameter session ID.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failures *boolean*

Synopsis	Debug Diameter application failures
Context	debug aaa diameter application failures *boolean*
Tree	failures
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy [name] *string*

Synopsis	Enter the **policy** list instance
Context	debug aaa diameter application policy *string*
Tree	policy
Max. Instances	32
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Diameter application policy name
Context	debug aaa diameter application policy *string*
Tree	policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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failures *boolean*

Synopsis	Debug Diameter application failures
Context	debug aaa diameter application policy *string* failures *boolean*
Tree	failures
Default	true
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

messages *boolean*

Synopsis	Debug Diameter application messages
Context	debug aaa diameter application policy *string* messages *boolean*
Tree	messages
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

node [origin-host] *string*

Synopsis	Enter the **node** list instance
Context	debug aaa diameter node *string*
Tree	node
Max. Instances	32
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**origin-host**] *string*

Synopsis	Origin host of the Diameter node
Context	debug aaa diameter node *string*
Tree	node
String Length	1 to 80
Notes	This element is part of a list key.
Introduced	23.3.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failures *boolean*

Synopsis	Debug Diameter node failures
Context	debug aaa diameter node *string* failures *boolean*
Tree	failures
Description	When configured to **true**, the system debugs Diameter node-level failures that occur before the peer is determined. For example, when no route for a message is found in the realm routing table.
Default	true
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer [index] *number*

Synopsis	Enter the **peer** list instance
Context	debug aaa diameter node *string* peer *number*
Tree	peer
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**index**] *number*

Synopsis	Index of the peer in the Diameter node
Context	debug aaa diameter node *string* peer *number*
Tree	peer
Range	1 to 5
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failures *boolean*

Synopsis	Debug Diameter peer failures
Context	debug aaa diameter node *string* peer *number* failures *boolean*

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Tree	failures
Default	true
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

messages *boolean*

Synopsis	Debug Diameter peer messages
Context	debug aaa diameter node *string* peer *number* messages *boolean*
Tree	messages
Description	When configured to **true**, the system debugs peer-level messages that are required to bring up, maintain, and tear down a peering connection, for example, Capabilities Exchange and Device Watchdog messages.
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

relayed-messages *boolean*

Synopsis	Debug relayed Diameter messages
Context	debug aaa diameter node *string* relayed-messages *boolean*
Tree	relayed-messages
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

call-trace

Synopsis	Enter the **call-trace** context
Context	debug call-trace
Tree	call-trace
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ipoe

Synopsis	Enter the **ipoe** context
Context	debug call-trace ipoe
Tree	ipoe
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

trace [name] *string*

Synopsis	Enter the **trace** list instance
Context	debug call-trace ipoe trace *string*
Tree	trace
Max. Instances	50
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Unique trace name
Context	debug call-trace ipoe trace *string*
Tree	trace
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Circuit ID of the sessions to trace
Context	debug call-trace ipoe trace *string* circuit-id *string*
Tree	circuit-id

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Description	This command configures the circuit ID of the sessions to trace. The circuit ID filter is ignored if it is not part of the IPoE session key.
String Length	1 to 255
Notes	The following elements are part of a choice: **circuit-id** or **remote-id**.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MAC address of the sessions to trace
Context	debug call-trace ipoe trace *string* mac *string*
Tree	mac
String Length	1 to 17
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-jobs *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maximum number of trace jobs
Context	debug call-trace ipoe trace *string* max-jobs *number*
Tree	max-jobs
Range	1 to 50
Default	1
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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profile *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Call trace profile applied for the trace
Context	debug call-trace ipoe trace *string* profile *string*
Tree	profile
String Length	1 to 32
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Remote ID of the sessions to trace
Context	debug call-trace ipoe trace *string* remote-id *string*
Tree	remote-id
Description	This command configures the remote ID of the sessions to trace. The remote ID filter is ignored if it is not part of the IPoE session key.
String Length	1 to 255
Notes	The following elements are part of a choice: **circuit-id** or **remote-id**.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP ID of the sessions to trace
Context	debug call-trace ipoe trace *string* sap *string*

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Tree	sap
String Length	1 to 45
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

trace-existing-sessions *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable call trace for existing sessions
Context	debug call-trace ipoe trace *string* trace-existing-sessions *boolean*
Tree	trace-existing-sessions
Description	When configured to **true**, the system traces existing sessions. When configured to **false**, only new sessions are traced.
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe

Synopsis	Enter the **pppoe** context
Context	debug call-trace pppoe
Tree	pppoe
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

trace [name] *string*

Synopsis	Enter the **trace** list instance
Context	debug call-trace pppoe trace *string*
Tree	trace
Max. Instances	50
Introduced	22.7.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Unique trace name
Context	debug call-trace pppoe trace *string*
Tree	trace
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Circuit ID of the sessions to trace
Context	debug call-trace pppoe trace *string* circuit-id *string*
Tree	circuit-id
String Length	1 to 255
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MAC address of the sessions to trace
Context	debug call-trace pppoe trace *string* mac *string*
Tree	mac
String Length	1 to 17
Introduced	22.7.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-jobs *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maximum number of trace jobs
Context	debug call-trace pppoe trace *string* max-jobs *number*
Tree	max-jobs
Range	1 to 50
Default	1
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

profile *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Call trace profile applied for the trace
Context	debug call-trace pppoe trace *string* profile *string*
Tree	profile
String Length	1 to 32
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Remote ID of the sessions to trace

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Context	debug call-trace pppoe trace *string* remote-id *string*
Tree	remote-id
String Length	1 to 255
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP ID of the sessions to trace
Context	debug call-trace pppoe trace *string* sap *string*
Tree	sap
String Length	1 to 45
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

trace-existing-sessions *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable call trace for existing sessions
Context	debug call-trace pppoe trace *string* trace-existing-sessions *boolean*
Tree	trace-existing-sessions
Description	When configured to **true**, the system traces existing sessions. When configured to **false**, only new sessions are traced.
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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user-name *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PPPoE username of the sessions to trace
Context	debug call-trace pppoe trace *string* user-name *string*
Tree	user-name
String Length	1 to 253
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wlan-gw

Synopsis	Enter the **wlan-gw** context
Context	debug call-trace wlan-gw
Tree	wlan-gw
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ue [name] *string*

Synopsis	Enter the **ue** list instance
Context	debug call-trace wlan-gw ue *string*
Tree	ue
Max. Instances	50
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Unique trace name
Context	debug call-trace wlan-gw ue *string*
Tree	ue
String Length	1 to 32

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Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MAC address of the sessions to trace
Context	debug call-trace wlan-gw ue *string* mac *string*
Tree	mac
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

profile *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Call trace profile applied for the trace
Context	debug call-trace wlan-gw ue *string* profile *string*
Tree	profile
String Length	1 to 32
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2tp

Synopsis	Enter the **l2tp** context
Context	debug l2tp
Tree	l2tp

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Introduced	23.7.R1
Platforms	All

predictable-id-assignment *boolean*

Synopsis	Enable predictable tunnel and session ID assignment
Context	debug l2tp predictable-id-assignment *boolean*
Tree	predictable-id-assignment
Default	false
Introduced	23.7.R1
Platforms	All

lag [lag-name] *string*

Synopsis	Enter the **lag** list instance
Context	debug lag *string*
Tree	lag
Description	Commands in this context configure debugging for Link Aggregation Group (LAG).
Introduced	22.7.R1
Platforms	All

[**lag-name**] *string*

Synopsis	LAG name
Context	debug lag *string*
Tree	lag
Description	This command specifies the LAG name. In model-driven interfaces, the LAG name is used for configuration references and **show** commands. A service provider or administrator can use the defined LAG name to identify and manage LAGs within the SR OS platforms. The LAG name must always start with "lag-".
String Length	1 to 27
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

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bfd *boolean*

Synopsis	Enable debugging for BFD
Context	debug lag *string* bfd *boolean*
Tree	bfd
Default	false
Introduced	22.7.R1
Platforms	All

config *boolean*

Synopsis	Enable debugging for configuration changes
Context	debug lag *string* config *boolean*
Tree	config
Default	false
Introduced	22.7.R1
Platforms	All

iom-updates *boolean*

Synopsis	Enable debugging for IOM updates
Context	debug lag *string* iom-updates *boolean*
Tree	iom-updates
Default	false
Introduced	22.7.R1
Platforms	All

lacp-packets *boolean*

Synopsis	Enable debugging for LACP packets
Context	debug lag *string* lacp-packets *boolean*
Tree	lacp-packets
Default	false
Introduced	22.7.R1
Platforms	All

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multi-chassis *boolean*

Synopsis	Enable debugging for multi-chassis LAG
Context	debug lag *string* multi-chassis *boolean*
Tree	multi-chassis
Default	false
Introduced	22.7.R1
Platforms	All

multi-chassis-packets *boolean*

Synopsis	Enable debugging for multi-chassis packets
Context	debug lag *string* multi-chassis-packets *boolean*
Tree	multi-chassis-packets
Default	false
Introduced	22.7.R1
Platforms	All

port [port-id] *string*

Synopsis	Enter the **port** list instance
Context	debug lag *string* port *string*
Tree	port
Introduced	22.7.R1
Platforms	All

[**port-id**] *string*

Synopsis	Unique identifier for the port in the LAG
Context	debug lag *string* port *string*
Tree	port
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

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bfd *boolean*

Synopsis	Enable debugging for BFD
Context	debug lag *string* port *string* bfd *boolean*
Tree	bfd
Default	false
Introduced	22.7.R1
Platforms	All

config *boolean*

Synopsis	Enable debugging for configuration changes
Context	debug lag *string* port *string* config *boolean*
Tree	config
Default	false
Introduced	22.7.R1
Platforms	All

lacp-packets *boolean*

Synopsis	Enable debugging for LACP packets
Context	debug lag *string* port *string* lacp-packets *boolean*
Tree	lacp-packets
Default	false
Introduced	22.7.R1
Platforms	All

multi-chassis *boolean*

Synopsis	Enable debugging for multi-chassis LAG
Context	debug lag *string* port *string* multi-chassis *boolean*
Tree	multi-chassis
Default	false
Introduced	22.7.R1
Platforms	All

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port-states *boolean*

Synopsis	Enable debugging for port-state changes
Context	debug lag *string* port *string* port-states *boolean*
Tree	port-states
Default	false
Introduced	22.7.R1
Platforms	All

redundancy *boolean*

Synopsis	Enable debugging for redundancy
Context	debug lag *string* port *string* redundancy *boolean*
Tree	redundancy
Default	false
Introduced	22.7.R1
Platforms	All

selection-logic *boolean*

Synopsis	Enable debugging for selection logic
Context	debug lag *string* port *string* selection-logic *boolean*
Tree	selection-logic
Default	false
Introduced	22.7.R1
Platforms	All

state-machine *boolean*

Synopsis	Enable debugging for state-machine changes
Context	debug lag *string* port *string* state-machine *boolean*
Tree	state-machine
Default	false
Introduced	22.7.R1
Platforms	All

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timers *boolean*

Synopsis	Enable debugging for timers
Context	debug lag *string* port *string* timers *boolean*
Tree	timers
Default	false
Introduced	22.7.R1
Platforms	All

port-states *boolean*

Synopsis	Enable debugging for port-state changes
Context	debug lag *string* port-states *boolean*
Tree	port-states
Default	false
Introduced	22.7.R1
Platforms	All

redundancy *boolean*

Synopsis	Enable debugging for redundancy
Context	debug lag *string* redundancy *boolean*
Tree	redundancy
Default	false
Introduced	22.7.R1
Platforms	All

selection-logic *boolean*

Synopsis	Enable debugging for selection logic
Context	debug lag *string* selection-logic *boolean*
Tree	selection-logic
Default	false
Introduced	22.7.R1
Platforms	All

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state-machine *boolean*

Synopsis	Enable debugging for state-machine changes
Context	debug lag *string* state-machine *boolean*
Tree	state-machine
Default	false
Introduced	22.7.R1
Platforms	All

timers *boolean*

Synopsis	Enable debugging for timers
Context	debug lag *string* timers *boolean*
Tree	timers
Default	false
Introduced	22.7.R1
Platforms	All

nat

Synopsis	Enter the **nat** context
Context	debug nat
Tree	nat
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2-aware

Synopsis	Enter the **l2-aware** context
Context	debug nat l2-aware
Tree	l2-aware
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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subscriber [subscriber-id] *string*

Synopsis	Add a list entry for **subscriber**
Context	debug nat l2-aware subscriber *string*
Tree	subscriber
Max. Instances	16
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**subscriber-id**] *string*

Synopsis	L2-aware subscriber ID
Context	debug nat l2-aware subscriber *string*
Tree	subscriber
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

upnp

Synopsis	Enter the **upnp** context
Context	debug nat l2-aware upnp
Tree	upnp
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber [subscriber-id] *string*

Synopsis	Enter the **subscriber** list instance
Context	debug nat l2-aware upnp subscriber *string*
Tree	subscriber
Max. Instances	10
Introduced	22.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**subscriber-id**] *string*

Synopsis	L2-aware subscriber ID
Context	debug nat l2-aware upnp subscriber *string*
Tree	subscriber
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

events *boolean*

Synopsis	Enable UPnP event debugging
Context	debug nat l2-aware upnp subscriber *string* events *boolean*
Tree	events
Default	true
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packets

Synopsis	Enable the **packets** context
Context	debug nat l2-aware upnp subscriber *string* packets
Tree	packets
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

detail *boolean*

Synopsis	Include IP, UDP, and TCP headers in UPnP packet debug
Context	debug nat l2-aware upnp subscriber *string* packets detail *boolean*
Tree	detail
Default	false

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Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

large-scale

Synopsis	Enter the **large-scale** context
Context	debug nat large-scale
Tree	large-scale
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dual-stack-lite

Synopsis	Enter the **dual-stack-lite** context
Context	debug nat large-scale dual-stack-lite
Tree	dual-stack-lite
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber inside-router *string* b4-address *string*

Synopsis	Add a list entry for **subscriber**
Context	debug nat large-scale dual-stack-lite subscriber inside-router *string* b4-address *string*
Tree	subscriber
Max. Instances	16
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside-router *string*

Synopsis	Inside router instance name
Context	debug nat large-scale dual-stack-lite subscriber inside-router *string* b4-address *string*
Tree	subscriber
Notes	This element is part of a list key.

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Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

b4-address *string*

Synopsis	IPv6 B4 address of the DS-Lite subscriber
Context	debug nat large-scale dual-stack-lite subscriber inside-router *string* b4-address *string*
Tree	subscriber
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat44

Synopsis	Enter the **nat44** context
Context	debug nat large-scale nat44
Tree	nat44
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber inside-router *string* ip-address *string*

Synopsis	Add a list entry for **subscriber**
Context	debug nat large-scale nat44 subscriber inside-router *string* ip-address *string*
Tree	subscriber
Max. Instances	16
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside-router *string*

Synopsis	Inside router instance name
Context	debug nat large-scale nat44 subscriber inside-router *string* ip-address *string*
Tree	subscriber

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Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis	Inside IPv4 address of the NAT44 subscriber
Context	debug nat large-scale nat44 subscriber inside-router *string* ip-address *string*
Tree	subscriber
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat64

Synopsis	Enter the **nat64** context
Context	debug nat large-scale nat64
Tree	nat64
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber inside-router *string* ipv6-prefix *string*

Synopsis	Add a list entry for **subscriber**
Context	debug nat large-scale nat64 subscriber inside-router *string* ipv6-prefix *string*
Tree	subscriber
Max. Instances	16
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside-router *string*

Synopsis	Inside router instance name
Context	debug nat large-scale nat64 subscriber inside-router *string* ipv6-prefix *string*

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Tree	subscriber
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-prefix *string*

Synopsis	NAT64 IPv6 prefix of the subscriber
Context	debug nat large-scale nat64 subscriber inside-router *string* ipv6-prefix *string*
Tree	subscriber
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-import

Synopsis	Enter the **nat-import** context
Context	debug nat nat-import
Tree	nat-import
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

route [ip-address] *(ipv4-unicast-address | keyword)* inside-router *string*

Synopsis	Add a list entry for **route**
Context	debug nat nat-import route *(ipv4-unicast-address | keyword)* inside-router *string*
Tree	route
Max. Instances	32
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**ip-address**] *(ipv4-unicast-address | keyword)*

Synopsis	IPv4 address of imported route, or any

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Context	debug nat nat-import route *(ipv4-unicast-address | keyword)* inside-router *string*
Tree	route
Options	any
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside-router *string*

Synopsis	Router name or VPRN service name, or any
Context	debug nat nat-import route *(ipv4-unicast-address | keyword)* inside-router *string*
Tree	route
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pcp

Synopsis	Enter the **pcp** context
Context	debug nat pcp
Tree	pcp
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router [router-instance] *string*

Synopsis	Enter the **router** list instance
Context	debug nat pcp router *string*
Tree	router
Max. Instances	8
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**router-instance**] *string*

Synopsis	Inside router instance name
Context	debug nat pcp router *string*
Tree	router
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server [name] *string*

Synopsis	Enter the **server** list instance
Context	debug nat pcp router *string* server *string*
Tree	server
Max. Instances	8
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	PCP server name
Context	debug nat pcp router *string* server *string*
Tree	server
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packets

Synopsis	Enter the **packets** context
Context	debug nat pcp router *string* server *string* packets
Tree	packets
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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detail *boolean*

Synopsis	Enable the detailed PCP packet debug output
Context	debug nat pcp router *string* server *string* packets detail *boolean*
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of the PCP packet debugging
Context	debug nat pcp router *string* server *string* packets direction *keyword*
Tree	direction
Options	ingress, egress, both
Default	ingress
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router [router-instance] *string*

Synopsis	Enter the **router** list instance
Context	debug router *string*
Tree	router
Introduced	22.5.R1
Platforms	All

[**router-instance**] *string*

Synopsis	Router name or VPRN service name
Context	debug router *string*
Tree	router
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

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dhcp

Synopsis	Enter the **dhcp** context
Context	debug router *string* dhcp
Tree	dhcp
Description	Commands in this context enable DHCP debug for all packets in the specified routing instance or VPRN service, or for specific packets matching the specific MAC addresses, SAP identifiers, or interface names. When a DHCP packet matches a specified filter and is conforming the configured debug mode for that filter, the packet debug is available in the specified detail level. DHCP debug filter criteria are applied in the following order: **1.** MAC address **2.** SAP identifier **3.** interface names **4.** all packets Up to 8 MAC address filters, 8 SAP identifier filters, 4 interface name filters, and 4 all-packet filters can be specified simultaneously across all routing instances and VPRN services.
Introduced	22.10.R1
Platforms	All

all-packets

Synopsis	Enable the **all-packets** context
Context	debug router *string* dhcp all-packets
Tree	all-packets
Introduced	22.10.R1
Platforms	All

detail-level *keyword*

Synopsis	Detail level of the DHCP debug output
Context	debug router *string* dhcp all-packets detail-level *keyword*
Tree	detail-level
Options	high, medium, low
Default	high
Introduced	22.10.R1

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Platforms	All

mode *keyword*

Synopsis	DHCP packets present in the debug output
Context	debug router *string* dhcp all-packets mode *keyword*
Tree	mode
Options	egress-ingress-and-dropped, dropped-only, ingress-and-dropped
Default	egress-ingress-and-dropped
Introduced	22.10.R1
Platforms	All

interface [interface-name] *string*

Synopsis	Enter the **interface** list instance
Context	debug router *string* dhcp interface *string*
Tree	interface
Introduced	22.10.R1
Platforms	All

[**interface-name**] *string*

Synopsis	Interface name
Context	debug router *string* dhcp interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

detail-level *keyword*

Synopsis	Detail level of the DHCP debug output
Context	debug router *string* dhcp interface *string* detail-level *keyword*
Tree	detail-level

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Options	high, medium, low
Default	high
Introduced	22.10.R1
Platforms	All

mode *keyword*

Synopsis	DHCP packets present in the debug output
Context	debug router *string* dhcp interface *string* mode *keyword*
Tree	mode
Options	egress-ingress-and-dropped, dropped-only, ingress-and-dropped
Default	egress-ingress-and-dropped
Introduced	22.10.R1
Platforms	All

mac [address] *string*

Synopsis	Enter the **mac** list instance
Context	debug router *string* dhcp mac *string*
Tree	mac
Introduced	22.10.R1
Platforms	All

[**address**] *string*

Synopsis	MAC address matching the client hardware address field
Context	debug router *string* dhcp mac *string*
Tree	mac
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

detail-level *keyword*

Synopsis	Detail level of the DHCP debug output

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Context	debug router *string* dhcp mac *string* detail-level *keyword*
Tree	detail-level
Options	high, medium, low
Default	high
Introduced	22.10.R1
Platforms	All

mode *keyword*

Synopsis	DHCP packets present in the debug output
Context	debug router *string* dhcp mac *string* mode *keyword*
Tree	mode
Options	egress-ingress-and-dropped, dropped-only, ingress-and-dropped
Default	egress-ingress-and-dropped
Introduced	22.10.R1
Platforms	All

sap [sap-id] *string*

Synopsis	Enter the **sap** list instance
Context	debug router *string* dhcp sap *string*
Tree	sap
Introduced	22.10.R1
Platforms	All

[**sap-id**] *string*

Synopsis	SAP ID
Context	debug router *string* dhcp sap *string*
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

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detail-level *keyword*

Synopsis	Detail level of the DHCP debug output
Context	debug router *string* dhcp sap *string* detail-level *keyword*
Tree	detail-level
Options	high, medium, low
Default	high
Introduced	22.10.R1
Platforms	All

mode *keyword*

Synopsis	DHCP packets present in the debug output
Context	debug router *string* dhcp sap *string* mode *keyword*
Tree	mode
Options	egress-ingress-and-dropped, dropped-only, ingress-and-dropped
Default	egress-ingress-and-dropped
Introduced	22.10.R1
Platforms	All

igmp

Synopsis	Enter the **igmp** context
Context	debug router *string* igmp
Tree	igmp
Introduced	22.10.R1
Platforms	All

group-interface

Synopsis	Enable the **group-interface** context
Context	debug router *string* igmp group-interface
Tree	group-interface
Introduced	22.10.R1
Platforms	All

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all-group-interfaces

Synopsis	Trace all interfaces
Context	debug router *string* igmp group-interface all-group-interfaces
Tree	all-group-interfaces
Notes	The following elements are part of a mandatory choice: **all-group-interfaces** or (**forwarding-service** and **group-interface-name**).
Introduced	22.10.R1
Platforms	All

forwarding-service *string*

Synopsis	ID of the forwarding service to trace
Context	debug router *string* igmp group-interface forwarding-service *string*
Tree	forwarding-service
String Length	1 to 64
Default	../../router-instance
Notes	The following elements are part of a mandatory choice: **all-group-interfaces** or (**forwarding-service** and **group-interface-name**).
Introduced	22.10.R1
Platforms	All

group-interface-name *string*

Synopsis	Interface name
Context	debug router *string* igmp group-interface group-interface-name *string*
Tree	group-interface-name
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: **all-group-interfaces** or (**forwarding-service** and **group-interface-name**).
Introduced	22.10.R1
Platforms	All

host

Synopsis	Enable the **host** context

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Context	debug router *string* igmp host
Tree	host
Introduced	22.10.R1
Platforms	All

group-interface

Synopsis	Enter the **group-interface** context
Context	debug router *string* igmp host group-interface
Tree	group-interface
Introduced	22.10.R1
Platforms	All

forwarding-service *string*

Synopsis	ID of the forwarding service to trace
Context	debug router *string* igmp host group-interface forwarding-service *string*
Tree	forwarding-service
String Length	1 to 64
Default	../../router-instance
Introduced	22.10.R1
Platforms	All

group-interface-name *string*

Synopsis	Interface name
Context	debug router *string* igmp host group-interface group-interface-name *string*
Tree	group-interface-name
String Length	1 to 32
Introduced	22.10.R1
Platforms	All

ip-address *string*

Synopsis	IP address of the host to trace

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Context	debug router *string* igmp host ip-address *string*
Tree	ip-address
Introduced	22.10.R1
Platforms	All

interface

Synopsis	Enable the **interface** context
Context	debug router *string* igmp interface
Tree	interface
Introduced	22.10.R1
Platforms	All

all-interfaces

Synopsis	Trace all interfaces
Context	debug router *string* igmp interface all-interfaces
Tree	all-interfaces
Notes	The following elements are part of a mandatory choice: **all-interfaces** or **interface-name**.
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router *string* igmp interface interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: **all-interfaces** or **interface-name**.
Introduced	22.10.R1
Platforms	All

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mcs

Synopsis	Enable the **mcs** context
Context	debug router *string* igmp mcs
Tree	mcs
Description	Commands in this context enable debugging for IGMP multicast servers.
Introduced	22.10.R1
Platforms	All

all-interfaces

Synopsis	Trace all interfaces
Context	debug router *string* igmp mcs all-interfaces
Tree	all-interfaces
Notes	The following elements are part of a mandatory choice: **all-interfaces** or **interface-name**.
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router *string* igmp mcs interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: **all-interfaces** or **interface-name**.
Introduced	22.10.R1
Platforms	All

miscellaneous *boolean*

Synopsis	Enable tracing of miscellaneous events
Context	debug router *string* igmp miscellaneous *boolean*
Tree	miscellaneous
Default	false

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Introduced	22.10.R1
Platforms	All

packet

Synopsis	Enable the **packet** context
Context	debug router *string* igmp packet
Tree	packet
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Trace all origins
Context	debug router *string* igmp packet all-origins
Tree	all-origins
Notes	The following elements are part of a choice: **all-origins**, **group-interface-name**, **host-ip-address**, **interface-ip-address**, or **interface-name**.
Introduced	22.10.R1
Platforms	All

dropped *boolean*

Synopsis	Enable tracing for dropped packets
Context	debug router *string* igmp packet dropped *boolean*
Tree	dropped
Default	true
Introduced	22.10.R1
Platforms	All

egress *boolean*

Synopsis	Enable tracing for transmitted packets
Context	debug router *string* igmp packet egress *boolean*
Tree	egress

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Default	true
Introduced	22.10.R1
Platforms	All

group-interface-name *string*

Synopsis	Interface name
Context	debug router *string* igmp packet group-interface-name *string*
Tree	group-interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: **all-origins**, **group-interface-name**, **host-ip-address**, **interface-ip-address**, or **interface-name**.
Introduced	22.10.R1
Platforms	All

host-ip-address *string*

Synopsis	Address of the host to trace
Context	debug router *string* igmp packet host-ip-address *string*
Tree	host-ip-address
Notes	The following elements are part of a choice: **all-origins**, **group-interface-name**, **host-ip-address**, **interface-ip-address**, or **interface-name**.
Introduced	22.10.R2
Platforms	All

ingress *boolean*

Synopsis	Enable tracing for received packets
Context	debug router *string* igmp packet ingress *boolean*
Tree	ingress
Default	true
Introduced	22.10.R1
Platforms	All

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interface-ip-address *string*

Synopsis	Source address of the packet to trace
Context	debug router *string* igmp packet interface-ip-address *string*
Tree	interface-ip-address
Notes	The following elements are part of a choice: **all-origins**, **group-interface-name**, **host-ip-address**, **interface-ip-address**, or **interface-name**.
Introduced	22.10.R2
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router *string* igmp packet interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: **all-origins**, **group-interface-name**, **host-ip-address**, **interface-ip-address**, or **interface-name**.
Introduced	22.10.R1
Platforms	All

type *keyword*

Synopsis	Packet type to trace
Context	debug router *string* igmp packet type *keyword*
Tree	type
Options	all – All IGMP packets query – IGMP Query packets v1-report – IGMP version 1 Report packets v2-report – IGMP version 2 Report packets v2-leave – IGMP version 2 Leave packets v3-report – IGMP version 3 Report packets
Default	all
Introduced	22.10.R1
Platforms	All

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ip

Synopsis	Enter the **ip** context
Context	debug router *string* ip
Tree	ip
Introduced	23.3.R1
Platforms	All

icmp

Synopsis	Enter the **icmp** context
Context	debug router *string* ip icmp
Tree	icmp
Introduced	23.3.R1
Platforms	All

all-packets

Synopsis	Enable the **all-packets** context
Context	debug router *string* ip icmp all-packets
Tree	all-packets
Introduced	23.3.R1
Platforms	All

interface [interface-name] *string*

Synopsis	Add a list entry for **interface**
Context	debug router *string* ip icmp interface *string*
Tree	interface
Introduced	23.3.R1
Platforms	All

[**interface-name**] *string*

Synopsis	Interface name
Context	debug router *string* ip icmp interface *string*

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Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

icmp6

Synopsis	Enter the **icmp6** context
Context	debug router *string* ip icmp6
Tree	icmp6
Introduced	23.3.R1
Platforms	All

all-packets

Synopsis	Enable the **all-packets** context
Context	debug router *string* ip icmp6 all-packets
Tree	all-packets
Introduced	23.3.R1
Platforms	All

interface [interface-name] *string*

Synopsis	Add a list entry for **interface**
Context	debug router *string* ip icmp6 interface *string*
Tree	interface
Introduced	23.3.R1
Platforms	All

[**interface-name**] *string*

Synopsis	Interface name
Context	debug router *string* ip icmp6 interface *string*
Tree	interface

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String Length	1 to 32
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

interface-events

Synopsis	Enter the **interface-events** context
Context	debug router *string* ip interface-events
Tree	interface-events
Introduced	23.3.R1
Platforms	All

all-events

Synopsis	Enable the **all-events** context
Context	debug router *string* ip interface-events all-events
Tree	all-events
Introduced	23.3.R1
Platforms	All

interface [interface-name] *string*

Synopsis	Add a list entry for **interface**
Context	debug router *string* ip interface-events interface *string*
Tree	interface
Introduced	23.3.R1
Platforms	All

[**interface-name**] *string*

Synopsis	Interface name
Context	debug router *string* ip interface-events interface *string*
Tree	interface
String Length	1 to 32

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Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

neighbor

Synopsis	Enter the **neighbor** context
Context	debug router *string* ip neighbor
Tree	neighbor
Introduced	23.3.R1
Platforms	All

all-events

Synopsis	Enable the **all-events** context
Context	debug router *string* ip neighbor all-events
Tree	all-events
Introduced	23.3.R1
Platforms	All

address-family *keyword*

Synopsis	Debug the specified address family
Context	debug router *string* ip neighbor all-events address-family *keyword*
Tree	address-family
Options	ipv4, ipv6
Introduced	23.3.R1
Platforms	All

interface [interface-name] *string*

Synopsis	Enter the **interface** list instance
Context	debug router *string* ip neighbor interface *string*
Tree	interface
Introduced	23.3.R1

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Platforms	All

[**interface-name**] *string*

Synopsis	Interface name
Context	debug router *string* ip neighbor interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

address-family *keyword*

Synopsis	Debug the specified address family
Context	debug router *string* ip neighbor interface *string* address-family *keyword*
Tree	address-family
Options	ipv4, ipv6
Introduced	23.3.R1
Platforms	All

packet

Synopsis	Enter the **packet** context
Context	debug router *string* ip packet
Tree	packet
Introduced	23.3.R1
Platforms	All

all-packets

Synopsis	Enable the **all-packets** context
Context	debug router *string* ip packet all-packets
Tree	all-packets
Introduced	23.3.R1

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Platforms	All

address-family *keyword*

Synopsis	Debug the specified address family
Context	debug router *string* ip packet all-packets address-family *keyword*
Tree	address-family
Options	ipv4, ipv6
Introduced	23.3.R1
Platforms	All

headers *boolean*

Synopsis	Display information associated with packet header only
Context	debug router *string* ip packet all-packets headers *boolean*
Tree	headers
Default	false
Introduced	23.3.R1
Platforms	All

protocol-id *number*

Synopsis	IP protocol ID to trace
Context	debug router *string* ip packet all-packets protocol-id *number*
Tree	protocol-id
Range	0 to 255
Introduced	23.3.R1
Platforms	All

interface [interface-name] *string*

Synopsis	Enter the **interface** list instance
Context	debug router *string* ip packet interface *string*
Tree	interface
Introduced	23.3.R1

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Platforms	All

[**interface-name**] *string*

Synopsis	Interface name
Context	debug router *string* ip packet interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

address-family *keyword*

Synopsis	Debug the specified address family
Context	debug router *string* ip packet interface *string* address-family *keyword*
Tree	address-family
Options	ipv4, ipv6
Introduced	23.3.R1
Platforms	All

headers *boolean*

Synopsis	Display information associated with packet header only
Context	debug router *string* ip packet interface *string* headers *boolean*
Tree	headers
Default	false
Introduced	23.3.R1
Platforms	All

protocol-id *number*

Synopsis	IP protocol ID to trace
Context	debug router *string* ip packet interface *string* protocol-id *number*
Tree	protocol-id

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Range	0 to 255
Introduced	23.3.R1
Platforms	All

route-table

Synopsis	Enable the **route-table** context
Context	debug router *string* ip route-table
Tree	route-table
Introduced	23.3.R1
Platforms	All

all

Synopsis	Allow trace for all route updates
Context	debug router *string* ip route-table all
Tree	all
Notes	The following elements are part of a mandatory choice: **all** or **filter**.
Introduced	23.3.R1
Platforms	All

filter

Synopsis	Enter the **filter** context
Context	debug router *string* ip route-table filter
Tree	filter
Notes	The following elements are part of a mandatory choice: **all** or **filter**.
Introduced	23.3.R1
Platforms	All

ipv4

Synopsis	Enter the **ipv4** context
Context	debug router *string* ip route-table filter ipv4
Tree	ipv4

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Introduced	23.3.R1
Platforms	All

prefix [prefix] *string*

Synopsis	Enter the **prefix** list instance
Context	debug router *string* ip route-table filter ipv4 prefix *string*
Tree	prefix
Max. Instances	1
Introduced	23.3.R1
Platforms	All

[**prefix**] *string*

Synopsis	IPv4 prefix
Context	debug router *string* ip route-table filter ipv4 prefix *string*
Tree	prefix
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

longest-prefix-match *boolean*

Synopsis	Allow match for greatest prefix values
Context	debug router *string* ip route-table filter ipv4 prefix *string* longest-prefix-match *boolean*
Tree	longest-prefix-match
Default	false
Introduced	23.3.R1
Platforms	All

ipv6

Synopsis	Enter the **ipv6** context
Context	debug router *string* ip route-table filter ipv6

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Tree	ipv6
Introduced	23.3.R1
Platforms	All

prefix [prefix] *string*

Synopsis	Enter the **prefix** list instance
Context	debug router *string* ip route-table filter ipv6 prefix *string*
Tree	prefix
Max. Instances	1
Introduced	23.3.R1
Platforms	All

[**prefix**] *string*

Synopsis	IPv6 prefix
Context	debug router *string* ip route-table filter ipv6 prefix *string*
Tree	prefix
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

longest-prefix-match *boolean*

Synopsis	Allow match for greatest prefix values
Context	debug router *string* ip route-table filter ipv6 prefix *string* longest-prefix-match *boolean*
Tree	longest-prefix-match
Default	false
Introduced	23.3.R1
Platforms	All

tunnel-table

Synopsis	Enable the **tunnel-table** context

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Context	debug router *string* ip tunnel-table
Tree	tunnel-table
Introduced	23.3.R1
Platforms	All

all

Synopsis	Allow trace for all tunnel updates
Context	debug router *string* ip tunnel-table all
Tree	all
Notes	The following elements are part of a mandatory choice: **all** or **filter**.
Introduced	23.3.R1
Platforms	All

filter

Synopsis	Enter the **filter** context
Context	debug router *string* ip tunnel-table filter
Tree	filter
Notes	The following elements are part of a mandatory choice: **all** or **filter**.
Introduced	23.3.R1
Platforms	All

id

Synopsis	Enter the **id** context
Context	debug router *string* ip tunnel-table filter id
Tree	id
Introduced	23.3.R1
Platforms	All

sdp-id *number*

Synopsis	SDP ID for tracing
Context	debug router *string* ip tunnel-table filter id sdp-id *number*

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Tree	sdp-id
Range	1 to 32767
Notes	The following elements are part of a choice: **sdp-id** or **tunnel-id**.
Introduced	23.3.R1
Platforms	All

tunnel-id *number*

Synopsis	Tunnel ID for tracing
Context	debug router *string* ip tunnel-table filter id tunnel-id *number*
Tree	tunnel-id
Max. Range	0 to 4294967295
Notes	The following elements are part of a choice: **sdp-id** or **tunnel-id**.
Introduced	23.3.R1
Platforms	All

ipv4

Synopsis	Enter the **ipv4** context
Context	debug router *string* ip tunnel-table filter ipv4
Tree	ipv4
Introduced	23.3.R1
Platforms	All

prefix [prefix] *string*

Synopsis	Enter the **prefix** list instance
Context	debug router *string* ip tunnel-table filter ipv4 prefix *string*
Tree	prefix
Max. Instances	1
Introduced	23.3.R1
Platforms	All

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[**prefix**] *string*

Synopsis	IPv4 prefix
Context	debug router *string* ip tunnel-table filter ipv4 prefix *string*
Tree	prefix
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

longest-prefix-match *boolean*

Synopsis	Allow match for greatest prefix values
Context	debug router *string* ip tunnel-table filter ipv4 prefix *string* longest-prefix-match *boolean*
Tree	longest-prefix-match
Default	false
Introduced	23.3.R1
Platforms	All

tunnel-type *(keyword | keyword)*

Synopsis	Tunnel type
Context	debug router *string* ip tunnel-table filter ipv4 prefix *string* tunnel-type *(keyword | keyword)*
Tree	tunnel-type
Options	none, invalid, sdp, rsvp, ldp, ospf, isis, bypass, gre, bgp, sr-te, fpe, udp, ospfv3, mpls-fwd-policy, sr-policy, rib-api, bgp-epe, srv6-isis, srv6-policy
Options	all
Default	all
Introduced	23.3.R1
Platforms	All

ipv6

Synopsis	Enter the **ipv6** context
Context	debug router *string* ip tunnel-table filter ipv6
Tree	ipv6
Introduced	23.3.R1

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Platforms	All

prefix [prefix] *string*

Synopsis	Enter the **prefix** list instance
Context	debug router *string* ip tunnel-table filter ipv6 prefix *string*
Tree	prefix
Max. Instances	1
Introduced	23.3.R1
Platforms	All

[**prefix**] *string*

Synopsis	IPv6 prefix
Context	debug router *string* ip tunnel-table filter ipv6 prefix *string*
Tree	prefix
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

longest-prefix-match *boolean*

Synopsis	Allow match for greatest prefix values
Context	debug router *string* ip tunnel-table filter ipv6 prefix *string* longest-prefix-match *boolean*
Tree	longest-prefix-match
Default	false
Introduced	23.3.R1
Platforms	All

tunnel-type *(keyword | keyword)*

Synopsis	Tunnel type
Context	debug router *string* ip tunnel-table filter ipv6 prefix *string* tunnel-type *(keyword | keyword)*
Tree	tunnel-type

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Options	none, invalid, sdp, rsvp, ldp, ospf, isis, bypass, gre, bgp, sr-te, fpe, udp, ospfv3, mpls-fwd-policy, sr-policy, rib-api, bgp-epe, srv6-isis, srv6-policy
Options	all
Default	all
Introduced	23.3.R1
Platforms	All

l2tp

Synopsis	Enter the **l2tp** context
Context	debug router *string* l2tp
Tree	l2tp
Introduced	23.7.R1
Platforms	All

assignment-id [assignment-id] *string*

Synopsis	Enter the **assignment-id** list instance
Context	debug router *string* l2tp assignment-id *string*
Tree	assignment-id
Max. Instances	8
Introduced	23.7.R1
Platforms	All

[**assignment-id**] *string*

Synopsis	Assignment ID of the L2TP tunnel to debug
Context	debug router *string* l2tp assignment-id *string*
Tree	assignment-id
String Length	1 to 63
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

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events

Synopsis	Enable the **events** context
Context	debug router *string* l2tp assignment-id *string* events
Tree	events
Introduced	23.7.R1
Platforms	All

all

Synopsis	Enable debugging for all events
Context	debug router *string* l2tp assignment-id *string* events all
Tree	all
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

call-disconnect-notification *boolean*

Synopsis	Enable L2TP CDN event debugging
Context	debug router *string* l2tp assignment-id *string* events call-disconnect-notification *boolean*
Tree	call-disconnect-notification
Default	false
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

finite-state-machine *boolean*

Synopsis	Enable L2TP FSM event debugging
Context	debug router *string* l2tp assignment-id *string* events finite-state-machine *boolean*
Tree	finite-state-machine
Default	false

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Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

lac

Synopsis	Enter the **lac** context
Context	debug router *string* l2tp assignment-id *string* events lac
Tree	lac
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

state-recovery *boolean*

Synopsis	Enable L2TP LAC state recovery event debugging
Context	debug router *string* l2tp assignment-id *string* events lac state-recovery *boolean*
Tree	state-recovery
Default	false
Introduced	23.7.R1
Platforms	All

state-recovery-failed *boolean*

Synopsis	Enable L2TP LAC state recovery failed event debugging
Context	debug router *string* l2tp assignment-id *string* events lac state-recovery-failed *boolean*
Tree	state-recovery-failed
Default	false
Introduced	23.7.R1
Platforms	All

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lns

Synopsis	Enter the **lns** context
Context	debug router *string* l2tp assignment-id *string* events lns
Tree	lns
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

ppp

Synopsis	Enable the **ppp** context
Context	debug router *string* l2tp assignment-id *string* events lns ppp
Tree	ppp
Introduced	23.7.R1
Platforms	All

terminate-only *boolean*

Synopsis	Debug events for ungracefully terminated sessions only
Context	debug router *string* l2tp assignment-id *string* events lns ppp terminate-only *boolean*
Tree	terminate-only
Default	false
Introduced	23.7.R1
Platforms	All

stop-control-connection-notification *boolean*

Synopsis	Enable L2TP StopCCN event debugging
Context	debug router *string* l2tp assignment-id *string* events stop-control-connection-notification *boolean*
Tree	stop-control-connection-notification
Default	false

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Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

packets

Synopsis	Enable the **packets** context
Context	debug router *string* l2tp assignment-id *string* packets
Tree	packets
Introduced	23.7.R1
Platforms	All

all

Synopsis	Enable debugging for all session packets
Context	debug router *string* l2tp assignment-id *string* packets all
Tree	all
Notes	The following elements are part of a mandatory choice: **all** or (**l2tp** and **lns**).
Introduced	23.7.R1
Platforms	All

detail-level *keyword*

Synopsis	Detail level of the L2TP packet debug output
Context	debug router *string* l2tp assignment-id *string* packets detail-level *keyword*
Tree	detail-level
Options	low, high
Default	low
Introduced	23.7.R1
Platforms	All

direction *keyword*

Synopsis	Direction of the L2TP packet debugging

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Context	debug router *string* l2tp assignment-id *string* packets direction *keyword*
Tree	direction
Options	ingress, egress, both
Default	both
Introduced	23.7.R1
Platforms	All

l2tp *boolean*

Synopsis	Enable L2TP packet debugging
Context	debug router *string* l2tp assignment-id *string* packets l2tp *boolean*
Tree	l2tp
Default	false
Notes	The following elements are part of a mandatory choice: **all** or (**l2tp** and **lns**).
Introduced	23.7.R1
Platforms	All

lns

Synopsis	Enter the **lns** context
Context	debug router *string* l2tp assignment-id *string* packets lns
Tree	lns
Notes	The following elements are part of a mandatory choice: **all** or (**l2tp** and **lns**).
Introduced	23.7.R1
Platforms	All

dhcp-client *boolean*

Synopsis	Enable DHCP client packet debugging
Context	debug router *string* l2tp assignment-id *string* packets lns dhcp-client *boolean*
Tree	dhcp-client
Default	false
Introduced	23.7.R1
Platforms	All

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ppp

Synopsis	Enter the **ppp** context
Context	debug router *string* l2tp assignment-id *string* packets lns ppp
Tree	ppp
Introduced	23.7.R1
Platforms	All

all

Synopsis	Enable PPP debugging for all PPP session packets
Context	debug router *string* l2tp assignment-id *string* packets lns ppp all
Tree	all
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

chap *boolean*

Synopsis	Enable PPP debugging for CHAP authentication packets
Context	debug router *string* l2tp assignment-id *string* packets lns ppp chap *boolean*
Tree	chap
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

ipcp *boolean*

Synopsis	Enable PPP debugging for IPCP NCP packets
Context	debug router *string* l2tp assignment-id *string* packets lns ppp ipcp *boolean*
Tree	ipcp
Default	false

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Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

ipv6cp *boolean*

Synopsis	Enable PPP debugging for IPv6CP NCP packets
Context	debug router *string* l2tp assignment-id *string* packets lns ppp ipv6cp *boolean*
Tree	ipv6cp
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

lcp *boolean*

Synopsis	Enable PPP debugging for LCP link establishment packets
Context	debug router *string* l2tp assignment-id *string* packets lns ppp lcp *boolean*
Tree	lcp
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

other *boolean*

Synopsis	Enable other PPP protocol packet debugging
Context	debug router *string* l2tp assignment-id *string* packets lns ppp other *boolean*
Tree	other
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1

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Platforms	All

pap *boolean*

Synopsis	Enable PPP debugging for PAP authentication packets
Context	debug router *string* l2tp assignment-id *string* packets lns ppp pap *boolean*
Tree	pap
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

events

Synopsis	Enable the **events** context
Context	debug router *string* l2tp events
Tree	events
Introduced	23.7.R1
Platforms	All

all

Synopsis	Enable debugging for all events
Context	debug router *string* l2tp events all
Tree	all
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, **session-setup**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

call-disconnect-notification *boolean*

Synopsis	Enable L2TP CDN event debugging
Context	debug router *string* l2tp events call-disconnect-notification *boolean*

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Tree	call-disconnect-notification
Default	false
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, **session-setup**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

finite-state-machine *boolean*

Synopsis	Enable L2TP FSM event debugging
Context	debug router *string* l2tp events finite-state-machine *boolean*
Tree	finite-state-machine
Default	false
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, **session-setup**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

lac

Synopsis	Enter the **lac** context
Context	debug router *string* l2tp events lac
Tree	lac
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, **session-setup**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

state-recovery *boolean*

Synopsis	Enable L2TP LAC state recovery event debugging
Context	debug router *string* l2tp events lac state-recovery *boolean*
Tree	state-recovery
Default	false

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Introduced	23.7.R1
Platforms	All

state-recovery-failed *boolean*

Synopsis	Enable L2TP LAC state recovery failed event debugging
Context	debug router *string* l2tp events lac state-recovery-failed *boolean*
Tree	state-recovery-failed
Default	false
Introduced	23.7.R1
Platforms	All

lns

Synopsis	Enter the **lns** context
Context	debug router *string* l2tp events lns
Tree	lns
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, **session-setup**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

ppp

Synopsis	Enable the **ppp** context
Context	debug router *string* l2tp events lns ppp
Tree	ppp
Introduced	23.7.R1
Platforms	All

terminate-only *boolean*

Synopsis	Debug events for ungracefully terminated sessions only
Context	debug router *string* l2tp events lns ppp terminate-only *boolean*
Tree	terminate-only

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Default	false
Introduced	23.7.R1
Platforms	All

session-setup

Synopsis	Enter the **session-setup** context
Context	debug router *string* l2tp events session-setup
Tree	session-setup
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, **session-setup**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

attempted-tunnels *boolean*

Synopsis	Enable debugging for attempted LNS tunnels
Context	debug router *string* l2tp events session-setup attempted-tunnels *boolean*
Tree	attempted-tunnels
Default	false
Introduced	23.7.R1
Platforms	All

skipped-tunnels *boolean*

Synopsis	Enable debugging for skipped LNS tunnels
Context	debug router *string* l2tp events session-setup skipped-tunnels *boolean*
Tree	skipped-tunnels
Default	false
Introduced	23.7.R1
Platforms	All

stop-control-connection-notification *boolean*

Synopsis	Enable L2TP StopCCN event debugging

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Context	debug router *string* l2tp events stop-control-connection-notification *boolean*
Tree	stop-control-connection-notification
Default	false
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, **session-setup**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

group [tunnel-group-name] *string*

Synopsis	Enter the **group** list instance
Context	debug router *string* l2tp group *string*
Tree	group
Max. Instances	8
Introduced	23.7.R1
Platforms	All

[**tunnel-group-name**] *string*

Synopsis	Tunnel group name of the L2TP tunnel to debug
Context	debug router *string* l2tp group *string*
Tree	group
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

events

Synopsis	Enable the **events** context
Context	debug router *string* l2tp group *string* events
Tree	events
Introduced	23.7.R1
Platforms	All

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all

Synopsis	Enable debugging for all events
Context	debug router *string* l2tp group *string* events all
Tree	all
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, **session-setup**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

call-disconnect-notification *boolean*

Synopsis	Enable L2TP CDN event debugging
Context	debug router *string* l2tp group *string* events call-disconnect-notification *boolean*
Tree	call-disconnect-notification
Default	false
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, **session-setup**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

finite-state-machine *boolean*

Synopsis	Enable L2TP FSM event debugging
Context	debug router *string* l2tp group *string* events finite-state-machine *boolean*
Tree	finite-state-machine
Default	false
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, **session-setup**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

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lac

Synopsis	Enter the **lac** context
Context	debug router *string* l2tp group *string* events lac
Tree	lac
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, **session-setup**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

state-recovery *boolean*

Synopsis	Enable L2TP LAC state recovery event debugging
Context	debug router *string* l2tp group *string* events lac state-recovery *boolean*
Tree	state-recovery
Default	false
Introduced	23.7.R1
Platforms	All

state-recovery-failed *boolean*

Synopsis	Enable L2TP LAC state recovery failed event debugging
Context	debug router *string* l2tp group *string* events lac state-recovery-failed *boolean*
Tree	state-recovery-failed
Default	false
Introduced	23.7.R1
Platforms	All

lns

Synopsis	Enter the **lns** context
Context	debug router *string* l2tp group *string* events lns
Tree	lns
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, **session-setup**, and **stop-control-connection-notification**).

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Introduced	23.7.R1
Platforms	All

ppp

Synopsis	Enable the **ppp** context
Context	debug router *string* l2tp group *string* events lns ppp
Tree	ppp
Introduced	23.7.R1
Platforms	All

terminate-only *boolean*

Synopsis	Debug events for ungracefully terminated sessions only
Context	debug router *string* l2tp group *string* events lns ppp terminate-only *boolean*
Tree	terminate-only
Default	false
Introduced	23.7.R1
Platforms	All

session-setup

Synopsis	Enter the **session-setup** context
Context	debug router *string* l2tp group *string* events session-setup
Tree	session-setup
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, **session-setup**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

attempted-tunnels *boolean*

Synopsis	Enable debugging for attempted LNS tunnels
Context	debug router *string* l2tp group *string* events session-setup attempted-tunnels *boolean*
Tree	attempted-tunnels

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Default	false
Introduced	23.7.R1
Platforms	All

skipped-tunnels *boolean*

Synopsis	Enable debugging for skipped LNS tunnels
Context	debug router *string* l2tp group *string* events session-setup skipped-tunnels *boolean*
Tree	skipped-tunnels
Default	false
Introduced	23.7.R1
Platforms	All

stop-control-connection-notification *boolean*

Synopsis	Enable L2TP StopCCN event debugging
Context	debug router *string* l2tp group *string* events stop-control-connection-notification *boolean*
Tree	stop-control-connection-notification
Default	false
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, **session-setup**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

packets

Synopsis	Enable the **packets** context
Context	debug router *string* l2tp group *string* packets
Tree	packets
Introduced	23.7.R1
Platforms	All

all

Synopsis	Enable debugging for all session packets

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Context	debug router *string* l2tp group *string* packets all
Tree	all
Notes	The following elements are part of a mandatory choice: **all** or (**l2tp** and **lns**).
Introduced	23.7.R1
Platforms	All

detail-level *keyword*

Synopsis	Detail level of the L2TP packet debug output
Context	debug router *string* l2tp group *string* packets detail-level *keyword*
Tree	detail-level
Options	low, high
Default	low
Introduced	23.7.R1
Platforms	All

direction *keyword*

Synopsis	Direction of the L2TP packet debugging
Context	debug router *string* l2tp group *string* packets direction *keyword*
Tree	direction
Options	ingress, egress, both
Default	both
Introduced	23.7.R1
Platforms	All

l2tp *boolean*

Synopsis	Enable L2TP packet debugging
Context	debug router *string* l2tp group *string* packets l2tp *boolean*
Tree	l2tp
Default	false
Notes	The following elements are part of a mandatory choice: **all** or (**l2tp** and **lns**).
Introduced	23.7.R1
Platforms	All

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lns

Synopsis	Enter the **lns** context
Context	debug router *string* l2tp group *string* packets lns
Tree	lns
Notes	The following elements are part of a mandatory choice: **all** or (**l2tp** and **lns**).
Introduced	23.7.R1
Platforms	All

dhcp-client *boolean*

Synopsis	Enable DHCP client packet debugging
Context	debug router *string* l2tp group *string* packets lns dhcp-client *boolean*
Tree	dhcp-client
Default	false
Introduced	23.7.R1
Platforms	All

ppp

Synopsis	Enter the **ppp** context
Context	debug router *string* l2tp group *string* packets lns ppp
Tree	ppp
Introduced	23.7.R1
Platforms	All

all

Synopsis	Enable PPP debugging for all PPP session packets
Context	debug router *string* l2tp group *string* packets lns ppp all
Tree	all
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

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chap *boolean*

Synopsis	Enable PPP debugging for CHAP authentication packets
Context	debug router *string* l2tp group *string* packets lns ppp chap *boolean*
Tree	chap
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

ipcp *boolean*

Synopsis	Enable PPP debugging for IPCP NCP packets
Context	debug router *string* l2tp group *string* packets lns ppp ipcp *boolean*
Tree	ipcp
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

ipv6cp *boolean*

Synopsis	Enable PPP debugging for IPv6CP NCP packets
Context	debug router *string* l2tp group *string* packets lns ppp ipv6cp *boolean*
Tree	ipv6cp
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

lcp *boolean*

Synopsis	Enable PPP debugging for LCP link establishment packets

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Context	debug router *string* l2tp group *string* packets lns ppp lcp *boolean*
Tree	lcp
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

other *boolean*

Synopsis	Enable other PPP protocol packet debugging
Context	debug router *string* l2tp group *string* packets lns ppp other *boolean*
Tree	other
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

pap *boolean*

Synopsis	Enable PPP debugging for PAP authentication packets
Context	debug router *string* l2tp group *string* packets lns ppp pap *boolean*
Tree	pap
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

ip-peer [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **ip-peer** list instance
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-peer

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Max. Instances	8
Introduced	23.7.R1
Platforms	All

[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the L2TP peer to debug
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-peer
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

events

Synopsis	Enable the **events** context
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* events
Tree	events
Introduced	23.7.R1
Platforms	All

all

Synopsis	Enable debugging for all events
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* events all
Tree	all
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

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call-disconnect-notification *boolean*

Synopsis	Enable L2TP CDN event debugging
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* events call-disconnect-notification *boolean*
Tree	call-disconnect-notification
Default	false
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

finite-state-machine *boolean*

Synopsis	Enable L2TP FSM event debugging
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* events finite-state-machine *boolean*
Tree	finite-state-machine
Default	false
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

lac

Synopsis	Enter the **lac** context
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* events lac
Tree	lac
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

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state-recovery *boolean*

Synopsis	Enable L2TP LAC state recovery event debugging
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* events lac state-recovery *boolean*
Tree	state-recovery
Default	false
Introduced	23.7.R1
Platforms	All

state-recovery-failed *boolean*

Synopsis	Enable L2TP LAC state recovery failed event debugging
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* events lac state-recovery-failed *boolean*
Tree	state-recovery-failed
Default	false
Introduced	23.7.R1
Platforms	All

lns

Synopsis	Enter the **lns** context
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* events lns
Tree	lns
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

ppp

Synopsis	Enable the **ppp** context
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* events lns ppp
Tree	ppp

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Introduced	23.7.R1
Platforms	All

terminate-only *boolean*

Synopsis	Debug events for ungracefully terminated sessions only
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* events lns ppp terminate-only *boolean*
Tree	terminate-only
Default	false
Introduced	23.7.R1
Platforms	All

stop-control-connection-notification *boolean*

Synopsis	Enable L2TP StopCCN event debugging
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* events stop-control-connection-notification *boolean*
Tree	stop-control-connection-notification
Default	false
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

packets

Synopsis	Enable the **packets** context
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* packets
Tree	packets
Introduced	23.7.R1
Platforms	All

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all

Synopsis	Enable debugging for all session packets
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* packets all
Tree	all
Notes	The following elements are part of a mandatory choice: **all** or (**l2tp** and **lns**).
Introduced	23.7.R1
Platforms	All

detail-level *keyword*

Synopsis	Detail level of the L2TP packet debug output
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* packets detail-level *keyword*
Tree	detail-level
Options	low, high
Default	low
Introduced	23.7.R1
Platforms	All

direction *keyword*

Synopsis	Direction of the L2TP packet debugging
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* packets direction *keyword*
Tree	direction
Options	ingress, egress, both
Default	both
Introduced	23.7.R1
Platforms	All

l2tp *boolean*

Synopsis	Enable L2TP packet debugging
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* packets l2tp *boolean*

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Tree	l2tp
Default	false
Notes	The following elements are part of a mandatory choice: **all** or (**l2tp** and **lns**).
Introduced	23.7.R1
Platforms	All

lns

Synopsis	Enter the **lns** context
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* packets lns
Tree	lns
Notes	The following elements are part of a mandatory choice: **all** or (**l2tp** and **lns**).
Introduced	23.7.R1
Platforms	All

dhcp-client *boolean*

Synopsis	Enable DHCP client packet debugging
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* packets lns dhcp-client *boolean*
Tree	dhcp-client
Default	false
Introduced	23.7.R1
Platforms	All

ppp

Synopsis	Enter the **ppp** context
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* packets lns ppp
Tree	ppp
Introduced	23.7.R1
Platforms	All

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all

Synopsis	Enable PPP debugging for all PPP session packets
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* packets lns ppp all
Tree	all
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

chap *boolean*

Synopsis	Enable PPP debugging for CHAP authentication packets
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* packets lns ppp chap *boolean*
Tree	chap
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

ipcp *boolean*

Synopsis	Enable PPP debugging for IPCP NCP packets
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* packets lns ppp ipcp *boolean*
Tree	ipcp
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

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ipv6cp *boolean*

Synopsis	Enable PPP debugging for IPv6CP NCP packets
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* packets lns ppp ipv6cp *boolean*
Tree	ipv6cp
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

lcp *boolean*

Synopsis	Enable PPP debugging for LCP link establishment packets
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* packets lns ppp lcp *boolean*
Tree	lcp
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

other *boolean*

Synopsis	Enable other PPP protocol packet debugging
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* packets lns ppp other *boolean*
Tree	other
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

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pap *boolean*

Synopsis	Enable PPP debugging for PAP authentication packets
Context	debug router *string* l2tp ip-peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* packets lns ppp pap *boolean*
Tree	pap
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

packets

Synopsis	Enable the **packets** context
Context	debug router *string* l2tp packets
Tree	packets
Introduced	23.7.R1
Platforms	All

all

Synopsis	Enable debugging for all session packets
Context	debug router *string* l2tp packets all
Tree	all
Notes	The following elements are part of a mandatory choice: **all** or (**l2tp** and **lns**).
Introduced	23.7.R1
Platforms	All

detail-level *keyword*

Synopsis	Detail level of the L2TP packet debug output
Context	debug router *string* l2tp packets detail-level *keyword*
Tree	detail-level
Options	low, high
Default	low

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Introduced	23.7.R1
Platforms	All

direction *keyword*

Synopsis	Direction of the L2TP packet debugging
Context	debug router *string* l2tp packets direction *keyword*
Tree	direction
Options	ingress, egress, both
Default	both
Introduced	23.7.R1
Platforms	All

l2tp *boolean*

Synopsis	Enable L2TP packet debugging
Context	debug router *string* l2tp packets l2tp *boolean*
Tree	l2tp
Default	false
Notes	The following elements are part of a mandatory choice: **all** or (**l2tp** and **lns**).
Introduced	23.7.R1
Platforms	All

lns

Synopsis	Enter the **lns** context
Context	debug router *string* l2tp packets lns
Tree	lns
Notes	The following elements are part of a mandatory choice: **all** or (**l2tp** and **lns**).
Introduced	23.7.R1
Platforms	All

dhcp-client *boolean*

Synopsis	Enable DHCP client packet debugging

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Context	debug router *string* l2tp packets lns dhcp-client *boolean*
Tree	dhcp-client
Default	false
Introduced	23.7.R1
Platforms	All

ppp

Synopsis	Enter the **ppp** context
Context	debug router *string* l2tp packets lns ppp
Tree	ppp
Introduced	23.7.R1
Platforms	All

all

Synopsis	Enable PPP debugging for all PPP session packets
Context	debug router *string* l2tp packets lns ppp all
Tree	all
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

chap *boolean*

Synopsis	Enable PPP debugging for CHAP authentication packets
Context	debug router *string* l2tp packets lns ppp chap *boolean*
Tree	chap
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

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ipcp *boolean*

Synopsis	Enable PPP debugging for IPCP NCP packets
Context	debug router *string* l2tp packets lns ppp ipcp *boolean*
Tree	ipcp
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

ipv6cp *boolean*

Synopsis	Enable PPP debugging for IPv6CP NCP packets
Context	debug router *string* l2tp packets lns ppp ipv6cp *boolean*
Tree	ipv6cp
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

lcp *boolean*

Synopsis	Enable PPP debugging for LCP link establishment packets
Context	debug router *string* l2tp packets lns ppp lcp *boolean*
Tree	lcp
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

other *boolean*

Synopsis	Enable other PPP protocol packet debugging

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Context	debug router *string* l2tp packets lns ppp other *boolean*
Tree	other
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

pap *boolean*

Synopsis	Enable PPP debugging for PAP authentication packets
Context	debug router *string* l2tp packets lns ppp pap *boolean*
Tree	pap
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

tunnel [connection-id] *number*

Synopsis	Enter the **tunnel** list instance
Context	debug router *string* l2tp tunnel *number*
Tree	tunnel
Max. Instances	8
Introduced	23.7.R1
Platforms	All

[**connection-id**] *number*

Synopsis	Local control connection ID of the L2TP tunnel to debug
Context	debug router *string* l2tp tunnel *number*
Tree	tunnel
Max. Range	0 to 4294967295
Notes	This element is part of a list key.

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Introduced	23.7.R1
Platforms	All

events

Synopsis	Enable the **events** context
Context	debug router *string* l2tp tunnel *number* events
Tree	events
Introduced	23.7.R1
Platforms	All

all

Synopsis	Enable debugging for all events
Context	debug router *string* l2tp tunnel *number* events all
Tree	all
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

call-disconnect-notification *boolean*

Synopsis	Enable L2TP CDN event debugging
Context	debug router *string* l2tp tunnel *number* events call-disconnect-notification *boolean*
Tree	call-disconnect-notification
Default	false
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

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finite-state-machine *boolean*

Synopsis	Enable L2TP FSM event debugging
Context	debug router *string* l2tp tunnel *number* events finite-state-machine *boolean*
Tree	finite-state-machine
Default	false
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

lac

Synopsis	Enter the **lac** context
Context	debug router *string* l2tp tunnel *number* events lac
Tree	lac
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

state-recovery *boolean*

Synopsis	Enable L2TP LAC state recovery event debugging
Context	debug router *string* l2tp tunnel *number* events lac state-recovery *boolean*
Tree	state-recovery
Default	false
Introduced	23.7.R1
Platforms	All

state-recovery-failed *boolean*

Synopsis	Enable L2TP LAC state recovery failed event debugging
Context	debug router *string* l2tp tunnel *number* events lac state-recovery-failed *boolean*
Tree	state-recovery-failed

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Default	false
Introduced	23.7.R1
Platforms	All

lns

Synopsis	Enter the **lns** context
Context	debug router *string* l2tp tunnel *number* events lns
Tree	lns
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

ppp

Synopsis	Enable the **ppp** context
Context	debug router *string* l2tp tunnel *number* events lns ppp
Tree	ppp
Introduced	23.7.R1
Platforms	All

terminate-only *boolean*

Synopsis	Debug events for ungracefully terminated sessions only
Context	debug router *string* l2tp tunnel *number* events lns ppp terminate-only *boolean*
Tree	terminate-only
Default	false
Introduced	23.7.R1
Platforms	All

stop-control-connection-notification *boolean*

Synopsis	Enable L2TP StopCCN event debugging

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Context	debug router *string* l2tp tunnel *number* events stop-control-connection-notification *boolean*
Tree	stop-control-connection-notification
Default	false
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

packets

Synopsis	Enable the **packets** context
Context	debug router *string* l2tp tunnel *number* packets
Tree	packets
Introduced	23.7.R1
Platforms	All

all

Synopsis	Enable debugging for all session packets
Context	debug router *string* l2tp tunnel *number* packets all
Tree	all
Notes	The following elements are part of a mandatory choice: **all** or (**l2tp** and **lns**).
Introduced	23.7.R1
Platforms	All

detail-level *keyword*

Synopsis	Detail level of the L2TP packet debug output
Context	debug router *string* l2tp tunnel *number* packets detail-level *keyword*
Tree	detail-level
Options	low, high
Default	low
Introduced	23.7.R1
Platforms	All

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direction *keyword*

Synopsis	Direction of the L2TP packet debugging
Context	debug router *string* l2tp tunnel *number* packets direction *keyword*
Tree	direction
Options	ingress, egress, both
Default	both
Introduced	23.7.R1
Platforms	All

l2tp *boolean*

Synopsis	Enable L2TP packet debugging
Context	debug router *string* l2tp tunnel *number* packets l2tp *boolean*
Tree	l2tp
Default	false
Notes	The following elements are part of a mandatory choice: **all** or (**l2tp** and **lns**).
Introduced	23.7.R1
Platforms	All

lns

Synopsis	Enter the **lns** context
Context	debug router *string* l2tp tunnel *number* packets lns
Tree	lns
Notes	The following elements are part of a mandatory choice: **all** or (**l2tp** and **lns**).
Introduced	23.7.R1
Platforms	All

dhcp-client *boolean*

Synopsis	Enable DHCP client packet debugging
Context	debug router *string* l2tp tunnel *number* packets lns dhcp-client *boolean*
Tree	dhcp-client
Default	false

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Introduced	23.7.R1
Platforms	All

ppp

Synopsis	Enter the **ppp** context
Context	debug router *string* l2tp tunnel *number* packets lns ppp
Tree	ppp
Introduced	23.7.R1
Platforms	All

all

Synopsis	Enable PPP debugging for all PPP session packets
Context	debug router *string* l2tp tunnel *number* packets lns ppp all
Tree	all
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

chap *boolean*

Synopsis	Enable PPP debugging for CHAP authentication packets
Context	debug router *string* l2tp tunnel *number* packets lns ppp chap *boolean*
Tree	chap
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

ipcp *boolean*

Synopsis	Enable PPP debugging for IPCP NCP packets
Context	debug router *string* l2tp tunnel *number* packets lns ppp ipcp *boolean*

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Tree	ipcp
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

ipv6cp *boolean*

Synopsis	Enable PPP debugging for IPv6CP NCP packets
Context	debug router *string* l2tp tunnel *number* packets lns ppp ipv6cp *boolean*
Tree	ipv6cp
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

lcp *boolean*

Synopsis	Enable PPP debugging for LCP link establishment packets
Context	debug router *string* l2tp tunnel *number* packets lns ppp lcp *boolean*
Tree	lcp
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

other *boolean*

Synopsis	Enable other PPP protocol packet debugging
Context	debug router *string* l2tp tunnel *number* packets lns ppp other *boolean*
Tree	other
Default	false

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Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

pap *boolean*

Synopsis	Enable PPP debugging for PAP authentication packets
Context	debug router *string* l2tp tunnel *number* packets lns ppp pap *boolean*
Tree	pap
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

udp-peer [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number*

Synopsis	Enter the **udp-peer** list instance
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number*
Tree	udp-peer
Max. Instances	8
Introduced	23.7.R1
Platforms	All

[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the L2TP peer to debug
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number*
Tree	udp-peer
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

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udp-port *number*

Synopsis	UDP port of the L2TP peer to debug
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number*
Tree	udp-peer
Range	0 to 65535
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

events

Synopsis	Enable the **events** context
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number* events
Tree	events
Introduced	23.7.R1
Platforms	All

all

Synopsis	Enable debugging for all events
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number* events all
Tree	all
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

call-disconnect-notification *boolean*

Synopsis	Enable L2TP CDN event debugging
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number* events call-disconnect-notification *boolean*

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Tree	call-disconnect-notification
Default	false
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

finite-state-machine *boolean*

Synopsis	Enable L2TP FSM event debugging
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number* events finite-state-machine *boolean*
Tree	finite-state-machine
Default	false
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

lac

Synopsis	Enter the **lac** context
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number* events lac
Tree	lac
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

state-recovery *boolean*

Synopsis	Enable L2TP LAC state recovery event debugging
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number* events lac state-recovery *boolean*

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Tree	state-recovery
Default	false
Introduced	23.7.R1
Platforms	All

state-recovery-failed *boolean*

Synopsis	Enable L2TP LAC state recovery failed event debugging
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number* events lac state-recovery-failed *boolean*
Tree	state-recovery-failed
Default	false
Introduced	23.7.R1
Platforms	All

lns

Synopsis	Enter the **lns** context
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number* events lns
Tree	lns
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

ppp

Synopsis	Enable the **ppp** context
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number* events lns ppp
Tree	ppp
Introduced	23.7.R1
Platforms	All

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terminate-only *boolean*

Synopsis	Debug events for ungracefully terminated sessions only
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number* events lns ppp terminate-only *boolean*
Tree	terminate-only
Default	false
Introduced	23.7.R1
Platforms	All

stop-control-connection-notification *boolean*

Synopsis	Enable L2TP StopCCN event debugging
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number* events stop-control-connection-notification *boolean*
Tree	stop-control-connection-notification
Default	false
Notes	The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).
Introduced	23.7.R1
Platforms	All

packets

Synopsis	Enable the **packets** context
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number* packets
Tree	packets
Introduced	23.7.R1
Platforms	All

all

Synopsis	Enable debugging for all session packets
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number* packets all
Tree	all

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Notes	The following elements are part of a mandatory choice: **all** or (**l2tp** and **lns**).
Introduced	23.7.R1
Platforms	All

detail-level *keyword*

Synopsis	Detail level of the L2TP packet debug output
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number* packets detail-level *keyword*
Tree	detail-level
Options	low, high
Default	low
Introduced	23.7.R1
Platforms	All

direction *keyword*

Synopsis	Direction of the L2TP packet debugging
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number* packets direction *keyword*
Tree	direction
Options	ingress, egress, both
Default	both
Introduced	23.7.R1
Platforms	All

l2tp *boolean*

Synopsis	Enable L2TP packet debugging
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number* packets l2tp *boolean*
Tree	l2tp
Default	false
Notes	The following elements are part of a mandatory choice: **all** or (**l2tp** and **lns**).
Introduced	23.7.R1
Platforms	All

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lns

Synopsis	Enter the **lns** context
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number* packets lns
Tree	lns
Notes	The following elements are part of a mandatory choice: **all** or (**l2tp** and **lns**).
Introduced	23.7.R1
Platforms	All

dhcp-client *boolean*

Synopsis	Enable DHCP client packet debugging
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number* packets lns dhcp-client *boolean*
Tree	dhcp-client
Default	false
Introduced	23.7.R1
Platforms	All

ppp

Synopsis	Enter the **ppp** context
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number* packets lns ppp
Tree	ppp
Introduced	23.7.R1
Platforms	All

all

Synopsis	Enable PPP debugging for all PPP session packets
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number* packets lns ppp all
Tree	all

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Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

chap *boolean*

Synopsis	Enable PPP debugging for CHAP authentication packets
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number* packets lns ppp chap *boolean*
Tree	chap
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

ipcp *boolean*

Synopsis	Enable PPP debugging for IPCP NCP packets
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number* packets lns ppp ipcp *boolean*
Tree	ipcp
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

ipv6cp *boolean*

Synopsis	Enable PPP debugging for IPv6CP NCP packets
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number* packets lns ppp ipv6cp *boolean*
Tree	ipv6cp
Default	false

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Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

lcp *boolean*

Synopsis	Enable PPP debugging for LCP link establishment packets
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number* packets lns ppp lcp *boolean*
Tree	lcp
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

other *boolean*

Synopsis	Enable other PPP protocol packet debugging
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number* packets lns ppp other *boolean*
Tree	other
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

pap *boolean*

Synopsis	Enable PPP debugging for PAP authentication packets
Context	debug router *string* l2tp udp-peer *(ipv4-address-no-zone | ipv6-address-no-zone)* udp-port *number* packets lns ppp pap *boolean*
Tree	pap
Default	false

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Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).
Introduced	23.7.R1
Platforms	All

ldp

Synopsis	Enter the **ldp** context
Context	debug router *string* ldp
Tree	ldp
Introduced	23.3.R1
Platforms	All

interface [interface-name] *string*

Synopsis	Enter the **interface** list instance
Context	debug router *string* ldp interface *string*
Tree	interface
Introduced	23.3.R1
Platforms	All

[interface-name] *string*

Synopsis	Interface name
Context	debug router *string* ldp interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

ipv4

Synopsis	Enable the **ipv4** context
Context	debug router *string* ldp interface *string* ipv4

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Tree	ipv4
Introduced	23.3.R1
Platforms	All

event

Synopsis	Enter the **event** context
Context	debug router *string* ldp interface *string* ipv4 event
Tree	event
Introduced	23.3.R1
Platforms	All

messages

Synopsis	Enable the **messages** context
Context	debug router *string* ldp interface *string* ipv4 event messages
Tree	messages
Introduced	23.3.R1
Platforms	All

packet

Synopsis	Enter the **packet** context
Context	debug router *string* ldp interface *string* ipv4 packet
Tree	packet
Introduced	23.3.R1
Platforms	All

hello

Synopsis	Enable the **hello** context
Context	debug router *string* ldp interface *string* ipv4 packet hello
Tree	hello
Introduced	23.3.R1
Platforms	All

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detail *boolean*

Synopsis	Display detailed information
Context	debug router *string* ldp interface *string* ipv4 packet hello detail *boolean*
Tree	detail
Default	false
Introduced	23.3.R1
Platforms	All

ipv6

Synopsis	Enable the **ipv6** context
Context	debug router *string* ldp interface *string* ipv6
Tree	ipv6
Introduced	23.3.R1
Platforms	All

event

Synopsis	Enter the **event** context
Context	debug router *string* ldp interface *string* ipv6 event
Tree	event
Introduced	23.3.R1
Platforms	All

messages

Synopsis	Enable the **messages** context
Context	debug router *string* ldp interface *string* ipv6 event messages
Tree	messages
Introduced	23.3.R1
Platforms	All

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packet

Synopsis	Enter the **packet** context
Context	debug router *string* ldp interface *string* ipv6 packet
Tree	packet
Introduced	23.3.R1
Platforms	All

hello

Synopsis	Enable the **hello** context
Context	debug router *string* ldp interface *string* ipv6 packet hello
Tree	hello
Introduced	23.3.R1
Platforms	All

detail *boolean*

Synopsis	Display detailed information
Context	debug router *string* ldp interface *string* ipv6 packet hello detail *boolean*
Tree	detail
Default	false
Introduced	23.3.R1
Platforms	All

peer [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **peer** list instance
Context	debug router *string* ldp peer *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	peer
Introduced	23.3.R1
Platforms	All

[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Peer IP address

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Context	debug router *string* ldp peer *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	peer
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

event

Synopsis	Enter the **event** context
Context	debug router *string* ldp peer *(ipv4-address-no-zone | ipv6-address-no-zone)* event
Tree	event
Introduced	23.3.R1
Platforms	All

bindings

Synopsis	Enable the **bindings** context
Context	debug router *string* ldp peer *(ipv4-address-no-zone | ipv6-address-no-zone)* event bindings
Tree	bindings
Introduced	23.3.R1
Platforms	All

messages

Synopsis	Enable the **messages** context
Context	debug router *string* ldp peer *(ipv4-address-no-zone | ipv6-address-no-zone)* event messages
Tree	messages
Introduced	23.3.R1
Platforms	All

packet

Synopsis	Enter the **packet** context
Context	debug router *string* ldp peer *(ipv4-address-no-zone | ipv6-address-no-zone)* packet

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Tree	packet
Introduced	23.3.R1
Platforms	All

hello

Synopsis	Enable the **hello** context
Context	debug router *string* ldp peer *(ipv4-address-no-zone | ipv6-address-no-zone)* packet hello
Tree	hello
Introduced	23.3.R1
Platforms	All

detail *boolean*

Synopsis	Display detailed information
Context	debug router *string* ldp peer *(ipv4-address-no-zone | ipv6-address-no-zone)* packet hello detail *boolean*
Tree	detail
Default	false
Introduced	23.3.R1
Platforms	All

init

Synopsis	Enable the **init** context
Context	debug router *string* ldp peer *(ipv4-address-no-zone | ipv6-address-no-zone)* packet init
Tree	init
Introduced	23.3.R1
Platforms	All

detail *boolean*

Synopsis	Display detailed information
Context	debug router *string* ldp peer *(ipv4-address-no-zone | ipv6-address-no-zone)* packet init detail *boolean*
Tree	detail

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Default	false
Introduced	23.3.R1
Platforms	All

keepalive

Synopsis	Enable the **keepalive** context
Context	debug router *string* ldp peer *(ipv4-address-no-zone | ipv6-address-no-zone)* packet keepalive
Tree	keepalive
Introduced	23.3.R1
Platforms	All

label

Synopsis	Enable the **label** context
Context	debug router *string* ldp peer *(ipv4-address-no-zone | ipv6-address-no-zone)* packet label
Tree	label
Introduced	23.3.R1
Platforms	All

detail *boolean*

Synopsis	Display detailed information
Context	debug router *string* ldp peer *(ipv4-address-no-zone | ipv6-address-no-zone)* packet label detail *boolean*
Tree	detail
Default	false
Introduced	23.3.R1
Platforms	All

mld

Synopsis	Enter the **mld** context
Context	debug router *string* mld
Tree	mld

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Introduced	22.10.R1
Platforms	All

group-interface

Synopsis	Enable the **group-interface** context
Context	debug router *string* mld group-interface
Tree	group-interface
Introduced	22.10.R1
Platforms	All

all-group-interfaces

Synopsis	Trace all interfaces
Context	debug router *string* mld group-interface all-group-interfaces
Tree	all-group-interfaces
Notes	The following elements are part of a mandatory choice: **all-group-interfaces** or (**forwarding-service** and **group-interface-name**).
Introduced	22.10.R1
Platforms	All

forwarding-service *string*

Synopsis	ID of the forwarding service to trace
Context	debug router *string* mld group-interface forwarding-service *string*
Tree	forwarding-service
String Length	1 to 64
Default	../../router-instance
Notes	The following elements are part of a mandatory choice: **all-group-interfaces** or (**forwarding-service** and **group-interface-name**).
Introduced	22.10.R1
Platforms	All

group-interface-name *string*

Synopsis	Interface name

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Context	debug router *string* mld group-interface group-interface-name *string*
Tree	group-interface-name
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: **all-group-interfaces** or (**forwarding-service** and **group-interface-name**).
Introduced	22.10.R1
Platforms	All

host

Synopsis	Enable the **host** context
Context	debug router *string* mld host
Tree	host
Introduced	22.10.R1
Platforms	All

group-interface

Synopsis	Enter the **group-interface** context
Context	debug router *string* mld host group-interface
Tree	group-interface
Introduced	22.10.R1
Platforms	All

forwarding-service *string*

Synopsis	ID of the forwarding service to trace
Context	debug router *string* mld host group-interface forwarding-service *string*
Tree	forwarding-service
String Length	1 to 64
Default	../../router-instance
Introduced	22.10.R1
Platforms	All

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group-interface-name *string*

Synopsis	Interface name
Context	debug router *string* mld host group-interface group-interface-name *string*
Tree	group-interface-name
String Length	1 to 32
Introduced	22.10.R1
Platforms	All

ip-address *string*

Synopsis	IP address of the host to trace
Context	debug router *string* mld host ip-address *string*
Tree	ip-address
Introduced	22.10.R1
Platforms	All

interface

Synopsis	Enable the **interface** context
Context	debug router *string* mld interface
Tree	interface
Introduced	22.10.R1
Platforms	All

all-interfaces

Synopsis	Trace all interfaces
Context	debug router *string* mld interface all-interfaces
Tree	all-interfaces
Notes	The following elements are part of a mandatory choice: **all-interfaces** or **interface-name**.
Introduced	22.10.R1
Platforms	All

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interface-name *string*

Synopsis	Interface name
Context	debug router *string* mld interface interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: **all-interfaces** or **interface-name**.
Introduced	22.10.R1
Platforms	All

mcs

Synopsis	Enable the **mcs** context
Context	debug router *string* mld mcs
Tree	mcs
Introduced	22.10.R1
Platforms	All

all-interfaces

Synopsis	Trace all interfaces
Context	debug router *string* mld mcs all-interfaces
Tree	all-interfaces
Notes	The following elements are part of a mandatory choice: **all-interfaces** or **interface-name**.
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router *string* mld mcs interface-name *string*
Tree	interface-name
String Length	1 to 32

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Notes	The following elements are part of a mandatory choice: **all-interfaces** or **interface-name**.
Introduced	22.10.R1
Platforms	All

miscellaneous *boolean*

Synopsis	Enable the tracing of miscellaneous events
Context	debug router *string* mld miscellaneous *boolean*
Tree	miscellaneous
Default	false
Introduced	22.10.R1
Platforms	All

packet

Synopsis	Enable the **packet** context
Context	debug router *string* mld packet
Tree	packet
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Allow trace for all origins
Context	debug router *string* mld packet all-origins
Tree	all-origins
Notes	The following elements are part of a choice: **all-origins**, **group-interface-name**, **host-ip-address**, **interface-ip-address**, or **interface-name**.
Introduced	22.10.R1
Platforms	All

dropped *boolean*

Synopsis	Enable tracing for dropped packets
Context	debug router *string* mld packet dropped *boolean*

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Tree	dropped
Default	true
Introduced	22.10.R1
Platforms	All

egress *boolean*

Synopsis	Enable tracing for transmitted packets
Context	debug router *string* mld packet egress *boolean*
Tree	egress
Default	true
Introduced	22.10.R1
Platforms	All

group-interface-name *string*

Synopsis	Interface name
Context	debug router *string* mld packet group-interface-name *string*
Tree	group-interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: **all-origins**, **group-interface-name**, **host-ip-address**, **interface-ip-address**, or **interface-name**.
Introduced	22.10.R1
Platforms	All

host-ip-address *string*

Synopsis	Address of the host to trace
Context	debug router *string* mld packet host-ip-address *string*
Tree	host-ip-address
Notes	The following elements are part of a choice: **all-origins**, **group-interface-name**, **host-ip-address**, **interface-ip-address**, or **interface-name**.
Introduced	22.10.R2
Platforms	All

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ingress *boolean*

Synopsis	Enable tracing for received packets
Context	debug router *string* mld packet ingress *boolean*
Tree	ingress
Default	true
Introduced	22.10.R1
Platforms	All

interface-ip-address *string*

Synopsis	Source address of the packet to trace
Context	debug router *string* mld packet interface-ip-address *string*
Tree	interface-ip-address
Notes	The following elements are part of a choice: **all-origins**, **group-interface-name**, **host-ip-address**, **interface-ip-address**, or **interface-name**.
Introduced	22.10.R2
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router *string* mld packet interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: **all-origins**, **group-interface-name**, **host-ip-address**, **interface-ip-address**, or **interface-name**.
Introduced	22.10.R1
Platforms	All

type *keyword*

Synopsis	Packet type
Context	debug router *string* mld packet type *keyword*
Tree	type
Options	all – All MLD packets query – MLD Query packets

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	v1-report – MLD version 1 Report packets v2-report – MLD version 2 Report packets
Default	all
Introduced	22.10.R1
Platforms	All

msdp

Synopsis	Enter the **msdp** context
Context	debug router *string* msdp
Tree	msdp
Description	Commands in this context configure debugging for the Multicast Source Discovery Protocol (MSDP).
Introduced	22.10.R1
Platforms	All

packet

Synopsis	Enable the **packet** context
Context	debug router *string* msdp packet
Tree	packet
Introduced	22.10.R1
Platforms	All

all-packet-types

Synopsis	Enable MSDP debugging for all packets
Context	debug router *string* msdp packet all-packet-types
Tree	all-packet-types
Notes	The following elements are part of a choice: **all-packet-types** or **packet-types**.
Introduced	22.10.R1
Platforms	All

packet-types

Synopsis	Enter the **packet-types** context

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Context	debug router *string* msdp packet packet-types
Tree	packet-types
Notes	The following elements are part of a choice: **all-packet-types** or **packet-types**.
Introduced	22.10.R1
Platforms	All

keep-alive

Synopsis	Enable the **keep-alive** context
Context	debug router *string* msdp packet packet-types keep-alive
Tree	keep-alive
Introduced	22.10.R1
Platforms	All

peer-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Peer address used to trace packets
Context	debug router *string* msdp packet packet-types keep-alive peer-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	peer-address
Introduced	22.10.R1
Platforms	All

sa-request

Synopsis	Enable the **sa-request** context
Context	debug router *string* msdp packet packet-types sa-request
Tree	sa-request
Introduced	22.10.R1
Platforms	All

peer-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Peer address used to trace packets
Context	debug router *string* msdp packet packet-types sa-request peer-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

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Tree	peer-address
Introduced	22.10.R1
Platforms	All

sa-response

Synopsis	Enable the **sa-response** context
Context	debug router *string* msdp packet packet-types sa-response
Tree	sa-response
Introduced	22.10.R1
Platforms	All

peer-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Peer address used to trace packets
Context	debug router *string* msdp packet packet-types sa-response peer-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	peer-address
Introduced	22.10.R1
Platforms	All

source-active

Synopsis	Enable the **source-active** context
Context	debug router *string* msdp packet packet-types source-active
Tree	source-active
Introduced	22.10.R1
Platforms	All

peer-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Peer address used to trace packets
Context	debug router *string* msdp packet packet-types source-active peer-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	peer-address
Introduced	22.10.R1

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Platforms	All

pim

Synopsis	Enable the **pim** context
Context	debug router *string* msdp pim
Tree	pim
Description	Commands in this context enable MSDP PIM debugging.
Introduced	22.10.R1
Platforms	All

group-address *string*

Synopsis	IP multicast group address used to trace events
Context	debug router *string* msdp pim group-address *string*
Tree	group-address
Introduced	22.10.R1
Platforms	All

rtm

Synopsis	Enable the **rtm** context
Context	debug router *string* msdp rtm
Tree	rtm
Description	Commands in this context enable MSDP route table manager (RTM) debugging.
Introduced	22.10.R1
Platforms	All

rp-address *string*

Synopsis	IP multicast RP address used to trace events
Context	debug router *string* msdp rtm rp-address *string*
Tree	rp-address
Introduced	22.10.R1
Platforms	All

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sa-db

Synopsis	Enable the **sa-db** context
Context	debug router *string* msdp sa-db
Tree	sa-db
Description	Commands in this context enable MSDP source-active database debugging.
Introduced	22.10.R1
Platforms	All

group-address *string*

Synopsis	IP multicast group address used to trace events
Context	debug router *string* msdp sa-db group-address *string*
Tree	group-address
Introduced	22.10.R1
Platforms	All

rp-address *string*

Synopsis	IP multicast RP address used to trace events
Context	debug router *string* msdp sa-db rp-address *string*
Tree	rp-address
Introduced	22.10.R1
Platforms	All

source-address *string*

Synopsis	Source address used to trace events
Context	debug router *string* msdp sa-db source-address *string*
Tree	source-address
Introduced	22.10.R1
Platforms	All

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mtrace

Synopsis	Enter the **mtrace** context
Context	debug router *string* mtrace
Tree	mtrace
Introduced	22.10.R1
Platforms	All

miscellaneous

Synopsis	Enable the **miscellaneous** context
Context	debug router *string* mtrace miscellaneous
Tree	miscellaneous
Introduced	22.10.R1
Platforms	All

packet

Synopsis	Enable the **packet** context
Context	debug router *string* mtrace packet
Tree	packet
Introduced	22.10.R1
Platforms	All

all-packet-types

Synopsis	Enable debugging for all packets
Context	debug router *string* mtrace packet all-packet-types
Tree	all-packet-types
Notes	The following elements are part of a choice: **all-packet-types** or **packet-types**.
Introduced	22.10.R1
Platforms	All

packet-types

Synopsis	Enter the **packet-types** context

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Context	debug router *string* mtrace packet packet-types
Tree	packet-types
Notes	The following elements are part of a choice: **all-packet-types** or **packet-types**.
Introduced	22.10.R1
Platforms	All

query *boolean*

Synopsis	Debug query packets
Context	debug router *string* mtrace packet packet-types query *boolean*
Tree	query
Default	false
Introduced	22.10.R1
Platforms	All

request *boolean*

Synopsis	Debug request packets
Context	debug router *string* mtrace packet packet-types request *boolean*
Tree	request
Default	false
Introduced	22.10.R1
Platforms	All

response *boolean*

Synopsis	Debug response packets
Context	debug router *string* mtrace packet packet-types response *boolean*
Tree	response
Default	false
Introduced	22.10.R1
Platforms	All

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mtrace2

Synopsis	Enter the **mtrace2** context
Context	debug router *string* mtrace2
Tree	mtrace2
Introduced	22.10.R1
Platforms	All

miscellaneous

Synopsis	Enable the **miscellaneous** context
Context	debug router *string* mtrace2 miscellaneous
Tree	miscellaneous
Introduced	22.10.R1
Platforms	All

packet

Synopsis	Enable the **packet** context
Context	debug router *string* mtrace2 packet
Tree	packet
Introduced	22.10.R1
Platforms	All

all-packet-types

Synopsis	Enable debugging for all packets
Context	debug router *string* mtrace2 packet all-packet-types
Tree	all-packet-types
Notes	The following elements are part of a choice: **all-packet-types** or **packet-types**.
Introduced	22.10.R1
Platforms	All

packet-types

Synopsis	Enter the **packet-types** context

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Context	debug router *string* mtrace2 packet packet-types
Tree	packet-types
Notes	The following elements are part of a choice: **all-packet-types** or **packet-types**.
Introduced	22.10.R1
Platforms	All

query *boolean*

Synopsis	Debug query packets
Context	debug router *string* mtrace2 packet packet-types query *boolean*
Tree	query
Default	false
Introduced	22.10.R1
Platforms	All

request *boolean*

Synopsis	Debug request packets
Context	debug router *string* mtrace2 packet packet-types request *boolean*
Tree	request
Default	false
Introduced	22.10.R1
Platforms	All

response *boolean*

Synopsis	Debug response packets
Context	debug router *string* mtrace2 packet packet-types response *boolean*
Tree	response
Default	false
Introduced	22.10.R1
Platforms	All

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pim

Synopsis	Enter the **pim** context
Context	debug router *string* pim
Tree	pim
Introduced	22.10.R1
Platforms	All

events

Synopsis	Enable the **events** context
Context	debug router *string* pim events
Tree	events
Introduced	22.10.R1
Platforms	All

adjacency

Synopsis	Enable the **adjacency** context
Context	debug router *string* pim events adjacency
Tree	adjacency
Notes	The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced	22.10.R1
Platforms	All

all

Synopsis	Enable the **all** context
Context	debug router *string* pim events all
Tree	all
Notes	The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced	22.10.R1
Platforms	All

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detail *boolean*

Synopsis	Enable detail tracing
Context	debug router *string* pim events all detail *boolean*
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

group-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP multicast group address used to trace events
Context	debug router *string* pim events all group-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	group-address
Introduced	22.10.R1
Platforms	All

source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source address used to trace events
Context	debug router *string* pim events all source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-address
Introduced	22.10.R1
Platforms	All

assert

Synopsis	Enable the **assert** context
Context	debug router *string* pim events assert
Tree	assert
Notes	The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced	22.10.R1

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Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router *string* pim events assert detail *boolean*
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

group-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP multicast group address used to trace events
Context	debug router *string* pim events assert group-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	group-address
Introduced	22.10.R1
Platforms	All

source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source address used to trace events
Context	debug router *string* pim events assert source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-address
Introduced	22.10.R1
Platforms	All

auto-rp

Synopsis	Enable the **auto-rp** context
Context	debug router *string* pim events auto-rp
Tree	auto-rp

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Notes	The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced	22.10.R1
Platforms	All

bgp

Synopsis	Enable the **bgp** context
Context	debug router *string* pim events bgp
Tree	bgp
Notes	The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced	22.10.R1
Platforms	All

group-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP multicast group address used to trace events
Context	debug router *string* pim events bgp group-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	group-address
Introduced	22.10.R1
Platforms	All

peer-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	BGP peer address used to trace events
Context	debug router *string* pim events bgp peer-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	peer-address
Introduced	22.10.R1
Platforms	All

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source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source address used to trace events
Context	debug router *string* pim events bgp source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-address
Introduced	22.10.R1
Platforms	All

bier-inband

Synopsis	Enable the **bier-inband** context
Context	debug router *string* pim events bier-inband
Tree	bier-inband
Notes	The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router *string* pim events bier-inband detail *boolean*
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

bsr

Synopsis	Enable the **bsr** context
Context	debug router *string* pim events bsr
Tree	bsr
Description	Commands in this context enable debugging for the PIM bootstrap mechanism.

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Notes	The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router *string* pim events bsr detail *boolean*
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

data

Synopsis	Enable the **data** context
Context	debug router *string* pim events data
Tree	data
Description	Commands in this context enable PIM data exception debugging.
Notes	The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router *string* pim events data detail *boolean*
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

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group-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP multicast group address used to trace events
Context	debug router *string* pim events data group-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	group-address
Introduced	22.10.R1
Platforms	All

source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source address used to trace events
Context	debug router *string* pim events data source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-address
Introduced	22.10.R1
Platforms	All

db

Synopsis	Enable the **db** context
Context	debug router *string* pim events db
Tree	db
Description	Commands in this context enable PIM database debugging.
Notes	The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router *string* pim events db detail *boolean*
Tree	detail
Default	false

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Introduced	22.10.R1
Platforms	All

group-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP multicast group address used to trace events
Context	debug router *string* pim events db group-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	group-address
Introduced	22.10.R1
Platforms	All

source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source address used to trace events
Context	debug router *string* pim events db source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-address
Introduced	22.10.R1
Platforms	All

dynmldp

Synopsis	Enable the **dynmldp** context
Context	debug router *string* pim events dynmldp
Tree	dynmldp
Description	Commands in this context enable dynamic MLDP debugging.
Notes	The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing

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Context	debug router *string* pim events dynmldp detail *boolean*
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

extranet

Synopsis	Enable the **extranet** context
Context	debug router *string* pim events extranet
Tree	extranet
Notes	The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router *string* pim events extranet detail *boolean*
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

graft

Synopsis	Enable the **graft** context
Context	debug router *string* pim events graft
Tree	graft
Notes	The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced	22.10.R1
Platforms	All

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detail *boolean*

Synopsis	Enable detail tracing
Context	debug router *string* pim events graft detail *boolean*
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

group-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP multicast group address used to trace events
Context	debug router *string* pim events graft group-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	group-address
Introduced	22.10.R1
Platforms	All

source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source address used to trace events
Context	debug router *string* pim events graft source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-address
Introduced	22.10.R1
Platforms	All

interface

Synopsis	Enable the **interface** context
Context	debug router *string* pim events interface
Tree	interface
Notes	The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced	22.10.R1

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Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router *string* pim events interface interface-name *string*
Tree	interface-name
String Length	1 to 32
Introduced	22.10.R1
Platforms	All

jp

Synopsis	Enable the **jp** context
Context	debug router *string* pim events jp
Tree	jp
Description	Commands in this context enable debugging for PIM join and prune mechanisms.
Notes	The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router *string* pim events jp detail *boolean*
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

group-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP multicast group address used to trace events

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Context	debug router *string* pim events jp group-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	group-address
Introduced	22.10.R1
Platforms	All

source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source address used to trace events
Context	debug router *string* pim events jp source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-address
Introduced	22.10.R1
Platforms	All

mofrr

Synopsis	Enable the **mofrr** context
Context	debug router *string* pim events mofrr
Tree	mofrr
Description	Commands in this context enable debugging for PIM Multicast-only Fast Reroute (MoFRR).
Notes	The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced	22.10.R1
Platforms	All

mrib

Synopsis	Enable the **mrib** context
Context	debug router *string* pim events mrib
Tree	mrib
Description	Commands in this context enable Multicast Routing Information Base (MRIB) debugging.

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Notes	The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router *string* pim events mrib detail *boolean*
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

group-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP multicast group address used to trace events
Context	debug router *string* pim events mrib group-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	group-address
Introduced	22.10.R1
Platforms	All

source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source address used to trace events
Context	debug router *string* pim events mrib source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-address
Introduced	22.10.R1
Platforms	All

msg

Synopsis	Enable the **msg** context

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Context	debug router *string* pim events msg
Tree	msg
Notes	The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced	22.10.R1
Platforms	All

mvpn-rtcache

Synopsis	Enable the **mvpn-rtcache** context
Context	debug router *string* pim events mvpn-rtcache
Tree	mvpn-rtcache
Description	Commands in this context enable debugging for the PIM MVPN route cache.
Notes	The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced	22.10.R1
Platforms	All

group-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Group address used to trace events
Context	debug router *string* pim events mvpn-rtcache group-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	group-address
Introduced	22.10.R1
Platforms	All

peer-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Peer address used to trace events
Context	debug router *string* pim events mvpn-rtcache peer-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	peer-address
Introduced	22.10.R1

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Platforms	All

red

Synopsis	Enable the **red** context
Context	debug router *string* pim events red
Tree	red
Description	Commands in this context enable debugging for PIM redundancy messages to the standby CPM.
Notes	The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router *string* pim events red detail *boolean*
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

register

Synopsis	Enable the **register** context
Context	debug router *string* pim events register
Tree	register
Notes	The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced	22.10.R1
Platforms	All

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detail *boolean*

Synopsis	Enable detail tracing
Context	debug router *string* pim events register detail *boolean*
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

group-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP multicast group address used to trace events
Context	debug router *string* pim events register group-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	group-address
Introduced	22.10.R1
Platforms	All

source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source address used to trace events
Context	debug router *string* pim events register source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-address
Introduced	22.10.R1
Platforms	All

rpfv

Synopsis	Enable the **rpfv** context
Context	debug router *string* pim events rpfv
Tree	rpfv
Description	Commands in this context enable PIM RPF vector debugging.
Notes	The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced	22.10.R1

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Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router *string* pim events rpfv detail *boolean*
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

rtm

Synopsis	Enable the **rtm** context
Context	debug router *string* pim events rtm
Tree	rtm
Notes	The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router *string* pim events rtm detail *boolean*
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

s-pmsi

Synopsis	Enable the **s-pmsi** context
Context	debug router *string* pim events s-pmsi
Tree	s-pmsi

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Description	Commands in this context enable debugging for the PIM selective provider multicast service interface.
Notes	The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router *string* pim events s-pmsi detail *boolean*
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

vpn-source-address *(ipv4-address-no-zone \| ipv6-address-no-zone)*

Synopsis	VPN source address used to trace events
Context	debug router *string* pim events s-pmsi vpn-source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	vpn-source-address
Introduced	22.10.R1
Platforms	All

tunnel-interface

Synopsis	Enable the **tunnel-interface** context
Context	debug router *string* pim events tunnel-interface
Tree	tunnel-interface
Notes	The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.
Introduced	22.10.R1
Platforms	All

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ldp-p2mp-id *number*

Synopsis	LDP P2MP ID
Context	debug router *string* pim events tunnel-interface ldp-p2mp-id *number*
Tree	ldp-p2mp-id
Range	1 to 8192
Introduced	22.10.R1
Platforms	All

rsvp-p2mp *string*

Synopsis	RSVP P2MP LSP name
Context	debug router *string* pim events tunnel-interface rsvp-p2mp *string*
Tree	rsvp-p2mp
String Length	1 to 32
Introduced	22.10.R1
Platforms	All

sender-address *string*

Synopsis	IP address of the sender
Context	debug router *string* pim events tunnel-interface sender-address *string*
Tree	sender-address
Introduced	22.10.R1
Platforms	All

packet

Synopsis	Enable the **packet** context
Context	debug router *string* pim packet
Tree	packet
Introduced	22.10.R1
Platforms	All

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all-origins

Synopsis	Enable trace for all origins
Context	debug router *string* pim packet all-origins
Tree	all-origins
Notes	The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced	22.10.R1
Platforms	All

all-packet-types

Synopsis	Enable PIM debugging for all packets
Context	debug router *string* pim packet all-packet-types
Tree	all-packet-types
Notes	The following elements are part of a choice: **all-packet-types** or **packet-types**.
Introduced	22.10.R1
Platforms	All

egress *boolean*

Synopsis	Enable tracing for transmitted packets
Context	debug router *string* pim packet egress *boolean*
Tree	egress
Default	true
Introduced	22.10.R1
Platforms	All

ingress *boolean*

Synopsis	Enable tracing for received packets
Context	debug router *string* pim packet ingress *boolean*
Tree	ingress
Default	true
Introduced	22.10.R1
Platforms	All

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interface-name *string*

Synopsis	Interface name
Context	debug router *string* pim packet interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced	22.10.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable tracing for PIM IPv4 packets
Context	debug router *string* pim packet ipv4 *boolean*
Tree	ipv4
Default	true
Introduced	22.10.R1
Platforms	All

ipv6 *boolean*

Synopsis	Enable tracing for PIM IPv6 packets
Context	debug router *string* pim packet ipv6 *boolean*
Tree	ipv6
Default	true
Introduced	22.10.R1
Platforms	All

packet-types

Synopsis	Enter the **packet-types** context
Context	debug router *string* pim packet packet-types
Tree	packet-types
Notes	The following elements are part of a choice: **all-packet-types** or **packet-types**.
Introduced	22.10.R1

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Platforms	All

assert

Synopsis	Enable the **assert** context
Context	debug router *string* pim packet packet-types assert
Tree	assert
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router *string* pim packet packet-types assert all-origins
Tree	all-origins
Notes	The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router *string* pim packet packet-types assert interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced	22.10.R1
Platforms	All

auto-rp-announcement

Synopsis	Enable the **auto-rp-announcement** context
Context	debug router *string* pim packet packet-types auto-rp-announcement
Tree	auto-rp-announcement
Introduced	22.10.R1

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Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router *string* pim packet packet-types auto-rp-announcement all-origins
Tree	all-origins
Notes	The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router *string* pim packet packet-types auto-rp-announcement interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced	22.10.R1
Platforms	All

auto-rp-mapping

Synopsis	Enable the **auto-rp-mapping** context
Context	debug router *string* pim packet packet-types auto-rp-mapping
Tree	auto-rp-mapping
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router *string* pim packet packet-types auto-rp-mapping all-origins
Tree	all-origins

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Notes	The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router *string* pim packet packet-types auto-rp-mapping interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced	22.10.R1
Platforms	All

bsr

Synopsis	Enable the **bsr** context
Context	debug router *string* pim packet packet-types bsr
Tree	bsr
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router *string* pim packet packet-types bsr all-origins
Tree	all-origins
Notes	The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router *string* pim packet packet-types bsr interface-name *string*

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Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced	22.10.R1
Platforms	All

crp

Synopsis	Enable the **crp** context
Context	debug router *string* pim packet packet-types crp
Tree	crp
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router *string* pim packet packet-types crp all-origins
Tree	all-origins
Notes	The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router *string* pim packet packet-types crp interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced	22.10.R1
Platforms	All

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graft

Synopsis	Enable the **graft** context
Context	debug router *string* pim packet packet-types graft
Tree	graft
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router *string* pim packet packet-types graft all-origins
Tree	all-origins
Notes	The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router *string* pim packet packet-types graft interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced	22.10.R1
Platforms	All

graft-ack

Synopsis	Enable the **graft-ack** context
Context	debug router *string* pim packet packet-types graft-ack
Tree	graft-ack
Introduced	22.10.R1
Platforms	All

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all-origins

Synopsis	Enable trace for all origins
Context	debug router *string* pim packet packet-types graft-ack all-origins
Tree	all-origins
Notes	The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router *string* pim packet packet-types graft-ack interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced	22.10.R1
Platforms	All

hello

Synopsis	Enable the **hello** context
Context	debug router *string* pim packet packet-types hello
Tree	hello
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router *string* pim packet packet-types hello all-origins
Tree	all-origins
Notes	The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced	22.10.R1
Platforms	All

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interface-name *string*

Synopsis	Interface name
Context	debug router *string* pim packet packet-types hello interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced	22.10.R1
Platforms	All

jp

Synopsis	Enable the **jp** context
Context	debug router *string* pim packet packet-types jp
Tree	jp
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router *string* pim packet packet-types jp all-origins
Tree	all-origins
Notes	The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router *string* pim packet packet-types jp interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced	22.10.R1

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Platforms	All

mdt-tlv

Synopsis	Enable the **mdt-tlv** context
Context	debug router *string* pim packet packet-types mdt-tlv
Tree	mdt-tlv
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router *string* pim packet packet-types mdt-tlv all-origins
Tree	all-origins
Notes	The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router *string* pim packet packet-types mdt-tlv interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced	22.10.R1
Platforms	All

register

Synopsis	Enable the **register** context
Context	debug router *string* pim packet packet-types register
Tree	register
Introduced	22.10.R1

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Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router *string* pim packet packet-types register all-origins
Tree	all-origins
Notes	The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router *string* pim packet packet-types register interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced	22.10.R1
Platforms	All

register-stop

Synopsis	Enable the **register-stop** context
Context	debug router *string* pim packet packet-types register-stop
Tree	register-stop
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router *string* pim packet packet-types register-stop all-origins
Tree	all-origins
Notes	The following elements are part of a choice: **all-origins** or **interface-name**.

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Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router *string* pim packet packet-types register-stop interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: **all-origins** or **interface-name**.
Introduced	22.10.R1
Platforms	All

radius

Synopsis	Enter the **radius** context
Context	debug router *string* radius
Tree	radius
Introduced	22.5.R1
Platforms	All

proxy [name] *string*

Synopsis	Enter the **proxy** list instance
Context	debug router *string* radius proxy *string*
Tree	proxy
Max. Instances	8
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	RADIUS proxy server name
Context	debug router *string* radius proxy *string*

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Tree	proxy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all-packet-types

Synopsis	Enable RADIUS proxy debugging for all packets
Context	debug router *string* radius proxy *string* all-packet-types
Tree	all-packet-types
Notes	The following elements are part of a mandatory choice: **all-packet-types** or **packet-types**.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-address [address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Add a list entry for **client-address**
Context	debug router *string* radius proxy *string* client-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	client-address
Max. Instances	10
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the RADIUS client
Context	debug router *string* radius proxy *string* client-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	client-address
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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detail-level *keyword*

Synopsis	Detail level of the RADIUS proxy debug output
Context	debug router *string* radius proxy *string* detail-level *keyword*
Tree	detail-level
Options	low, high
Default	low
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of the RADIUS proxy packet debugging
Context	debug router *string* radius proxy *string* direction *keyword*
Tree	direction
Options	ingress, egress, both
Default	both
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dropped-only *boolean*

Synopsis	Show dropped packets only
Context	debug router *string* radius proxy *string* dropped-only *boolean*
Tree	dropped-only
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

packet-types

Synopsis	Enter the **packet-types** context
Context	debug router *string* radius proxy *string* packet-types
Tree	packet-types

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Notes	The following elements are part of a mandatory choice: **all-packet-types** or **packet-types**.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

access-accept *boolean*

Synopsis	Debug Access-Accept packets
Context	debug router *string* radius proxy *string* packet-types access-accept *boolean*
Tree	access-accept
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

access-challenge *boolean*

Synopsis	Debug Access-Challenge packets
Context	debug router *string* radius proxy *string* packet-types access-challenge *boolean*
Tree	access-challenge
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

access-reject *boolean*

Synopsis	Debug Access-Reject packets
Context	debug router *string* radius proxy *string* packet-types access-reject *boolean*
Tree	access-reject
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

access-request *boolean*

Synopsis	Debug Access-Request packets

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Context	debug router *string* radius proxy *string* packet-types access-request *boolean*
Tree	access-request
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-request *boolean*

Synopsis	Debug Accounting-Request packets
Context	debug router *string* radius proxy *string* packet-types accounting-request *boolean*
Tree	accounting-request
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-response *boolean*

Synopsis	Debug Accounting-Response packets
Context	debug router *string* radius proxy *string* packet-types accounting-response *boolean*
Tree	accounting-response
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

other *boolean*

Synopsis	Debug other packet types
Context	debug router *string* radius proxy *string* packet-types other *boolean*
Tree	other
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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servers

Synopsis	Enable the **servers** context
Context	debug router *string* radius servers
Tree	servers
Introduced	22.5.R1
Platforms	All

attribute [name] *string*

Synopsis	Enter the **attribute** list instance
Context	debug router *string* radius servers attribute *string*
Tree	attribute
Max. Instances	10
Introduced	22.5.R1
Platforms	All

[name] *string*

Synopsis	Attribute filter name
Context	debug router *string* radius servers attribute *string*
Tree	attribute
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

extended-type *number*

Synopsis	RADIUS attribute extended type
Context	debug router *string* radius servers attribute *string* extended-type *number*
Tree	extended-type
Range	1 to 255
Introduced	22.5.R1
Platforms	All

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transaction *boolean*

Synopsis	Debug request and response transaction
Context	debug router *string* radius servers attribute *string* transaction *boolean*
Tree	transaction
Default	false
Introduced	22.5.R1
Platforms	All

type *number*

Synopsis	RADIUS attribute type
Context	debug router *string* radius servers attribute *string* type *number*
Tree	type
Range	1 to 255
Notes	This element is mandatory.
Introduced	22.5.R1
Platforms	All

value

Synopsis	Enter the **value** context
Context	debug router *string* radius servers attribute *string* value
Tree	value
Introduced	22.5.R1
Platforms	All

address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Attribute value specified as an IP address
Context	debug router *string* radius servers attribute *string* value address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	address
Notes	The following elements are part of a choice: **address**, **hex**, **integer**, **prefix**, or **string**.
Introduced	22.5.R1

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Platforms	All

hex *string*

Synopsis	Attribute value specified as a hexadecimal string
Context	debug router *string* radius servers attribute *string* value hex *string*
Tree	hex
String Length	1 to 253
Notes	The following elements are part of a choice: **address**, **hex**, **integer**, **prefix**, or **string**.
Introduced	22.5.R1
Platforms	All

integer *number*

Synopsis	Attribute value specified as an integer
Context	debug router *string* radius servers attribute *string* value integer *number*
Tree	integer
Max. Range	0 to 4294967295
Notes	The following elements are part of a choice: **address**, **hex**, **integer**, **prefix**, or **string**.
Introduced	22.5.R1
Platforms	All

prefix *(ipv4-prefix | ipv6-prefix)*

Synopsis	Attribute value specified as an IP prefix
Context	debug router *string* radius servers attribute *string* value prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Notes	The following elements are part of a choice: **address**, **hex**, **integer**, **prefix**, or **string**.
Introduced	22.5.R1
Platforms	All

string *string*

Synopsis	Attribute value specified as a string
Context	debug router *string* radius servers attribute *string* value string *string*

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Tree	string
String Length	1 to 253
Notes	The following elements are part of a choice: **address**, **hex**, **integer**, **prefix**, or **string**.
Introduced	22.5.R1
Platforms	All

vendor-specific

Synopsis	Enter the **vendor-specific** context
Context	debug router *string* radius servers attribute *string* vendor-specific
Tree	vendor-specific
Introduced	22.5.R1
Platforms	All

encoding

Synopsis	Enter the **encoding** context
Context	debug router *string* radius servers attribute *string* vendor-specific encoding
Tree	encoding
Introduced	22.5.R1
Platforms	All

length-size *number*

Synopsis	Size of the vendor-length field
Context	debug router *string* radius servers attribute *string* vendor-specific encoding length-size *number*
Tree	length-size
Range	0 to 2
Default	1
Introduced	22.5.R1
Platforms	All

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type-size *number*

Synopsis	Size of the vendor-type field
Context	debug router *string* radius servers attribute *string* vendor-specific encoding type-size *number*
Tree	type-size
Range	1 to 4
Default	1
Introduced	22.5.R1
Platforms	All

vendor *(number | keyword)*

Synopsis	RADIUS vendor ID
Context	debug router *string* radius servers attribute *string* vendor-specific vendor *(number | keyword)*
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	22.5.R1
Platforms	All

vendor-type *number*

Synopsis	RADIUS vendor specific type
Context	debug router *string* radius servers attribute *string* vendor-specific vendor-type *number*
Tree	vendor-type
Max. Range	0 to 4294967295
Introduced	22.5.R1
Platforms	All

detail-level *keyword*

Synopsis	Detail level of the RADIUS debug output
Context	debug router *string* radius servers detail-level *keyword*
Tree	detail-level

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Options	low, medium, high
Default	medium
Introduced	22.5.R1
Platforms	All

packet-types

Synopsis	Enter the **packet-types** context
Context	debug router *string* radius servers packet-types
Tree	packet-types
Introduced	22.7.R1
Platforms	All

accounting *boolean*

Synopsis	Debug accounting packets
Context	debug router *string* radius servers packet-types accounting *boolean*
Tree	accounting
Default	true
Introduced	22.7.R1
Platforms	All

authentication *boolean*

Synopsis	Debug authentication packets
Context	debug router *string* radius servers packet-types authentication *boolean*
Tree	authentication
Default	true
Introduced	22.7.R1
Platforms	All

coa *boolean*

Synopsis	Debug CoA and DM packets
Context	debug router *string* radius servers packet-types coa *boolean*

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Tree	coa
Default	true
Introduced	22.7.R1
Platforms	All

server-address [address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Add a list entry for **server-address**
Context	debug router *string* radius servers server-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	server-address
Max. Instances	10
Introduced	22.5.R1
Platforms	All

[**address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the RADIUS server
Context	debug router *string* radius servers server-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	server-address
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

vrrp

Synopsis	Enter the **vrrp** context
Context	debug router *string* vrrp
Tree	vrrp
Introduced	22.10.R1
Platforms	All

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events

Synopsis	Enter the **events** context
Context	debug router *string* vrrp events
Tree	events
Description	Commands in this context enable debugging for VRRP events and state changes.
Introduced	22.10.R1
Platforms	All

all-events

Synopsis	Enable the **all-events** context
Context	debug router *string* vrrp events all-events
Tree	all-events
Introduced	22.10.R1
Platforms	All

interface [interface-name] *string*

Synopsis	Enter the **interface** list instance
Context	debug router *string* vrrp events interface *string*
Tree	interface
Introduced	22.10.R1
Platforms	All

[interface-name] *string*

Synopsis	Interface name
Context	debug router *string* vrrp events interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

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all-vrids

Synopsis	Enable the **all-vrids** context
Context	debug router *string* vrrp events interface *string* all-vrids
Tree	all-vrids
Introduced	23.3.R1
Platforms	All

ipv4

Synopsis	Enter the **ipv4** context
Context	debug router *string* vrrp events interface *string* ipv4
Tree	ipv4
Introduced	22.10.R1
Platforms	All

vrid [virtual-router-id] *number*

Synopsis	Add a list entry for **vrid**
Context	debug router *string* vrrp events interface *string* ipv4 vrid *number*
Tree	vrid
Max. Instances	4
Introduced	22.10.R1
Platforms	All

[**virtual-router-id**] *number*

Synopsis	Virtual router ID to debug
Context	debug router *string* vrrp events interface *string* ipv4 vrid *number*
Tree	vrid
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

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ipv6

Synopsis	Enter the **ipv6** context
Context	debug router *string* vrrp events interface *string* ipv6
Tree	ipv6
Introduced	22.10.R1
Platforms	All

vrid [virtual-router-id] *number*

Synopsis	Add a list entry for **vrid**
Context	debug router *string* vrrp events interface *string* ipv6 vrid *number*
Tree	vrid
Max. Instances	4
Introduced	22.10.R1
Platforms	All

[**virtual-router-id**] *number*

Synopsis	Virtual router ID to debug
Context	debug router *string* vrrp events interface *string* ipv6 vrid *number*
Tree	vrid
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

packet

Synopsis	Enter the **packet** context
Context	debug router *string* vrrp packet
Tree	packet
Description	Commands in this context enable debugging for VRRP packet exchanges.
Introduced	22.10.R1

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Platforms	All

all-packets

Synopsis	Enable the **all-packets** context
Context	debug router *string* vrrp packet all-packets
Tree	all-packets
Introduced	22.10.R1
Platforms	All

interface [interface-name] *string*

Synopsis	Enter the **interface** list instance
Context	debug router *string* vrrp packet interface *string*
Tree	interface
Introduced	22.10.R1
Platforms	All

[interface-name] *string*

Synopsis	Interface name
Context	debug router *string* vrrp packet interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

all-vrids

Synopsis	Enable the **all-vrids** context
Context	debug router *string* vrrp packet interface *string* all-vrids
Tree	all-vrids
Introduced	23.3.R1
Platforms	All

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ipv4

Synopsis	Enter the **ipv4** context
Context	debug router *string* vrrp packet interface *string* ipv4
Tree	ipv4
Introduced	22.10.R1
Platforms	All

vrid [virtual-router-id] *number*

Synopsis	Add a list entry for **vrid**
Context	debug router *string* vrrp packet interface *string* ipv4 vrid *number*
Tree	vrid
Max. Instances	4
Introduced	22.10.R1
Platforms	All

[**virtual-router-id**] *number*

Synopsis	Virtual router ID to debug
Context	debug router *string* vrrp packet interface *string* ipv4 vrid *number*
Tree	vrid
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

ipv6

Synopsis	Enter the **ipv6** context
Context	debug router *string* vrrp packet interface *string* ipv6
Tree	ipv6
Introduced	22.10.R1
Platforms	All

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vrid [virtual-router-id] *number*

Synopsis	Add a list entry for **vrid**
Context	debug router *string* vrrp packet interface *string* ipv6 vrid *number*
Tree	vrid
Max. Instances	4
Introduced	22.10.R1
Platforms	All

[**virtual-router-id**] *number*

Synopsis	Virtual router ID to debug
Context	debug router *string* vrrp packet interface *string* ipv6 vrid *number*
Tree	vrid
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

wpp

Synopsis	Enter the **wpp** context
Context	debug router *string* wpp
Tree	wpp
Introduced	22.7.R1
Platforms	All

packets

Synopsis	Enable the **packets** context
Context	debug router *string* wpp packets
Tree	packets
Introduced	22.7.R1
Platforms	All

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detail-level *keyword*

Synopsis	Detail level of the WPP packet debug output
Context	debug router *string* wpp packets detail-level *keyword*
Tree	detail-level
Options	low, high
Default	low
Introduced	22.7.R1
Platforms	All

portal [name] *string*

Synopsis	Enter the **portal** list instance
Context	debug router *string* wpp portal *string*
Tree	portal
Introduced	22.7.R1
Platforms	All

[**name**] *string*

Synopsis	WPP portal name
Context	debug router *string* wpp portal *string*
Tree	portal
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

packets

Synopsis	Enter the **packets** context
Context	debug router *string* wpp portal *string* packets
Tree	packets
Introduced	22.7.R1
Platforms	All

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detail-level *keyword*

Synopsis	Detail level of the WPP packet debug output
Context	debug router *string* wpp portal *string* packets detail-level *keyword*
Tree	detail-level
Options	low, high
Default	low
Introduced	22.7.R1
Platforms	All

service

Synopsis	Enter the **service** context
Context	debug service
Tree	service
Introduced	22.10.R1
Platforms	All

ies [service-name] *string*

Synopsis	Enter the **ies** list instance
Context	debug service ies *string*
Tree	ies
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**service-name**] *string*

Synopsis	Administrative service name
Context	debug service ies *string*
Tree	ies
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ppp

Synopsis	Enter the **ppp** context
Context	debug service ies *string* ppp
Tree	ppp
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id [id] *string*

Synopsis	Add a list entry for **circuit-id**
Context	debug service ies *string* ppp circuit-id *string*
Tree	circuit-id
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**id**] *string*

Synopsis	Circuit ID of the PPPoE session to debug
Context	debug service ies *string* ppp circuit-id *string*
Tree	circuit-id
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

events

Synopsis	Enable the **events** context
Context	debug service ies *string* ppp events
Tree	events
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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all

Synopsis	Enable PPP debugging for all events
Context	debug service ies *string* ppp events all
Tree	all
Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **l2tp**, **local-address-assignment**, and **ppp**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp-client

Synopsis	Enable the **dhcp-client** context
Context	debug service ies *string* ppp events dhcp-client
Tree	dhcp-client
Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **l2tp**, **local-address-assignment**, and **ppp**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	debug service ies *string* ppp events dhcp-client terminate-only *boolean*
Tree	terminate-only
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2tp

Synopsis	Enable the **l2tp** context
Context	debug service ies *string* ppp events l2tp
Tree	l2tp
Description	Commands in this context configure debugging events for L2TP sessions.

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Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **l2tp**, **local-address-assignment**, and **ppp**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	debug service ies *string* ppp events l2tp terminate-only *boolean*
Tree	terminate-only
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-address-assignment

Synopsis	Enable the **local-address-assignment** context
Context	debug service ies *string* ppp events local-address-assignment
Tree	local-address-assignment
Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **l2tp**, **local-address-assignment**, and **ppp**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	debug service ies *string* ppp events local-address-assignment terminate-only *boolean*
Tree	terminate-only
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp

Synopsis	Enable the **ppp** context

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Context	debug service ies *string* ppp events ppp
Tree	ppp
Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **l2tp**, **local-address-assignment**, and **ppp**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	debug service ies *string* ppp events ppp terminate-only *boolean*
Tree	terminate-only
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac [address] *string*

Synopsis	Add a list entry for **mac**
Context	debug service ies *string* ppp mac *string*
Tree	mac
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**address**] *string*

Synopsis	MAC address of the PPPoE session to debug
Context	debug service ies *string* ppp mac *string*
Tree	mac
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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packets

Synopsis	Enable the **packets** context
Context	debug service ies *string* ppp packets
Tree	packets
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all

Synopsis	Enable PPP debugging for all packets
Context	debug service ies *string* ppp packets all
Tree	all
Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **discovery**, and **ppp-session**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

detail-level *keyword*

Synopsis	Detail level of the PPP packet debug output
Context	debug service ies *string* ppp packets detail-level *keyword*
Tree	detail-level
Options	low, medium, high
Default	high
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp-client *boolean*

Synopsis	Enable DHCP client packet debugging
Context	debug service ies *string* ppp packets dhcp-client *boolean*
Tree	dhcp-client
Default	false
Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **discovery**, and **ppp-session**).

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Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

discovery

Synopsis	Enter the **discovery** context
Context	debug service ies *string* ppp packets discovery
Tree	discovery
Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **discovery**, and **ppp-session**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all

Synopsis	Enable PPP debugging for all discovery packets
Context	debug service ies *string* ppp packets discovery all
Tree	all
Notes	The following elements are part of a choice: **all** or (**padi**, **pado**, **padr**, **pads**, and **padt**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

padi *boolean*

Synopsis	Enable PPP debugging for PADI discovery packets
Context	debug service ies *string* ppp packets discovery padi *boolean*
Tree	padi
Default	false
Notes	The following elements are part of a choice: **all** or (**padi**, **pado**, **padr**, **pads**, and **padt**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pado *boolean*

Synopsis	Enable PPP debugging for PADO discovery packets

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Context	debug service ies *string* ppp packets discovery pado *boolean*
Tree	pado
Default	false
Notes	The following elements are part of a choice: **all** or (**padi**, **pado**, **padr**, **pads**, and **padt**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

padr *boolean*

Synopsis	Enable PPP debugging for PADR discovery packets
Context	debug service ies *string* ppp packets discovery padr *boolean*
Tree	padr
Default	false
Notes	The following elements are part of a choice: **all** or (**padi**, **pado**, **padr**, **pads**, and **padt**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pads *boolean*

Synopsis	Enable PPP debugging for PADS discovery packets
Context	debug service ies *string* ppp packets discovery pads *boolean*
Tree	pads
Default	false
Notes	The following elements are part of a choice: **all** or (**padi**, **pado**, **padr**, **pads**, and **padt**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

padt *boolean*

Synopsis	Enable PPP debugging for PADT discovery packets
Context	debug service ies *string* ppp packets discovery padt *boolean*
Tree	padt
Default	false
Notes	The following elements are part of a choice: **all** or (**padi**, **pado**, **padr**, **pads**, and **padt**).

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Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mode *keyword*

Synopsis	PPP packets present in the debug output
Context	debug service ies *string* ppp packets mode *keyword*
Tree	mode
Options	dropped-only, ingress-and-dropped, egress-ingress-and-dropped
Default	dropped-only
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-session

Synopsis	Enter the **ppp-session** context
Context	debug service ies *string* ppp packets ppp-session
Tree	ppp-session
Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **discovery**, and **ppp-session**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all

Synopsis	Enable PPP debugging for all PPP session packets
Context	debug service ies *string* ppp packets ppp-session all
Tree	all
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, and **pap**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

chap *boolean*

Synopsis	Enable PPP debugging for CHAP authentication packets

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Context	debug service ies *string* ppp packets ppp-session chap *boolean*
Tree	chap
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, and **pap**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipcp *boolean*

Synopsis	Enable PPP debugging for IPCP NCP packets
Context	debug service ies *string* ppp packets ppp-session ipcp *boolean*
Tree	ipcp
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, and **pap**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6cp *boolean*

Synopsis	Enable PPP debugging for IPv6CP NCP packets
Context	debug service ies *string* ppp packets ppp-session ipv6cp *boolean*
Tree	ipv6cp
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, and **pap**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lcp *boolean*

Synopsis	Enable PPP debugging for LCP link establishment packets
Context	debug service ies *string* ppp packets ppp-session lcp *boolean*
Tree	lcp
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, and **pap**).

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Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pap *boolean*

Synopsis	Enable PPP debugging for PAP authentication packets
Context	debug service ies *string* ppp packets ppp-session pap *boolean*
Tree	pap
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, and **pap**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id [id] *string*

Synopsis	Add a list entry for **remote-id**
Context	debug service ies *string* ppp remote-id *string*
Tree	remote-id
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**id**] *string*

Synopsis	Remote ID of the PPPoE session to debug
Context	debug service ies *string* ppp remote-id *string*
Tree	remote-id
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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sap [sap-id] *string*

Synopsis	Add a list entry for **sap**
Context	debug service ies *string* ppp sap *string*
Tree	sap
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**sap-id**] *string*

Synopsis	SAP ID of the PPPoE session to debug
Context	debug service ies *string* ppp sap *string*
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-name [name] *string*

Synopsis	Add a list entry for **user-name**
Context	debug service ies *string* ppp user-name *string*
Tree	user-name
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Username of the PPPoE session to debug
Context	debug service ies *string* ppp user-name *string*
Tree	user-name

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Description	This command configures the username of the PPPoE sesssion to debug. Only packets after the PAP or CHAP authentication are logged. If the purpose is to include PPPoE discovery packets in the debug log, configure a MAC filter instead.
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vpls [service-name] *string*

Synopsis	Enter the **vpls** list instance
Context	debug service vpls *string*
Tree	vpls
Introduced	22.10.R1
Platforms	All

[**service-name**] *string*

Synopsis	Administrative service name
Context	debug service vpls *string*
Tree	vpls
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

igmp-snooping

Synopsis	Enter the **igmp-snooping** context
Context	debug service vpls *string* igmp-snooping
Tree	igmp-snooping
Introduced	22.10.R1
Platforms	All

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packet

Synopsis	Enable the **packet** context
Context	debug service vpls *string* igmp-snooping packet
Tree	packet
Introduced	22.10.R1
Platforms	All

detail *keyword*

Synopsis	Detail level of the debug output
Context	debug service vpls *string* igmp-snooping packet detail *keyword*
Tree	detail
Options	low, medium, high
Default	medium
Introduced	22.10.R1
Platforms	All

dropped *boolean*

Synopsis	Enable tracing for dropped packets
Context	debug service vpls *string* igmp-snooping packet dropped *boolean*
Tree	dropped
Default	true
Introduced	22.10.R1
Platforms	All

egress *boolean*

Synopsis	Enable tracing for transmitted packets
Context	debug service vpls *string* igmp-snooping packet egress *boolean*
Tree	egress
Default	true
Introduced	22.10.R1
Platforms	All

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evpn-mpls *boolean*

Synopsis	Allow debugging for EVPN-MPLS destinations
Context	debug service vpls *string* igmp-snooping packet evpn-mpls *boolean*
Tree	evpn-mpls
Default	false
Introduced	22.10.R1
Platforms	All

evpn-vxlan [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)* vni *number*

Synopsis	Add a list entry for **evpn-vxlan**
Context	debug service vpls *string* igmp-snooping packet evpn-vxlan *(ipv4-address-no-zone | ipv6-address-no-zone)* vni *number*
Tree	evpn-vxlan
Max. Instances	8
Introduced	22.10.R1
Platforms	All

[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the VXLAN Tunnel Endpoint
Context	debug service vpls *string* igmp-snooping packet evpn-vxlan *(ipv4-address-no-zone | ipv6-address-no-zone)* vni *number*
Tree	evpn-vxlan
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

vni *number*

Synopsis	VXLAN Network Identifier of the VXLAN binding
Context	debug service vpls *string* igmp-snooping packet evpn-vxlan *(ipv4-address-no-zone | ipv6-address-no-zone)* vni *number*
Tree	evpn-vxlan

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Range	1 to 16777215
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

ingress *boolean*

Synopsis	Enable tracing for received packets
Context	debug service vpls *string* igmp-snooping packet ingress *boolean*
Tree	ingress
Default	true
Introduced	22.10.R1
Platforms	All

mac [mac-address] *string*

Synopsis	Add a list entry for **mac**
Context	debug service vpls *string* igmp-snooping packet mac *string*
Tree	mac
Max. Instances	8
Introduced	22.10.R1
Platforms	All

[**mac-address**] *string*

Synopsis	MAC address
Context	debug service vpls *string* igmp-snooping packet mac *string*
Tree	mac
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

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sap [sap-id] *string*

Synopsis	Add a list entry for **sap**
Context	debug service vpls *string* igmp-snooping packet sap *string*
Tree	sap
Max. Instances	8
Introduced	22.10.R1
Platforms	All

[**sap-id**] *string*

Synopsis	SAP ID
Context	debug service vpls *string* igmp-snooping packet sap *string*
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

sdp-bind [sdp-bind-id] *string*

Synopsis	Add a list entry for **sdp-bind**
Context	debug service vpls *string* igmp-snooping packet sdp-bind *string*
Tree	sdp-bind
Max. Instances	8
Introduced	22.10.R1
Platforms	All

[**sdp-bind-id**] *string*

Synopsis	SDP bind ID
Context	debug service vpls *string* igmp-snooping packet sdp-bind *string*
Tree	sdp-bind
String Length	3 to 16

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Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

mld-snooping

Synopsis	Enter the **mld-snooping** context
Context	debug service vpls *string* mld-snooping
Tree	mld-snooping
Introduced	22.10.R1
Platforms	All

packet

Synopsis	Enable the **packet** context
Context	debug service vpls *string* mld-snooping packet
Tree	packet
Introduced	22.10.R1
Platforms	All

detail *keyword*

Synopsis	Detail level of the debug output
Context	debug service vpls *string* mld-snooping packet detail *keyword*
Tree	detail
Options	low, medium, high
Default	medium
Introduced	22.10.R1
Platforms	All

dropped *boolean*

Synopsis	Enable tracing for dropped packets
Context	debug service vpls *string* mld-snooping packet dropped *boolean*
Tree	dropped

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Default	true
Introduced	22.10.R1
Platforms	All

egress *boolean*

Synopsis	Enable tracing for transmitted packets
Context	debug service vpls *string* mld-snooping packet egress *boolean*
Tree	egress
Default	true
Introduced	22.10.R1
Platforms	All

evpn-mpls *boolean*

Synopsis	Allow debugging for EVPN-MPLS destinations
Context	debug service vpls *string* mld-snooping packet evpn-mpls *boolean*
Tree	evpn-mpls
Default	false
Introduced	22.10.R1
Platforms	All

evpn-vxlan [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)* vni *number*

Synopsis	Add a list entry for **evpn-vxlan**
Context	debug service vpls *string* mld-snooping packet evpn-vxlan *(ipv4-address-no-zone | ipv6-address-no-zone)* vni *number*
Tree	evpn-vxlan
Max. Instances	8
Introduced	22.10.R1
Platforms	All

[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the VXLAN Tunnel Endpoint

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Context	debug service vpls *string* mld-snooping packet evpn-vxlan *(ipv4-address-no-zone | ipv6-address-no-zone)* vni *number*
Tree	evpn-vxlan
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

vni *number*

Synopsis	VXLAN Network Identifier of the VXLAN binding
Context	debug service vpls *string* mld-snooping packet evpn-vxlan *(ipv4-address-no-zone | ipv6-address-no-zone)* vni *number*
Tree	evpn-vxlan
Range	1 to 16777215
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

ingress *boolean*

Synopsis	Enable tracing for received packets
Context	debug service vpls *string* mld-snooping packet ingress *boolean*
Tree	ingress
Default	true
Introduced	22.10.R1
Platforms	All

mac [mac-address] *string*

Synopsis	Add a list entry for **mac**
Context	debug service vpls *string* mld-snooping packet mac *string*
Tree	mac
Max. Instances	8
Introduced	22.10.R1
Platforms	All

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[**mac-address**] *string*

Synopsis	MAC address
Context	debug service vpls *string* mld-snooping packet mac *string*
Tree	mac
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

sap [sap-id] *string*

Synopsis	Add a list entry for **sap**
Context	debug service vpls *string* mld-snooping packet sap *string*
Tree	sap
Max. Instances	8
Introduced	22.10.R1
Platforms	All

[**sap-id**] *string*

Synopsis	SAP ID
Context	debug service vpls *string* mld-snooping packet sap *string*
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

sdp-bind [sdp-bind-id] *string*

Synopsis	Add a list entry for **sdp-bind**
Context	debug service vpls *string* mld-snooping packet sdp-bind *string*
Tree	sdp-bind

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Max. Instances	8
Introduced	22.10.R1
Platforms	All

[**sdp-bind-id**] *string*

Synopsis	SDP bind ID
Context	debug service vpls *string* mld-snooping packet sdp-bind *string*
Tree	sdp-bind
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

pim-snooping

Synopsis	Enter the **pim-snooping** context
Context	debug service vpls *string* pim-snooping
Tree	pim-snooping
Introduced	22.10.R1
Platforms	All

events

Synopsis	Enable the **events** context
Context	debug service vpls *string* pim-snooping events
Tree	events
Introduced	22.10.R1
Platforms	All

adjacency

Synopsis	Enable the **adjacency** context
Context	debug service vpls *string* pim-snooping events adjacency

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Tree	adjacency
Notes	The following elements are part of a choice: (**adjacency**, **db**, **jp**, **mcs**, **port**, and **red**) or **all**.
Introduced	22.10.R1
Platforms	All

all

Synopsis	Enable the **all** context
Context	debug service vpls *string* pim-snooping events all
Tree	all
Notes	The following elements are part of a choice: (**adjacency**, **db**, **jp**, **mcs**, **port**, and **red**) or **all**.
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug service vpls *string* pim-snooping events all detail *boolean*
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

group-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP multicast group address used to trace events
Context	debug service vpls *string* pim-snooping events all group-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	group-address
Introduced	22.10.R1
Platforms	All

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source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source address used to trace events
Context	debug service vpls *string* pim-snooping events all source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-address
Introduced	22.10.R1
Platforms	All

db

Synopsis	Enable the **db** context
Context	debug service vpls *string* pim-snooping events db
Tree	db
Notes	The following elements are part of a choice: (**adjacency**, **db**, **jp**, **mcs**, **port**, and **red**) or **all**.
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug service vpls *string* pim-snooping events db detail *boolean*
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

group-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP multicast group address used to trace events
Context	debug service vpls *string* pim-snooping events db group-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	group-address
Introduced	22.10.R1
Platforms	All

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source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source address used to trace events
Context	debug service vpls *string* pim-snooping events db source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-address
Introduced	22.10.R1
Platforms	All

jp

Synopsis	Enable the **jp** context
Context	debug service vpls *string* pim-snooping events jp
Tree	jp
Description	Commands in this context enable debugging for PIM join and prune mechanisms.
Notes	The following elements are part of a choice: (**adjacency**, **db**, **jp**, **mcs**, **port**, and **red**) or **all**.
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug service vpls *string* pim-snooping events jp detail *boolean*
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

group-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP multicast group address used to trace events
Context	debug service vpls *string* pim-snooping events jp group-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	group-address
Introduced	22.10.R1

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Platforms	All

source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source address used to trace events
Context	debug service vpls *string* pim-snooping events jp source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-address
Introduced	22.10.R1
Platforms	All

mcs

Synopsis	Enable the **mcs** context
Context	debug service vpls *string* pim-snooping events mcs
Tree	mcs
Description	Commands in this context enable debugging for PIM snooping multi-chassis synchronization.
Notes	The following elements are part of a choice: (**adjacency**, **db**, **jp**, **mcs**, **port**, and **red**) or **all**.
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug service vpls *string* pim-snooping events mcs detail *boolean*
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

port

Synopsis	Enable the **port** context
Context	debug service vpls *string* pim-snooping events port

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Tree	port
Notes	The following elements are part of a choice: (**adjacency**, **db**, **jp**, **mcs**, **port**, and **red**) or **all**.
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug service vpls *string* pim-snooping events port detail *boolean*
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

evpn-mpls

Synopsis	Enable tracing for EVPN-MPLS ports
Context	debug service vpls *string* pim-snooping events port evpn-mpls
Tree	evpn-mpls
Notes	The following elements are part of a mandatory choice: **evpn-mpls**, **sap-id**, **sdp-bind-id**, or (**vni** and **vtep**).
Introduced	22.10.R1
Platforms	All

sap-id *string*

Synopsis	SAP ID
Context	debug service vpls *string* pim-snooping events port sap-id *string*
Tree	sap-id
String Length	1 to 45
Notes	The following elements are part of a mandatory choice: **evpn-mpls**, **sap-id**, **sdp-bind-id**, or (**vni** and **vtep**).
Introduced	22.10.R1
Platforms	All

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sdp-bind-id *string*

Synopsis	SDP bind ID
Context	debug service vpls *string* pim-snooping events port sdp-bind-id *string*
Tree	sdp-bind-id
String Length	3 to 16
Notes	The following elements are part of a mandatory choice: **evpn-mpls**, **sap-id**, **sdp-bind-id**, or (**vni** and **vtep**).
Introduced	22.10.R1
Platforms	All

vni *number*

Synopsis	VXLAN Network Identifier of the VXLAN binding
Context	debug service vpls *string* pim-snooping events port vni *number*
Tree	vni
Range	1 to 16777215
Notes	The following elements are part of a mandatory choice: **evpn-mpls**, **sap-id**, **sdp-bind-id**, or (**vni** and **vtep**).
Introduced	22.10.R1
Platforms	All

vtep *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the tunnel endpoint
Context	debug service vpls *string* pim-snooping events port vtep *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	vtep
Notes	The following elements are part of a mandatory choice: **evpn-mpls**, **sap-id**, **sdp-bind-id**, or (**vni** and **vtep**).
Introduced	22.10.R1
Platforms	All

red

Synopsis	Enable the **red** context

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Context	debug service vpls *string* pim-snooping events red
Tree	red
Description	Commands in this context enable debugging for PIM messages sent to the standby CPM.
Notes	The following elements are part of a choice: (**adjacency**, **db**, **jp**, **mcs**, **port**, and **red**) or **all**.
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug service vpls *string* pim-snooping events red detail *boolean*
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

packet

Synopsis	Enable the **packet** context
Context	debug service vpls *string* pim-snooping packet
Tree	packet
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Allow tracing on all ports
Context	debug service vpls *string* pim-snooping packet all-origins
Tree	all-origins
Notes	The following elements are part of a choice: **all-origins** or **port**.
Introduced	22.10.R1
Platforms	All

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all-packet-types

Synopsis	Enable PIM debugging for all packets
Context	debug service vpls *string* pim-snooping packet all-packet-types
Tree	all-packet-types
Notes	The following elements are part of a choice: **all-packet-types** or **packet-types**.
Introduced	22.10.R1
Platforms	All

packet-types

Synopsis	Enter the **packet-types** context
Context	debug service vpls *string* pim-snooping packet packet-types
Tree	packet-types
Notes	The following elements are part of a choice: **all-packet-types** or **packet-types**.
Introduced	22.10.R1
Platforms	All

hello *boolean*

Synopsis	Debug Hello packets
Context	debug service vpls *string* pim-snooping packet packet-types hello *boolean*
Tree	hello
Default	false
Introduced	22.10.R1
Platforms	All

jp *boolean*

Synopsis	Debug join and prune packets
Context	debug service vpls *string* pim-snooping packet packet-types jp *boolean*
Tree	jp
Default	false
Introduced	22.10.R1
Platforms	All

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port

Synopsis	Enable the **port** context
Context	debug service vpls *string* pim-snooping packet port
Tree	port
Notes	The following elements are part of a choice: **all-origins** or **port**.
Introduced	22.10.R1
Platforms	All

evpn-mpls

Synopsis	Enable tracing for EVPN-MPLS ports
Context	debug service vpls *string* pim-snooping packet port evpn-mpls
Tree	evpn-mpls
Notes	The following elements are part of a mandatory choice: **evpn-mpls**, **sap-id**, **sdp-bind-id**, or (**vni** and **vtep**).
Introduced	22.10.R1
Platforms	All

sap-id *string*

Synopsis	SAP ID
Context	debug service vpls *string* pim-snooping packet port sap-id *string*
Tree	sap-id
String Length	1 to 45
Notes	The following elements are part of a mandatory choice: **evpn-mpls**, **sap-id**, **sdp-bind-id**, or (**vni** and **vtep**).
Introduced	22.10.R1
Platforms	All

sdp-bind-id *string*

Synopsis	SDP bind ID
Context	debug service vpls *string* pim-snooping packet port sdp-bind-id *string*
Tree	sdp-bind-id

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String Length	3 to 16
Notes	The following elements are part of a mandatory choice: **evpn-mpls**, **sap-id**, **sdp-bind-id**, or (**vni** and **vtep**).
Introduced	22.10.R1
Platforms	All

vni *number*

Synopsis	VXLAN Network Identifier of the VXLAN binding
Context	debug service vpls *string* pim-snooping packet port vni *number*
Tree	vni
Range	1 to 16777215
Notes	The following elements are part of a mandatory choice: **evpn-mpls**, **sap-id**, **sdp-bind-id**, or (**vni** and **vtep**).
Introduced	22.10.R1
Platforms	All

vtep *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the tunnel endpoint
Context	debug service vpls *string* pim-snooping packet port vtep *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	vtep
Notes	The following elements are part of a mandatory choice: **evpn-mpls**, **sap-id**, **sdp-bind-id**, or (**vni** and **vtep**).
Introduced	22.10.R1
Platforms	All

ppp

Synopsis	Enter the **ppp** context
Context	debug service vpls *string* ppp
Tree	ppp
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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circuit-id [id] *string*

Synopsis	Add a list entry for **circuit-id**
Context	debug service vpls *string* ppp circuit-id *string*
Tree	circuit-id
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**id**] *string*

Synopsis	Circuit ID of the PPPoE session to debug
Context	debug service vpls *string* ppp circuit-id *string*
Tree	circuit-id
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

events

Synopsis	Enable the **events** context
Context	debug service vpls *string* ppp events
Tree	events
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all

Synopsis	Enable PPP debugging for all events
Context	debug service vpls *string* ppp events all
Tree	all
Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **l2tp**, **local-address-assignment**, and **ppp**).

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Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp-client

Synopsis	Enable the **dhcp-client** context
Context	debug service vpls *string* ppp events dhcp-client
Tree	dhcp-client
Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **l2tp**, **local-address-assignment**, and **ppp**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	debug service vpls *string* ppp events dhcp-client terminate-only *boolean*
Tree	terminate-only
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2tp

Synopsis	Enable the **l2tp** context
Context	debug service vpls *string* ppp events l2tp
Tree	l2tp
Description	Commands in this context configure debugging events for L2TP sessions.
Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **l2tp**, **local-address-assignment**, and **ppp**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only

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Context	debug service vpls *string* ppp events l2tp terminate-only *boolean*
Tree	terminate-only
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-address-assignment

Synopsis	Enable the **local-address-assignment** context
Context	debug service vpls *string* ppp events local-address-assignment
Tree	local-address-assignment
Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **l2tp**, **local-address-assignment**, and **ppp**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	debug service vpls *string* ppp events local-address-assignment terminate-only *boolean*
Tree	terminate-only
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp

Synopsis	Enable the **ppp** context
Context	debug service vpls *string* ppp events ppp
Tree	ppp
Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **l2tp**, **local-address-assignment**, and **ppp**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	debug service vpls *string* ppp events ppp terminate-only *boolean*
Tree	terminate-only
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac [address] *string*

Synopsis	Add a list entry for **mac**
Context	debug service vpls *string* ppp mac *string*
Tree	mac
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**address**] *string*

Synopsis	MAC address of the PPPoE session to debug
Context	debug service vpls *string* ppp mac *string*
Tree	mac
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

packets

Synopsis	Enable the **packets** context
Context	debug service vpls *string* ppp packets
Tree	packets
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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all

Synopsis	Enable PPP debugging for all packets
Context	debug service vpls *string* ppp packets all
Tree	all
Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **discovery**, and **ppp-session**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

detail-level *keyword*

Synopsis	Detail level of the PPP packet debug output
Context	debug service vpls *string* ppp packets detail-level *keyword*
Tree	detail-level
Options	low, medium, high
Default	high
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp-client *boolean*

Synopsis	Enable DHCP client packet debugging
Context	debug service vpls *string* ppp packets dhcp-client *boolean*
Tree	dhcp-client
Default	false
Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **discovery**, and **ppp-session**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

discovery

Synopsis	Enter the **discovery** context
Context	debug service vpls *string* ppp packets discovery

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Tree	discovery
Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **discovery**, and **ppp-session**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all

Synopsis	Enable PPP debugging for all discovery packets
Context	debug service vpls *string* ppp packets discovery all
Tree	all
Notes	The following elements are part of a choice: **all** or (**padi**, **pado**, **padr**, **pads**, and **padt**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

padi *boolean*

Synopsis	Enable PPP debugging for PADI discovery packets
Context	debug service vpls *string* ppp packets discovery padi *boolean*
Tree	padi
Default	false
Notes	The following elements are part of a choice: **all** or (**padi**, **pado**, **padr**, **pads**, and **padt**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pado *boolean*

Synopsis	Enable PPP debugging for PADO discovery packets
Context	debug service vpls *string* ppp packets discovery pado *boolean*
Tree	pado
Default	false
Notes	The following elements are part of a choice: **all** or (**padi**, **pado**, **padr**, **pads**, and **padt**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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padr *boolean*

Synopsis	Enable PPP debugging for PADR discovery packets
Context	debug service vpls *string* ppp packets discovery padr *boolean*
Tree	padr
Default	false
Notes	The following elements are part of a choice: **all** or (**padi**, **pado**, **padr**, **pads**, and **padt**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pads *boolean*

Synopsis	Enable PPP debugging for PADS discovery packets
Context	debug service vpls *string* ppp packets discovery pads *boolean*
Tree	pads
Default	false
Notes	The following elements are part of a choice: **all** or (**padi**, **pado**, **padr**, **pads**, and **padt**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

padt *boolean*

Synopsis	Enable PPP debugging for PADT discovery packets
Context	debug service vpls *string* ppp packets discovery padt *boolean*
Tree	padt
Default	false
Notes	The following elements are part of a choice: **all** or (**padi**, **pado**, **padr**, **pads**, and **padt**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mode *keyword*

Synopsis	PPP packets present in the debug output
Context	debug service vpls *string* ppp packets mode *keyword*
Tree	mode

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Options	dropped-only, ingress-and-dropped, egress-ingress-and-dropped
Default	dropped-only
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-session

Synopsis	Enter the **ppp-session** context
Context	debug service vpls *string* ppp packets ppp-session
Tree	ppp-session
Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **discovery**, and **ppp-session**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all

Synopsis	Enable PPP debugging for all PPP session packets
Context	debug service vpls *string* ppp packets ppp-session all
Tree	all
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, and **pap**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

chap *boolean*

Synopsis	Enable PPP debugging for CHAP authentication packets
Context	debug service vpls *string* ppp packets ppp-session chap *boolean*
Tree	chap
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, and **pap**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ipcp *boolean*

Synopsis	Enable PPP debugging for IPCP NCP packets
Context	debug service vpls *string* ppp packets ppp-session ipcp *boolean*
Tree	ipcp
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, and **pap**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6cp *boolean*

Synopsis	Enable PPP debugging for IPv6CP NCP packets
Context	debug service vpls *string* ppp packets ppp-session ipv6cp *boolean*
Tree	ipv6cp
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, and **pap**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lcp *boolean*

Synopsis	Enable PPP debugging for LCP link establishment packets
Context	debug service vpls *string* ppp packets ppp-session lcp *boolean*
Tree	lcp
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, and **pap**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pap *boolean*

Synopsis	Enable PPP debugging for PAP authentication packets
Context	debug service vpls *string* ppp packets ppp-session pap *boolean*
Tree	pap

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Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, and **pap**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id [id] *string*

Synopsis	Add a list entry for **remote-id**
Context	debug service vpls *string* ppp remote-id *string*
Tree	remote-id
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**id**] *string*

Synopsis	Remote ID of the PPPoE session to debug
Context	debug service vpls *string* ppp remote-id *string*
Tree	remote-id
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap [sap-id] *string*

Synopsis	Add a list entry for **sap**
Context	debug service vpls *string* ppp sap *string*
Tree	sap
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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[**sap-id**] *string*

Synopsis	SAP ID of the PPPoE session to debug
Context	debug service vpls *string* ppp sap *string*
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-name [name] *string*

Synopsis	Add a list entry for **user-name**
Context	debug service vpls *string* ppp user-name *string*
Tree	user-name
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Username of the PPPoE session to debug
Context	debug service vpls *string* ppp user-name *string*
Tree	user-name
Description	This command configures the username of the PPPoE sesssion to debug. Only packets after the PAP or CHAP authentication are logged. If the purpose is to include PPPoE discovery packets in the debug log, configure a MAC filter instead.
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vprn [service-name] *string*

Synopsis	Enter the **vprn** list instance

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Context	debug service vprn *string*
Tree	vprn
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**service-name**] *string*

Synopsis	Administrative service name
Context	debug service vprn *string*
Tree	vprn
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp

Synopsis	Enter the **ppp** context
Context	debug service vprn *string* ppp
Tree	ppp
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id [id] *string*

Synopsis	Add a list entry for **circuit-id**
Context	debug service vprn *string* ppp circuit-id *string*
Tree	circuit-id
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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[**id**] *string*

Synopsis	Circuit ID of the PPPoE session to debug
Context	debug service vprn *string* ppp circuit-id *string*
Tree	circuit-id
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

events

Synopsis	Enable the **events** context
Context	debug service vprn *string* ppp events
Tree	events
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all

Synopsis	Enable PPP debugging for all events
Context	debug service vprn *string* ppp events all
Tree	all
Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **l2tp**, **local-address-assignment**, and **ppp**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp-client

Synopsis	Enable the **dhcp-client** context
Context	debug service vprn *string* ppp events dhcp-client
Tree	dhcp-client
Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **l2tp**, **local-address-assignment**, and **ppp**).
Introduced	23.3.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	debug service vprn *string* ppp events dhcp-client terminate-only *boolean*
Tree	terminate-only
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2tp

Synopsis	Enable the **l2tp** context
Context	debug service vprn *string* ppp events l2tp
Tree	l2tp
Description	Commands in this context configure debugging events for L2TP sessions.
Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **l2tp**, **local-address-assignment**, and **ppp**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	debug service vprn *string* ppp events l2tp terminate-only *boolean*
Tree	terminate-only
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-address-assignment

Synopsis	Enable the **local-address-assignment** context
Context	debug service vprn *string* ppp events local-address-assignment

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Tree	local-address-assignment
Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **l2tp**, **local-address-assignment**, and **ppp**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	debug service vprn *string* ppp events local-address-assignment terminate-only *boolean*
Tree	terminate-only
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp

Synopsis	Enable the **ppp** context
Context	debug service vprn *string* ppp events ppp
Tree	ppp
Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **l2tp**, **local-address-assignment**, and **ppp**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	debug service vprn *string* ppp events ppp terminate-only *boolean*
Tree	terminate-only
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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mac [address] *string*

Synopsis	Add a list entry for **mac**
Context	debug service vprn *string* ppp mac *string*
Tree	mac
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**address**] *string*

Synopsis	MAC address of the PPPoE session to debug
Context	debug service vprn *string* ppp mac *string*
Tree	mac
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

packets

Synopsis	Enable the **packets** context
Context	debug service vprn *string* ppp packets
Tree	packets
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all

Synopsis	Enable PPP debugging for all packets
Context	debug service vprn *string* ppp packets all
Tree	all
Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **discovery**, and **ppp-session**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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detail-level *keyword*

Synopsis	Detail level of the PPP packet debug output
Context	debug service vprn *string* ppp packets detail-level *keyword*
Tree	detail-level
Options	low, medium, high
Default	high
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp-client *boolean*

Synopsis	Enable DHCP client packet debugging
Context	debug service vprn *string* ppp packets dhcp-client *boolean*
Tree	dhcp-client
Default	false
Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **discovery**, and **ppp-session**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

discovery

Synopsis	Enter the **discovery** context
Context	debug service vprn *string* ppp packets discovery
Tree	discovery
Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **discovery**, and **ppp-session**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all

Synopsis	Enable PPP debugging for all discovery packets
Context	debug service vprn *string* ppp packets discovery all

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Tree	all
Notes	The following elements are part of a choice: **all** or (**padi**, **pado**, **padr**, **pads**, and **padt**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

padi *boolean*

Synopsis	Enable PPP debugging for PADI discovery packets
Context	debug service vprn *string* ppp packets discovery padi *boolean*
Tree	padi
Default	false
Notes	The following elements are part of a choice: **all** or (**padi**, **pado**, **padr**, **pads**, and **padt**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pado *boolean*

Synopsis	Enable PPP debugging for PADO discovery packets
Context	debug service vprn *string* ppp packets discovery pado *boolean*
Tree	pado
Default	false
Notes	The following elements are part of a choice: **all** or (**padi**, **pado**, **padr**, **pads**, and **padt**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

padr *boolean*

Synopsis	Enable PPP debugging for PADR discovery packets
Context	debug service vprn *string* ppp packets discovery padr *boolean*
Tree	padr
Default	false
Notes	The following elements are part of a choice: **all** or (**padi**, **pado**, **padr**, **pads**, and **padt**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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pads *boolean*

Synopsis	Enable PPP debugging for PADS discovery packets
Context	debug service vprn *string* ppp packets discovery pads *boolean*
Tree	pads
Default	false
Notes	The following elements are part of a choice: **all** or (**padi**, **pado**, **padr**, **pads**, and **padt**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

padt *boolean*

Synopsis	Enable PPP debugging for PADT discovery packets
Context	debug service vprn *string* ppp packets discovery padt *boolean*
Tree	padt
Default	false
Notes	The following elements are part of a choice: **all** or (**padi**, **pado**, **padr**, **pads**, and **padt**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mode *keyword*

Synopsis	PPP packets present in the debug output
Context	debug service vprn *string* ppp packets mode *keyword*
Tree	mode
Options	dropped-only, ingress-and-dropped, egress-ingress-and-dropped
Default	dropped-only
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-session

Synopsis	Enter the **ppp-session** context
Context	debug service vprn *string* ppp packets ppp-session
Tree	ppp-session

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Notes	The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **discovery**, and **ppp-session**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all

Synopsis	Enable PPP debugging for all PPP session packets
Context	debug service vprn *string* ppp packets ppp-session all
Tree	all
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, and **pap**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

chap *boolean*

Synopsis	Enable PPP debugging for CHAP authentication packets
Context	debug service vprn *string* ppp packets ppp-session chap *boolean*
Tree	chap
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, and **pap**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipcp *boolean*

Synopsis	Enable PPP debugging for IPCP NCP packets
Context	debug service vprn *string* ppp packets ppp-session ipcp *boolean*
Tree	ipcp
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, and **pap**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ipv6cp *boolean*

Synopsis	Enable PPP debugging for IPv6CP NCP packets
Context	debug service vprn *string* ppp packets ppp-session ipv6cp *boolean*
Tree	ipv6cp
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, and **pap**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lcp *boolean*

Synopsis	Enable PPP debugging for LCP link establishment packets
Context	debug service vprn *string* ppp packets ppp-session lcp *boolean*
Tree	lcp
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, and **pap**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pap *boolean*

Synopsis	Enable PPP debugging for PAP authentication packets
Context	debug service vprn *string* ppp packets ppp-session pap *boolean*
Tree	pap
Default	false
Notes	The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, and **pap**).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id [id] *string*

Synopsis	Add a list entry for **remote-id**
Context	debug service vprn *string* ppp remote-id *string*
Tree	remote-id

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Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**id**] *string*

Synopsis	Remote ID of the PPPoE session to debug
Context	debug service vprn *string* ppp remote-id *string*
Tree	remote-id
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap [sap-id] *string*

Synopsis	Add a list entry for **sap**
Context	debug service vprn *string* ppp sap *string*
Tree	sap
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**sap-id**] *string*

Synopsis	SAP ID of the PPPoE session to debug
Context	debug service vprn *string* ppp sap *string*
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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user-name [name] *string*

Synopsis	Add a list entry for **user-name**
Context	debug service vprn *string* ppp user-name *string*
Tree	user-name
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Username of the PPPoE session to debug
Context	debug service vprn *string* ppp user-name *string*
Tree	user-name
Description	This command configures the username of the PPPoE sesssion to debug. Only packets after the PAP or CHAP authentication are logged. If the purpose is to include PPPoE discovery packets in the debug log, configure a MAC filter instead.
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-mgmt

Synopsis	Enter the **subscriber-mgmt** context
Context	debug subscriber-mgmt
Tree	subscriber-mgmt
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp

Synopsis	Enter the **gtp** context
Context	debug subscriber-mgmt gtp
Tree	gtp

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Description	This command enables the context to configure box-wide GTP parameters and profiles.
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

events *boolean*

Synopsis	Enable GTP event debugging
Context	debug subscriber-mgmt gtp events *boolean*
Tree	events
Default	false
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

imsi [imsi-instance] *string*

Synopsis	Add a list entry for **imsi**
Context	debug subscriber-mgmt gtp imsi *string*
Tree	imsi
Max. Instances	8
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**imsi-instance**] *string*

Synopsis	IMSI of GTP sessions to debug
Context	debug subscriber-mgmt gtp imsi *string*
Tree	imsi
String Length	0 to 15
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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packets

Synopsis	Enable the **packets** context
Context	debug subscriber-mgmt gtp packets
Tree	packets
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

detail-level *keyword*

Synopsis	Detail level of the GTP packet debug output
Context	debug subscriber-mgmt gtp packets detail-level *keyword*
Tree	detail-level
Options	high, low
Default	low
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mode *keyword*

Synopsis	GTP packets to include in the debug output
Context	debug subscriber-mgmt gtp packets mode *keyword*
Tree	mode
Options	all, dropped
Default	dropped
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer [address] *(ipv4-address-no-zone | ipv6-address-no-zone)* router *string*

Synopsis	Enter the **peer** list instance
Context	debug subscriber-mgmt gtp peer *(ipv4-address-no-zone | ipv6-address-no-zone)* router *string*
Tree	peer
Max. Instances	8

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Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Remote IP address of the GTP peer
Context	debug subscriber-mgmt gtp peer *(ipv4-address-no-zone | ipv6-address-no-zone)* router *string*
Tree	peer
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

router *string*

Synopsis	Router instance where GTP peer packets are expected
Context	debug subscriber-mgmt gtp peer *(ipv4-address-no-zone | ipv6-address-no-zone)* router *string*
Tree	peer
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp-port *number*

Synopsis	UDP source (Rx packets) / destination (Tx packets) port
Context	debug subscriber-mgmt gtp peer *(ipv4-address-no-zone | ipv6-address-no-zone)* router *string* udp-port *number*
Tree	udp-port
Description	This command configures the UDP source port of received packets or the UDP destination port of transmitted packets.
Range	0 | 1 to 65535
Default	2123
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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system

Synopsis	Enter the **system** context
Context	debug system
Tree	system
Introduced	21.5.R1
Platforms	All

grpc

Synopsis	Enter the **grpc** context
Context	debug system grpc
Tree	grpc
Introduced	21.5.R1
Platforms	All

client

Synopsis	Enter the **client** context
Context	debug system grpc client
Tree	client
Introduced	21.5.R1
Platforms	All

all

Synopsis	Enable debugging for all clients
Context	debug system grpc client all
Tree	all
Notes	The following elements are part of a choice: **all** or **ip-address**.
Introduced	21.5.R1
Platforms	All

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ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address for debugging
Context	debug system grpc client ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-address
Notes	The following elements are part of a choice: **all** or **ip-address**.
Introduced	21.5.R1
Platforms	All

type *keyword*

Synopsis	RPCs or service types to debug
Context	debug system grpc type *keyword*
Tree	type
Options	gnmi-capabilities, gnmi-get, gnmi-set, gnmi-subscribe, rib-api-modify, rib-api-getversion, gnoi-cert-mgmt-rpcs, gnoi-file-rpcs, gnoi-system-rpcs
Max. Instances	10
Introduced	21.5.R1
Platforms	All

grpc-tunnel

Synopsis	Enter the **grpc-tunnel** context
Context	debug system grpc-tunnel
Tree	grpc-tunnel
Introduced	22.10.R1
Platforms	All

tunnel

Synopsis	Enter the **tunnel** context
Context	debug system grpc-tunnel tunnel
Tree	tunnel
Introduced	22.10.R1
Platforms	All

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all

Synopsis	Set debug output for all tunnels
Context	debug system grpc-tunnel tunnel all
Tree	all
Notes	The following elements are part of a choice: **all** or **name**.
Introduced	22.10.R1
Platforms	All

name *string*

Synopsis	Name of the tunnel to restrict the debug output
Context	debug system grpc-tunnel tunnel name *string*
Tree	name
String Length	1 to 32
Notes	The following elements are part of a choice: **all** or **name**.
Introduced	22.10.R1
Platforms	All

http-connections

Synopsis	Enable the **http-connections** context
Context	debug system http-connections
Tree	http-connections
Introduced	22.10.R1
Platforms	All

client-ip-prefix *(ipv4-prefix | ipv6-prefix | keyword)*

Synopsis	HTTP client IP prefix
Context	debug system http-connections client-ip-prefix *(ipv4-prefix | ipv6-prefix | keyword)*
Tree	client-ip-prefix
Options	any
Default	any
Introduced	22.10.R1

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Platforms	All

management-interface

Synopsis	Enter the **management-interface** context
Context	debug system management-interface
Tree	management-interface
Introduced	21.5.R1
Platforms	All

netconf *keyword*

Synopsis	Debugging verbosity for NETCONF
Context	debug system management-interface netconf *keyword*
Tree	netconf
Options	error, warning, info
Introduced	21.5.R1
Platforms	All

remote-management

Synopsis	Enter the **remote-management** context
Context	debug system management-interface remote-management
Tree	remote-management
Introduced	21.7.R1
Platforms	All

manager

Synopsis	Enter the **manager** context
Context	debug system management-interface remote-management manager
Tree	manager
Introduced	21.7.R1
Platforms	All

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all

Synopsis	Enable debug of all managers
Context	debug system management-interface remote-management manager all
Tree	all
Notes	The following elements are part of a choice: **all** or **manager-name**.
Introduced	21.7.R1
Platforms	All

manager-name [name] *string*

Synopsis	Add a list entry for **manager-name**
Context	debug system management-interface remote-management manager manager-name *string*
Tree	manager-name
Notes	The following elements are part of a choice: **all** or **manager-name**.
Introduced	21.7.R1
Platforms	All

[**name**] *string*

Synopsis	Manager name
Context	debug system management-interface remote-management manager manager-name *string*
Tree	manager-name
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	All

service *boolean*

Synopsis	Enable service level debug
Context	debug system management-interface remote-management service *boolean*
Tree	service
Default	false

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Introduced	21.7.R1
Platforms	All

wlan-gw

Synopsis	Enter the **wlan-gw** context
Context	debug wlan-gw
Tree	wlan-gw
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

group [id] *number*

Synopsis	Enter the **group** list instance
Context	debug wlan-gw group *number*
Tree	group
Max. Instances	1
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	WLAN-GW group ID in the system
Context	debug wlan-gw group *number*
Tree	group
Range	1 to 4
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

learn-ap-mac

Synopsis	Enable the **learn-ap-mac** context
Context	debug wlan-gw group *number* learn-ap-mac

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Tree	learn-ap-mac
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-remote-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the remote tunnel endpoint
Context	debug wlan-gw group *number* learn-ap-mac tunnel-remote-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	tunnel-remote-address
Notes	This element is mandatory.
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

statistic [type] *keyword* name *string*

Synopsis	Enter the **statistic** list instance
Context	debug wlan-gw group *number* statistic *keyword* name *string*
Tree	statistic
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**type**] *keyword*

Synopsis	Type of statistic to trace
Context	debug wlan-gw group *number* statistic *keyword* name *string*
Tree	statistic
Options	packet-error – Packet related error host-error – Host related error bd-error – Bridge domain related error forwarding – Number of forwarded packets reassembly – Reassembly related statistic aa – AA related statistic radius – RADIUS related statistic arp – ARP related statistic dhcp4 – DHCP related statistic dhcp6 – DHCPv6 related statistic icmp4 – ICMP related statistic icmp6 – ICMPv6 related statistic

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Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	Name of the statistic to trace
Context	debug wlan-gw group *number* statistic *keyword* name *string*
Tree	statistic
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

capture-packet *boolean*

Synopsis	Set a single packet capture trigger for the statistic
Context	debug wlan-gw group *number* statistic *keyword* name *string* capture-packet *boolean*
Tree	capture-packet
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ue

Synopsis	Enable the **ue** context
Context	debug wlan-gw group *number* ue
Tree	ue
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bridge-domain *number*

Synopsis	Bridge domain of the UEs to debug
Context	debug wlan-gw group *number* ue bridge-domain *number*

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Tree	bridge-domain
Range	1 to 4294967295
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-address *string*

Synopsis	MAC address of the UE to debug
Context	debug wlan-gw group *number* ue mac-address *string*
Tree	mac-address
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocols

Synopsis	Enable the **protocols** context
Context	debug wlan-gw group *number* ue protocols
Tree	protocols
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

arp *boolean*

Synopsis	Enable debugging for the ARP protocol
Context	debug wlan-gw group *number* ue protocols arp *boolean*
Tree	arp
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp4 *boolean*

Synopsis	Enable debugging for the DHCP protocol
Context	debug wlan-gw group *number* ue protocols dhcp4 *boolean*
Tree	dhcp4

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Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp6 *boolean*

Synopsis	Enable debugging for the DHCPv6 protocol
Context	debug wlan-gw group *number* ue protocols dhcp6 *boolean*
Tree	dhcp6
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp4 *boolean*

Synopsis	Enable debugging for the ICMP protocol
Context	debug wlan-gw group *number* ue protocols icmp4 *boolean*
Tree	icmp4
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp6 *boolean*

Synopsis	Enable debugging for the ICMPv6 protocol
Context	debug wlan-gw group *number* ue protocols icmp6 *boolean*
Tree	icmp6
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius *boolean*

Synopsis	Enable debugging for the RADIUS protocol
Context	debug wlan-gw group *number* ue protocols radius *boolean*

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Tree	radius
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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3.14 esa commands

```
configure
   –  esa number
      –  admin-state keyword
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  description string
      –  host-port string
      –  vm number
         –  admin-state keyword
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  cores number
         –  description string
         –  host-port reference
         –  memory number
         –  vm-type keyword
```


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3.14.1 esa command descriptions

esa [esa-id] *number*

Synopsis	Enter the **esa** list instance
Context	**configure** esa *number*
Tree	esa
Description	Commands in this context configure the Extended Services Appliance (ESA) instance.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

[**esa-id**] *number*

Synopsis	ESA ID
Context	**configure** esa *number*
Tree	esa
Range	1 to 16
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of the ESA
Context	**configure** esa *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

description *string*

Synopsis	Text description

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Context	**configure** esa *number* description *string*
Tree	description
String Length	1 to 80
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

host-port [host-port] *string*

Synopsis	Add a list entry for **host-port**
Context	**configure** esa *number* host-port *string*
Tree	host-port
Max. Instances	4
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

[**host-port**] *string*

Synopsis	Ethernet port associated with the ESA
Context	**configure** esa *number* host-port *string*
Tree	host-port
Description	This command configures an Ethernet port associated with the ESA-VM instance. The port ID must be the same as the port ID associated with the ESA context on which the ESA-VM is configured.
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

vm [vm-id] *number*

Synopsis	Enter the **vm** list instance
Context	**configure** esa *number* vm *number*
Tree	vm
Description	Commands in this context configure the ESA-VM instance.
Introduced	20.5.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

[**vm-id**] *number*

Synopsis	VM ID
Context	**configure** esa *number* vm *number*
Tree	vm
Range	1 to 4
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of the ESA-VM instance
Context	**configure** esa *number* vm *number* admin-state *keyword*
Tree	admin-state
Description	This command configures the administrative state of the ESA-VM instance. The state affects the operational state of the instance and all entities contained within the instance; however, configuration settings or statistics are not changed, reset, or removed.
Options	enable, disable
Default	disable
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

cores *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of CPU physical cores allocated to the ESA-VM
Context	**configure** esa *number* vm *number* cores *number*
Tree	cores
Description	This command specifies the number of CPU physical cores allocated to the ESA-VM instance. If an invalid value is configured for the number of cores, the VM remains in a failed state.

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Range	0 to 128
Default	0
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

description *string*

Synopsis	Text description
Context	**configure** esa *number* vm *number* description *string*
Tree	description
String Length	1 to 80
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

host-port *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Ethernet port associated with the ESA-VM instance
Context	**configure** esa *number* vm *number* host-port *reference*
Tree	host-port
Description	This command configures an Ethernet port associated with the ESA-VM instance. The port ID must be the same as the port ID associated with the ESA context on which the ESA-VM is configured.
Reference	**configure** esa *number* host-port *string*
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

memory *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Amount of memory allocated to the ESA-VM

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Context	**configure** esa *number* vm *number* memory *number*
Tree	memory
Range	0 to 256
Units	gigabytes
Default	0
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

vm-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	ESA-VM type
Context	**configure** esa *number* vm *number* vm-type *keyword*
Tree	vm-type
Options	aa, bb, tunnel, video
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

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3.15 eth-cfm commands

```
configure
   –  eth-cfm
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  default-domain
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  bridge-identifier string vlan (number | keyword)
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  id-permission keyword
            –  mhf-creation
               –  level (number | keyword)
               –  mhf-type keyword
            –  mip-ltr-priority (number | keyword)
      –  domain string
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  association string
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  auto-mep-discovery boolean
            –  bridge-identifier string
               –  apply-groups reference
               –  apply-groups-exclude reference
               –  id-permission keyword
               –  mhf-creation keyword
               –  mip-ltr-priority number
               –  vlan number
            –  ccm-hold-time
               –  down number
            –  ccm-interval keyword
            –  facility-id-permission keyword
            –  icc-based string
            –  integer number
            –  ma-index number
            –  remote-mep number
               –  apply-groups reference
               –  apply-groups-exclude reference
               –  remote-mac string
            –  string string
            –  vid number
            –  vpn-id string
         –  dns string
         –  format keyword
         –  level number
         –  mac string
         –  md-index number
         –  name string
```


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3.15.1 eth-cfm command descriptions

eth-cfm

Synopsis	Enter the **eth-cfm** context
Context	**configure** eth-cfm
Tree	eth-cfm
Description	Commands in this context configure ETH-CFM parameters.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

default-domain

Synopsis	Enter the **default-domain** context
Context	**configure** eth-cfm default-domain
Tree	default-domain
Description	Commands in this context configure MIP creation parameters per index (**bridge-identifier** *bridge-id* **vlan** *vlan-id*) if the MIP creation statement exists as part of the service connection. The MIP creation statement must be present on the connection before any configuration can occur for a MIP under this context. Whether a MIP uses the **default-domain** creation method is determined by the MIP authoritative nature of the **eth-cfm domain association**. The **eth-cfm default-domain** MIP creation is considered only if the **eth-cfm domain association** is not authoritative.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bridge-identifier [bridge-name] *string* vlan *(number | keyword)*

Synopsis	Enter the **bridge-identifier** list instance
Context	**configure** eth-cfm default-domain bridge-identifier *string* vlan *(number | keyword)*
Tree	bridge-identifier
Description	Commands in this context configure the references required to link the CFM function with the service context, allowing the entry of MIP-specific parameters for the index in the default domain table. The **info** and **info detail** commands do not display any entries for the instance unless they have previously been accessed. The possible candidates for the instance can be located using the **show eth-cfm default-domain** command.

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Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**bridge-name**] *string*

Synopsis	Bridge name in the default domain table
Context	**configure** eth-cfm default-domain bridge-identifier *string* vlan *(number | keyword)*
Tree	bridge-identifier
Description	This command specifies the bridge name to enter in the default domain associated with the MIP.
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vlan *(number | keyword)*

Synopsis	VLAN ID for the default domain
Context	**configure** eth-cfm default-domain bridge-identifier *string* vlan *(number | keyword)*
Tree	bridge-identifier
Description	This command configures a VLAN ID for the default domain.
Range	1 to 4094
Options	none
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

id-permission *keyword*

Synopsis	Strategy for the inclusion of Sender ID TLV information
Context	**configure** eth-cfm default-domain bridge-identifier *string* vlan *(number | keyword)* id-permission *keyword*
Tree	id-permission
Description	This command specifies how the Sender ID TLV information is included for installed MEPs and MIPs. The Sender ID TLV is supported for ETH-CCM, ETH-LB, and ETH-LB PDUs.

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Options	none, chassis, defer
Default	defer
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mhf-creation

Synopsis	Enter the **mhf-creation** context
Context	**configure** eth-cfm default-domain bridge-identifier *string* vlan *(number | keyword)* mhf-creation
Tree	mhf-creation
Description	Commands in this context configure the MIP method of creation. MIP creation mode and other factors are part of the MIP creation authority (**association** or **default-domain**) logic. The MIP creation algorithm may result in multiple potential MIPs. Only the lowest-level valid MIP is instantiated.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

level *(number | keyword)*

Synopsis	Requested level of the MIP
Context	**configure** eth-cfm default-domain bridge-identifier *string* vlan *(number | keyword)* mhf-creation level *(number | keyword)*
Tree	level
Description	This command configures the requested level of the MIP. This is used by the MIP creation algorithm to determine its validity in comparison to other ETH-CFM MIPs and MEPs. If the level is configured as **defer**, the level value is inherited from the global read-only system values.
Range	0 to 7
Options	defer
Default	defer
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mhf-type *keyword*

Synopsis	MIP creation mode

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Context	**configure** eth-cfm default-domain bridge-identifier *string* vlan *(number | keyword)* mhf-creation mhf-type *keyword*
Tree	mhf-type
Options	none, default, explicit, defer
Default	defer
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mip-ltr-priority *(number | keyword)*

Synopsis	Priority of the Linktrace Response
Context	**configure** eth-cfm default-domain bridge-identifier *string* vlan *(number | keyword)* mip-ltr-priority *(number | keyword)*
Tree	mip-ltr-priority
Description	This command allows the operator to set the priority of the Linktrace Response Message (ETH-LTR) from a MIP for this association.
Range	0 to 7
Options	defer
Default	defer
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

domain [md-admin-name] *string*

Synopsis	Enter the **domain** list instance
Context	**configure** eth-cfm domain *string*
Tree	domain
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**md-admin-name**] *string*

Synopsis	Unique domain name
Context	**configure** eth-cfm domain *string*
Tree	domain
String Length	1 to 64

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

association [ma-admin-name] *string*

Synopsis	Enter the **association** list instance
Context	**configure** eth-cfm domain *string* association *string*
Tree	association
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**ma-admin-name**] *string*

Synopsis	Domain association name
Context	**configure** eth-cfm domain *string* association *string*
Tree	association
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

auto-mep-discovery *boolean*

Synopsis	Allow remote MEP automatic discovery
Context	**configure** eth-cfm domain *string* association *string* auto-mep-discovery *boolean*
Tree	auto-mep-discovery
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bridge-identifier [bridge-name] *string*

Synopsis	Enter the **bridge-identifier** list instance
Context	**configure** eth-cfm domain *string* association *string* bridge-identifier *string*

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Tree	bridge-identifier
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**bridge-name**] *string*

Synopsis	Bridge name that links to the service
Context	**configure** eth-cfm domain *string* association *string* bridge-identifier *string*
Tree	bridge-identifier
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

id-permission *keyword*

Synopsis	Strategy for the inclusion of Sender ID TLV information
Context	**configure** eth-cfm domain *string* association *string* bridge-identifier *string* id-permission *keyword*
Tree	id-permission
Description	This command specifies how the Sender ID TLV information is included for installed MEPs and MIPs. The Sender ID TLV is supported for ETH-CCM, ETH-LB, and ETH-LB PDUs.
Options	none, chassis
Default	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mhf-creation *keyword*

Synopsis	MIP method of creation
Context	**configure** eth-cfm domain *string* association *string* bridge-identifier *string* mhf-creation *keyword*
Tree	mhf-creation

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Options	none, default, explicit, static
Default	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mip-ltr-priority *number*

Synopsis	Priority of the Linktrace Response Message (ETH-LTR) from a MIP
Context	**configure** eth-cfm domain *string* association *string* bridge-identifier *string* mip-ltr-priority *number*
Tree	mip-ltr-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vlan *number*

Synopsis	VLAN ID for the default domain index
Context	**configure** eth-cfm domain *string* association *string* bridge-identifier *string* vlan *number*
Tree	vlan
Range	1 to 4094
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-hold-time

Synopsis	Enter the **ccm-hold-time** context
Context	**configure** eth-cfm domain *string* association *string* ccm-hold-time
Tree	ccm-hold-time
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

down *number*

Synopsis	Additional time before a MEP declares a fault, in CCM timeout conditions

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Context	**configure** eth-cfm domain *string* association *string* ccm-hold-time down *number*
Tree	down
Range	1 to 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-interval *keyword*

Synopsis	CCM transmission interval for all MEPs in association
Context	**configure** eth-cfm domain *string* association *string* ccm-interval *keyword*
Tree	ccm-interval
Options	300hz, 10ms, 100ms, 1s, 10s, 60s, 600s
Default	10s
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

facility-id-permission *keyword*

Synopsis	Sender ID TLV information for facility base MEPs
Context	**configure** eth-cfm domain *string* association *string* facility-id-permission *keyword*
Tree	facility-id-permission
Options	none, chassis
Default	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

icc-based *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance Association name in ICC-based format
Context	**configure** eth-cfm domain *string* association *string* icc-based *string*
Tree	icc-based

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String Length	8 to 13
Notes	The following elements are part of a mandatory choice: **icc-based**, **integer**, **string**, **vid**, or **vpn-id**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

integer *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance Association name in integer format
Context	**configure** eth-cfm domain *string* association *string* integer *number*
Tree	integer
Range	0 to 65535
Notes	The following elements are part of a mandatory choice: **icc-based**, **integer**, **string**, **vid**, or **vpn-id**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-index *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance Association (MA) table index
Context	**configure** eth-cfm domain *string* association *string* ma-index *number*
Tree	ma-index
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

remote-mep [mep-id] *number*

Synopsis	Enter the **remote-mep** list instance

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Context	**configure** eth-cfm domain *string* association *string* remote-mep *number*
Tree	remote-mep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**mep-id**] *number*

Synopsis	Remote MEP ID
Context	**configure** eth-cfm domain *string* association *string* remote-mep *number*
Tree	remote-mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

remote-mac *string*

Synopsis	Remote MAC Address for transmitting CFM packets to remote MEPs
Context	**configure** eth-cfm domain *string* association *string* remote-mep *number* remote-mac *string*
Tree	remote-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

string *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance Association name in raw ASCII string format
Context	**configure** eth-cfm domain *string* association *string* string *string*
Tree	string
String Length	1 to 45
Notes	The following elements are part of a mandatory choice: **icc-based**, **integer**, **string**, **vid**, or **vpn-id**.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vid *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Primary VLAN ID for the Maintenance Association name
Context	**configure** eth-cfm domain *string* association *string* vid *number*
Tree	vid
Range	0 to 4094
Notes	The following elements are part of a mandatory choice: **icc-based**, **integer**, **string**, **vid**, or **vpn-id**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vpn-id *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPN ID for the Maintenance Association name
Context	**configure** eth-cfm domain *string* association *string* vpn-id *string*
Tree	vpn-id
String Length	0 to 15
Notes	The following elements are part of a mandatory choice: **icc-based**, **integer**, **string**, **vid**, or **vpn-id**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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dns *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Domain name like text string derived from a DNS name
Context	**configure** eth-cfm domain *string* dns *string*
Tree	dns
String Length	1 to 43
Notes	The following elements are part of a mandatory choice: **dns**, **format**, **mac**, or **name**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

format *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance domain name not to be provided
Context	**configure** eth-cfm domain *string* format *keyword*
Tree	format
Options	none
Notes	The following elements are part of a mandatory choice: **dns**, **format**, **mac**, or **name**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

level *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance Domain Level (MD Level)
Context	**configure** eth-cfm domain *string* level *number*
Tree	level
Range	0 to 7

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance domain MAC name
Context	**configure** eth-cfm domain *string* mac *string*
Tree	mac
String Length	13 to 23
Notes	The following elements are part of a mandatory choice: **dns**, **format**, **mac**, or **name**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-index *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	The index of the Maintenance Domain (MD)
Context	**configure** eth-cfm domain *string* md-index *number*
Tree	md-index
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

name *string*

WARNING:
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Synopsis	Maintenance Domain name
Context	**configure** eth-cfm domain *string* name *string*
Tree	name
String Length	1 to 43
Notes	The following elements are part of a mandatory choice: **dns**, **format**, **mac**, or **name**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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3.16 eth-ring commands

```
configure
   –  eth-ring number
      –  admin-state keyword
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  ccm-hold-time
         –  down number
         –  up number
      –  compatible-version number
      –  description string
      –  guard-time number
      –  node-id string
      –  path string
         –  admin-state keyword
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  description string
         –  eth-cfm
            –  mep md-admin-name reference ma-admin-name reference mep-id number
               –  admin-state keyword
               –  alarm-notification
                  –  fng-alarm-time number
                  –  fng-reset-time number
               –  apply-groups reference
               –  apply-groups-exclude reference
               –  ccm boolean
               –  ccm-ltm-priority number
               –  ccm-padding-size number
               –  control-mep boolean
               –  description string
               –  eth-test
                  –  bit-error-threshold number
                  –  test-pattern
                     –  crc-tlv boolean
                     –  pattern keyword
               –  grace
                  –  eth-ed
                     –  max-rx-defect-window number
                     –  priority number
                     –  rx-eth-ed boolean
                     –  tx-eth-ed boolean
                  –  eth-vsm-grace
                     –  rx-eth-vsm-grace boolean
                     –  tx-eth-vsm-grace boolean
               –  low-priority-defect keyword
               –  mac-address string
               –  one-way-delay-threshold number
         –  port-and-raps-tag string
         –  rpl-end boolean
      –  revert-time number
      –  rpl-node keyword
      –  sub-ring
         –  interconnect
            –  propagate-topology-change boolean
            –  ring-id reference
            –  vpls
         –  type keyword
```


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3.16.1 eth-ring command descriptions

eth-ring [ring-index] *number*

Synopsis	Enter the **eth-ring** list instance
Context	**configure** eth-ring *number*
Tree	eth-ring
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**ring-index**] *number*

Synopsis	Ring ID
Context	**configure** eth-ring *number*
Tree	eth-ring
Range	1 to 128
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the Ethernet ring
Context	**configure** eth-ring *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-hold-time

Synopsis	Enter the **ccm-hold-time** context
Context	**configure** eth-ring *number* ccm-hold-time
Tree	ccm-hold-time

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Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

down *number*

Synopsis	Hold timer for down event dampening
Context	**configure** eth-ring *number* ccm-hold-time down *number*
Tree	down
Range	1 to 5000
Units	centiseconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

up *number*

Synopsis	Hold timer for recovery reporting
Context	**configure** eth-ring *number* ccm-hold-time up *number*
Tree	up
Range	0 to 5000
Units	deciseconds
Default	20
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

compatible-version *number*

Synopsis	Compatibility version for the Ethernet ring
Context	**configure** eth-ring *number* compatible-version *number*
Tree	compatible-version
Range	1 to 2
Default	2
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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description *string*

Synopsis	Text description
Context	**configure** eth-ring *number* description *string*
Tree	description
String Length	0 to 80
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

guard-time *number*

Synopsis	Ethernet ring guard time
Context	**configure** eth-ring *number* guard-time *number*
Tree	guard-time
Range	1 to 20
Units	deciseconds
Default	5
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

node-id *string*

Synopsis	MAC address of the RPL link
Context	**configure** eth-ring *number* node-id *string*
Tree	node-id
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

path [path-index] *string*

Synopsis	Enter the **path** list instance
Context	**configure** eth-ring *number* path *string*
Tree	path
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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[**path-index**] *string*

Synopsis	Path ID
Context	**configure** eth-ring *number* path *string*
Tree	path
String Length	1
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the Ethernet ring path
Context	**configure** eth-ring *number* path *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** eth-ring *number* path *string* description *string*
Tree	description
String Length	0 to 80
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-cfm

Synopsis	Enter the **eth-cfm** context
Context	**configure** eth-ring *number* path *string* eth-cfm
Tree	eth-cfm
Introduced	21.7.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*

Synopsis	Enter the **mep** list instance
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string*
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string* association *string*
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID

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Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the **alarm-notification** context
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification
Tree	alarm-notification
Description	Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm. Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised

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Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-alarm-time *number*
Tree	fng-alarm-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-reset-time *number*
Tree	fng-reset-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis	Generate CCM messages
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm *boolean*
Tree	ccm
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-ltm-priority *number*
Tree	ccm-ltm-priority
Range	0 to 7

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Default	7
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-padding-size *number*
Tree	ccm-padding-size
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU. This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through **configure eth-cfm domain association ccm-interval)** is less than 1 second.
Range	3 to 1500
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

control-mep *boolean*

Synopsis	Enable Ethernet ring control on the MEP
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* control-mep *boolean*
Tree	control-mep
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* description *string*
Tree	description
String Length	1 to 80

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Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the **eth-test** context
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the **oam eth-cfm eth-test** command.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test bit-error-threshold *number*
Tree	bit-error-threshold
Range	0 to 11840
Units	bit errors
Default	1
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis	Enter the **test-pattern** context
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern crc-tlv *boolean*
Tree	crc-tlv
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern pattern *keyword*
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the **grace** context
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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eth-ed

Synopsis	Enter the **eth-ed** context
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed max-rx-defect-window *number*
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed priority *number*
Tree	priority
Range	0 to 7
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed rx-eth-ed *boolean*
Tree	rx-eth-ed

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Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed tx-eth-ed *boolean*
Tree	tx-eth-ed
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis	Enter the **eth-vsm-grace** context
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace rx-eth-vsm-grace *boolean*
Tree	rx-eth-vsm-grace
Description	When configured to **true**, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to **false**, the router disables the Nokia Grace function.
Default	true

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Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace tx-eth-vsm-grace *boolean*
Tree	tx-eth-vsm-grace
Description	When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards. The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED). When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* low-priority-defect *keyword*
Tree	low-priority-defect
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	all-def
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MEP

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Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* mac-address *string*
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	**configure** eth-ring *number* path *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* one-way-delay-threshold *number*
Tree	one-way-delay-threshold
Range	0 to 600
Units	seconds
Default	3
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-and-raps-tag *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Port ID and Ring APS tag ID
Context	**configure** eth-ring *number* path *string* port-and-raps-tag *string*
Tree	port-and-raps-tag
String Length	1 to 45
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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rpl-end *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable path as a Ring Protection Link (RPL) end
Context	**configure** eth-ring *number* path *string* rpl-end *boolean*
Tree	rpl-end
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

revert-time *number*

Synopsis	Revert time for the Ethernet ring
Context	**configure** eth-ring *number* revert-time *number*
Tree	revert-time
Range	0 | 60 to 720
Units	seconds
Default	300
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rpl-node *keyword*

Synopsis	Ring Protection Link (RPL) type for the Ethernet ring
Context	**configure** eth-ring *number* rpl-node *keyword*
Tree	rpl-node
Options	owner, neighbor
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sub-ring

Synopsis	Enter the **sub-ring** context
Context	**configure** eth-ring *number* sub-ring

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Tree	sub-ring
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interconnect

Synopsis	Enter the **interconnect** context
Context	**configure** eth-ring *number* sub-ring interconnect
Tree	interconnect
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

propagate-topology-change *boolean*

Synopsis	Propagate topology changes
Context	**configure** eth-ring *number* sub-ring interconnect propagate-topology-change *boolean*
Tree	propagate-topology-change
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ring-id *reference*

Synopsis	Ring instance of the connection ring for the sub-ring
Context	**configure** eth-ring *number* sub-ring interconnect ring-id *reference*
Tree	ring-id
Reference	**configure** eth-ring *number*
Notes	The following elements are part of a choice: **ring-id** or **vpls**.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vpls

Synopsis	Connect sub-ring to VPLS ID that contains sub-ring SAP
Context	**configure** eth-ring *number* sub-ring interconnect vpls

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Tree	vpls
Notes	The following elements are part of a choice: **ring-id** or **vpls**.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type *keyword*

Synopsis	Sub-ring type
Context	**configure** eth-ring *number* sub-ring type *keyword*
Tree	type
Options	virtual-link, non-virtual-link
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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3.17 filter commands

```
configure
   –  filter
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  dhcp-filter number
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  default-action
            –  bypass-host-creation
            –  drop
         –  description string
         –  entry number
            –  action
               –  bypass-host-creation
               –  drop
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  option
               –  absent
               –  match
                  –  exact boolean
                  –  hex string
                  –  invert boolean
                  –  string string
               –  number number
               –  present
      –  dhcp6-filter number
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  default-action
            –  bypass-host-creation
               –  na boolean
               –  pd boolean
            –  drop
         –  description string
         –  entry number
            –  action
               –  bypass-host-creation
                  –  na boolean
                  –  pd boolean
               –  drop
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  option
               –  absent
               –  match
                  –  exact boolean
                  –  hex string
                  –  invert boolean
                  –  string string
               –  number number
               –  present
      –  gre-tunnel-template string
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  description string
         –  ipv4
            –  destination-address string
            –  gre-key (keyword | number)
```


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configure filter gre-tunnel-template ipv4 skip-ttl-decrement

```
            - skip-ttl-decrement boolean
            - source-address string
         - ipv6
            - destination-address string
            - gre-key keyword
            - skip-hop-decrement boolean
            - source-address string
      - ip-exception string
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - entry number
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - match
               - dst-ip
                  - address (ipv4-prefix-with-host-bits | ipv4-address)
                  - mask string
               - dst-port
                  - eq number
                  - gt number
                  - lt number
                  - range
                     - end number
                     - start number
               - icmp
                  - code number
                  - type number
               - protocol (number | keyword)
               - src-ip
                  - address (ipv4-prefix-with-host-bits | ipv4-address)
                  - mask string
               - src-port
                  - eq number
                  - gt number
                  - lt number
                  - range
                     - end number
                     - start number
         - filter-id number
      - ip-filter string
         - apply-groups reference
         - apply-groups-exclude reference
         - chain-to-system-filter boolean
         - default-action keyword
         - description string
         - embed
            - filter reference offset number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
            - flowspec offset number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - group number
               - router-instance string
            - openflow reference offset number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - grt
               - sap reference
```


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configure filter ip-filter embed openflow system

```
            - system
            - vpls reference
            - vprn reference
      - entry number
         - action
            - accept
            - accept-when
               - pattern
                  - expression string
                  - mask string
                  - offset-type keyword
                  - offset-value number
            - apply-groups reference
            - apply-groups-exclude reference
            - drop
            - drop-when
               - extracted-traffic
               - packet-length
                  - eq number
                  - gt number
                  - lt number
                  - range
                     - end number
                     - start number
               - pattern
                  - expression string
                  - mask string
                  - offset-type keyword
                  - offset-value number
               - ttl
                  - eq number
                  - gt number
                  - lt number
                  - range
                     - end number
                     - start number
            - fc keyword
            - forward
               - bonding-connection number
               - esi-l2
                  - esi-value string
                  - vpls reference
               - esi-l3
                  - esi-value string
                  - sf-ip string
                  - vas-interface reference
                  - vprn reference
               - gre-tunnel reference
               - lsp string
               - mpls-policy
                  - endpoint string
               - next-hop
                  - interface-name string
                  - nh-ip
                     - address string
                     - indirect boolean
                  - nh-ip-vrf
                     - address string
                     - indirect boolean
                     - router-instance string
               - redirect-policy reference
               - router-instance string
               - sap
                  - sap-id reference
```


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configure filter ip-filter entry action forward sap vpls

```
                  - vpls reference
               - sdp
                  - sdp-bind-id string
                  - vpls reference
               - srte-policy
                  - color number
                  - endpoint string
               - srv6-policy
                  - color number
                  - endpoint string
                  - service-sid string
               - vprn-target
                  - adv-prefix string
                  - bgp-nh string
                  - lsp string
                  - vprn reference
            - gtp-local-breakout
            - http-redirect
               - allow-override boolean
               - url (keyword | http-redirect-url)
            - ignore-match
            - l2-aware-nat-bypass boolean
            - nat
               - nat-policy reference
            - rate-limit
               - extracted-traffic
               - packet-length
                  - eq number
                  - gt number
                  - lt number
                  - range
                     - end number
                     - start number
               - pattern
                  - expression string
                  - mask string
                  - offset-type keyword
                  - offset-value number
               - pir (number | keyword)
               - pps-pir (number | keyword)
               - ttl
                  - eq number
                  - gt number
                  - lt number
                  - range
                     - end number
                     - start number
            - reassemble
            - remark
               - dscp keyword
            - secondary
               - apply-groups reference
               - apply-groups-exclude reference
               - forward
                  - next-hop
                     - nh-ip-vrf
                        - address string
                        - indirect boolean
                        - router-instance string
                  - sap
                     - sap-id reference
                     - vpls reference
                  - sdp
                     - sdp-bind-id string
```


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configure filter ip-filter entry action secondary forward sdp vpls

```
                    - vpls reference
                 - vprn-target
                    - adv-prefix string
                    - bgp-nh string
                    - lsp string
                    - vprn reference
              - remark
                 - dscp keyword
           - tcp-mss-adjust
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
        - egress-pbr keyword
        - filter-sample boolean
        - interface-sample boolean
        - log reference
        - match
           - destination-class number
           - dscp keyword
           - dst-ip
              - address (ipv4-prefix-with-host-bits | ipv4-address)
              - ip-prefix-list reference
              - mask string
           - dst-port
              - eq number
              - gt number
              - lt number
              - port-list reference
              - range
                 - end number
                 - start number
           - fragment keyword
           - icmp
              - code number
              - type number
           - ip
              - address (ipv4-prefix-with-host-bits | ipv4-address)
              - ip-prefix-list reference
              - mask string
           - ip-option
              - mask number
              - type number
           - multiple-option boolean
           - option-present boolean
           - packet-length
              - eq number
              - gt number
              - lt number
              - range
                 - end number
                 - start number
           - port
              - eq number
              - gt number
              - lt number
              - port-list reference
              - range
                 - end number
                 - start number
           - protocol (number | keyword)
           - protocol-list reference
           - src-ip
              - address (ipv4-prefix-with-host-bits | ipv4-address)
              - ip-prefix-list reference
```


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configure filter ip-filter entry match src-ip mask

```
                  - mask string
               - src-mac
                  - address string
                  - mask string
               - src-port
                  - eq number
                  - gt number
                  - lt number
                  - port-list reference
                  - range
                     - end number
                     - start number
               - src-route-option boolean
               - tcp-established
               - tcp-flags
                  - ack boolean
                  - cwr boolean
                  - ece boolean
                  - fin boolean
                  - ns boolean
                  - psh boolean
                  - rst boolean
                  - syn boolean
                  - urg boolean
               - ttl
                  - eq number
                  - gt number
                  - lt number
                  - range
                     - end number
                     - start number
            - pbr-down-action-override keyword
            - sample-profile reference
            - sticky-dest (number | keyword)
         - filter-id number
         - scope keyword
         - shared-policer boolean
         - subscriber-mgmt
            - host-specific-entry
               - credit-control
                  - range
                     - end number
                     - start number
               - filter-rule
                  - range
                     - end number
                     - start number
               - watermark
                  - high number
                  - low number
            - shared-entry
               - filter-rule
                  - range
                     - end number
                     - start number
               - pcc-rule
                  - range
                     - end number
                     - start number
               - watermark
                  - high number
                  - low number
         - type keyword
      - ipv6-exception string
```


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```
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
        - entry number
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - match
            - dst-ip
              - address (ipv6-prefix-with-host-bits | ipv6-address)
              - ipv6-prefix-list reference
              - mask string
            - dst-port
              - eq number
              - gt number
              - lt number
              - port-list reference
              - range
                - end number
                - start number
            - icmp
              - code number
              - type number
            - next-header (number | keyword)
            - port
              - eq number
              - gt number
              - lt number
              - port-list reference
              - range
                - end number
                - start number
            - src-ip
              - address (ipv6-prefix-with-host-bits | ipv6-address)
              - ipv6-prefix-list reference
              - mask string
            - src-port
              - eq number
              - gt number
              - lt number
              - port-list reference
              - range
                - end number
                - start number
        - filter-id number
    - ipv6-filter string
        - apply-groups reference
        - apply-groups-exclude reference
        - chain-to-system-filter boolean
        - default-action keyword
        - description string
        - embed
          - filter reference offset number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
          - flowspec offset number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - group number
            - router-instance string
          - openflow reference offset number
            - admin-state keyword
```


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configure filter ipv6-filter embed openflow apply-groups

```
            - apply-groups reference
            - apply-groups-exclude reference
            - grt
            - sap reference
            - system
            - vpls reference
            - vprn reference
      - entry number
         - action
            - accept
            - accept-when
               - pattern
                  - expression string
                  - mask string
                  - offset-type keyword
                  - offset-value number
            - apply-groups reference
            - apply-groups-exclude reference
            - drop
            - drop-when
               - extracted-traffic
               - hop-limit
                  - eq number
                  - gt number
                  - lt number
                  - range
                     - end number
                     - start number
               - pattern
                  - expression string
                  - mask string
                  - offset-type keyword
                  - offset-value number
               - payload-length
                  - eq number
                  - gt number
                  - lt number
                  - range
                     - end number
                     - start number
            - fc keyword
            - forward
               - bonding-connection number
               - esi-l2
                  - esi-value string
                  - vpls reference
               - esi-l3
                  - esi-value string
                  - sf-ip string
                  - vas-interface reference
                  - vprn reference
               - gre-tunnel reference
               - lsp string
               - mpls-policy
                  - endpoint string
               - next-hop
                  - nh-ip
                     - address string
                     - indirect boolean
                  - nh-ip-vrf
                     - address string
                     - indirect boolean
                     - router-instance string
               - redirect-policy reference
```


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configure filter ipv6-filter entry action forward router-instance

```
                  -  router-instance string
                  -  sap
                     -  sap-id reference
                     -  vpls reference
                  -  sdp
                     -  sdp-bind-id string
                     -  vpls reference
                  -  srte-policy
                     -  color number
                     -  endpoint string
                  -  srv6-policy
                     -  color number
                     -  endpoint string
                     -  service-sid string
                  -  vprn-target
                     -  adv-prefix string
                     -  bgp-nh string
                     -  lsp string
                     -  vprn reference
               -  http-redirect
                  -  allow-override boolean
                  -  url (keyword | http-redirect-url)
               -  ignore-match
               -  nat
                  -  nat-policy reference
                  -  nat-type keyword
               -  rate-limit
                  -  extracted-traffic
                  -  hop-limit
                     -  eq number
                     -  gt number
                     -  lt number
                     -  range
                        -  end number
                        -  start number
                  -  pattern
                     -  expression string
                     -  mask string
                     -  offset-type keyword
                     -  offset-value number
                  -  payload-length
                     -  eq number
                     -  gt number
                     -  lt number
                     -  range
                        -  end number
                        -  start number
                  -  pir (number | keyword)
                  -  pps-pir (number | keyword)
               -  remark
                  -  dscp keyword
               -  secondary
                  -  apply-groups reference
                  -  apply-groups-exclude reference
                  -  forward
                     -  next-hop
                        -  nh-ip-vrf
                           -  address string
                           -  indirect boolean
                           -  router-instance string
                     -  sap
                        -  sap-id reference
                        -  vpls reference
                     -  sdp
```


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configure filter ipv6-filter entry action secondary forward sdp sdp-bind-id

```
                        - sdp-bind-id string
                        - vpls reference
                     - vprn-target
                        - adv-prefix string
                        - bgp-nh string
                        - lsp string
                        - vprn reference
                  - remark
                     - dscp keyword
               - tcp-mss-adjust
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - egress-pbr keyword
            - filter-sample boolean
            - interface-sample boolean
            - log reference
            - match
               - destination-class number
               - dscp keyword
               - dst-ip
                  - address (ipv6-prefix-with-host-bits | ipv6-address)
                  - ipv6-prefix-list reference
                  - mask string
               - dst-port
                  - eq number
                  - gt number
                  - lt number
                  - port-list reference
                  - range
                     - end number
                     - start number
               - extension-header
                  - ah boolean
                  - esp boolean
                  - hop-by-hop boolean
                  - routing-type0 boolean
               - flow-label
                  - mask number
                  - value number
               - fragment keyword
               - hop-limit
                  - eq number
                  - gt number
                  - lt number
                  - range
                     - end number
                     - start number
               - icmp
                  - code number
                  - type number
               - ip
                  - address (ipv6-prefix-with-host-bits | ipv6-address)
                  - ipv6-prefix-list reference
                  - mask string
               - next-header (number | keyword)
               - next-header-list reference
               - packet-length
                  - eq number
                  - gt number
                  - lt number
                  - range
                     - end number
                     - start number
```


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configure filter ipv6-filter entry match port

```
            - port
              - eq number
              - gt number
              - lt number
              - port-list reference
              - range
                - end number
                - start number
            - src-ip
              - address (ipv6-prefix-with-host-bits | ipv6-address)
              - ipv6-prefix-list reference
              - mask string
            - src-mac
              - address string
              - mask string
            - src-port
              - eq number
              - gt number
              - lt number
              - port-list reference
              - range
                - end number
                - start number
            - tcp-established
            - tcp-flags
              - ack boolean
              - cwr boolean
              - ece boolean
              - fin boolean
              - ns boolean
              - psh boolean
              - rst boolean
              - syn boolean
              - urg boolean
          - pbr-down-action-override keyword
          - sample-profile reference
          - sticky-dest (number | keyword)
        - filter-id number
        - scope keyword
        - shared-policer boolean
        - subscriber-mgmt
          - host-specific-entry
            - credit-control
              - range
                - end number
                - start number
            - filter-rule
              - range
                - end number
                - start number
            - watermark
              - high number
              - low number
          - shared-entry
            - filter-rule
              - range
                - end number
                - start number
            - pcc-rule
              - range
                - end number
                - start number
            - watermark
              - high number
```


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configure filter ipv6-filter subscriber-mgmt shared-entry watermark low

```
                - low number
            - type keyword
        - log number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - destination
                - memory
                    - max-entries number
                    - stop-on-full boolean
                - syslog
                    - name reference
                    - summary
                        - admin-state keyword
                        - summary-crit keyword
        - mac-filter string
            - apply-groups reference
            - apply-groups-exclude reference
            - default-action keyword
            - description string
            - embed
            - entry number
                - action
                    - accept
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - drop
                    - forward
                        - esi-l2
                            - esi-value string
                            - vpls reference
                        - sap
                            - sap-id reference
                            - vpls reference
                        - sdp
                            - sdp-bind-id string
                            - vpls reference
                    - http-redirect
                        - url string
                    - ignore-match
                    - rate-limit
                        - pir (number | keyword)
                    - secondary
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - forward
                            - sap
                                - sap-id reference
                                - vpls reference
                            - sdp
                                - sdp-bind-id string
                                - vpls reference
                - apply-groups reference
                - apply-groups-exclude reference
                - description string
                - log reference
                - match
                    - dot1p
                        - mask number
                        - priority number
                    - dst-mac
                        - address string
                        - mask string
```


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configure filter mac-filter entry match etype

```
                - etype string
                - frame-type keyword
                - inner-tag
                  - mask number
                  - tag number
                - isid
                  - range
                    - end number
                    - start number
                  - value number
                - llc-dsap
                  - dsap number
                  - mask number
                - llc-ssap
                  - mask number
                  - ssap number
                - outer-tag
                  - mask number
                  - tag number
                - snap-oui keyword
                - snap-pid number
                - src-mac
                  - address string
                  - mask string
            - pbr-down-action-override keyword
            - sticky-dest (number | keyword)
        - filter-id number
        - scope keyword
        - type keyword
    - match-list
        - apply-groups reference
        - apply-groups-exclude reference
        - ip-prefix-list string
            - apply-groups reference
            - apply-groups-exclude reference
            - apply-path
                - bgp-peers number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - group string
                  - neighbor string
                  - router-instance string
            - description string
            - prefix string
            - prefix-exclude string
        - ipv6-prefix-list string
            - apply-groups reference
            - apply-groups-exclude reference
            - apply-path
                - bgp-peers number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - group string
                  - neighbor string
                  - router-instance string
            - description string
            - prefix string
            - prefix-exclude string
        - port-list string
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - port number
            - range start number end number
```


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configure filter match-list protocol-list

```
        - protocol-list string
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - protocol (number | keyword)
    - md-auto-id
      - filter-id-range
        - apply-groups reference
        - apply-groups-exclude reference
        - end number
        - start number
    - redirect-policy string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - destination (ipv4-address-no-zone | ipv6-address-no-zone)
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
        - ping-test
          - apply-groups reference
          - apply-groups-exclude reference
          - drop-count number
          - hold-down number
          - interval number
          - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
          - timeout number
        - priority number
        - unicast-rt-test
      - notify-dest-change boolean
      - router-instance string
      - sticky-dest (number | keyword)
    - redirect-policy-binding string
      - apply-groups reference
      - apply-groups-exclude reference
      - binding-operator keyword
      - redirect-policy reference
        - apply-groups reference
        - apply-groups-exclude reference
        - destination reference
    - system-filter
      - apply-groups reference
      - apply-groups-exclude reference
      - ip reference
      - ipv6 reference
```


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3.17.1 filter command descriptions

filter

Synopsis	Enter the **filter** context
Context	**configure** filter
Tree	filter
Introduced	16.0.R1
Platforms	All

dhcp-filter [filter-id] *number*

Synopsis	Enter the **dhcp-filter** list instance
Context	**configure** filter dhcp-filter *number*
Tree	dhcp-filter
Introduced	16.0.R1
Platforms	All

[**filter-id**] *number*

Synopsis	Unique DHCP filter policy ID
Context	**configure** filter dhcp-filter *number*
Tree	dhcp-filter
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

default-action

Synopsis	Enable the **default-action** context
Context	**configure** filter dhcp-filter *number* default-action
Tree	default-action
Introduced	16.0.R1

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Platforms	All

bypass-host-creation

Synopsis	Host creation options to bypass
Context	**configure** filter dhcp-filter *number* default-action bypass-host-creation
Tree	bypass-host-creation
Notes	The following elements are part of a mandatory choice: **bypass-host-creation** or **drop**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

drop

Synopsis	DHCP host creation when the filter entry is matched
Context	**configure** filter dhcp-filter *number* default-action drop
Tree	drop
Notes	The following elements are part of a mandatory choice: **bypass-host-creation** or **drop**.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** filter dhcp-filter *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** filter dhcp-filter *number* entry *number*
Tree	entry

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Max. Instances	10
Introduced	16.0.R1
Platforms	All

[**entry-id**] *number*

Synopsis	DHCP filter entry ID
Context	**configure** filter dhcp-filter *number* entry *number*
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enable the **action** context
Context	**configure** filter dhcp-filter *number* entry *number* action
Tree	action
Introduced	16.0.R1
Platforms	All

bypass-host-creation

Synopsis	Host creation options to bypass
Context	**configure** filter dhcp-filter *number* entry *number* action bypass-host-creation
Tree	bypass-host-creation
Notes	The following elements are part of a mandatory choice: **bypass-host-creation** or **drop**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

drop

Synopsis	DHCP host creation when the filter entry is matched

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Context	**configure** filter dhcp-filter *number* entry *number* action drop
Tree	drop
Notes	The following elements are part of a mandatory choice: **bypass-host-creation** or **drop**.
Introduced	16.0.R1
Platforms	All

option

Synopsis	Enable the **option** context
Context	**configure** filter dhcp-filter *number* entry *number* option
Tree	option
Introduced	16.0.R1
Platforms	All

absent

Synopsis	Require the absence of related option
Context	**configure** filter dhcp-filter *number* entry *number* option absent
Tree	absent
Notes	The following elements are part of a mandatory choice: **absent**, **match**, or **present**.
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enable the **match** context
Context	**configure** filter dhcp-filter *number* entry *number* option match
Tree	match
Notes	The following elements are part of a mandatory choice: **absent**, **match**, or **present**.
Introduced	16.0.R1
Platforms	All

exact *boolean*

Synopsis	Use an exact match pattern (not partial)

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Context	**configure** filter dhcp-filter *number* entry *number* option match exact *boolean*
Tree	exact
Default	false
Introduced	16.0.R1
Platforms	All

hex *string*

Synopsis	Matching pattern for the filtered option
Context	**configure** filter dhcp-filter *number* entry *number* option match hex *string*
Tree	hex
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: **hex** or **string**.
Introduced	16.0.R1
Platforms	All

invert *boolean*

Synopsis	Invert (partial) matching criteria
Context	**configure** filter dhcp-filter *number* entry *number* option match invert *boolean*
Tree	invert
Default	false
Introduced	16.0.R1
Platforms	All

string *string*

Synopsis	Matching pattern for the filtered option
Context	**configure** filter dhcp-filter *number* entry *number* option match string *string*
Tree	string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **hex** or **string**.
Introduced	16.0.R1
Platforms	All

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number *number*

Synopsis	Number for DHCP or DHCPv6 option to filter on
Context	**configure** filter dhcp-filter *number* entry *number* option number *number*
Tree	number
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

present

Synopsis	Require the presence of related option
Context	**configure** filter dhcp-filter *number* entry *number* option present
Tree	present
Notes	The following elements are part of a mandatory choice: **absent**, **match**, or **present**.
Introduced	16.0.R1
Platforms	All

dhcp6-filter [filter-id] *number*

Synopsis	Enter the **dhcp6-filter** list instance
Context	**configure** filter dhcp6-filter *number*
Tree	dhcp6-filter
Introduced	16.0.R1
Platforms	All

[**filter-id**] *number*

Synopsis	Unique DHCP filter policy ID
Context	**configure** filter dhcp6-filter *number*
Tree	dhcp6-filter
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

default-action

Synopsis	Enable the **default-action** context
Context	**configure** filter dhcp6-filter *number* default-action
Tree	default-action
Introduced	16.0.R1
Platforms	All

bypass-host-creation

Synopsis	Enable the **bypass-host-creation** context
Context	**configure** filter dhcp6-filter *number* default-action bypass-host-creation
Tree	bypass-host-creation
Notes	The following elements are part of a mandatory choice: **bypass-host-creation** or **drop**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

na *boolean*

Synopsis	Bypass the DHCPv6 NA host creation
Context	**configure** filter dhcp6-filter *number* default-action bypass-host-creation na *boolean*
Tree	na
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pd *boolean*

Synopsis	Bypass the DHCPv6 PD host creation
Context	**configure** filter dhcp6-filter *number* default-action bypass-host-creation pd *boolean*
Tree	pd
Default	true
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

drop

Synopsis	Drop DHCPv6 message (do not process)
Context	**configure** filter dhcp6-filter *number* default-action drop
Tree	drop
Notes	The following elements are part of a mandatory choice: **bypass-host-creation** or **drop**.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** filter dhcp6-filter *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** filter dhcp6-filter *number* entry *number*
Tree	entry
Max. Instances	10
Introduced	16.0.R1
Platforms	All

[entry-id] *number*

Synopsis	DHCP filter entry ID
Context	**configure** filter dhcp6-filter *number* entry *number*
Tree	entry

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Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enable the **action** context
Context	**configure** filter dhcp6-filter *number* entry *number* action
Tree	action
Introduced	16.0.R1
Platforms	All

bypass-host-creation

Synopsis	Enable the **bypass-host-creation** context
Context	**configure** filter dhcp6-filter *number* entry *number* action bypass-host-creation
Tree	bypass-host-creation
Notes	The following elements are part of a mandatory choice: **bypass-host-creation** or **drop**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

na *boolean*

Synopsis	Bypass the DHCPv6 NA host creation
Context	**configure** filter dhcp6-filter *number* entry *number* action bypass-host-creation na *boolean*
Tree	na
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pd *boolean*

Synopsis	Bypass the DHCPv6 PD host creation

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Context	**configure** filter dhcp6-filter *number* entry *number* action bypass-host-creation pd *boolean*
Tree	pd
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

drop

Synopsis	Drop DHCPv6 message (do not process)
Context	**configure** filter dhcp6-filter *number* entry *number* action drop
Tree	drop
Notes	The following elements are part of a mandatory choice: **bypass-host-creation** or **drop**.
Introduced	16.0.R1
Platforms	All

option

Synopsis	Enable the **option** context
Context	**configure** filter dhcp6-filter *number* entry *number* option
Tree	option
Introduced	16.0.R1
Platforms	All

absent

Synopsis	Require the absence of related option
Context	**configure** filter dhcp6-filter *number* entry *number* option absent
Tree	absent
Notes	The following elements are part of a mandatory choice: **absent**, **match**, or **present**.
Introduced	16.0.R1
Platforms	All

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match

Synopsis	Enable the **match** context
Context	**configure** filter dhcp6-filter *number* entry *number* option match
Tree	match
Notes	The following elements are part of a mandatory choice: **absent**, **match**, or **present**.
Introduced	16.0.R1
Platforms	All

exact *boolean*

Synopsis	Use an exact match pattern (not partial)
Context	**configure** filter dhcp6-filter *number* entry *number* option match exact *boolean*
Tree	exact
Default	false
Introduced	16.0.R1
Platforms	All

hex *string*

Synopsis	Matching pattern for the filtered option
Context	**configure** filter dhcp6-filter *number* entry *number* option match hex *string*
Tree	hex
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: **hex** or **string**.
Introduced	16.0.R1
Platforms	All

invert *boolean*

Synopsis	Invert (partial) matching criteria
Context	**configure** filter dhcp6-filter *number* entry *number* option match invert *boolean*
Tree	invert
Default	false
Introduced	16.0.R1

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Platforms	All

string *string*

Synopsis	Matching pattern for the filtered option
Context	**configure** filter dhcp6-filter *number* entry *number* option match string *string*
Tree	string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **hex** or **string**.
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number for DHCP or DHCPv6 option to filter on
Context	**configure** filter dhcp6-filter *number* entry *number* option number *number*
Tree	number
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

present

Synopsis	Require the presence of related option
Context	**configure** filter dhcp6-filter *number* entry *number* option present
Tree	present
Notes	The following elements are part of a mandatory choice: **absent**, **match**, or **present**.
Introduced	16.0.R1
Platforms	All

gre-tunnel-template [gre-tunnel-template-name] *string*

Synopsis	Enter the **gre-tunnel-template** list instance
Context	**configure** filter gre-tunnel-template *string*

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Tree	gre-tunnel-template
Max. Instances	8191
Introduced	16.0.R1
Platforms	All

[**gre-tunnel-template-name**] *string*

Synopsis	GRE tunnel template ID
Context	**configure** filter gre-tunnel-template *string*
Tree	gre-tunnel-template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** filter gre-tunnel-template *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R2
Platforms	All

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** filter gre-tunnel-template *string* ipv4
Tree	ipv4
Notes	The following elements are part of a choice: **ipv4** or **ipv6**.
Introduced	16.0.R1
Platforms	All

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destination-address [address] *string*

Synopsis	Add a list entry for **destination-address**
Context	**configure** filter gre-tunnel-template *string* ipv4 destination-address *string*
Tree	destination-address
Description	This command defines a destination for the GRE IP header used to encapsulate the matching IPv4/IPv6 packet. A single destination address can be specified for an IPv6 **gre-tunnel-template**. Traffic matching the associated IPv4 or IPv6 filter is hashed across any available ECMP or UCMP route next hop available to the destination address. If no destination address is available, then matching traffic follows the configured **pbr-down-action-override** action, if configured. If no **pbr-down-action-override** is configured traffic is discarded.
Max. Instances	32
Introduced	16.0.R1
Platforms	All

[**address**] *string*

Synopsis	Destination IPv4 address
Context	**configure** filter gre-tunnel-template *string* ipv4 destination-address *string*
Tree	destination-address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

gre-key *(keyword | number)*

Synopsis	GRE key
Context	**configure** filter gre-tunnel-template *string* ipv4 gre-key *(keyword | number)*
Tree	gre-key
Max. Range	0 to 4294967295
Options	if-index
Introduced	16.0.R1
Platforms	All

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skip-ttl-decrement *boolean*

Synopsis	Decrement TTL
Context	**configure** filter gre-tunnel-template *string* ipv4 skip-ttl-decrement *boolean*
Tree	skip-ttl-decrement
Default	false
Introduced	16.0.R1
Platforms	All

source-address *string*

Synopsis	Source IP address of the GRE encapsulated
Context	**configure** filter gre-tunnel-template *string* ipv4 source-address *string*
Tree	source-address
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** filter gre-tunnel-template *string* ipv6
Tree	ipv6
Notes	The following elements are part of a choice: **ipv4** or **ipv6**.
Introduced	22.7.R1
Platforms	All

destination-address [address] *string*

Synopsis	Add a list entry for **destination-address**
Context	**configure** filter gre-tunnel-template *string* ipv6 destination-address *string*
Tree	destination-address
Max. Instances	1
Introduced	22.7.R1
Platforms	All

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[**address**] *string*

Synopsis	IPv6 destination address
Context	**configure** filter gre-tunnel-template *string* ipv6 destination-address *string*
Tree	destination-address
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

gre-key *keyword*

Synopsis	Include a key value in GRE header
Context	**configure** filter gre-tunnel-template *string* ipv6 gre-key *keyword*
Tree	gre-key
Description	This command includes a key value in the GRE header of ifIndex of the ingress interface.
Options	if-index
Introduced	22.7.R1
Platforms	All

skip-hop-decrement *boolean*

Synopsis	Decrement TTL of the received packet
Context	**configure** filter gre-tunnel-template *string* ipv6 skip-hop-decrement *boolean*
Tree	skip-hop-decrement
Description	When configured to **true**, the system decrements the TTL of the IP packet matching the IPv4 or IPv6 filter when it is encapsulated into the GRE tunnel header. When configured to **false**, the system increases the TTL of the received packet.
Default	false
Introduced	22.7.R1
Platforms	All

source-address *string*

Synopsis	Source IPv6 address of the GRE encapsulated

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Context	**configure** filter gre-tunnel-template *string* ipv6 source-address *string*
Tree	source-address
Introduced	22.7.R1
Platforms	All

ip-exception [filter-name] *string*

Synopsis	Enter the **ip-exception** list instance
Context	**configure** filter ip-exception *string*
Tree	ip-exception
Introduced	20.10.R1
Platforms	VSR

[**filter-name**] *string*

Synopsis	Filter name
Context	**configure** filter ip-exception *string*
Tree	ip-exception
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	VSR

description *string*

Synopsis	Text description
Context	**configure** filter ip-exception *string* description *string*
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	VSR

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance

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Context	**configure** filter ip-exception *string* entry *number*
Tree	entry
Introduced	20.10.R1
Platforms	VSR

[**entry-id**] *number*

Synopsis	ID for a match criteria and the corresponding action
Context	**configure** filter ip-exception *string* entry *number*
Tree	entry
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	VSR

description *string*

Synopsis	Text description
Context	**configure** filter ip-exception *string* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	VSR

match

Synopsis	Enter the **match** context
Context	**configure** filter ip-exception *string* entry *number* match
Tree	match
Introduced	20.10.R1
Platforms	VSR

dst-ip

Synopsis	Enter the **dst-ip** context

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Context	**configure** filter ip-exception *string* entry *number* match dst-ip
Tree	dst-ip
Introduced	20.10.R1
Platforms	VSR

address *(ipv4-prefix-with-host-bits | ipv4-address)*

Synopsis	IP address to match
Context	**configure** filter ip-exception *string* entry *number* match dst-ip address *(ipv4-prefix-with-host-bits | ipv4-address)*
Tree	address
Introduced	20.10.R1
Platforms	VSR

mask *string*

Synopsis	Mask applied as an AND to the IP address
Context	**configure** filter ip-exception *string* entry *number* match dst-ip mask *string*
Tree	mask
Introduced	20.10.R1
Platforms	VSR

dst-port

Synopsis	Enter the **dst-port** context
Context	**configure** filter ip-exception *string* entry *number* match dst-port
Tree	dst-port
Introduced	20.10.R1
Platforms	VSR

eq *number*

Synopsis	Exact match criterion
Context	**configure** filter ip-exception *string* entry *number* match dst-port eq *number*
Tree	eq
Range	0 to 65535

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Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	20.10.R1
Platforms	VSR

gt *number*

Synopsis	Condition on being greater than the specified value.
Context	**configure** filter ip-exception *string* entry *number* match dst-port gt *number*
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	20.10.R1
Platforms	VSR

lt *number*

Synopsis	Condition on being less than the specified value.
Context	**configure** filter ip-exception *string* entry *number* match dst-port lt *number*
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	20.10.R1
Platforms	VSR

range

Synopsis	Enable the **range** context
Context	**configure** filter ip-exception *string* entry *number* match dst-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	20.10.R1
Platforms	VSR

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end *number*

Synopsis	Upper bound of the port range to match
Context	**configure** filter ip-exception *string* entry *number* match dst-port range end *number*
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

start *number*

Synopsis	Lower bound of the port range to match
Context	**configure** filter ip-exception *string* entry *number* match dst-port range start *number*
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

icmp

Synopsis	Enter the **icmp** context
Context	**configure** filter ip-exception *string* entry *number* match icmp
Tree	icmp
Introduced	20.10.R1
Platforms	VSR

code *number*

Synopsis	ICMP code value to match
Context	**configure** filter ip-exception *string* entry *number* match icmp code *number*
Tree	code
Range	0 to 255
Introduced	20.10.R1

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Platforms	VSR

type *number*

Synopsis	ICMP type value to match
Context	**configure** filter ip-exception *string* entry *number* match icmp type *number*
Tree	type
Range	0 to 255
Introduced	20.10.R1
Platforms	VSR

protocol *(number | keyword)*

Synopsis	IP protocol to match.
Context	**configure** filter ip-exception *string* entry *number* match protocol *(number | keyword)*
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	20.10.R1
Platforms	VSR

src-ip

Synopsis	Enter the **src-ip** context
Context	**configure** filter ip-exception *string* entry *number* match src-ip
Tree	src-ip
Introduced	20.10.R1
Platforms	VSR

address *(ipv4-prefix-with-host-bits | ipv4-address)*

Synopsis	IP address to match
Context	**configure** filter ip-exception *string* entry *number* match src-ip address *(ipv4-prefix-with-host-bits | ipv4-address)*

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Tree	address
Introduced	20.10.R1
Platforms	VSR

mask *string*

Synopsis	Mask applied as an AND to the IP address
Context	**configure** filter ip-exception *string* entry *number* match src-ip mask *string*
Tree	mask
Introduced	20.10.R1
Platforms	VSR

src-port

Synopsis	Enter the **src-port** context
Context	**configure** filter ip-exception *string* entry *number* match src-port
Tree	src-port
Introduced	20.10.R1
Platforms	VSR

eq *number*

Synopsis	Exact match criterion
Context	**configure** filter ip-exception *string* entry *number* match src-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	20.10.R1
Platforms	VSR

gt *number*

Synopsis	Condition on being greater than the specified value.
Context	**configure** filter ip-exception *string* entry *number* match src-port gt *number*
Tree	gt

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Range	0 to 65534
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	20.10.R1
Platforms	VSR

lt *number*

Synopsis	Condition on being less than the specified value.
Context	**configure** filter ip-exception *string* entry *number* match src-port lt *number*
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	20.10.R1
Platforms	VSR

range

Synopsis	Enable the **range** context
Context	**configure** filter ip-exception *string* entry *number* match src-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	20.10.R1
Platforms	VSR

end *number*

Synopsis	Upper bound of the port range to match
Context	**configure** filter ip-exception *string* entry *number* match src-port range end *number*
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

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start *number*

Synopsis	Lower bound of the port range to match
Context	**configure** filter ip-exception *string* entry *number* match src-port range start *number*
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

filter-id *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Filter ID
Context	**configure** filter ip-exception *string* filter-id *number*
Tree	filter-id
Range	1 to 65535
Introduced	20.10.R1
Platforms	VSR

ip-filter [filter-name] *string*

Synopsis	Enter the **ip-filter** list instance
Context	**configure** filter ip-filter *string*
Tree	ip-filter
Introduced	16.0.R1
Platforms	All

[**filter-name**] *string*

Synopsis	Filter name
Context	**configure** filter ip-filter *string*
Tree	ip-filter
String Length	1 to 64

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

chain-to-system-filter *boolean*

Synopsis	Chain filter policy to the active IPvX system filter policy
Context	**configure** filter ip-filter *string* chain-to-system-filter *boolean*
Tree	chain-to-system-filter
Default	false
Introduced	16.0.R1
Platforms	All

default-action *keyword*

Synopsis	Action for packets that do not match any entry
Context	**configure** filter ip-filter *string* default-action *keyword*
Tree	default-action
Options	drop, accept
Default	drop
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** filter ip-filter *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

embed

Synopsis	Enter the **embed** context

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Context	**configure** filter ip-filter *string* embed
Tree	embed
Description	Commands in this context embed a previously defined IPv4 embedded filter policy or Hybrid OpenFlow switch instance into an exclusive, template, or system filter policy at the specified offset value. Rules derived from the BGP FlowSpec can also be embedded into template filter policies only.
Introduced	16.0.R1
Platforms	All

filter [name] *reference* offset *number*

Synopsis	Enter the **filter** list instance
Context	**configure** filter ip-filter *string* embed filter *reference* offset *number*
Tree	filter
Introduced	16.0.R1
Platforms	All

[**name**] *reference*

Synopsis	IPv4 policy to be embedded in the filter
Context	**configure** filter ip-filter *string* embed filter *reference* offset *number*
Tree	filter
Reference	**configure** filter ip-filter *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

offset *number*

Synopsis	Offset of the inserted entries
Context	**configure** filter ip-filter *string* embed filter *reference* offset *number*
Tree	filter
Range	0 to 2097150
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the embedded filter
Context	**configure** filter ip-filter *string* embed filter *reference* offset *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

flowspec offset *number*

Synopsis	Enter the **flowspec** list instance
Context	**configure** filter ip-filter *string* embed flowspec offset *number*
Tree	flowspec
Introduced	16.0.R1
Platforms	All

offset *number*

Synopsis	Offset of the inserted entries
Context	**configure** filter ip-filter *string* embed flowspec offset *number*
Tree	flowspec
Range	0 to 2097151
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the embedded filter
Context	**configure** filter ip-filter *string* embed flowspec offset *number* admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

group *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Interface group ID for an external configured set of flowspec rules
Context	**configure** filter ip-filter *string* embed flowspec offset *number* group *number*
Tree	group
Range	0 to 16383
Introduced	16.0.R1
Platforms	All

router-instance *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Virtual router for an external configured set of flowspec rules
Context	**configure** filter ip-filter *string* embed flowspec offset *number* router-instance *string*
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

openflow [of-switch] *reference* offset *number*

Synopsis	Enter the **openflow** list instance
Context	**configure** filter ip-filter *string* embed openflow *reference* offset *number*
Tree	openflow
Introduced	16.0.R4

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Platforms	All

[**of-switch**] *reference*

Synopsis	Referenced Hybrid OpenFlow Switch (OFS) name
Context	**configure** filter ip-filter *string* embed openflow *reference* offset *number*
Tree	openflow
Reference	**configure** openflow of-switch *string*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

offset *number*

Synopsis	Offset of the inserted entries
Context	**configure** filter ip-filter *string* embed openflow *reference* offset *number*
Tree	openflow
Range	0 to 2097150
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the embedded filter
Context	**configure** filter ip-filter *string* embed openflow *reference* offset *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

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grt

WARNING:
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Synopsis	Global routing context
Context	**configure** filter ip-filter *string* embed openflow *reference* offset *number* grt
Tree	grt
Notes	The following elements are part of a choice: **grt**, **system**, (**sap** and **vpls**), or **vprn**.
Introduced	16.0.R4
Platforms	All

sap *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP context
Context	**configure** filter ip-filter *string* embed openflow *reference* offset *number* sap *reference*
Tree	sap
Reference	**configure** service vpls *string* sap *string*
Notes	The following elements are part of a choice: **grt**, **system**, (**sap** and **vpls**), or **vprn**.
Introduced	16.0.R4
Platforms	All

system

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	System context
Context	**configure** filter ip-filter *string* embed openflow *reference* offset *number* system
Tree	system
Notes	The following elements are part of a choice: **grt**, **system**, (**sap** and **vpls**), or **vprn**.
Introduced	16.0.R4

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Platforms	All

vpls *reference*

WARNING:
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Synopsis	VPLS context
Context	**configure** filter ip-filter *string* embed openflow *reference* offset *number* vpls *reference*
Tree	vpls
Reference	**configure** service vpls *string*
Notes	The following elements are part of a choice: **grt**, **system**, (**sap** and **vpls**), or **vprn**.
Introduced	16.0.R4
Platforms	All

vprn *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPRN context
Context	**configure** filter ip-filter *string* embed openflow *reference* offset *number* vprn *reference*
Tree	vprn
Reference	**configure** service vprn *string*
Notes	The following elements are part of a choice: **grt**, **system**, (**sap** and **vpls**), or **vprn**.
Introduced	16.0.R4
Platforms	All

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** filter ip-filter *string* entry *number*
Tree	entry
Introduced	16.0.R1

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Platforms	All

[**entry-id**] *number*

Synopsis	ID for a match criteria and the corresponding action
Context	**configure** filter ip-filter *string* entry *number*
Tree	entry
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enable the **action** context
Context	**configure** filter ip-filter *string* entry *number* action
Tree	action
Introduced	16.0.R1
Platforms	All

accept

Synopsis	Accept regular routing to forward a matching packet
Context	**configure** filter ip-filter *string* entry *number* action accept
Tree	accept
Notes	The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **gtp-local-breakout**, **http-redirect**, **ignore-match**, **nat**, **reassemble**, or **tcp-mss-adjust**.
Introduced	16.0.R1
Platforms	All

accept-when

Synopsis	Enable the **accept-when** context
Context	**configure** filter ip-filter *string* entry *number* action accept-when
Tree	accept-when

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Introduced	19.5.R1
Platforms	All

pattern

Synopsis	Enable the **pattern** context
Context	**configure** filter ip-filter *string* entry *number* action accept-when pattern
Tree	pattern
Introduced	19.5.R1
Platforms	All

expression *string*

Synopsis	Pattern expression to match
Context	**configure** filter ip-filter *string* entry *number* action accept-when pattern expression *string*
Tree	expression
String Length	3 to 18
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

mask *string*

Synopsis	Mask for the pattern expression
Context	**configure** filter ip-filter *string* entry *number* action accept-when pattern mask *string*
Tree	mask
String Length	3 to 18
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

offset-type *keyword*

Synopsis	Starting point reference for offset value of pattern

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Context	**configure** filter ip-filter *string* entry *number* action accept-when pattern offset-type *keyword*
Tree	offset-type
Options	layer-3, layer-4, data, dns-qtype
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

offset-value *number*

Synopsis	Offset value for the pattern expression
Context	**configure** filter ip-filter *string* entry *number* action accept-when pattern offset-value *number*
Tree	offset-value
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

drop

Synopsis	Drop a packet matching this entry
Context	**configure** filter ip-filter *string* entry *number* action drop
Tree	drop
Notes	The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **gtp-local-breakout**, **http-redirect**, **ignore-match**, **nat**, **reassemble**, or **tcp-mss-adjust**.
Introduced	16.0.R1
Platforms	All

drop-when

Synopsis	Enable the **drop-when** context
Context	**configure** filter ip-filter *string* entry *number* action drop-when
Tree	drop-when
Introduced	16.0.R1

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Platforms	All

extracted-traffic

Synopsis	Drop traffic extracted to CPM
Context	**configure** filter ip-filter *string* entry *number* action drop-when extracted-traffic
Tree	extracted-traffic
Introduced	16.0.R1
Platforms	All

packet-length

Synopsis	Enable the **packet-length** context
Context	**configure** filter ip-filter *string* entry *number* action drop-when packet-length
Tree	packet-length
Notes	The following elements are part of a choice: **packet-length** or **ttl**.
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Exact match criterion for the length
Context	**configure** filter ip-filter *string* entry *number* action drop-when packet-length eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Greater than match criterion for the length
Context	**configure** filter ip-filter *string* entry *number* action drop-when packet-length gt *number*
Tree	gt
Range	0 to 65534

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Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Less than match criterion for the length
Context	**configure** filter ip-filter *string* entry *number* action drop-when packet-length lt *number*
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the **range** context
Context	**configure** filter ip-filter *string* entry *number* action drop-when packet-length range
Tree	range
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the length range
Context	**configure** filter ip-filter *string* entry *number* action drop-when packet-length range end *number*
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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start *number*

Synopsis	Lower bound of the length range
Context	**configure** filter ip-filter *string* entry *number* action drop-when packet-length range start *number*
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

pattern

Synopsis	Enable the **pattern** context
Context	**configure** filter ip-filter *string* entry *number* action drop-when pattern
Tree	pattern
Introduced	16.0.R4
Platforms	All

expression *string*

Synopsis	Pattern expression to match
Context	**configure** filter ip-filter *string* entry *number* action drop-when pattern expression *string*
Tree	expression
String Length	3 to 18
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

mask *string*

Synopsis	Mask for the pattern expression
Context	**configure** filter ip-filter *string* entry *number* action drop-when pattern mask *string*
Tree	mask
String Length	3 to 18
Notes	This element is mandatory.

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Introduced	16.0.R4
Platforms	All

offset-type *keyword*

Synopsis	Starting point reference for offset value of pattern
Context	**configure** filter ip-filter *string* entry *number* action drop-when pattern offset-type *keyword*
Tree	offset-type
Options	layer-3, layer-4, data, dns-qtype
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

offset-value *number*

Synopsis	Offset value for the pattern expression
Context	**configure** filter ip-filter *string* entry *number* action drop-when pattern offset-value *number*
Tree	offset-value
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

ttl

Synopsis	Enable the **ttl** context
Context	**configure** filter ip-filter *string* entry *number* action drop-when ttl
Tree	ttl
Notes	The following elements are part of a choice: **packet-length** or **ttl**.
Introduced	16.0.R1
Platforms	All

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eq *number*

Synopsis	Equal to condition match value
Context	**configure** filter ip-filter *string* entry *number* action drop-when ttl eq *number*
Tree	eq
Range	0 to 255
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Greater than condition match value
Context	**configure** filter ip-filter *string* entry *number* action drop-when ttl gt *number*
Tree	gt
Range	0 to 254
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Less than condition match value
Context	**configure** filter ip-filter *string* entry *number* action drop-when ttl lt *number*
Tree	lt
Range	1 to 255
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the **range** context
Context	**configure** filter ip-filter *string* entry *number* action drop-when ttl range
Tree	range

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Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the range
Context	**configure** filter ip-filter *string* entry *number* action drop-when ttl range end *number*
Tree	end
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the range
Context	**configure** filter ip-filter *string* entry *number* action drop-when ttl range start *number*
Tree	start
Range	0 to 254
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Class name to be forwarded for matching packets
Context	**configure** filter ip-filter *string* entry *number* action fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

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forward

Synopsis	Enter the **forward** context
Context	**configure** filter ip-filter *string* entry *number* action forward
Tree	forward
Notes	The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **gtp-local-breakout**, **http-redirect**, **ignore-match**, **nat**, **reassemble**, or **tcp-mss-adjust**.
Introduced	16.0.R1
Platforms	All

bonding-connection *number*

Synopsis	Connection ID over which packet is forwarded
Context	**configure** filter ip-filter *string* entry *number* action forward bonding-connection *number*
Tree	bonding-connection
Range	1 to 2
Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esi-l2

Synopsis	Enable the **esi-l2** context
Context	**configure** filter ip-filter *string* entry *number* action forward esi-l2
Tree	esi-l2
Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	16.0.R1
Platforms	All

esi-value *string*

Synopsis	ESI of the first ESI-identified appliance

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Context	**configure** filter ip-filter *string* entry *number* action forward esi-l2 esi-value *string*
Tree	esi-value
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls *reference*

Synopsis	VPLS service name
Context	**configure** filter ip-filter *string* entry *number* action forward esi-l2 vpls *reference*
Tree	vpls
Reference	**configure** service vpls *string*
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

esi-l3

Synopsis	Enable the **esi-l3** context
Context	**configure** filter ip-filter *string* entry *number* action forward esi-l3
Tree	esi-l3
Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	16.0.R1
Platforms	All

esi-value *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	ESI of the first ESI-identified appliance
Context	**configure** filter ip-filter *string* entry *number* action forward esi-l3 esi-value *string*
Tree	esi-value

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sf-ip *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the service function to forward traffic
Context	**configure** filter ip-filter *string* entry *number* action forward esi-l3 sf-ip *string*
Tree	sf-ip
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vas-interface *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Egress R-VPLS IP interface name
Context	**configure** filter ip-filter *string* entry *number* action forward esi-l3 vas-interface *reference*
Tree	vas-interface
Reference	**configure** service vprn *string* interface *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vprn *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

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Synopsis	VPRN service name
Context	**configure** filter ip-filter *string* entry *number* action forward esi-l3 vprn *reference*
Tree	vprn
Reference	**configure** service vprn *string*
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

gre-tunnel *reference*

Synopsis	GRE tunnel template ID that sets the location where an encapsulated matching packet is transported
Context	**configure** filter ip-filter *string* entry *number* action forward gre-tunnel *reference*
Tree	gre-tunnel
Reference	**configure** filter gre-tunnel-template *string*
Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	16.0.R1
Platforms	All

lsp *string*

Synopsis	LSP that is specified to forward a packet matching this entry
Context	**configure** filter ip-filter *string* entry *number* action forward lsp *string*
Tree	lsp
String Length	1 to 64
Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	16.0.R1
Platforms	All

mpls-policy

Synopsis	Enable the **mpls-policy** context

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Context	**configure** filter ip-filter *string* entry *number* action forward mpls-policy
Tree	mpls-policy
Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	19.10.R1
Platforms	All

endpoint *string*

Synopsis	MPLS forwarding policy endpoint IPv4 address
Context	**configure** filter ip-filter *string* entry *number* action forward mpls-policy endpoint *string*
Tree	endpoint
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

next-hop

Synopsis	Enable the **next-hop** context
Context	**configure** filter ip-filter *string* entry *number* action forward next-hop
Tree	next-hop
Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	16.0.R1
Platforms	All

interface-name *string*

Synopsis	IP interface name that forwards matching packets
Context	**configure** filter ip-filter *string* entry *number* action forward next-hop interface-name *string*
Tree	interface-name
String Length	1 to 32

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Notes	The following elements are part of a mandatory choice: **interface-name**, **nh-ip**, or **nh-ip-vrf**.
Introduced	16.0.R1
Platforms	All

nh-ip

Synopsis	Enable the **nh-ip** context
Context	**configure** filter ip-filter *string* entry *number* action forward next-hop nh-ip
Tree	nh-ip
Notes	The following elements are part of a mandatory choice: **interface-name**, **nh-ip**, or **nh-ip-vrf**.
Introduced	16.0.R1
Platforms	All

address *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv4 address of next hop to forward matching packets
Context	**configure** filter ip-filter *string* entry *number* action forward next-hop nh-ip address *string*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

indirect *boolean*

Synopsis	Allow next hop to be indirectly reachable
Context	**configure** filter ip-filter *string* entry *number* action forward next-hop nh-ip indirect *boolean*
Tree	indirect
Default	false
Introduced	16.0.R1

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Platforms	All

nh-ip-vrf

Synopsis	Enable the **nh-ip-vrf** context
Context	**configure** filter ip-filter *string* entry *number* action forward next-hop nh-ip-vrf
Tree	nh-ip-vrf
Notes	The following elements are part of a mandatory choice: **interface-name**, **nh-ip**, or **nh-ip-vrf**.
Introduced	16.0.R1
Platforms	All

address *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv4 address of next hop to forward matching packets
Context	**configure** filter ip-filter *string* entry *number* action forward next-hop nh-ip-vrf address *string*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

indirect *boolean*

Synopsis	Allow next hop to be indirectly reachable
Context	**configure** filter ip-filter *string* entry *number* action forward next-hop nh-ip-vrf indirect *boolean*
Tree	indirect
Default	false
Introduced	16.0.R1
Platforms	All

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router-instance *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Routing context for route lookup for forwarding packets
Context	**configure** filter ip-filter *string* entry *number* action forward next-hop nh-ip-vrf router-instance *string*
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

redirect-policy *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Next hop or forward next hop router that forwards a packet that matches this entry
Context	**configure** filter ip-filter *string* entry *number* action forward redirect-policy *reference*
Tree	redirect-policy
Reference	**configure** filter redirect-policy *string*
Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	16.0.R1
Platforms	All

router-instance *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Router name or VPRN service name
Context	**configure** filter ip-filter *string* entry *number* action forward router-instance *string*
Tree	router-instance

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Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	16.0.R1
Platforms	All

sap

Synopsis	Enable the **sap** context
Context	**configure** filter ip-filter *string* entry *number* action forward sap
Tree	sap
Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	16.0.R1
Platforms	All

sap-id *reference*

Synopsis	VPLS Ethernet SAP ID used to forward matching packets
Context	**configure** filter ip-filter *string* entry *number* action forward sap sap-id *reference*
Tree	sap-id
Reference	**configure** service vpls *string* sap *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls *reference*

Synopsis	VPLS associated with the SAP
Context	**configure** filter ip-filter *string* entry *number* action forward sap vpls *reference*
Tree	vpls
Reference	**configure** service vpls *string*
Notes	This element is mandatory.
Introduced	16.0.R1

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Platforms	All

sdp

Synopsis	Enable the **sdp** context
Context	**configure** filter ip-filter *string* entry *number* action forward sdp
Tree	sdp
Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	16.0.R1
Platforms	All

sdp-bind-id *string*

Synopsis	VPLS SDP bind ID used to forward matching packets
Context	**configure** filter ip-filter *string* entry *number* action forward sdp sdp-bind-id *string*
Tree	sdp-bind-id
String Length	3 to 16
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls *reference*

Synopsis	VPLS associated with the SDP
Context	**configure** filter ip-filter *string* entry *number* action forward sdp vpls *reference*
Tree	vpls
Reference	**configure** service vpls *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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srte-policy

Synopsis	Enable the **srte-policy** context
Context	**configure** filter ip-filter *string* entry *number* action forward srte-policy
Tree	srte-policy
Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	19.10.R1
Platforms	All

color *number*

Synopsis	SR-TE policy color ID
Context	**configure** filter ip-filter *string* entry *number* action forward srte-policy color *number*
Tree	color
Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

endpoint *string*

Synopsis	SR-TE policy endpoint IPv4 address
Context	**configure** filter ip-filter *string* entry *number* action forward srte-policy endpoint *string*
Tree	endpoint
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

srv6-policy

Synopsis	Enable the **srv6-policy** context
Context	**configure** filter ip-filter *string* entry *number* action forward srv6-policy
Tree	srv6-policy
Description	Command in this context configure the redirection of packets to an active SRv6 policy.

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Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	23.7.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

color *number*

Synopsis	SRv6 policy color
Context	**configure** filter ip-filter *string* entry *number* action forward srv6-policy color *number*
Tree	color
Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

endpoint *string*

Synopsis	SRv6 policy endpoint IPv6 address
Context	**configure** filter ip-filter *string* entry *number* action forward srv6-policy endpoint *string*
Tree	endpoint
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

service-sid *string*

Synopsis	SRv6 service segment identifier
Context	**configure** filter ip-filter *string* entry *number* action forward srv6-policy service-sid *string*
Tree	service-sid
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

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vprn-target

Synopsis	Enable the **vprn-target** context
Context	**configure** filter ip-filter *string* entry *number* action forward vprn-target
Tree	vprn-target
Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	16.0.R1
Platforms	All

adv-prefix *string*

Synopsis	Advertised IP prefix for target destination
Context	**configure** filter ip-filter *string* entry *number* action forward vprn-target adv-prefix *string*
Tree	adv-prefix
Introduced	16.0.R1
Platforms	All

bgp-nh *string*

Synopsis	Target BGP next hop IP address
Context	**configure** filter ip-filter *string* entry *number* action forward vprn-target bgp-nh *string*
Tree	bgp-nh
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

lsp *string*

Synopsis	LSP that is specified to forward a packet matching this entry
Context	**configure** filter ip-filter *string* entry *number* action forward vprn-target lsp *string*
Tree	lsp
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

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vprn *reference*

Synopsis	Routing context used for route lookup
Context	**configure** filter ip-filter *string* entry *number* action forward vprn-target vprn *reference*
Tree	vprn
Reference	**configure** service vprn *string*
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

gtp-local-breakout

Synopsis	Break out matching traffic locally from a GTP tunnel for GTP-subscriber-hosts, or forward for other entities
Context	**configure** filter ip-filter *string* entry *number* action gtp-local-breakout
Tree	gtp-local-breakout
Notes	The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **gtp-local-breakout**, **http-redirect**, **ignore-match**, **nat**, **reassemble**, or **tcp-mss-adjust**.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect

Synopsis	Enable the **http-redirect** context
Context	**configure** filter ip-filter *string* entry *number* action http-redirect
Tree	http-redirect
Description	Commands in this context configure the filter entry action for HTTP redirection.
Notes	The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **gtp-local-breakout**, **http-redirect**, **ignore-match**, **nat**, **reassemble**, or **tcp-mss-adjust**.
Introduced	16.0.R1
Platforms	All

allow-override *boolean*

Synopsis	Override the HTTP redirect URL by a RADIUS VSA

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Context	**configure** filter ip-filter *string* entry *number* action http-redirect allow-override *boolean*
Tree	allow-override
Description	This command specifies whether the RADIUS VSA can override the configured HTTP redirect URL for this filter entry. When configured to **true**, the RADIUS VSA can override the HTTP redirect URL. When configured to **false**, the HTTP redirect URL is not overriden. This does not apply if the CPF option is specified for the URL.
Default	false
Introduced	16.0.R1
Platforms	All

url *(keyword | http-redirect-url)*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	URL used for HTTP redirect action
Context	**configure** filter ip-filter *string* entry *number* action http-redirect url *(keyword | http-redirect-url)*
Tree	url
Description	This command specifies the URL to use for HTTP redirection for this filter entry. A URL can be specified or the CPF option can be used for BNG CUPS ESM sessions only. The following macro substitutions may be used: $URL — request-URI in the HTTP GET request received $MAC — a string that represents the MAC address of the subscriber host $IP — a string that represents the IP address of the subscriber host $SUB — a string that represents the subscriber ID $SAP — a string that represents a SAP ID $SAPDESC — description string configured on the SAP $CID — a string that represents the circuit ID or interface ID of the subscriber host (hexadecimal format) $RID — a string that represents the remote ID of the subscriber host (hexadecimal format)
String Length	1 to 255

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Options	from-cpf
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

ignore-match

Synopsis	Ignore match criteria for the entry
Context	**configure** filter ip-filter *string* entry *number* action ignore-match
Tree	ignore-match
Notes	The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **gtp-local-breakout**, **http-redirect**, **ignore-match**, **nat**, **reassemble**, or **tcp-mss-adjust**.
Introduced	16.0.R1
Platforms	All

l2-aware-nat-bypass *boolean*

Synopsis	Divert traffic from an L2-Aware NAT subscriber
Context	**configure** filter ip-filter *string* entry *number* action l2-aware-nat-bypass *boolean*
Tree	l2-aware-nat-bypass
Description	When configured to **true**, the filter action selectively diverts traffic from a L2-Aware NAT subscriber away from NAT. This action is only applicable to L2-Aware NAT subscribers and must be configured together with action **accept**. Traffic identified in the match condition bypasses L2-Aware NAT. An example is to bypass NAT for on-net destinations (within the customer network). For selective NAT bypass to take effect, in addition to IP filter configuration, the L2-Aware NAT subscriber must be specifically enabled for selective bypass via the allow-bypass configuration option in the **configure subscriber-mgmt sub-profile nat allow-bypass** context. When configured to **false**, traffic that is not classified for bypass automatically diverts to L2-Aware NAT, unless it is explicitly configured in the IP filter action to be dropped.
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat

Synopsis	Enable the **nat** context

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Context	**configure** filter ip-filter *string* entry *number* action nat
Tree	nat
Notes	The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **gtp-local-breakout**, **http-redirect**, **ignore-match**, **nat**, **reassemble**, or **tcp-mss-adjust**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT policy name when action is NAT
Context	**configure** filter ip-filter *string* entry *number* action nat nat-policy *reference*
Tree	nat-policy
Reference	**configure** service nat nat-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-limit

Synopsis	Enable the **rate-limit** context
Context	**configure** filter ip-filter *string* entry *number* action rate-limit
Tree	rate-limit
Introduced	16.0.R1
Platforms	All

extracted-traffic

Synopsis	Limit the rate of traffic extracted to the CPM
Context	**configure** filter ip-filter *string* entry *number* action rate-limit extracted-traffic
Tree	extracted-traffic
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

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packet-length

Synopsis	Enable the **packet-length** context
Context	**configure** filter ip-filter *string* entry *number* action rate-limit packet-length
Tree	packet-length
Notes	The following elements are part of a choice: **packet-length** or **ttl**.
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Exact match criterion for the length
Context	**configure** filter ip-filter *string* entry *number* action rate-limit packet-length eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Greater than match criterion for the length
Context	**configure** filter ip-filter *string* entry *number* action rate-limit packet-length gt *number*
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Less than match criterion for the length
Context	**configure** filter ip-filter *string* entry *number* action rate-limit packet-length lt *number*
Tree	lt
Range	1 to 65535

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Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the **range** context
Context	**configure** filter ip-filter *string* entry *number* action rate-limit packet-length range
Tree	range
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the length range
Context	**configure** filter ip-filter *string* entry *number* action rate-limit packet-length range end *number*
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the length range
Context	**configure** filter ip-filter *string* entry *number* action rate-limit packet-length range start *number*
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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pattern

Synopsis	Enable the **pattern** context
Context	**configure** filter ip-filter *string* entry *number* action rate-limit pattern
Tree	pattern
Introduced	16.0.R4
Platforms	All

expression *string*

Synopsis	Pattern expression to match
Context	**configure** filter ip-filter *string* entry *number* action rate-limit pattern expression *string*
Tree	expression
String Length	3 to 18
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

mask *string*

Synopsis	Mask for the pattern expression
Context	**configure** filter ip-filter *string* entry *number* action rate-limit pattern mask *string*
Tree	mask
String Length	3 to 18
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

offset-type *keyword*

Synopsis	Starting point reference for offset value of pattern
Context	**configure** filter ip-filter *string* entry *number* action rate-limit pattern offset-type *keyword*
Tree	offset-type
Options	layer-3, layer-4, data, dns-qtype
Notes	This element is mandatory.

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Introduced	16.0.R4
Platforms	All

offset-value *number*

Synopsis	Offset value for the pattern expression
Context	**configure** filter ip-filter *string* entry *number* action rate-limit pattern offset-value *number*
Tree	offset-value
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

pir *(number | keyword)*

Synopsis	Peak information rate
Context	**configure** filter ip-filter *string* entry *number* action rate-limit pir *(number | keyword)*
Tree	pir
Range	0 to 2000000000
Units	kilobps
Options	max
Notes	The following elements are part of a mandatory choice: **pir** or **pps-pir**.
Introduced	16.0.R1
Platforms	All

pps-pir *(number | keyword)*

Synopsis	Peak information rate
Context	**configure** filter ip-filter *string* entry *number* action rate-limit pps-pir *(number | keyword)*
Tree	pps-pir
Range	0 to 100000000
Units	packets per second
Options	max
Notes	The following elements are part of a mandatory choice: **pir** or **pps-pir**.
Introduced	22.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

ttl

Synopsis	Enable the **ttl** context
Context	**configure** filter ip-filter *string* entry *number* action rate-limit ttl
Tree	ttl
Notes	The following elements are part of a choice: **packet-length** or **ttl**.
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Equal to condition match value
Context	**configure** filter ip-filter *string* entry *number* action rate-limit ttl eq *number*
Tree	eq
Range	0 to 255
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Greater than condition match value
Context	**configure** filter ip-filter *string* entry *number* action rate-limit ttl gt *number*
Tree	gt
Range	0 to 254
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Less than condition match value
Context	**configure** filter ip-filter *string* entry *number* action rate-limit ttl lt *number*

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Tree	lt
Range	1 to 255
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the **range** context
Context	**configure** filter ip-filter *string* entry *number* action rate-limit ttl range
Tree	range
Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the range
Context	**configure** filter ip-filter *string* entry *number* action rate-limit ttl range end *number*
Tree	end
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the range
Context	**configure** filter ip-filter *string* entry *number* action rate-limit ttl range start *number*
Tree	start
Range	0 to 254
Notes	This element is mandatory.

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Introduced	16.0.R1
Platforms	All

reassemble

Synopsis	Forward matching packets to reassembly function
Context	**configure** filter ip-filter *string* entry *number* action reassemble
Tree	reassemble
Notes	The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **gtp-local-breakout**, **http-redirect**, **ignore-match**, **nat**, **reassemble**, or **tcp-mss-adjust**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remark

Synopsis	Enable the **remark** context
Context	**configure** filter ip-filter *string* entry *number* action remark
Tree	remark
Introduced	16.0.R1
Platforms	All

dscp *keyword*

Synopsis	Destination SAP
Context	**configure** filter ip-filter *string* entry *number* action remark dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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secondary

Synopsis	Enable the **secondary** context
Context	**configure** filter ip-filter *string* entry *number* action secondary
Tree	secondary
Introduced	16.0.R1
Platforms	All

forward

Synopsis	Enter the **forward** context
Context	**configure** filter ip-filter *string* entry *number* action secondary forward
Tree	forward
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

next-hop

Synopsis	Enable the **next-hop** context
Context	**configure** filter ip-filter *string* entry *number* action secondary forward next-hop
Tree	next-hop
Notes	The following elements are part of a choice: **next-hop**, **sap**, **sdp**, or **vprn-target**.
Introduced	16.0.R1
Platforms	All

nh-ip-vrf

Synopsis	Enable the **nh-ip-vrf** context
Context	**configure** filter ip-filter *string* entry *number* action secondary forward next-hop nh-ip-vrf
Tree	nh-ip-vrf
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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address *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv4 address of next hop to forward matching packets
Context	**configure** filter ip-filter *string* entry *number* action secondary forward next-hop nh-ip-vrf address *string*
Tree	address
Description	This command specifies the IPv4 address of a direct or indirect next hop to which matching packets are forwarded.
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

indirect *boolean*

Synopsis	Allow next hop to be indirectly reachable
Context	**configure** filter ip-filter *string* entry *number* action secondary forward next-hop nh-ip-vrf indirect *boolean*
Tree	indirect
Default	false
Introduced	16.0.R1
Platforms	All

router-instance *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Routing context for route lookup for forwarding packets
Context	**configure** filter ip-filter *string* entry *number* action secondary forward next-hop nh-ip-vrf router-instance *string*
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R1

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Platforms	All

sap

Synopsis	Enable the **sap** context
Context	**configure** filter ip-filter *string* entry *number* action secondary forward sap
Tree	sap
Notes	The following elements are part of a choice: **next-hop**, **sap**, **sdp**, or **vprn-target**.
Introduced	16.0.R1
Platforms	All

sap-id *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP ID used to forward packets matching the entry
Context	**configure** filter ip-filter *string* entry *number* action secondary forward sap sap-id *reference*
Tree	sap-id
Reference	**configure** service vpls *string* sap *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls *reference*

Synopsis	VPLS the sdp-bind-id belongs to
Context	**configure** filter ip-filter *string* entry *number* action secondary forward sap vpls *reference*
Tree	vpls
Reference	**configure** service vpls *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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sdp

Synopsis	Enable the **sdp** context
Context	**configure** filter ip-filter *string* entry *number* action secondary forward sdp
Tree	sdp
Notes	The following elements are part of a choice: **next-hop**, **sap**, **sdp**, or **vprn-target**.
Introduced	16.0.R1
Platforms	All

sdp-bind-id *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPLS SDP bind ID used to forward matching packets
Context	**configure** filter ip-filter *string* entry *number* action secondary forward sdp sdp-bind-id *string*
Tree	sdp-bind-id
String Length	3 to 16
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls *reference*

Synopsis	VPLS associated with the SDP
Context	**configure** filter ip-filter *string* entry *number* action secondary forward sdp vpls *reference*
Tree	vpls
Reference	**configure** service vpls *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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vprn-target

Synopsis	Enable the **vprn-target** context
Context	**configure** filter ip-filter *string* entry *number* action secondary forward vprn-target
Tree	vprn-target
Notes	The following elements are part of a choice: **next-hop**, **sap**, **sdp**, or **vprn-target**.
Introduced	21.7.R1
Platforms	All

adv-prefix *string*

Synopsis	Advertised IP prefix for the target destination
Context	**configure** filter ip-filter *string* entry *number* action secondary forward vprn-target adv-prefix *string*
Tree	adv-prefix
Introduced	21.7.R1
Platforms	All

bgp-nh *string*

Synopsis	Target BGP next hop IP address
Context	**configure** filter ip-filter *string* entry *number* action secondary forward vprn-target bgp-nh *string*
Tree	bgp-nh
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	All

lsp *string*

Synopsis	LSP that is specified to forward a packet matching this entry
Context	**configure** filter ip-filter *string* entry *number* action secondary forward vprn-target lsp *string*
Tree	lsp
String Length	1 to 64
Introduced	21.7.R1

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Platforms	All

vprn *reference*

Synopsis	Routing context used for route lookup
Context	**configure** filter ip-filter *string* entry *number* action secondary forward vprn-target vprn *reference*
Tree	vprn
Reference	**configure** service vprn *string*
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	All

remark

Synopsis	Enable the **remark** context
Context	**configure** filter ip-filter *string* entry *number* action secondary remark
Tree	remark
Introduced	16.0.R1
Platforms	All

dscp *keyword*

Synopsis	Destination SAP
Context	**configure** filter ip-filter *string* entry *number* action secondary remark dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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tcp-mss-adjust

Synopsis	Adjust MSS option of TCP matching packets to configured value of tcp-mss in router interface context
Context	**configure** filter ip-filter *string* entry *number* action tcp-mss-adjust
Tree	tcp-mss-adjust
Notes	The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **gtp-local-breakout**, **http-redirect**, **ignore-match**, **nat**, **reassemble**, or **tcp-mss-adjust**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** filter ip-filter *string* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

egress-pbr *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PBR that has an effect when this filter is applied on egress
Context	**configure** filter ip-filter *string* entry *number* egress-pbr *keyword*
Tree	egress-pbr
Options	true, true-with-l4lb
Introduced	16.0.R1
Platforms	All

filter-sample *boolean*

Synopsis	Sample matching traffic if IP interface is set to cflowd ACL mode
Context	**configure** filter ip-filter *string* entry *number* filter-sample *boolean*

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Tree	filter-sample
Default	false
Introduced	16.0.R1
Platforms	All

interface-sample *boolean*

Synopsis	Sample matching traffic if IP interface is set to cflowd interface mode
Context	**configure** filter ip-filter *string* entry *number* interface-sample *boolean*
Tree	interface-sample
Default	true
Introduced	16.0.R1
Platforms	All

log *reference*

Synopsis	Log that is used for packets matching this entry
Context	**configure** filter ip-filter *string* entry *number* log *reference*
Tree	log
Reference	**configure** filter log *number*
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the **match** context
Context	**configure** filter ip-filter *string* entry *number* match
Tree	match
Description	Commands in this context configure match criteria for the filter entry. When the match criteria are satisfied, the action associated with the match criteria is executed.
Introduced	16.0.R1
Platforms	All

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destination-class *number*

Synopsis	Destination class as a match criterion
Context	**configure** filter ip-filter *string* entry *number* match destination-class *number*
Tree	destination-class
Description	This command configures the BGP destination class value as a match criterion. Filtering egress traffic on the destination class requires the **destination-class-lookup** command (under the **ingress** context for the service interface) to be enabled (set to **true**).
Range	1 to 255
Introduced	20.7.R1
Platforms	All

dscp *keyword*

Synopsis	DSCP used as an IP filter match criterion
Context	**configure** filter ip-filter *string* entry *number* match dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the **dst-ip** context
Context	**configure** filter ip-filter *string* entry *number* match dst-ip
Tree	dst-ip
Notes	The following elements are part of a choice: **ip** or (**dst-ip** and **src-ip**).
Introduced	16.0.R1
Platforms	All

address *(ipv4-prefix-with-host-bits | ipv4-address)*

Synopsis	IPv4 address used as the match criterion

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Context	**configure** filter ip-filter *string* entry *number* match dst-ip address *(ipv4-prefix-with-host-bits | ipv4-address)*
Tree	address
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	All

ip-prefix-list *reference*

Synopsis	IP4 address prefix list used as match criterion
Context	**configure** filter ip-filter *string* entry *number* match dst-ip ip-prefix-list *reference*
Tree	ip-prefix-list
Reference	**configure** filter match-list ip-prefix-list *string*
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	IPv4 address mask used as the match criterion
Context	**configure** filter ip-filter *string* entry *number* match dst-ip mask *string*
Tree	mask
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	All

dst-port

Synopsis	Enter the **dst-port** context
Context	**configure** filter ip-filter *string* entry *number* match dst-port
Tree	dst-port
Notes	The following elements are part of a choice: **port** or (**dst-port** and **src-port**).
Introduced	16.0.R1
Platforms	All

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eq *number*

Synopsis	Exact match criterion for the port number
Context	**configure** filter ip-filter *string* entry *number* match dst-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Greater than match criterion for the port number
Context	**configure** filter ip-filter *string* entry *number* match dst-port gt *number*
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Less than match criterion for the port number
Context	**configure** filter ip-filter *string* entry *number* match dst-port lt *number*
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

port-list *reference*

Synopsis	Name of the port list as the match criterion
Context	**configure** filter ip-filter *string* entry *number* match dst-port port-list *reference*
Tree	port-list

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Reference	**configure** filter match-list port-list *string*
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the **range** context
Context	**configure** filter ip-filter *string* entry *number* match dst-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the port range as port match criterion
Context	**configure** filter ip-filter *string* entry *number* match dst-port range end *number*
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the port range as port match criterion
Context	**configure** filter ip-filter *string* entry *number* match dst-port range start *number*
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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fragment *keyword*

Synopsis	Match criterion for fragmented packets
Context	**configure** filter ip-filter *string* entry *number* match fragment *keyword*
Tree	fragment
Options	false, true, first-only, non-first-only
Introduced	16.0.R1
Platforms	All

icmp

Synopsis	Enter the **icmp** context
Context	**configure** filter ip-filter *string* entry *number* match icmp
Tree	icmp
Introduced	16.0.R1
Platforms	All

code *number*

Synopsis	ICMP code value to match
Context	**configure** filter ip-filter *string* entry *number* match icmp code *number*
Tree	code
Range	0 to 255
Introduced	16.0.R1
Platforms	All

type *number*

Synopsis	ICMP type value to match
Context	**configure** filter ip-filter *string* entry *number* match icmp type *number*
Tree	type
Range	0 to 255
Introduced	16.0.R1
Platforms	All

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ip

Synopsis	Enter the **ip** context
Context	**configure** filter ip-filter *string* entry *number* match ip
Tree	ip
Notes	The following elements are part of a choice: **ip** or (**dst-ip** and **src-ip**).
Introduced	21.10.R1
Platforms	All

address *(ipv4-prefix-with-host-bits | ipv4-address)*

Synopsis	IPv4 address used as the match criterion
Context	**configure** filter ip-filter *string* entry *number* match ip address *(ipv4-prefix-with-host-bits | ipv4-address)*
Tree	address
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	21.10.R1
Platforms	All

ip-prefix-list *reference*

Synopsis	IP4 address prefix list used as match criterion
Context	**configure** filter ip-filter *string* entry *number* match ip ip-prefix-list *reference*
Tree	ip-prefix-list
Reference	**configure** filter match-list ip-prefix-list *string*
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	21.10.R1
Platforms	All

mask *string*

Synopsis	IPv4 address mask used as the match criterion
Context	**configure** filter ip-filter *string* entry *number* match ip mask *string*
Tree	mask
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	21.10.R1

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Platforms	All

ip-option

Synopsis	Enable the **ip-option** context
Context	**configure** filter ip-filter *string* entry *number* match ip-option
Tree	ip-option
Introduced	16.0.R1
Platforms	All

mask *number*

Synopsis	Mask that is ANDed with ip-option value in the packet header
Context	**configure** filter ip-filter *string* entry *number* match ip-option mask *number*
Tree	mask
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

type *number*

Synopsis	Specific IP option to match
Context	**configure** filter ip-filter *string* entry *number* match ip-option type *number*
Tree	type
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

multiple-option *boolean*

Synopsis	Match based on presence of multiple options in header
Context	**configure** filter ip-filter *string* entry *number* match multiple-option *boolean*
Tree	multiple-option

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Introduced	16.0.R1
Platforms	All

option-present *boolean*

Synopsis	Match on the presence of any IP option in the packet
Context	**configure** filter ip-filter *string* entry *number* match option-present *boolean*
Tree	option-present
Introduced	16.0.R1
Platforms	All

packet-length

Synopsis	Enable the **packet-length** context
Context	**configure** filter ip-filter *string* entry *number* match packet-length
Tree	packet-length
Introduced	19.5.R1
Platforms	All

eq *number*

Synopsis	Exact match criterion for the length
Context	**configure** filter ip-filter *string* entry *number* match packet-length eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	19.5.R1
Platforms	All

gt *number*

Synopsis	Greater than match criterion for the length
Context	**configure** filter ip-filter *string* entry *number* match packet-length gt *number*
Tree	gt
Range	0 to 65534

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Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	19.5.R1
Platforms	All

lt *number*

Synopsis	Less than match criterion for the length
Context	**configure** filter ip-filter *string* entry *number* match packet-length lt *number*
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	19.5.R1
Platforms	All

range

Synopsis	Enable the **range** context
Context	**configure** filter ip-filter *string* entry *number* match packet-length range
Tree	range
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	19.5.R1
Platforms	All

end *number*

Synopsis	Upper bound of the length range
Context	**configure** filter ip-filter *string* entry *number* match packet-length range end *number*
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

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start *number*

Synopsis	Lower bound of the length range
Context	**configure** filter ip-filter *string* entry *number* match packet-length range start *number*
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

port

Synopsis	Enter the **port** context
Context	**configure** filter ip-filter *string* entry *number* match port
Tree	port
Notes	The following elements are part of a choice: **port** or (**dst-port** and **src-port**).
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Exact match criterion for the port number
Context	**configure** filter ip-filter *string* entry *number* match port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Greater than match criterion for the port number
Context	**configure** filter ip-filter *string* entry *number* match port gt *number*
Tree	gt
Range	0 to 65534

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Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Less than match criterion for the port number
Context	**configure** filter ip-filter *string* entry *number* match port lt *number*
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

port-list *reference*

Synopsis	Name of the port list as the match criterion
Context	**configure** filter ip-filter *string* entry *number* match port port-list *reference*
Tree	port-list
Reference	**configure** filter match-list port-list *string*
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the **range** context
Context	**configure** filter ip-filter *string* entry *number* match port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

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end *number*

Synopsis	Upper bound of the port range as port match criterion
Context	**configure** filter ip-filter *string* entry *number* match port range end *number*
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the port range as port match criterion
Context	**configure** filter ip-filter *string* entry *number* match port range start *number*
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

protocol *(number | keyword)*

Synopsis	IP protocol identifier as a match criterion
Context	**configure** filter ip-filter *string* entry *number* match protocol *(number | keyword)*
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: **protocol** or **protocol-list**.
Introduced	16.0.R1
Platforms	All

protocol-list *reference*

Synopsis	Name of the protocol list as a match criterion

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Context	**configure** filter ip-filter *string* entry *number* match protocol-list *reference*
Tree	protocol-list
Reference	**configure** filter match-list protocol-list *string*
Notes	The following elements are part of a choice: **protocol** or **protocol-list**.
Introduced	20.7.R1
Platforms	All

src-ip

Synopsis	Enter the **src-ip** context
Context	**configure** filter ip-filter *string* entry *number* match src-ip
Tree	src-ip
Notes	The following elements are part of a choice: **ip** or (**dst-ip** and **src-ip**).
Introduced	16.0.R1
Platforms	All

address *(ipv4-prefix-with-host-bits | ipv4-address)*

Synopsis	IPv4 address used as the match criterion
Context	**configure** filter ip-filter *string* entry *number* match src-ip address *(ipv4-prefix-with-host-bits | ipv4-address)*
Tree	address
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	All

ip-prefix-list *reference*

Synopsis	IP4 address prefix list used as match criterion
Context	**configure** filter ip-filter *string* entry *number* match src-ip ip-prefix-list *reference*
Tree	ip-prefix-list
Reference	**configure** filter match-list ip-prefix-list *string*
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1

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Platforms	All

mask *string*

Synopsis	IPv4 address mask used as the match criterion
Context	**configure** filter ip-filter *string* entry *number* match src-ip mask *string*
Tree	mask
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	All

src-mac

Synopsis	Enable the **src-mac** context
Context	**configure** filter ip-filter *string* entry *number* match src-mac
Tree	src-mac
Introduced	19.5.R1
Platforms	All

address *string*

Synopsis	MAC address used as the match criterion
Context	**configure** filter ip-filter *string* entry *number* match src-mac address *string*
Tree	address
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

mask *string*

Synopsis	MAC address mask as the match criterion
Context	**configure** filter ip-filter *string* entry *number* match src-mac mask *string*
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	19.5.R1

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Platforms	All

src-port

Synopsis	Enter the **src-port** context
Context	**configure** filter ip-filter *string* entry *number* match src-port
Tree	src-port
Notes	The following elements are part of a choice: **port** or (**dst-port** and **src-port**).
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Exact match criterion for the port number
Context	**configure** filter ip-filter *string* entry *number* match src-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Greater than match criterion for the port number
Context	**configure** filter ip-filter *string* entry *number* match src-port gt *number*
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Less than match criterion for the port number
Context	**configure** filter ip-filter *string* entry *number* match src-port lt *number*

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Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

port-list *reference*

Synopsis	Name of the port list as the match criterion
Context	**configure** filter ip-filter *string* entry *number* match src-port port-list *reference*
Tree	port-list
Reference	**configure** filter match-list port-list *string*
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the **range** context
Context	**configure** filter ip-filter *string* entry *number* match src-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the port range as port match criterion
Context	**configure** filter ip-filter *string* entry *number* match src-port range end *number*
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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start *number*

Synopsis	Lower bound of the port range as port match criterion
Context	**configure** filter ip-filter *string* entry *number* match src-port range start *number*
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

src-route-option *boolean*

Synopsis	Match based on presence of source route option
Context	**configure** filter ip-filter *string* entry *number* match src-route-option *boolean*
Tree	src-route-option
Introduced	16.0.R1
Platforms	All

tcp-established

Synopsis	Match packets containing the TCP flag as ACK or RST
Context	**configure** filter ip-filter *string* entry *number* match tcp-established
Tree	tcp-established
Notes	The following elements are part of a choice: **tcp-established** or **tcp-flags**.
Introduced	22.10.R1
Platforms	All

tcp-flags

Synopsis	Enter the **tcp-flags** context
Context	**configure** filter ip-filter *string* entry *number* match tcp-flags
Tree	tcp-flags
Notes	The following elements are part of a choice: **tcp-established** or **tcp-flags**.
Introduced	16.0.R1
Platforms	All

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ack *boolean*

Synopsis	Match TCP ACK as per value of the ACK TCP flag bit
Context	**configure** filter ip-filter *string* entry *number* match tcp-flags ack *boolean*
Tree	ack
Introduced	16.0.R1
Platforms	All

cwr *boolean*

Synopsis	Match TCP CWR as per value of the CWR TCP flag bit
Context	**configure** filter ip-filter *string* entry *number* match tcp-flags cwr *boolean*
Tree	cwr
Introduced	16.0.R1
Platforms	All

ece *boolean*

Synopsis	Match TCP ECE as per value of the ECE TCP flag bit
Context	**configure** filter ip-filter *string* entry *number* match tcp-flags ece *boolean*
Tree	ece
Introduced	16.0.R1
Platforms	All

fin *boolean*

Synopsis	Match TCP FIN as per value of the FIN TCP flag bit
Context	**configure** filter ip-filter *string* entry *number* match tcp-flags fin *boolean*
Tree	fin
Introduced	16.0.R1
Platforms	All

ns *boolean*

Synopsis	Match TCP NS as per value of the NS TCP flag bit

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Context	**configure** filter ip-filter *string* entry *number* match tcp-flags ns *boolean*
Tree	ns
Introduced	16.0.R1
Platforms	All

psh *boolean*

Synopsis	Match TCP PSH as per value of the PSH TCP flag bit
Context	**configure** filter ip-filter *string* entry *number* match tcp-flags psh *boolean*
Tree	psh
Introduced	16.0.R1
Platforms	All

rst *boolean*

Synopsis	Match TCP RST as per value of the RST TCP flag bit
Context	**configure** filter ip-filter *string* entry *number* match tcp-flags rst *boolean*
Tree	rst
Introduced	16.0.R1
Platforms	All

syn *boolean*

Synopsis	Match TCP SYN as per value of the SYN TCP flag bit
Context	**configure** filter ip-filter *string* entry *number* match tcp-flags syn *boolean*
Tree	syn
Introduced	16.0.R1
Platforms	All

urg *boolean*

Synopsis	Match TCP URG as per value of the URG TCP flag bit
Context	**configure** filter ip-filter *string* entry *number* match tcp-flags urg *boolean*
Tree	urg
Introduced	16.0.R1

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Platforms	All

ttl

Synopsis	Enable the **ttl** context
Context	**configure** filter ip-filter *string* entry *number* match ttl
Tree	ttl
Introduced	21.10.R1
Platforms	All

eq *number*

Synopsis	Equal to condition match value
Context	**configure** filter ip-filter *string* entry *number* match ttl eq *number*
Tree	eq
Range	0 to 255
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	21.10.R1
Platforms	All

gt *number*

Synopsis	Greater than condition match value
Context	**configure** filter ip-filter *string* entry *number* match ttl gt *number*
Tree	gt
Range	0 to 254
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	21.10.R1
Platforms	All

lt *number*

Synopsis	Less than condition match value
Context	**configure** filter ip-filter *string* entry *number* match ttl lt *number*
Tree	lt

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Range	1 to 255
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	21.10.R1
Platforms	All

range

Synopsis	Enable the **range** context
Context	**configure** filter ip-filter *string* entry *number* match ttl range
Tree	range
Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	21.10.R1
Platforms	All

end *number*

Synopsis	Upper bound of the range
Context	**configure** filter ip-filter *string* entry *number* match ttl range end *number*
Tree	end
Range	1 to 255
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	All

start *number*

Synopsis	Lower bound of the range
Context	**configure** filter ip-filter *string* entry *number* match ttl range start *number*
Tree	start
Range	0 to 254
Notes	This element is mandatory.
Introduced	21.10.R1

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Platforms	All

pbr-down-action-override *keyword*

Synopsis	Action when PBR or PBF target for this entry is not available
Context	**configure** filter ip-filter *string* entry *number* pbr-down-action-override *keyword*
Tree	pbr-down-action-override
Options	drop, forward, filter-default-action
Introduced	16.0.R1
Platforms	All

sample-profile *reference*

Synopsis	Cflowd sample profile ID to match packets
Context	**configure** filter ip-filter *string* entry *number* sample-profile *reference*
Tree	sample-profile
Description	This command allows traffic matching an IPv4 or IPv6 filter to be sampled for cflowd processing using a specific sample profile ID. This option is only compatible if the associated interface is configured for interface-based sampling and is only supported for ingress sampling. An IP filter can only specify a single alternate sample profile ID for cflowd sampling, but the ID can be used in multiple entries.
Reference	**configure** cflowd sample-profile *number*
Introduced	20.10.R1
Platforms	All

sticky-dest *(number | keyword)*

Synopsis	Time before action with available PBR or PBF destination and highest priority
Context	**configure** filter ip-filter *string* entry *number* sticky-dest *(number | keyword)*
Tree	sticky-dest
Range	0 to 65535
Units	seconds
Options	no-hold-time-up
Introduced	16.0.R1
Platforms	All

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filter-id *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP filter ID
Context	**configure** filter ip-filter *string* filter-id *number*
Tree	filter-id
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

scope *keyword*

Synopsis	Scope of the filter defintion
Context	**configure** filter ip-filter *string* scope *keyword*
Tree	scope
Description	This command configures the filter policy scope. If the scope of the policy is **template** and is applied to one or more services or network interfaces, the scope cannot be changed.
Options	exclusive, template, embedded, system, cpm
Default	template
Introduced	16.0.R1
Platforms	All

shared-policer *boolean*

Synopsis	Share policer among active ports in the LAG
Context	**configure** filter ip-filter *string* shared-policer *boolean*
Tree	shared-policer
Description	When configured to **true**, and when the filter policy is configured on a LAG endpoint, the system programs the policer rates in the filter policy per line card FP of the LAG based on the number of active ports in the LAG for each FP. When configured to **false**, and when the filter policy is configured on a LAG endpoint, the system programs the same policer rate on each line card FP of the LAG.
Default	false

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Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

subscriber-mgmt

Synopsis	Enter the **subscriber-mgmt** context
Context	**configure** filter ip-filter *string* subscriber-mgmt
Tree	subscriber-mgmt
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-specific-entry

Synopsis	Enter the **host-specific-entry** context
Context	**configure** filter ip-filter *string* subscriber-mgmt host-specific-entry
Tree	host-specific-entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

credit-control

Synopsis	Enter the **credit-control** context
Context	**configure** filter ip-filter *string* subscriber-mgmt host-specific-entry credit-control
Tree	credit-control
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the **range** context
Context	**configure** filter ip-filter *string* subscriber-mgmt host-specific-entry credit-control range
Tree	range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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end *number*

Synopsis	Upper bound of range for credit control filter entries
Context	**configure** filter ip-filter *string* subscriber-mgmt host-specific-entry credit-control range end *number*
Tree	end
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of range for credit control filter entries
Context	**configure** filter ip-filter *string* subscriber-mgmt host-specific-entry credit-control range start *number*
Tree	start
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter-rule

Synopsis	Enter the **filter-rule** context
Context	**configure** filter ip-filter *string* subscriber-mgmt host-specific-entry filter-rule
Tree	filter-rule
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the **range** context
Context	**configure** filter ip-filter *string* subscriber-mgmt host-specific-entry filter-rule range
Tree	range
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of range for inserting filter rule entries
Context	**configure** filter ip-filter *string* subscriber-mgmt host-specific-entry filter-rule range end *number*
Tree	end
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of range for inserting filter rule entries
Context	**configure** filter ip-filter *string* subscriber-mgmt host-specific-entry filter-rule range start *number*
Tree	start
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

watermark

Synopsis	Enter the **watermark** context
Context	**configure** filter ip-filter *string* subscriber-mgmt host-specific-entry watermark
Tree	watermark
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis	High watermark for host-specific entries, to raise a table full alarm

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Context	**configure** filter ip-filter *string* subscriber-mgmt host-specific-entry watermark high *number*
Tree	high
Range	0 to 100
Default	95
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low *number*

Synopsis	Low watermark for host-specific entries, to clear a table full alarm
Context	**configure** filter ip-filter *string* subscriber-mgmt host-specific-entry watermark low *number*
Tree	low
Range	0 to 100
Default	90
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shared-entry

Synopsis	Enter the **shared-entry** context
Context	**configure** filter ip-filter *string* subscriber-mgmt shared-entry
Tree	shared-entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter-rule

Synopsis	Enter the **filter-rule** context
Context	**configure** filter ip-filter *string* subscriber-mgmt shared-entry filter-rule
Tree	filter-rule
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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range

Synopsis	Enable the **range** context
Context	**configure** filter ip-filter *string* subscriber-mgmt shared-entry filter-rule range
Tree	range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of range for inserting shared host rules
Context	**configure** filter ip-filter *string* subscriber-mgmt shared-entry filter-rule range end *number*
Tree	end
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of range for inserting shared host rules
Context	**configure** filter ip-filter *string* subscriber-mgmt shared-entry filter-rule range start *number*
Tree	start
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pcc-rule

Synopsis	Enter the **pcc-rule** context
Context	**configure** filter ip-filter *string* subscriber-mgmt shared-entry pcc-rule
Tree	pcc-rule
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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range

Synopsis	Enable the **range** context
Context	**configure** filter ip-filter *string* subscriber-mgmt shared-entry pcc-rule range
Tree	range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the range for PCC rule filter entries
Context	**configure** filter ip-filter *string* subscriber-mgmt shared-entry pcc-rule range end *number*
Tree	end
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of the range for PCC rule filter entries
Context	**configure** filter ip-filter *string* subscriber-mgmt shared-entry pcc-rule range start *number*
Tree	start
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

watermark

Synopsis	Enable the **watermark** context
Context	**configure** filter ip-filter *string* subscriber-mgmt shared-entry watermark
Tree	watermark
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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high *number*

Synopsis	Limit of RADIUS shared filters before generating high watermark notification
Context	**configure** filter ip-filter *string* subscriber-mgmt shared-entry watermark high *number*
Tree	high
Range	1 to 8000
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low *number*

Synopsis	Limit of RADIUS or Diameter shared filters before clearing high watermark notification
Context	**configure** filter ip-filter *string* subscriber-mgmt shared-entry watermark low *number*
Tree	low
Range	0 to 7999
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Set of match criteria for the filter policy
Context	**configure** filter ip-filter *string* type *keyword*
Tree	type
Description	This command configures the filter policy type that defines the list of match criteria supported in a filter policy.
Options	normal, src-mac, packet-length, destination-class
Default	normal
Introduced	19.5.R1
Platforms	All

ipv6-exception [filter-name] *string*

Synopsis	Enter the **ipv6-exception** list instance

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Context	**configure** filter ipv6-exception *string*
Tree	ipv6-exception
Introduced	20.10.R1
Platforms	VSR

[**filter-name**] *string*

Synopsis	Filter name
Context	**configure** filter ipv6-exception *string*
Tree	ipv6-exception
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	VSR

description *string*

Synopsis	Text description
Context	**configure** filter ipv6-exception *string* description *string*
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	VSR

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** filter ipv6-exception *string* entry *number*
Tree	entry
Introduced	20.10.R1
Platforms	VSR

[**entry-id**] *number*

Synopsis	ID for a match criteria and the corresponding action

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Context	**configure** filter ipv6-exception *string* entry *number*
Tree	entry
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	VSR

description *string*

Synopsis	Text description
Context	**configure** filter ipv6-exception *string* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	VSR

match

Synopsis	Enter the **match** context
Context	**configure** filter ipv6-exception *string* entry *number* match
Tree	match
Introduced	20.10.R1
Platforms	VSR

dst-ip

Synopsis	Enter the **dst-ip** context
Context	**configure** filter ipv6-exception *string* entry *number* match dst-ip
Tree	dst-ip
Introduced	20.10.R1
Platforms	VSR

address *(ipv6-prefix-with-host-bits | ipv6-address)*

Synopsis	IPv6 address used as the match criterion

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Context	**configure** filter ipv6-exception *string* entry *number* match dst-ip address *(ipv6-prefix-with-host-bits | ipv6-address)*
Tree	address
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	20.10.R1
Platforms	VSR

ipv6-prefix-list *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	**configure** filter ipv6-exception *string* entry *number* match dst-ip ipv6-prefix-list *reference*
Tree	ipv6-prefix-list
Reference	**configure** filter match-list ipv6-prefix-list *string*
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	20.10.R1
Platforms	VSR

mask *string*

Synopsis	IPv6 address mask used as the match criterion
Context	**configure** filter ipv6-exception *string* entry *number* match dst-ip mask *string*
Tree	mask
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	20.10.R1
Platforms	VSR

dst-port

Synopsis	Enter the **dst-port** context
Context	**configure** filter ipv6-exception *string* entry *number* match dst-port
Tree	dst-port
Notes	The following elements are part of a choice: **port** or (**dst-port** and **src-port**).
Introduced	20.10.R1
Platforms	VSR

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eq *number*

Synopsis	Exact match criterion for the port number
Context	**configure** filter ipv6-exception *string* entry *number* match dst-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	20.10.R1
Platforms	VSR

gt *number*

Synopsis	Greater than match criterion for the port number
Context	**configure** filter ipv6-exception *string* entry *number* match dst-port gt *number*
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	20.10.R1
Platforms	VSR

lt *number*

Synopsis	Less than match criterion for the port number
Context	**configure** filter ipv6-exception *string* entry *number* match dst-port lt *number*
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	20.10.R1
Platforms	VSR

port-list *reference*

Synopsis	Name of the port list as the match criterion
Context	**configure** filter ipv6-exception *string* entry *number* match dst-port port-list *reference*
Tree	port-list

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Reference	**configure** filter match-list port-list *string*
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	20.10.R1
Platforms	VSR

range

Synopsis	Enable the **range** context
Context	**configure** filter ipv6-exception *string* entry *number* match dst-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	20.10.R1
Platforms	VSR

end *number*

Synopsis	Upper bound of the port range as port match criterion
Context	**configure** filter ipv6-exception *string* entry *number* match dst-port range end *number*
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

start *number*

Synopsis	Lower bound of the port range as port match criterion
Context	**configure** filter ipv6-exception *string* entry *number* match dst-port range start *number*
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

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icmp

Synopsis	Enter the **icmp** context
Context	**configure** filter ipv6-exception *string* entry *number* match icmp
Tree	icmp
Introduced	20.10.R1
Platforms	VSR

code *number*

Synopsis	ICMPv6 code value to match
Context	**configure** filter ipv6-exception *string* entry *number* match icmp code *number*
Tree	code
Range	0 to 255
Introduced	20.10.R1
Platforms	VSR

type *number*

Synopsis	ICMPv6 type value to match
Context	**configure** filter ipv6-exception *string* entry *number* match icmp type *number*
Tree	type
Range	0 to 255
Introduced	20.10.R1
Platforms	VSR

next-header *(number | keyword)*

Synopsis	IP protocol to match
Context	**configure** filter ipv6-exception *string* entry *number* match next-header *(number | keyword)*
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	20.10.R1

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Platforms	VSR

port

Synopsis	Enter the **port** context
Context	**configure** filter ipv6-exception *string* entry *number* match port
Tree	port
Notes	The following elements are part of a choice: **port** or (**dst-port** and **src-port**).
Introduced	20.10.R1
Platforms	VSR

eq *number*

Synopsis	Exact match criterion for the port number
Context	**configure** filter ipv6-exception *string* entry *number* match port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	20.10.R1
Platforms	VSR

gt *number*

Synopsis	Greater than match criterion for the port number
Context	**configure** filter ipv6-exception *string* entry *number* match port gt *number*
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	20.10.R1
Platforms	VSR

lt *number*

Synopsis	Less than match criterion for the port number
Context	**configure** filter ipv6-exception *string* entry *number* match port lt *number*

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Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	20.10.R1
Platforms	VSR

port-list *reference*

Synopsis	Name of the port list as the match criterion
Context	**configure** filter ipv6-exception *string* entry *number* match port port-list *reference*
Tree	port-list
Reference	**configure** filter match-list port-list *string*
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	20.10.R1
Platforms	VSR

range

Synopsis	Enable the **range** context
Context	**configure** filter ipv6-exception *string* entry *number* match port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	20.10.R1
Platforms	VSR

end *number*

Synopsis	Upper bound of the port range as port match criterion
Context	**configure** filter ipv6-exception *string* entry *number* match port range end *number*
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

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start *number*

Synopsis	Lower bound of the port range as port match criterion
Context	**configure** filter ipv6-exception *string* entry *number* match port range start *number*
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

src-ip

Synopsis	Enter the **src-ip** context
Context	**configure** filter ipv6-exception *string* entry *number* match src-ip
Tree	src-ip
Introduced	20.10.R1
Platforms	VSR

address *(ipv6-prefix-with-host-bits | ipv6-address)*

Synopsis	IPv6 address used as the match criterion
Context	**configure** filter ipv6-exception *string* entry *number* match src-ip address *(ipv6-prefix-with-host-bits | ipv6-address)*
Tree	address
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	20.10.R1
Platforms	VSR

ipv6-prefix-list *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	**configure** filter ipv6-exception *string* entry *number* match src-ip ipv6-prefix-list *reference*
Tree	ipv6-prefix-list
Reference	**configure** filter match-list ipv6-prefix-list *string*
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.

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Introduced	20.10.R1
Platforms	VSR

mask *string*

Synopsis	IPv6 address mask used as the match criterion
Context	**configure** filter ipv6-exception *string* entry *number* match src-ip mask *string*
Tree	mask
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	20.10.R1
Platforms	VSR

src-port

Synopsis	Enter the **src-port** context
Context	**configure** filter ipv6-exception *string* entry *number* match src-port
Tree	src-port
Notes	The following elements are part of a choice: **port** or (**dst-port** and **src-port**).
Introduced	20.10.R1
Platforms	VSR

eq *number*

Synopsis	Exact match criterion for the port number
Context	**configure** filter ipv6-exception *string* entry *number* match src-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	20.10.R1
Platforms	VSR

gt *number*

Synopsis	Greater than match criterion for the port number
Context	**configure** filter ipv6-exception *string* entry *number* match src-port gt *number*

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Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	20.10.R1
Platforms	VSR

lt *number*

Synopsis	Less than match criterion for the port number
Context	**configure** filter ipv6-exception *string* entry *number* match src-port lt *number*
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	20.10.R1
Platforms	VSR

port-list *reference*

Synopsis	Name of the port list as the match criterion
Context	**configure** filter ipv6-exception *string* entry *number* match src-port port-list *reference*
Tree	port-list
Reference	**configure** filter match-list port-list *string*
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	20.10.R1
Platforms	VSR

range

Synopsis	Enable the **range** context
Context	**configure** filter ipv6-exception *string* entry *number* match src-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	20.10.R1
Platforms	VSR

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end *number*

Synopsis	Upper bound of the port range as port match criterion
Context	**configure** filter ipv6-exception *string* entry *number* match src-port range end *number*
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

start *number*

Synopsis	Lower bound of the port range as port match criterion
Context	**configure** filter ipv6-exception *string* entry *number* match src-port range start *number*
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

filter-id *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Filter ID
Context	**configure** filter ipv6-exception *string* filter-id *number*
Tree	filter-id
Range	1 to 65535
Introduced	20.10.R1
Platforms	VSR

ipv6-filter [filter-name] *string*

Synopsis	Enter the **ipv6-filter** list instance

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Context	**configure** filter ipv6-filter *string*
Tree	ipv6-filter
Introduced	16.0.R1
Platforms	All

[**filter-name**] *string*

Synopsis	Filter name
Context	**configure** filter ipv6-filter *string*
Tree	ipv6-filter
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

chain-to-system-filter *boolean*

Synopsis	Chain filter policy to the active IPvX system filter policy
Context	**configure** filter ipv6-filter *string* chain-to-system-filter *boolean*
Tree	chain-to-system-filter
Default	false
Introduced	16.0.R1
Platforms	All

default-action *keyword*

Synopsis	Action for packets that do not match any entry
Context	**configure** filter ipv6-filter *string* default-action *keyword*
Tree	default-action
Options	drop, accept
Default	drop
Introduced	16.0.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** filter ipv6-filter *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

embed

Synopsis	Enter the **embed** context
Context	**configure** filter ipv6-filter *string* embed
Tree	embed
Description	Commands in this context embed a previously defined IPv6 embedded filter policy or Hybrid OpenFlow switch instance into an exclusive, template, or system filter policy at the specified offset value. Rules derived from the BGP FlowSpec can also be embedded into template filter policies only.
Introduced	16.0.R1
Platforms	All

filter [name] *reference* offset *number*

Synopsis	Enter the **filter** list instance
Context	**configure** filter ipv6-filter *string* embed filter *reference* offset *number*
Tree	filter
Introduced	16.0.R1
Platforms	All

[**name**] *reference*

Synopsis	IPv6 policy to be embedded in the filter
Context	**configure** filter ipv6-filter *string* embed filter *reference* offset *number*
Tree	filter
Reference	**configure** filter ipv6-filter *string*
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	All

offset *number*

Synopsis	Offset of the inserted entries
Context	**configure** filter ipv6-filter *string* embed filter *reference* offset *number*
Tree	filter
Range	0 to 2097150
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the embedded filter
Context	**configure** filter ipv6-filter *string* embed filter *reference* offset *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

flowspec offset *number*

Synopsis	Enter the **flowspec** list instance
Context	**configure** filter ipv6-filter *string* embed flowspec offset *number*
Tree	flowspec
Introduced	16.0.R1
Platforms	All

offset *number*

Synopsis	Offset of the inserted entries

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Context	**configure** filter ipv6-filter *string* embed flowspec offset *number*
Tree	flowspec
Range	0 to 2097151
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the embedded filter
Context	**configure** filter ipv6-filter *string* embed flowspec offset *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

group *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Interface group ID for an external configured set of flowspec rules
Context	**configure** filter ipv6-filter *string* embed flowspec offset *number* group *number*
Tree	group
Range	0 to 16383
Introduced	16.0.R1
Platforms	All

router-instance *string*

WARNING:
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Synopsis	Virtual router for an external configured set of flowspec rules

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Context	**configure** filter ipv6-filter *string* embed flowspec offset *number* router-instance *string*
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

openflow [of-switch] *reference* offset *number*

Synopsis	Enter the **openflow** list instance
Context	**configure** filter ipv6-filter *string* embed openflow *reference* offset *number*
Tree	openflow
Introduced	16.0.R4
Platforms	All

[**of-switch**] *reference*

Synopsis	Referenced Hybrid OpenFlow Switch (OFS) name
Context	**configure** filter ipv6-filter *string* embed openflow *reference* offset *number*
Tree	openflow
Reference	**configure** openflow of-switch *string*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

offset *number*

Synopsis	Offset of the inserted entries
Context	**configure** filter ipv6-filter *string* embed openflow *reference* offset *number*
Tree	openflow
Range	0 to 2097150
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the embedded filter
Context	**configure** filter ipv6-filter *string* embed openflow *reference* offset *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

grt

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Global routing context
Context	**configure** filter ipv6-filter *string* embed openflow *reference* offset *number* grt
Tree	grt
Notes	The following elements are part of a choice: **grt**, **system**, (**sap** and **vpls**), or **vprn**.
Introduced	16.0.R4
Platforms	All

sap *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP context
Context	**configure** filter ipv6-filter *string* embed openflow *reference* offset *number* sap *reference*
Tree	sap
Reference	**configure** service vpls *string* sap *string*
Notes	The following elements are part of a choice: **grt**, **system**, (**sap** and **vpls**), or **vprn**.
Introduced	16.0.R4
Platforms	All

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system

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	System context
Context	**configure** filter ipv6-filter *string* embed openflow *reference* offset *number* system
Tree	system
Notes	The following elements are part of a choice: **grt**, **system**, (**sap** and **vpls**), or **vprn**.
Introduced	16.0.R4
Platforms	All

vpls *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPLS context
Context	**configure** filter ipv6-filter *string* embed openflow *reference* offset *number* vpls *reference*
Tree	vpls
Reference	**configure** service vpls *string*
Notes	The following elements are part of a choice: **grt**, **system**, (**sap** and **vpls**), or **vprn**.
Introduced	16.0.R4
Platforms	All

vprn *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPRN context
Context	**configure** filter ipv6-filter *string* embed openflow *reference* offset *number* vprn *reference*
Tree	vprn
Reference	**configure** service vprn *string*

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Notes	The following elements are part of a choice: **grt**, **system**, (**sap** and **vpls**), or **vprn**.
Introduced	16.0.R4
Platforms	All

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** filter ipv6-filter *string* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**entry-id**] *number*

Synopsis	ID for a match criteria and the corresponding action
Context	**configure** filter ipv6-filter *string* entry *number*
Tree	entry
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enable the **action** context
Context	**configure** filter ipv6-filter *string* entry *number* action
Tree	action
Introduced	16.0.R1
Platforms	All

accept

Synopsis	Accept regular routing to forward a matching packet
Context	**configure** filter ipv6-filter *string* entry *number* action accept
Tree	accept

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Notes	The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, **ignore-match**, **nat**, or **tcp-mss-adjust**.
Introduced	16.0.R1
Platforms	All

accept-when

Synopsis	Enable the **accept-when** context
Context	**configure** filter ipv6-filter *string* entry *number* action accept-when
Tree	accept-when
Introduced	19.5.R1
Platforms	All

pattern

Synopsis	Enable the **pattern** context
Context	**configure** filter ipv6-filter *string* entry *number* action accept-when pattern
Tree	pattern
Introduced	19.5.R1
Platforms	All

expression *string*

Synopsis	Pattern expression to match
Context	**configure** filter ipv6-filter *string* entry *number* action accept-when pattern expression *string*
Tree	expression
String Length	3 to 18
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

mask *string*

Synopsis	Mask for the pattern expression
Context	**configure** filter ipv6-filter *string* entry *number* action accept-when pattern mask *string*

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Tree	mask
String Length	3 to 18
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

offset-type *keyword*

Synopsis	Starting point reference for offset value of pattern
Context	**configure** filter ipv6-filter *string* entry *number* action accept-when pattern offset-type *keyword*
Tree	offset-type
Options	layer-3, layer-4, data, dns-qtype
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

offset-value *number*

Synopsis	Offset value for the pattern expression
Context	**configure** filter ipv6-filter *string* entry *number* action accept-when pattern offset-value *number*
Tree	offset-value
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

drop

Synopsis	Drop a packet matching this entry
Context	**configure** filter ipv6-filter *string* entry *number* action drop
Tree	drop
Notes	The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, **ignore-match**, **nat**, or **tcp-mss-adjust**.

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Introduced	16.0.R1
Platforms	All

drop-when

Synopsis	Enable the **drop-when** context
Context	**configure** filter ipv6-filter *string* entry *number* action drop-when
Tree	drop-when
Introduced	16.0.R1
Platforms	All

extracted-traffic

Synopsis	Drop traffic extracted to CPM
Context	**configure** filter ipv6-filter *string* entry *number* action drop-when extracted-traffic
Tree	extracted-traffic
Introduced	16.0.R1
Platforms	All

hop-limit

Synopsis	Enable the **hop-limit** context
Context	**configure** filter ipv6-filter *string* entry *number* action drop-when hop-limit
Tree	hop-limit
Notes	The following elements are part of a choice: **hop-limit** or **payload-length**.
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Equal to condition match value
Context	**configure** filter ipv6-filter *string* entry *number* action drop-when hop-limit eq *number*
Tree	eq
Range	0 to 255
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.

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Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Greater than condition match value
Context	**configure** filter ipv6-filter *string* entry *number* action drop-when hop-limit gt *number*
Tree	gt
Range	0 to 254
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Less than condition match value
Context	**configure** filter ipv6-filter *string* entry *number* action drop-when hop-limit lt *number*
Tree	lt
Range	1 to 255
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the **range** context
Context	**configure** filter ipv6-filter *string* entry *number* action drop-when hop-limit range
Tree	range
Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

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end *number*

Synopsis	Upper bound of the range
Context	**configure** filter ipv6-filter *string* entry *number* action drop-when hop-limit range end *number*
Tree	end
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the range
Context	**configure** filter ipv6-filter *string* entry *number* action drop-when hop-limit range start *number*
Tree	start
Range	0 to 254
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

pattern

Synopsis	Enable the **pattern** context
Context	**configure** filter ipv6-filter *string* entry *number* action drop-when pattern
Tree	pattern
Introduced	16.0.R4
Platforms	All

expression *string*

Synopsis	Pattern expression to match
Context	**configure** filter ipv6-filter *string* entry *number* action drop-when pattern expression *string*
Tree	expression
String Length	3 to 18

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Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

mask *string*

Synopsis	Mask for the pattern expression
Context	**configure** filter ipv6-filter *string* entry *number* action drop-when pattern mask *string*
Tree	mask
String Length	3 to 18
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

offset-type *keyword*

Synopsis	Starting point reference for offset value of pattern
Context	**configure** filter ipv6-filter *string* entry *number* action drop-when pattern offset-type *keyword*
Tree	offset-type
Options	layer-3, layer-4, data, dns-qtype
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

offset-value *number*

Synopsis	Offset value for the pattern expression
Context	**configure** filter ipv6-filter *string* entry *number* action drop-when pattern offset-value *number*
Tree	offset-value
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

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payload-length

Synopsis	Enable the **payload-length** context
Context	**configure** filter ipv6-filter *string* entry *number* action drop-when payload-length
Tree	payload-length
Notes	The following elements are part of a choice: **hop-limit** or **payload-length**.
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Exact match criterion for the length
Context	**configure** filter ipv6-filter *string* entry *number* action drop-when payload-length eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Greater than match criterion for the length
Context	**configure** filter ipv6-filter *string* entry *number* action drop-when payload-length gt *number*
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Less than match criterion for the length
Context	**configure** filter ipv6-filter *string* entry *number* action drop-when payload-length lt *number*

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Tree	lt
Range	1 to 65535
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the **range** context
Context	**configure** filter ipv6-filter *string* entry *number* action drop-when payload-length range
Tree	range
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the length range
Context	**configure** filter ipv6-filter *string* entry *number* action drop-when payload-length range end *number*
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the length range
Context	**configure** filter ipv6-filter *string* entry *number* action drop-when payload-length range start *number*
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1

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Platforms	All

fc *keyword*

Synopsis	Class name to be forwarded for matching packets
Context	**configure** filter ipv6-filter *string* entry *number* action fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

forward

Synopsis	Enter the **forward** context
Context	**configure** filter ipv6-filter *string* entry *number* action forward
Tree	forward
Notes	The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, **ignore-match**, **nat**, or **tcp-mss-adjust**.
Introduced	16.0.R1
Platforms	All

bonding-connection *number*

Synopsis	Connection ID over which packet is forwarded
Context	**configure** filter ipv6-filter *string* entry *number* action forward bonding-connection *number*
Tree	bonding-connection
Range	1 to 2
Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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esi-l2

Synopsis	Enable the **esi-l2** context
Context	**configure** filter ipv6-filter *string* entry *number* action forward esi-l2
Tree	esi-l2
Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	16.0.R1
Platforms	All

esi-value *string*

Synopsis	ESI of the first ESI-identified appliance
Context	**configure** filter ipv6-filter *string* entry *number* action forward esi-l2 esi-value *string*
Tree	esi-value
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls *reference*

Synopsis	VPLS service name
Context	**configure** filter ipv6-filter *string* entry *number* action forward esi-l2 vpls *reference*
Tree	vpls
Reference	**configure** service vpls *string*
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

esi-l3

Synopsis	Enable the **esi-l3** context
Context	**configure** filter ipv6-filter *string* entry *number* action forward esi-l3
Tree	esi-l3

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Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	16.0.R1
Platforms	All

esi-value *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	ESI of the first ESI-identified appliance
Context	**configure** filter ipv6-filter *string* entry *number* action forward esi-l3 esi-value *string*
Tree	esi-value
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sf-ip *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the service function to forward traffic
Context	**configure** filter ipv6-filter *string* entry *number* action forward esi-l3 sf-ip *string*
Tree	sf-ip
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vas-interface *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

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Synopsis	Egress R-VPLS IP interface name
Context	**configure** filter ipv6-filter *string* entry *number* action forward esi-l3 vas-interface *reference*
Tree	vas-interface
Reference	**configure** service vprn *string* interface *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vprn *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPRN service name
Context	**configure** filter ipv6-filter *string* entry *number* action forward esi-l3 vprn *reference*
Tree	vprn
Reference	**configure** service vprn *string*
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

gre-tunnel *reference*

Synopsis	GRE tunnel template ID that sets the location where an encapsulated matching packet is transported
Context	**configure** filter ipv6-filter *string* entry *number* action forward gre-tunnel *reference*
Tree	gre-tunnel
Reference	**configure** filter gre-tunnel-template *string*
Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	16.0.R1
Platforms	All

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lsp *string*

Synopsis	LSP that is specified to forward a packet matching this entry
Context	**configure** filter ipv6-filter *string* entry *number* action forward lsp *string*
Tree	lsp
String Length	1 to 64
Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	16.0.R1
Platforms	All

mpls-policy

Synopsis	Enable the **mpls-policy** context
Context	**configure** filter ipv6-filter *string* entry *number* action forward mpls-policy
Tree	mpls-policy
Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	19.10.R1
Platforms	All

endpoint *string*

Synopsis	MPLS forwarding policy endpoint IPv6 address
Context	**configure** filter ipv6-filter *string* entry *number* action forward mpls-policy endpoint *string*
Tree	endpoint
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

next-hop

Synopsis	Enable the **next-hop** context
Context	**configure** filter ipv6-filter *string* entry *number* action forward next-hop
Tree	next-hop

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Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	16.0.R1
Platforms	All

nh-ip

Synopsis	Enable the **nh-ip** context
Context	**configure** filter ipv6-filter *string* entry *number* action forward next-hop nh-ip
Tree	nh-ip
Notes	The following elements are part of a mandatory choice: **nh-ip** or **nh-ip-vrf**.
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	IPv6 address of next hop to forward matching packets
Context	**configure** filter ipv6-filter *string* entry *number* action forward next-hop nh-ip address *string*
Tree	address
Description	This command specifies the IPv6 address of a direct or indirect next hop to which matching packets are forwarded.
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

indirect *boolean*

Synopsis	Allow next hop to be indirectly reachable
Context	**configure** filter ipv6-filter *string* entry *number* action forward next-hop nh-ip indirect *boolean*
Tree	indirect
Default	false
Introduced	16.0.R1
Platforms	All

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nh-ip-vrf

Synopsis	Enable the **nh-ip-vrf** context
Context	**configure** filter ipv6-filter *string* entry *number* action forward next-hop nh-ip-vrf
Tree	nh-ip-vrf
Notes	The following elements are part of a mandatory choice: **nh-ip** or **nh-ip-vrf**.
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	IPv6 address of next hop to forward matching packets
Context	**configure** filter ipv6-filter *string* entry *number* action forward next-hop nh-ip-vrf address *string*
Tree	address
Description	This command specifies the IPv6 address of a direct or indirect next hop to which matching packets are forwarded.
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

indirect *boolean*

Synopsis	Allow next hop to be indirectly reachable
Context	**configure** filter ipv6-filter *string* entry *number* action forward next-hop nh-ip-vrf indirect *boolean*
Tree	indirect
Default	false
Introduced	16.0.R1
Platforms	All

router-instance *string*

WARNING:
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Synopsis	Routing context for route lookup for forwarding packets
Context	**configure** filter ipv6-filter *string* entry *number* action forward next-hop nh-ip-vrf router-instance *string*
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

redirect-policy *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Next hop or forward next hop router that forwards a packet that matches this entry
Context	**configure** filter ipv6-filter *string* entry *number* action forward redirect-policy *reference*
Tree	redirect-policy
Reference	**configure** filter redirect-policy *string*
Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	16.0.R1
Platforms	All

router-instance *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Router name or VPRN service name
Context	**configure** filter ipv6-filter *string* entry *number* action forward router-instance *string*
Tree	router-instance
Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	16.0.R1
Platforms	All

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sap

Synopsis	Enable the **sap** context
Context	**configure** filter ipv6-filter *string* entry *number* action forward sap
Tree	sap
Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	16.0.R1
Platforms	All

sap-id *reference*

Synopsis	VPLS Ethernet SAP ID used to forward matching packets
Context	**configure** filter ipv6-filter *string* entry *number* action forward sap sap-id *reference*
Tree	sap-id
Reference	**configure** service vpls *string* sap *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls *reference*

Synopsis	VPLS associated with the SAP
Context	**configure** filter ipv6-filter *string* entry *number* action forward sap vpls *reference*
Tree	vpls
Reference	**configure** service vpls *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sdp

Synopsis	Enable the **sdp** context
Context	**configure** filter ipv6-filter *string* entry *number* action forward sdp

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Tree	sdp
Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	16.0.R1
Platforms	All

sdp-bind-id *string*

Synopsis	VPLS SDP bind ID used to forward matching packets
Context	**configure** filter ipv6-filter *string* entry *number* action forward sdp sdp-bind-id *string*
Tree	sdp-bind-id
String Length	3 to 16
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls *reference*

Synopsis	VPLS associated with the SDP
Context	**configure** filter ipv6-filter *string* entry *number* action forward sdp vpls *reference*
Tree	vpls
Reference	**configure** service vpls *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

srte-policy

Synopsis	Enable the **srte-policy** context
Context	**configure** filter ipv6-filter *string* entry *number* action forward srte-policy
Tree	srte-policy
Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	19.10.R1

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Platforms	All

color *number*

Synopsis	SR-TE policy color ID
Context	**configure** filter ipv6-filter *string* entry *number* action forward srte-policy color *number*
Tree	color
Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

endpoint *string*

Synopsis	SR-TE policy endpoint IPv6 address
Context	**configure** filter ipv6-filter *string* entry *number* action forward srte-policy endpoint *string*
Tree	endpoint
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

srv6-policy

Synopsis	Enable the **srv6-policy** context
Context	**configure** filter ipv6-filter *string* entry *number* action forward srv6-policy
Tree	srv6-policy
Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	23.7.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

color *number*

Synopsis	SRv6 policy color
Context	**configure** filter ipv6-filter *string* entry *number* action forward srv6-policy color *number*

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Tree	color
Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

endpoint *string*

Synopsis	SRv6 policy endpoint IPv6 address
Context	**configure** filter ipv6-filter *string* entry *number* action forward srv6-policy endpoint *string*
Tree	endpoint
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

service-sid *string*

Synopsis	SRv6 service segment identifier
Context	**configure** filter ipv6-filter *string* entry *number* action forward srv6-policy service-sid *string*
Tree	service-sid
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

vprn-target

Synopsis	Enable the **vprn-target** context
Context	**configure** filter ipv6-filter *string* entry *number* action forward vprn-target
Tree	vprn-target
Notes	The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.
Introduced	16.0.R1
Platforms	All

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adv-prefix *string*

Synopsis	Advertised IP prefix for target destination
Context	**configure** filter ipv6-filter *string* entry *number* action forward vprn-target adv-prefix *string*
Tree	adv-prefix
Introduced	16.0.R1
Platforms	All

bgp-nh *string*

Synopsis	Target BGP next hop IP address
Context	**configure** filter ipv6-filter *string* entry *number* action forward vprn-target bgp-nh *string*
Tree	bgp-nh
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

lsp *string*

Synopsis	LSP that is specified to forward a packet matching this entry
Context	**configure** filter ipv6-filter *string* entry *number* action forward vprn-target lsp *string*
Tree	lsp
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

vprn *reference*

Synopsis	Routing context used for route lookup
Context	**configure** filter ipv6-filter *string* entry *number* action forward vprn-target vprn *reference*
Tree	vprn
Reference	**configure** service vprn *string*
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

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http-redirect

Synopsis	Enable the **http-redirect** context
Context	**configure** filter ipv6-filter *string* entry *number* action http-redirect
Tree	http-redirect
Description	Commands in this context configure the filter entry action for HTTP redirection.
Notes	The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, **ignore-match**, **nat**, or **tcp-mss-adjust**.
Introduced	16.0.R1
Platforms	All

allow-override *boolean*

Synopsis	Override the HTTP redirect URL by a RADIUS VSA
Context	**configure** filter ipv6-filter *string* entry *number* action http-redirect allow-override *boolean*
Tree	allow-override
Description	This command specifies whether the RADIUS VSA can override the configured HTTP redirect URL for this filter entry. When configured to **true**, the RADIUS VSA can override the HTTP redirect URL. When configured to **false**, the HTTP redirect URL is not overriden. This does not apply if the CPF option is specified for the URL.
Default	false
Introduced	16.0.R1
Platforms	All

url *(keyword | http-redirect-url)*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	URL used for HTTP redirect action
Context	**configure** filter ipv6-filter *string* entry *number* action http-redirect url *(keyword | http-redirect-url)*
Tree	url
Description	This command specifies the URL to use for HTTP redirection for this filter entry.

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A URL can be specified or the CPF option can be used for BNG CUPS ESM sessions only.

The following macro substitutions may be used:

$URL — request-URI in the HTTP GET request received

$MAC — a string that represents the MAC address of the subscriber host

$IP — a string that represents the IP address of the subscriber host

$SUB — a string that represents the subscriber ID

$SAP — a string that represents a SAP ID

$SAPDESC — description string configured on the SAP

$CID — a string that represents the circuit ID or interface ID of the subscriber host (hexadecimal format)

$RID — a string that represents the remote ID of the subscriber host (hexadecimal format)

String Length	1 to 255
Options	from-cpf
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

ignore-match

Synopsis	Ignore match criteria for the entry
Context	**configure** filter ipv6-filter *string* entry *number* action ignore-match
Tree	ignore-match
Notes	The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, **ignore-match**, **nat**, or **tcp-mss-adjust**.
Introduced	16.0.R1
Platforms	All

nat

Synopsis	Enable the **nat** context
Context	**configure** filter ipv6-filter *string* entry *number* action nat
Tree	nat

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Notes	The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, **ignore-match**, **nat**, or **tcp-mss-adjust**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT policy name when action is NAT
Context	**configure** filter ipv6-filter *string* entry *number* action nat nat-policy *reference*
Tree	nat-policy
Reference	**configure** service nat nat-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-type *keyword*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT type to assign when action is NAT
Context	**configure** filter ipv6-filter *string* entry *number* action nat nat-type *keyword*
Tree	nat-type
Options	dslite, nat64
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-limit

Synopsis	Enable the **rate-limit** context
Context	**configure** filter ipv6-filter *string* entry *number* action rate-limit
Tree	rate-limit
Introduced	16.0.R1

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Platforms	All

extracted-traffic

Synopsis	Limit the rate of traffic extracted to the CPM
Context	**configure** filter ipv6-filter *string* entry *number* action rate-limit extracted-traffic
Tree	extracted-traffic
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

hop-limit

Synopsis	Enable the **hop-limit** context
Context	**configure** filter ipv6-filter *string* entry *number* action rate-limit hop-limit
Tree	hop-limit
Notes	The following elements are part of a choice: **hop-limit** or **payload-length**.
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Equal to condition match value
Context	**configure** filter ipv6-filter *string* entry *number* action rate-limit hop-limit eq *number*
Tree	eq
Range	0 to 255
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Greater than condition match value
Context	**configure** filter ipv6-filter *string* entry *number* action rate-limit hop-limit gt *number*
Tree	gt
Range	0 to 254

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Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Less than condition match value
Context	**configure** filter ipv6-filter *string* entry *number* action rate-limit hop-limit lt *number*
Tree	lt
Range	1 to 255
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the **range** context
Context	**configure** filter ipv6-filter *string* entry *number* action rate-limit hop-limit range
Tree	range
Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the range
Context	**configure** filter ipv6-filter *string* entry *number* action rate-limit hop-limit range end *number*
Tree	end
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1

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Platforms	All

start *number*

Synopsis	Lower bound of the range
Context	**configure** filter ipv6-filter *string* entry *number* action rate-limit hop-limit range start *number*
Tree	start
Range	0 to 254
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

pattern

Synopsis	Enable the **pattern** context
Context	**configure** filter ipv6-filter *string* entry *number* action rate-limit pattern
Tree	pattern
Introduced	16.0.R4
Platforms	All

expression *string*

Synopsis	Pattern expression to match
Context	**configure** filter ipv6-filter *string* entry *number* action rate-limit pattern expression *string*
Tree	expression
String Length	3 to 18
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

mask *string*

Synopsis	Mask for the pattern expression
Context	**configure** filter ipv6-filter *string* entry *number* action rate-limit pattern mask *string*

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Tree	mask
String Length	3 to 18
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

offset-type *keyword*

Synopsis	Starting point reference for offset value of pattern
Context	**configure** filter ipv6-filter *string* entry *number* action rate-limit pattern offset-type *keyword*
Tree	offset-type
Options	layer-3, layer-4, data, dns-qtype
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

offset-value *number*

Synopsis	Offset value for the pattern expression
Context	**configure** filter ipv6-filter *string* entry *number* action rate-limit pattern offset-value *number*
Tree	offset-value
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

payload-length

Synopsis	Enable the **payload-length** context
Context	**configure** filter ipv6-filter *string* entry *number* action rate-limit payload-length
Tree	payload-length
Notes	The following elements are part of a choice: **hop-limit** or **payload-length**.
Introduced	16.0.R1

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Platforms	All

eq *number*

Synopsis	Exact match criterion for the length
Context	**configure** filter ipv6-filter *string* entry *number* action rate-limit payload-length eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Greater than match criterion for the length
Context	**configure** filter ipv6-filter *string* entry *number* action rate-limit payload-length gt *number*
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Less than match criterion for the length
Context	**configure** filter ipv6-filter *string* entry *number* action rate-limit payload-length lt *number*
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the **range** context

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Context	**configure** filter ipv6-filter *string* entry *number* action rate-limit payload-length range
Tree	range
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the length range
Context	**configure** filter ipv6-filter *string* entry *number* action rate-limit payload-length range end *number*
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the length range
Context	**configure** filter ipv6-filter *string* entry *number* action rate-limit payload-length range start *number*
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	Peak information rate
Context	**configure** filter ipv6-filter *string* entry *number* action rate-limit pir *(number | keyword)*
Tree	pir
Range	0 to 2000000000
Units	kilobps

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Options	max
Notes	The following elements are part of a mandatory choice: **pir** or **pps-pir**.
Introduced	16.0.R1
Platforms	All

pps-pir *(number | keyword)*

Synopsis	Peak information rate
Context	**configure** filter ipv6-filter *string* entry *number* action rate-limit pps-pir *(number | keyword)*
Tree	pps-pir
Range	0 to 100000000
Units	packets per second
Options	max
Notes	The following elements are part of a mandatory choice: **pir** or **pps-pir**.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

remark

Synopsis	Enable the **remark** context
Context	**configure** filter ipv6-filter *string* entry *number* action remark
Tree	remark
Introduced	16.0.R1
Platforms	All

dscp *keyword*

Synopsis	Destination SAP
Context	**configure** filter ipv6-filter *string* entry *number* action remark dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

secondary

Synopsis	Enable the **secondary** context
Context	**configure** filter ipv6-filter *string* entry *number* action secondary
Tree	secondary
Introduced	16.0.R1
Platforms	All

forward

Synopsis	Enter the **forward** context
Context	**configure** filter ipv6-filter *string* entry *number* action secondary forward
Tree	forward
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

next-hop

Synopsis	Enable the **next-hop** context
Context	**configure** filter ipv6-filter *string* entry *number* action secondary forward next-hop
Tree	next-hop
Notes	The following elements are part of a choice: **next-hop**, **sap**, **sdp**, or **vprn-target**.
Introduced	16.0.R1
Platforms	All

nh-ip-vrf

Synopsis	Enable the **nh-ip-vrf** context
Context	**configure** filter ipv6-filter *string* entry *number* action secondary forward next-hop nh-ip-vrf

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Tree	nh-ip-vrf
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	IPv6 address of next hop to forward matching packets
Context	**configure** filter ipv6-filter *string* entry *number* action secondary forward next-hop nh-ip-vrf address *string*
Tree	address
Description	This command specifies the IPv6 address of a direct or indirect next hop to which matching packets are forwarded.
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

indirect *boolean*

Synopsis	Allow next hop to be indirectly reachable
Context	**configure** filter ipv6-filter *string* entry *number* action secondary forward next-hop nh-ip-vrf indirect *boolean*
Tree	indirect
Default	false
Introduced	16.0.R1
Platforms	All

router-instance *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Routing context for route lookup for forwarding packets
Context	**configure** filter ipv6-filter *string* entry *number* action secondary forward next-hop nh-ip-vrf router-instance *string*
Tree	router-instance

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sap

Synopsis	Enable the **sap** context
Context	**configure** filter ipv6-filter *string* entry *number* action secondary forward sap
Tree	sap
Notes	The following elements are part of a choice: **next-hop**, **sap**, **sdp**, or **vprn-target**.
Introduced	16.0.R1
Platforms	All

sap-id *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP ID used to forward packets matching the entry
Context	**configure** filter ipv6-filter *string* entry *number* action secondary forward sap sap-id *reference*
Tree	sap-id
Reference	**configure** service vpls *string* sap *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls *reference*

Synopsis	VPLS the sdp-bind-id belongs to
Context	**configure** filter ipv6-filter *string* entry *number* action secondary forward sap vpls *reference*
Tree	vpls
Reference	**configure** service vpls *string*
Notes	This element is mandatory.

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Introduced	16.0.R1
Platforms	All

sdp

Synopsis	Enable the **sdp** context
Context	**configure** filter ipv6-filter *string* entry *number* action secondary forward sdp
Tree	sdp
Notes	The following elements are part of a choice: **next-hop**, **sap**, **sdp**, or **vprn-target**.
Introduced	16.0.R1
Platforms	All

sdp-bind-id *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPLS SDP bind ID used to forward matching packets
Context	**configure** filter ipv6-filter *string* entry *number* action secondary forward sdp sdp-bind-id *string*
Tree	sdp-bind-id
String Length	3 to 16
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls *reference*

Synopsis	VPLS associated with the SDP
Context	**configure** filter ipv6-filter *string* entry *number* action secondary forward sdp vpls *reference*
Tree	vpls
Reference	**configure** service vpls *string*
Notes	This element is mandatory.
Introduced	16.0.R1

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Platforms	All

vprn-target

Synopsis	Enable the **vprn-target** context
Context	**configure** filter ipv6-filter *string* entry *number* action secondary forward vprn-target
Tree	vprn-target
Notes	The following elements are part of a choice: **next-hop**, **sap**, **sdp**, or **vprn-target**.
Introduced	21.7.R1
Platforms	All

adv-prefix *string*

Synopsis	Advertised IP prefix for the target destination
Context	**configure** filter ipv6-filter *string* entry *number* action secondary forward vprn-target adv-prefix *string*
Tree	adv-prefix
Introduced	21.7.R1
Platforms	All

bgp-nh *string*

Synopsis	Target BGP next hop IP address
Context	**configure** filter ipv6-filter *string* entry *number* action secondary forward vprn-target bgp-nh *string*
Tree	bgp-nh
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	All

lsp *string*

Synopsis	LSP that is specified to forward a packet matching this entry
Context	**configure** filter ipv6-filter *string* entry *number* action secondary forward vprn-target lsp *string*
Tree	lsp

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String Length	1 to 64
Introduced	21.7.R1
Platforms	All

vprn *reference*

Synopsis	Routing context used for route lookup
Context	**configure** filter ipv6-filter *string* entry *number* action secondary forward vprn-target vprn *reference*
Tree	vprn
Reference	**configure** service vprn *string*
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	All

remark

Synopsis	Enable the **remark** context
Context	**configure** filter ipv6-filter *string* entry *number* action secondary remark
Tree	remark
Introduced	16.0.R1
Platforms	All

dscp *keyword*

Synopsis	Destination SAP
Context	**configure** filter ipv6-filter *string* entry *number* action secondary remark dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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tcp-mss-adjust

Synopsis	Adjust MSS option of TCP matching packets to configured value of tcp-mss in router interface context
Context	**configure** filter ipv6-filter *string* entry *number* action tcp-mss-adjust
Tree	tcp-mss-adjust
Notes	The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, **ignore-match**, **nat**, or **tcp-mss-adjust**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** filter ipv6-filter *string* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

egress-pbr *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PBR that has an effect when this filter is applied on egress
Context	**configure** filter ipv6-filter *string* entry *number* egress-pbr *keyword*
Tree	egress-pbr
Options	true, true-with-l4lb
Introduced	16.0.R1
Platforms	All

filter-sample *boolean*

Synopsis	Sample matching traffic if IP interface is set to cflowd ACL mode

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Context	**configure** filter ipv6-filter *string* entry *number* filter-sample *boolean*
Tree	filter-sample
Default	false
Introduced	16.0.R1
Platforms	All

interface-sample *boolean*

Synopsis	Sample matching traffic if IP interface is set to cflowd interface mode
Context	**configure** filter ipv6-filter *string* entry *number* interface-sample *boolean*
Tree	interface-sample
Default	true
Introduced	16.0.R1
Platforms	All

log *reference*

Synopsis	Log that is used for packets matching this entry
Context	**configure** filter ipv6-filter *string* entry *number* log *reference*
Tree	log
Reference	**configure** filter log *number*
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the **match** context
Context	**configure** filter ipv6-filter *string* entry *number* match
Tree	match
Description	Commands in this context provide match criteria for the filter entry. When the match criteria are satisfied, the action associated with the match criteria is executed.
Introduced	16.0.R1
Platforms	All

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destination-class *number*

Synopsis	Destination class as a match criterion
Context	**configure** filter ipv6-filter *string* entry *number* match destination-class *number*
Tree	destination-class
Description	This command configures the BGP destination class value as a match criterion. Filtering egress traffic on the destination class requires the **destination-class-lookup** command (under the **ingress** context for the service interface) to be enabled (set to **true**).
Range	1 to 255
Introduced	20.7.R1
Platforms	All

dscp *keyword*

Synopsis	DSCP used as an IP filter match criterion
Context	**configure** filter ipv6-filter *string* entry *number* match dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the **dst-ip** context
Context	**configure** filter ipv6-filter *string* entry *number* match dst-ip
Tree	dst-ip
Notes	The following elements are part of a choice: **ip** or (**dst-ip** and **src-ip**).
Introduced	16.0.R1
Platforms	All

address *(ipv6-prefix-with-host-bits | ipv6-address)*

Synopsis	IPv6 address used as the match criterion

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Context	**configure** filter ipv6-filter *string* entry *number* match dst-ip address *(ipv6-prefix-with-host-bits* | *ipv6-address)*
Tree	address
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R1
Platforms	All

ipv6-prefix-list *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	**configure** filter ipv6-filter *string* entry *number* match dst-ip ipv6-prefix-list *reference*
Tree	ipv6-prefix-list
Reference	**configure** filter match-list ipv6-prefix-list *string*
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	IPv6 address mask used as the match criterion
Context	**configure** filter ipv6-filter *string* entry *number* match dst-ip mask *string*
Tree	mask
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R1
Platforms	All

dst-port

Synopsis	Enter the **dst-port** context
Context	**configure** filter ipv6-filter *string* entry *number* match dst-port
Tree	dst-port
Notes	The following elements are part of a choice: **port** or (**dst-port** and **src-port**).
Introduced	16.0.R1
Platforms	All

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eq *number*

Synopsis	Exact match criterion for the port number
Context	**configure** filter ipv6-filter *string* entry *number* match dst-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Greater than match criterion for the port number
Context	**configure** filter ipv6-filter *string* entry *number* match dst-port gt *number*
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Less than match criterion for the port number
Context	**configure** filter ipv6-filter *string* entry *number* match dst-port lt *number*
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

port-list *reference*

Synopsis	Name of the port list as the match criterion
Context	**configure** filter ipv6-filter *string* entry *number* match dst-port port-list *reference*
Tree	port-list

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Reference	**configure** filter match-list port-list *string*
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the **range** context
Context	**configure** filter ipv6-filter *string* entry *number* match dst-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the port range as port match criterion
Context	**configure** filter ipv6-filter *string* entry *number* match dst-port range end *number*
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the port range as port match criterion
Context	**configure** filter ipv6-filter *string* entry *number* match dst-port range start *number*
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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extension-header

Synopsis	Enter the **extension-header** context
Context	**configure** filter ipv6-filter *string* entry *number* match extension-header
Tree	extension-header
Introduced	16.0.R1
Platforms	All

ah *boolean*

Synopsis	Match a packet as per the existence of an AH Extension Header
Context	**configure** filter ipv6-filter *string* entry *number* match extension-header ah *boolean*
Tree	ah
Introduced	16.0.R1
Platforms	All

esp *boolean*

Synopsis	Match a packet as per the existence of an Encapsulation security payload extension header
Context	**configure** filter ipv6-filter *string* entry *number* match extension-header esp *boolean*
Tree	esp
Introduced	16.0.R1
Platforms	All

hop-by-hop *boolean*

Synopsis	Match on Hop-by-Hop Options Extension Header existence
Context	**configure** filter ipv6-filter *string* entry *number* match extension-header hop-by-hop *boolean*
Tree	hop-by-hop
Introduced	16.0.R2
Platforms	All

routing-type0 *boolean*

Synopsis	Match a packet as per the existence of a routing Extension Header

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Context	**configure** filter ipv6-filter *string* entry *number* match extension-header routing-type0 *boolean*
Tree	routing-type0
Introduced	16.0.R1
Platforms	All

flow-label

Synopsis	Enable the **flow-label** context
Context	**configure** filter ipv6-filter *string* entry *number* match flow-label
Tree	flow-label
Description	Commands in this context configure the flow label and optional mask match condition.
Introduced	16.0.R1
Platforms	All

mask *number*

Synopsis	Flow label mask for the IPv6 filter entry
Context	**configure** filter ipv6-filter *string* entry *number* match flow-label mask *number*
Tree	mask
Description	This command specifies the IPv6 address mask for the flow label filter entry. This value can be expressed in decimal, hexadecimal, or binary format.
Range	1 to 1048575
Default	1048575
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Flow label as a match criterion
Context	**configure** filter ipv6-filter *string* entry *number* match flow-label value *number*
Tree	value
Description	This command specifies the flow label to use as a match criterion. This value can be expressed in decimal, hexadecimal, or binary format.
Range	0 to 1048575

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

fragment *keyword*

Synopsis	Match criterion for fragmented packages
Context	**configure** filter ipv6-filter *string* entry *number* match fragment *keyword*
Tree	fragment
Options	false, true, first-only, non-first-only
Introduced	16.0.R1
Platforms	All

hop-limit

Synopsis	Enable the **hop-limit** context
Context	**configure** filter ipv6-filter *string* entry *number* match hop-limit
Tree	hop-limit
Introduced	21.10.R1
Platforms	All

eq *number*

Synopsis	Equal to condition match value
Context	**configure** filter ipv6-filter *string* entry *number* match hop-limit eq *number*
Tree	eq
Range	0 to 255
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	21.10.R1
Platforms	All

gt *number*

Synopsis	Greater than condition match value
Context	**configure** filter ipv6-filter *string* entry *number* match hop-limit gt *number*

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Tree	gt
Range	0 to 254
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	21.10.R1
Platforms	All

lt *number*

Synopsis	Less than condition match value
Context	**configure** filter ipv6-filter *string* entry *number* match hop-limit lt *number*
Tree	lt
Range	1 to 255
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	21.10.R1
Platforms	All

range

Synopsis	Enable the **range** context
Context	**configure** filter ipv6-filter *string* entry *number* match hop-limit range
Tree	range
Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	21.10.R1
Platforms	All

end *number*

Synopsis	Upper bound of the range
Context	**configure** filter ipv6-filter *string* entry *number* match hop-limit range end *number*
Tree	end
Range	1 to 255
Notes	This element is mandatory.

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Introduced	21.10.R1
Platforms	All

start *number*

Synopsis	Lower bound of the range
Context	**configure** filter ipv6-filter *string* entry *number* match hop-limit range start *number*
Tree	start
Range	0 to 254
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	All

icmp

Synopsis	Enter the **icmp** context
Context	**configure** filter ipv6-filter *string* entry *number* match icmp
Tree	icmp
Introduced	16.0.R1
Platforms	All

code *number*

Synopsis	ICMPv6 code value to match
Context	**configure** filter ipv6-filter *string* entry *number* match icmp code *number*
Tree	code
Range	0 to 255
Introduced	16.0.R1
Platforms	All

type *number*

Synopsis	ICMPv6 type value to match
Context	**configure** filter ipv6-filter *string* entry *number* match icmp type *number*
Tree	type

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Range	0 to 255
Introduced	16.0.R1
Platforms	All

ip

Synopsis	Enter the **ip** context
Context	**configure** filter ipv6-filter *string* entry *number* match ip
Tree	ip
Notes	The following elements are part of a choice: **ip** or (**dst-ip** and **src-ip**).
Introduced	21.10.R1
Platforms	All

address *(ipv6-prefix-with-host-bits | ipv6-address)*

Synopsis	IPv6 address used as the match criterion
Context	**configure** filter ipv6-filter *string* entry *number* match ip address *(ipv6-prefix-with-host-bits | ipv6-address)*
Tree	address
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	21.10.R1
Platforms	All

ipv6-prefix-list *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	**configure** filter ipv6-filter *string* entry *number* match ip ipv6-prefix-list *reference*
Tree	ipv6-prefix-list
Reference	**configure** filter match-list ipv6-prefix-list *string*
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	21.10.R1
Platforms	All

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mask *string*

Synopsis	IPv6 address mask used as the match criterion
Context	**configure** filter ipv6-filter *string* entry *number* match ip mask *string*
Tree	mask
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	21.10.R1
Platforms	All

next-header *(number | keyword)*

Synopsis	IP protocol to match
Context	**configure** filter ipv6-filter *string* entry *number* match next-header *(number | keyword)*
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: **next-header** or **next-header-list**.
Introduced	16.0.R1
Platforms	All

next-header-list *reference*

Synopsis	Name of the protocol list as a match criterion
Context	**configure** filter ipv6-filter *string* entry *number* match next-header-list *reference*
Tree	next-header-list
Reference	**configure** filter match-list protocol-list *string*
Notes	The following elements are part of a choice: **next-header** or **next-header-list**.
Introduced	20.7.R1
Platforms	All

packet-length

Synopsis	Enable the **packet-length** context
Context	**configure** filter ipv6-filter *string* entry *number* match packet-length

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Tree	packet-length
Introduced	19.5.R1
Platforms	All

eq *number*

Synopsis	Exact match criterion for the length
Context	**configure** filter ipv6-filter *string* entry *number* match packet-length eq *number*
Tree	eq
Range	40 to 65575
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	19.5.R1
Platforms	All

gt *number*

Synopsis	Greater than match criterion for the length
Context	**configure** filter ipv6-filter *string* entry *number* match packet-length gt *number*
Tree	gt
Range	40 to 65574
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	19.5.R1
Platforms	All

lt *number*

Synopsis	Less than match criterion for the length
Context	**configure** filter ipv6-filter *string* entry *number* match packet-length lt *number*
Tree	lt
Range	41 to 65575
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	19.5.R1
Platforms	All

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range

Synopsis	Enable the **range** context
Context	**configure** filter ipv6-filter *string* entry *number* match packet-length range
Tree	range
Notes	The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced	19.5.R1
Platforms	All

end *number*

Synopsis	Upper bound of packet length range as match criterion
Context	**configure** filter ipv6-filter *string* entry *number* match packet-length range end *number*
Tree	end
Range	41 to 65575
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

start *number*

Synopsis	Lower bound of packet length range as match criterion
Context	**configure** filter ipv6-filter *string* entry *number* match packet-length range start *number*
Tree	start
Range	40 to 65574
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

port

Synopsis	Enter the **port** context
Context	**configure** filter ipv6-filter *string* entry *number* match port
Tree	port
Notes	The following elements are part of a choice: **port** or (**dst-port** and **src-port**).

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Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Exact match criterion for the port number
Context	**configure** filter ipv6-filter *string* entry *number* match port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Greater than match criterion for the port number
Context	**configure** filter ipv6-filter *string* entry *number* match port gt *number*
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Less than match criterion for the port number
Context	**configure** filter ipv6-filter *string* entry *number* match port lt *number*
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

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port-list *reference*

Synopsis	Name of the port list as the match criterion
Context	**configure** filter ipv6-filter *string* entry *number* match port port-list *reference*
Tree	port-list
Reference	**configure** filter match-list port-list *string*
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the **range** context
Context	**configure** filter ipv6-filter *string* entry *number* match port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the port range as port match criterion
Context	**configure** filter ipv6-filter *string* entry *number* match port range end *number*
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the port range as port match criterion
Context	**configure** filter ipv6-filter *string* entry *number* match port range start *number*
Tree	start
Range	0 to 65534

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

src-ip

Synopsis	Enter the **src-ip** context
Context	**configure** filter ipv6-filter *string* entry *number* match src-ip
Tree	src-ip
Notes	The following elements are part of a choice: **ip** or (**dst-ip** and **src-ip**).
Introduced	16.0.R1
Platforms	All

address *(ipv6-prefix-with-host-bits | ipv6-address)*

Synopsis	IPv6 address used as the match criterion
Context	**configure** filter ipv6-filter *string* entry *number* match src-ip address *(ipv6-prefix-with-host-bits | ipv6-address)*
Tree	address
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R1
Platforms	All

ipv6-prefix-list *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	**configure** filter ipv6-filter *string* entry *number* match src-ip ipv6-prefix-list *reference*
Tree	ipv6-prefix-list
Reference	**configure** filter match-list ipv6-prefix-list *string*
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R1
Platforms	All

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mask *string*

Synopsis	IPv6 address mask used as the match criterion
Context	**configure** filter ipv6-filter *string* entry *number* match src-ip mask *string*
Tree	mask
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R1
Platforms	All

src-mac

Synopsis	Enable the **src-mac** context
Context	**configure** filter ipv6-filter *string* entry *number* match src-mac
Tree	src-mac
Introduced	19.5.R1
Platforms	All

address *string*

Synopsis	MAC address used as the match criterion
Context	**configure** filter ipv6-filter *string* entry *number* match src-mac address *string*
Tree	address
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

mask *string*

Synopsis	MAC address mask as the match criterion
Context	**configure** filter ipv6-filter *string* entry *number* match src-mac mask *string*
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	19.5.R1
Platforms	All

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src-port

Synopsis	Enter the **src-port** context
Context	**configure** filter ipv6-filter *string* entry *number* match src-port
Tree	src-port
Notes	The following elements are part of a choice: **port** or (**dst-port** and **src-port**).
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Exact match criterion for the port number
Context	**configure** filter ipv6-filter *string* entry *number* match src-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Greater than match criterion for the port number
Context	**configure** filter ipv6-filter *string* entry *number* match src-port gt *number*
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Less than match criterion for the port number
Context	**configure** filter ipv6-filter *string* entry *number* match src-port lt *number*
Tree	lt
Range	1 to 65535

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Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

port-list *reference*

Synopsis	Name of the port list as the match criterion
Context	**configure** filter ipv6-filter *string* entry *number* match src-port port-list *reference*
Tree	port-list
Reference	**configure** filter match-list port-list *string*
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the **range** context
Context	**configure** filter ipv6-filter *string* entry *number* match src-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the port range as port match criterion
Context	**configure** filter ipv6-filter *string* entry *number* match src-port range end *number*
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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start *number*

Synopsis	Lower bound of the port range as port match criterion
Context	**configure** filter ipv6-filter *string* entry *number* match src-port range start *number*
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

tcp-established

Synopsis	Match packets containing the TCP flag as ACK or RST
Context	**configure** filter ipv6-filter *string* entry *number* match tcp-established
Tree	tcp-established
Notes	The following elements are part of a choice: **tcp-established** or **tcp-flags**.
Introduced	22.10.R1
Platforms	All

tcp-flags

Synopsis	Enter the **tcp-flags** context
Context	**configure** filter ipv6-filter *string* entry *number* match tcp-flags
Tree	tcp-flags
Notes	The following elements are part of a choice: **tcp-established** or **tcp-flags**.
Introduced	16.0.R1
Platforms	All

ack *boolean*

Synopsis	Match TCP ACK as per value of the ACK TCP flag bit
Context	**configure** filter ipv6-filter *string* entry *number* match tcp-flags ack *boolean*
Tree	ack
Introduced	16.0.R1
Platforms	All

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cwr *boolean*

Synopsis	Match TCP CWR as per value of the CWR TCP flag bit
Context	**configure** filter ipv6-filter *string* entry *number* match tcp-flags cwr *boolean*
Tree	cwr
Introduced	16.0.R1
Platforms	All

ece *boolean*

Synopsis	Match TCP ECE as per value of the ECE TCP flag bit
Context	**configure** filter ipv6-filter *string* entry *number* match tcp-flags ece *boolean*
Tree	ece
Introduced	16.0.R1
Platforms	All

fin *boolean*

Synopsis	Match TCP FIN as per value of the FIN TCP flag bit
Context	**configure** filter ipv6-filter *string* entry *number* match tcp-flags fin *boolean*
Tree	fin
Introduced	16.0.R1
Platforms	All

ns *boolean*

Synopsis	Match TCP NS as per value of the NS TCP flag bit
Context	**configure** filter ipv6-filter *string* entry *number* match tcp-flags ns *boolean*
Tree	ns
Introduced	16.0.R1
Platforms	All

psh *boolean*

Synopsis	Match TCP PSH as per value of the PSH TCP flag bit

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Context	**configure** filter ipv6-filter *string* entry *number* match tcp-flags psh *boolean*
Tree	psh
Introduced	16.0.R1
Platforms	All

rst *boolean*

Synopsis	Match TCP RST as per value of the RST TCP flag bit
Context	**configure** filter ipv6-filter *string* entry *number* match tcp-flags rst *boolean*
Tree	rst
Introduced	16.0.R1
Platforms	All

syn *boolean*

Synopsis	Match TCP SYN as per value of the SYN TCP flag bit
Context	**configure** filter ipv6-filter *string* entry *number* match tcp-flags syn *boolean*
Tree	syn
Introduced	16.0.R1
Platforms	All

urg *boolean*

Synopsis	Match TCP URG as per value of the URG TCP flag bit
Context	**configure** filter ipv6-filter *string* entry *number* match tcp-flags urg *boolean*
Tree	urg
Introduced	16.0.R1
Platforms	All

pbr-down-action-override *keyword*

Synopsis	Action when PBR or PBF target for this entry is not available
Context	**configure** filter ipv6-filter *string* entry *number* pbr-down-action-override *keyword*
Tree	pbr-down-action-override
Options	drop, forward, filter-default-action

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Introduced	16.0.R1
Platforms	All

sample-profile *reference*

Synopsis	Cflowd sample profile ID to match packets
Context	**configure** filter ipv6-filter *string* entry *number* sample-profile *reference*
Tree	sample-profile
Description	This command allows traffic matching an IPv4 or IPv6 filter to be sampled for cflowd processing using a specific sample profile ID. This option is only compatible if the associated interface is configured for interface-based sampling and is only supported for ingress sampling. An IP filter can only specify a single alternate sample profile ID for cflowd sampling, but the ID can be used in multiple entries.
Reference	**configure** cflowd sample-profile *number*
Introduced	20.10.R1
Platforms	All

sticky-dest *(number | keyword)*

Synopsis	Time before action with available PBR or PBF destination and highest priority
Context	**configure** filter ipv6-filter *string* entry *number* sticky-dest *(number | keyword)*
Tree	sticky-dest
Range	0 to 65535
Units	seconds
Options	no-hold-time-up
Introduced	16.0.R1
Platforms	All

filter-id *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv6 filter identifier
Context	**configure** filter ipv6-filter *string* filter-id *number*
Tree	filter-id

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Range	1 to 65535
Introduced	16.0.R1
Platforms	All

scope *keyword*

Synopsis	Scope of the filter defintion
Context	**configure** filter ipv6-filter *string* scope *keyword*
Tree	scope
Description	This command configures the filter policy scope. If the scope of the policy is **template** and is applied to one or more services or network interfaces, the scope cannot be changed.
Options	exclusive, template, embedded, system, cpm
Default	template
Introduced	16.0.R1
Platforms	All

shared-policer *boolean*

Synopsis	Share policer among active ports in the LAG
Context	**configure** filter ipv6-filter *string* shared-policer *boolean*
Tree	shared-policer
Description	When configured to **true**, and when the filter policy is configured on a LAG endpoint, the system programs the policer rates in the filter policy per line card FP of the LAG based on the number of active ports in the LAG for each FP. When configured to **false**, and when the filter policy is configured on a LAG endpoint, the system programs the same policer rate on each line card FP of the LAG.
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

subscriber-mgmt

Synopsis	Enter the **subscriber-mgmt** context
Context	**configure** filter ipv6-filter *string* subscriber-mgmt
Tree	subscriber-mgmt

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-specific-entry

Synopsis	Enter the **host-specific-entry** context
Context	**configure** filter ipv6-filter *string* subscriber-mgmt host-specific-entry
Tree	host-specific-entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

credit-control

Synopsis	Enter the **credit-control** context
Context	**configure** filter ipv6-filter *string* subscriber-mgmt host-specific-entry credit-control
Tree	credit-control
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the **range** context
Context	**configure** filter ipv6-filter *string* subscriber-mgmt host-specific-entry credit-control range
Tree	range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of range for credit control filter entries
Context	**configure** filter ipv6-filter *string* subscriber-mgmt host-specific-entry credit-control range end *number*
Tree	end
Range	1 to 2097151
Notes	This element is mandatory.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of range for credit control filter entries
Context	**configure** filter ipv6-filter *string* subscriber-mgmt host-specific-entry credit-control range start *number*
Tree	start
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter-rule

Synopsis	Enter the **filter-rule** context
Context	**configure** filter ipv6-filter *string* subscriber-mgmt host-specific-entry filter-rule
Tree	filter-rule
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the **range** context
Context	**configure** filter ipv6-filter *string* subscriber-mgmt host-specific-entry filter-rule range
Tree	range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of range for inserting filter rule entries
Context	**configure** filter ipv6-filter *string* subscriber-mgmt host-specific-entry filter-rule range end *number*
Tree	end

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Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of range for inserting filter rule entries
Context	**configure** filter ipv6-filter *string* subscriber-mgmt host-specific-entry filter-rule range start *number*
Tree	start
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

watermark

Synopsis	Enter the **watermark** context
Context	**configure** filter ipv6-filter *string* subscriber-mgmt host-specific-entry watermark
Tree	watermark
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis	High watermark for host-specific entries, to raise a table full alarm
Context	**configure** filter ipv6-filter *string* subscriber-mgmt host-specific-entry watermark high *number*
Tree	high
Range	0 to 100
Default	95
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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low *number*

Synopsis	Low watermark for host-specific entries, to clear a table full alarm
Context	**configure** filter ipv6-filter *string* subscriber-mgmt host-specific-entry watermark low *number*
Tree	low
Range	0 to 100
Default	90
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shared-entry

Synopsis	Enter the **shared-entry** context
Context	**configure** filter ipv6-filter *string* subscriber-mgmt shared-entry
Tree	shared-entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter-rule

Synopsis	Enter the **filter-rule** context
Context	**configure** filter ipv6-filter *string* subscriber-mgmt shared-entry filter-rule
Tree	filter-rule
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the **range** context
Context	**configure** filter ipv6-filter *string* subscriber-mgmt shared-entry filter-rule range
Tree	range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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end *number*

Synopsis	Upper bound of range for inserting shared host rules
Context	**configure** filter ipv6-filter *string* subscriber-mgmt shared-entry filter-rule range end *number*
Tree	end
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of range for inserting shared host rules
Context	**configure** filter ipv6-filter *string* subscriber-mgmt shared-entry filter-rule range start *number*
Tree	start
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pcc-rule

Synopsis	Enter the **pcc-rule** context
Context	**configure** filter ipv6-filter *string* subscriber-mgmt shared-entry pcc-rule
Tree	pcc-rule
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the **range** context
Context	**configure** filter ipv6-filter *string* subscriber-mgmt shared-entry pcc-rule range
Tree	range
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the range for PCC rule filter entries
Context	**configure** filter ipv6-filter *string* subscriber-mgmt shared-entry pcc-rule range end *number*
Tree	end
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of the range for PCC rule filter entries
Context	**configure** filter ipv6-filter *string* subscriber-mgmt shared-entry pcc-rule range start *number*
Tree	start
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

watermark

Synopsis	Enable the **watermark** context
Context	**configure** filter ipv6-filter *string* subscriber-mgmt shared-entry watermark
Tree	watermark
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis	Limit of RADIUS shared filters before generating high watermark notification
Context	**configure** filter ipv6-filter *string* subscriber-mgmt shared-entry watermark high *number*

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Tree	high
Range	1 to 8000
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low *number*

Synopsis	Limit of RADIUS or Diameter shared filters before clearing high watermark notification
Context	**configure** filter ipv6-filter *string* subscriber-mgmt shared-entry watermark low *number*
Tree	low
Range	0 to 7999
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Set of match criteria for the filter policy
Context	**configure** filter ipv6-filter *string* type *keyword*
Tree	type
Description	This command configures the filter policy type that defines the list of match criteria supported in a filter policy.
Options	normal, src-mac, packet-length, destination-class
Default	normal
Introduced	19.5.R1
Platforms	All

log [log-id] *number*

Synopsis	Enter the **log** list instance
Context	**configure** filter log *number*
Tree	log
Introduced	16.0.R1
Platforms	All

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[**log-id**] *number*

Synopsis	Filter log identifier
Context	**configure** filter log *number*
Tree	log
Range	101 to 199
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of filter logging
Context	**configure** filter log *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** filter log *number* description *string*
Tree	description
String Length	0 to 80
Introduced	16.0.R1
Platforms	All

destination

Synopsis	Enter the **destination** context
Context	**configure** filter log *number* destination
Tree	destination
Introduced	16.0.R1

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Platforms	All

memory

Synopsis	Enter the **memory** context
Context	**configure** filter log *number* destination memory
Tree	memory
Notes	The following elements are part of a choice: **memory** or **syslog**.
Introduced	16.0.R1
Platforms	All

max-entries *number*

Synopsis	Maximum number of memory entries that the log can store
Context	**configure** filter log *number* destination memory max-entries *number*
Tree	max-entries
Range	1 to 50000
Default	1000
Introduced	16.0.R1
Platforms	All

stop-on-full *boolean*

Synopsis	Stop logging when maximum number of memory entries is reached or wrap-around is used
Context	**configure** filter log *number* destination memory stop-on-full *boolean*
Tree	stop-on-full
Default	false
Introduced	16.0.R1
Platforms	All

syslog

Synopsis	Enter the **syslog** context
Context	**configure** filter log *number* destination syslog

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Tree	syslog
Notes	The following elements are part of a choice: **memory** or **syslog**.
Introduced	16.0.R1
Platforms	All

name *reference*

Synopsis	Syslog server definition ID
Context	**configure** filter log *number* destination syslog name *reference*
Tree	name
Reference	**configure** log syslog *string*
Introduced	21.2.R1
Platforms	All

summary

Synopsis	Enter the **summary** context
Context	**configure** filter log *number* destination syslog summary
Tree	summary
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of filter log summarization
Context	**configure** filter log *number* destination syslog summary admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

summary-crit *keyword*

Synopsis	Summary for filter log entries

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Context	**configure** filter log *number* destination syslog summary summary-crit *keyword*
Tree	summary-crit
Options	src-addr, dst-addr
Default	src-addr
Introduced	16.0.R1
Platforms	All

mac-filter [filter-name] *string*

Synopsis	Enter the **mac-filter** list instance
Context	**configure** filter mac-filter *string*
Tree	mac-filter
Introduced	16.0.R1
Platforms	All

[**filter-name**] *string*

Synopsis	Filter name
Context	**configure** filter mac-filter *string*
Tree	mac-filter
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

default-action *keyword*

Synopsis	Action for packets that do not match any entry
Context	**configure** filter mac-filter *string* default-action *keyword*
Tree	default-action
Options	drop, accept
Default	drop
Introduced	16.0.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** filter mac-filter *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

embed

Synopsis	Enter the **embed** context
Context	**configure** filter mac-filter *string* embed
Tree	embed
Description	Commands in this context embed a previously defined MAC embedded filter policy or Hybrid OpenFlow switch instance into an exclusive, template, or system filter policy at the specified offset value. Rules derived from the BGP FlowSpec can also be embedded into template filter policies only.
Introduced	16.0.R1
Platforms	All

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** filter mac-filter *string* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**entry-id**] *number*

Synopsis	ID for a match criteria and the corresponding action
Context	**configure** filter mac-filter *string* entry *number*
Tree	entry
Range	1 to 2097151
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	All

action

Synopsis	Enable the **action** context
Context	**configure** filter mac-filter *string* entry *number* action
Tree	action
Introduced	16.0.R1
Platforms	All

accept

Synopsis	Accept regular routing to forward a matching packet
Context	**configure** filter mac-filter *string* entry *number* action accept
Tree	accept
Notes	The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, or **ignore-match**.
Introduced	16.0.R1
Platforms	All

drop

Synopsis	Drop a packet matching this entry
Context	**configure** filter mac-filter *string* entry *number* action drop
Tree	drop
Notes	The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, or **ignore-match**.
Introduced	16.0.R1
Platforms	All

forward

Synopsis	Enter the **forward** context
Context	**configure** filter mac-filter *string* entry *number* action forward
Tree	forward

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Notes	The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, or **ignore-match**.
Introduced	16.0.R1
Platforms	All

esi-l2

Synopsis	Enable the **esi-l2** context
Context	**configure** filter mac-filter *string* entry *number* action forward esi-l2
Tree	esi-l2
Notes	The following elements are part of a choice: **esi-l2**, **sap**, or **sdp**.
Introduced	16.0.R1
Platforms	All

esi-value *string*

Synopsis	ESI of the first ESI-identified appliance
Context	**configure** filter mac-filter *string* entry *number* action forward esi-l2 esi-value *string*
Tree	esi-value
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls *reference*

Synopsis	VPLS service name
Context	**configure** filter mac-filter *string* entry *number* action forward esi-l2 vpls *reference*
Tree	vpls
Reference	**configure** service vpls *string*
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

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sap

Synopsis	Enable the **sap** context
Context	**configure** filter mac-filter *string* entry *number* action forward sap
Tree	sap
Notes	The following elements are part of a choice: **esi-l2**, **sap**, or **sdp**.
Introduced	16.0.R1
Platforms	All

sap-id *reference*

Synopsis	VPLS Ethernet SAP ID used to forward matching packets
Context	**configure** filter mac-filter *string* entry *number* action forward sap sap-id *reference*
Tree	sap-id
Reference	**configure** service vpls *string* sap *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls *reference*

Synopsis	VPLS associated with the SAP
Context	**configure** filter mac-filter *string* entry *number* action forward sap vpls *reference*
Tree	vpls
Reference	**configure** service vpls *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sdp

Synopsis	Enable the **sdp** context
Context	**configure** filter mac-filter *string* entry *number* action forward sdp
Tree	sdp
Notes	The following elements are part of a choice: **esi-l2**, **sap**, or **sdp**.

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Introduced	16.0.R1
Platforms	All

sdp-bind-id *string*

Synopsis	VPLS SDP bind ID used to forward matching packets
Context	**configure** filter mac-filter *string* entry *number* action forward sdp sdp-bind-id *string*
Tree	sdp-bind-id
String Length	3 to 16
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls *reference*

Synopsis	VPLS associated with the SDP
Context	**configure** filter mac-filter *string* entry *number* action forward sdp vpls *reference*
Tree	vpls
Reference	**configure** service vpls *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

http-redirect

Synopsis	Enable the **http-redirect** context
Context	**configure** filter mac-filter *string* entry *number* action http-redirect
Tree	http-redirect
Notes	The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, or **ignore-match**.
Introduced	16.0.R1
Platforms	All

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url *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	URL that is used for redirecting
Context	**configure** filter mac-filter *string* entry *number* action http-redirect url *string*
Tree	url
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

ignore-match

Synopsis	Ignore match criteria for the entry
Context	**configure** filter mac-filter *string* entry *number* action ignore-match
Tree	ignore-match
Notes	The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, or **ignore-match**.
Introduced	16.0.R1
Platforms	All

rate-limit

Synopsis	Enable the **rate-limit** context
Context	**configure** filter mac-filter *string* entry *number* action rate-limit
Tree	rate-limit
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	Peak information rate
Context	**configure** filter mac-filter *string* entry *number* action rate-limit pir *(number | keyword)*
Tree	pir

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Range	0 to 2000000000
Units	kilobps
Options	max
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

secondary

Synopsis	Enable the **secondary** context
Context	**configure** filter mac-filter *string* entry *number* action secondary
Tree	secondary
Introduced	16.0.R1
Platforms	All

forward

Synopsis	Enter the **forward** context
Context	**configure** filter mac-filter *string* entry *number* action secondary forward
Tree	forward
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sap

Synopsis	Enable the **sap** context
Context	**configure** filter mac-filter *string* entry *number* action secondary forward sap
Tree	sap
Notes	The following elements are part of a choice: **sap** or **sdp**.
Introduced	16.0.R1
Platforms	All

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sap-id *reference*

WARNING:
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Synopsis	SAP ID used to forward packets matching the entry
Context	**configure** filter mac-filter *string* entry *number* action secondary forward sap sap-id *reference*
Tree	sap-id
Reference	**configure** service vpls *string* sap *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls *reference*

Synopsis	VPLS the sdp-bind-id belongs to
Context	**configure** filter mac-filter *string* entry *number* action secondary forward sap vpls *reference*
Tree	vpls
Reference	**configure** service vpls *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sdp

Synopsis	Enable the **sdp** context
Context	**configure** filter mac-filter *string* entry *number* action secondary forward sdp
Tree	sdp
Notes	The following elements are part of a choice: **sap** or **sdp**.
Introduced	16.0.R1
Platforms	All

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sdp-bind-id *string*

WARNING:
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Synopsis	VPLS SDP bind ID used to forward matching packets
Context	**configure** filter mac-filter *string* entry *number* action secondary forward sdp sdp-bind-id *string*
Tree	sdp-bind-id
String Length	3 to 16
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls *reference*

Synopsis	VPLS associated with the SDP
Context	**configure** filter mac-filter *string* entry *number* action secondary forward sdp vpls *reference*
Tree	vpls
Reference	**configure** service vpls *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** filter mac-filter *string* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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log *reference*

Synopsis	Log that is used for packets matching this entry
Context	**configure** filter mac-filter *string* entry *number* log *reference*
Tree	log
Reference	**configure** filter log *number*
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the **match** context
Context	**configure** filter mac-filter *string* entry *number* match
Tree	match
Introduced	16.0.R1
Platforms	All

dot1p

Synopsis	Enable the **dot1p** context
Context	**configure** filter mac-filter *string* entry *number* match dot1p
Tree	dot1p
Introduced	16.0.R1
Platforms	All

mask *number*

Synopsis	802.1p mask value used as a MAC filter match criterion
Context	**configure** filter mac-filter *string* entry *number* match dot1p mask *number*
Tree	mask
Range	1 to 7
Default	7
Introduced	16.0.R1
Platforms	All

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priority *number*

Synopsis	IEEE 802.1p value used as a MAC filter match criterion
Context	**configure** filter mac-filter *string* entry *number* match dot1p priority *number*
Tree	priority
Range	0 to 7
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

dst-mac

Synopsis	Enable the **dst-mac** context
Context	**configure** filter mac-filter *string* entry *number* match dst-mac
Tree	dst-mac
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	MAC address used as the match criterion
Context	**configure** filter mac-filter *string* entry *number* match dst-mac address *string*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	MAC address mask as the match criterion
Context	**configure** filter mac-filter *string* entry *number* match dst-mac mask *string*
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	16.0.R1
Platforms	All

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etype *string*

Synopsis	Ethernet type
Context	**configure** filter mac-filter *string* entry *number* match etype *string*
Tree	etype
String Length	5 to 6
Introduced	16.0.R1
Platforms	All

frame-type *keyword*

Synopsis	MAC frame as match criteria
Context	**configure** filter mac-filter *string* entry *number* match frame-type *keyword*
Tree	frame-type
Options	802dot3, 802dot2-llc, 802dot2-snap, ethernet-ii
Introduced	16.0.R1
Platforms	All

inner-tag

Synopsis	Enable the **inner-tag** context
Context	**configure** filter mac-filter *string* entry *number* match inner-tag
Tree	inner-tag
Introduced	16.0.R1
Platforms	All

mask *number*

Synopsis	Mask to VID of the inner VLAN tag before comparing it with the inner-tag or outer-tag value
Context	**configure** filter mac-filter *string* entry *number* match inner-tag mask *number*
Tree	mask
Range	1 to 4095
Default	4095
Introduced	16.0.R1

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Platforms	All

tag *number*

Synopsis	Matching value against VID of the second or first VLAN tag in the packet carried transparently
Context	**configure** filter mac-filter *string* entry *number* match inner-tag tag *number*
Tree	tag
Range	0 to 4095
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

isid

Synopsis	Enter the **isid** context
Context	**configure** filter mac-filter *string* entry *number* match isid
Tree	isid
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the **range** context
Context	**configure** filter mac-filter *string* entry *number* match isid range
Tree	range
Notes	The following elements are part of a choice: **range** or **value**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the ISID range
Context	**configure** filter mac-filter *string* entry *number* match isid range end *number*
Tree	end

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Range	0 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the ISID range
Context	**configure** filter mac-filter *string* entry *number* match isid range start *number*
Tree	start
Range	0 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Lowest value of 24-bit service instance identifier for the service matching this entry
Context	**configure** filter mac-filter *string* entry *number* match isid value *number*
Tree	value
Range	0 to 16777215
Notes	The following elements are part of a choice: **range** or **value**.
Introduced	16.0.R1
Platforms	All

llc-dsap

Synopsis	Enable the **llc-dsap** context
Context	**configure** filter mac-filter *string* entry *number* match llc-dsap
Tree	llc-dsap
Introduced	16.0.R1
Platforms	All

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dsap *number*

Synopsis	DSAP value
Context	**configure** filter mac-filter *string* entry *number* match llc-dsap dsap *number*
Tree	dsap
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mask *number*

Synopsis	Destination SAP mask
Context	**configure** filter mac-filter *string* entry *number* match llc-dsap mask *number*
Tree	mask
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

llc-ssap

Synopsis	Enable the **llc-ssap** context
Context	**configure** filter mac-filter *string* entry *number* match llc-ssap
Tree	llc-ssap
Introduced	16.0.R1
Platforms	All

mask *number*

Synopsis	Source SAP mask
Context	**configure** filter mac-filter *string* entry *number* match llc-ssap mask *number*
Tree	mask
Range	1 to 255
Default	255
Introduced	16.0.R1

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Platforms	All

ssap *number*

Synopsis	Source or destination SAP value
Context	**configure** filter mac-filter *string* entry *number* match llc-ssap ssap *number*
Tree	ssap
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

outer-tag

Synopsis	Enable the **outer-tag** context
Context	**configure** filter mac-filter *string* entry *number* match outer-tag
Tree	outer-tag
Introduced	16.0.R1
Platforms	All

mask *number*

Synopsis	Mask to VID of the inner VLAN tag before comparing it with the inner-tag or outer-tag value
Context	**configure** filter mac-filter *string* entry *number* match outer-tag mask *number*
Tree	mask
Range	1 to 4095
Default	4095
Introduced	16.0.R1
Platforms	All

tag *number*

Synopsis	Matching value against VID of the second or first VLAN tag in the packet carried transparently
Context	**configure** filter mac-filter *string* entry *number* match outer-tag tag *number*

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Tree	tag
Range	0 to 4095
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

snap-oui *keyword*

Synopsis	Parameter snap-oui as a MAC filter match criteria
Context	**configure** filter mac-filter *string* entry *number* match snap-oui *keyword*
Tree	snap-oui
Options	zero, non-zero
Introduced	16.0.R1
Platforms	All

snap-pid *number*

Synopsis	Parameter snap-pid as a MAC filter match criteria
Context	**configure** filter mac-filter *string* entry *number* match snap-pid *number*
Tree	snap-pid
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

src-mac

Synopsis	Enable the **src-mac** context
Context	**configure** filter mac-filter *string* entry *number* match src-mac
Tree	src-mac
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	MAC address used as the match criterion

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Context	**configure** filter mac-filter *string* entry *number* match src-mac address *string*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	MAC address mask as the match criterion
Context	**configure** filter mac-filter *string* entry *number* match src-mac mask *string*
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	16.0.R1
Platforms	All

pbr-down-action-override *keyword*

Synopsis	Action when PBR or PBF target for this entry is not available
Context	**configure** filter mac-filter *string* entry *number* pbr-down-action-override *keyword*
Tree	pbr-down-action-override
Options	drop, forward, filter-default-action
Introduced	16.0.R1
Platforms	All

sticky-dest *(number | keyword)*

Synopsis	Time before action with available PBR or PBF destination and highest priority
Context	**configure** filter mac-filter *string* entry *number* sticky-dest *(number | keyword)*
Tree	sticky-dest
Range	0 to 65535
Units	seconds
Options	no-hold-time-up
Introduced	16.0.R1
Platforms	All

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filter-id *number*

WARNING:
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Synopsis	MAC filter ID
Context	**configure** filter mac-filter *string* filter-id *number*
Tree	filter-id
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

scope *keyword*

Synopsis	Filter policy scope
Context	**configure** filter mac-filter *string* scope *keyword*
Tree	scope
Options	exclusive, template, embedded, system, cpm
Default	template
Introduced	16.0.R1
Platforms	All

type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MAC filter policy
Context	**configure** filter mac-filter *string* type *keyword*
Tree	type
Options	normal, isid, vid
Default	normal
Introduced	16.0.R1
Platforms	All

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match-list

Synopsis	Enter the **match-list** context
Context	**configure** filter match-list
Tree	match-list
Introduced	16.0.R1
Platforms	All

ip-prefix-list [prefix-list-name] *string*

Synopsis	Enter the **ip-prefix-list** list instance
Context	**configure** filter match-list ip-prefix-list *string*
Tree	ip-prefix-list
Introduced	16.0.R1
Platforms	All

[**prefix-list-name**] *string*

Synopsis	IP prefix list name
Context	**configure** filter match-list ip-prefix-list *string*
Tree	ip-prefix-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

apply-path

Synopsis	Enter the **apply-path** context
Context	**configure** filter match-list ip-prefix-list *string* apply-path
Tree	apply-path
Introduced	16.0.R1
Platforms	All

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bgp-peers [criterion-index] *number*

Synopsis	Enter the **bgp-peers** list instance
Context	**configure** filter match-list ip-prefix-list *string* apply-path bgp-peers *number*
Tree	bgp-peers
Introduced	16.0.R1
Platforms	All

[**criterion-index**] *number*

Synopsis	BGP peers auto-generation configuration index
Context	**configure** filter match-list ip-prefix-list *string* apply-path bgp-peers *number*
Tree	bgp-peers
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

group *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Regular expression to match against the base router BGP instance group configuration
Context	**configure** filter match-list ip-prefix-list *string* apply-path bgp-peers *number* group *string*
Tree	group
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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neighbor *string*

WARNING:
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Synopsis	Regular expression to match against the base router BGP instance neighbor configuration
Context	**configure** filter match-list ip-prefix-list *string* apply-path bgp-peers *number* neighbor *string*
Tree	neighbor
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

router-instance *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Target routing instance
Context	**configure** filter match-list ip-prefix-list *string* apply-path bgp-peers *number* router-instance *string*
Tree	router-instance
Default	Base
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** filter match-list ip-prefix-list *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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prefix [ip-prefix] *string*

Synopsis	Add a list entry for **prefix**
Context	**configure** filter match-list ip-prefix-list *string* prefix *string*
Tree	prefix
Description	Commands in this context add IPv4 prefixes to the prefix match list. Prefixes can overlap IPv4 address space. An IPv4 prefix addition is blocked if resource exhaustion is detected anywhere in the system due to filter policies that use the prefix list.
Max. Instances	8192
Introduced	16.0.R1
Platforms	All

[**ip-prefix**] *string*

Synopsis	IPv4 prefix to be added to the prefix list
Context	**configure** filter match-list ip-prefix-list *string* prefix *string*
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

prefix-exclude [ip-prefix] *string*

Synopsis	Add a list entry for **prefix-exclude**
Context	**configure** filter match-list ip-prefix-list *string* prefix-exclude *string*
Tree	prefix-exclude
Description	Commands in this context exclude IPv4 prefixes from the prefix match list. This command is mutually exclusive with the **apply-path** command.
Max. Instances	512
Introduced	16.0.R4
Platforms	All

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[**ip-prefix**] *string*

Synopsis	IPv4 prefix to be added to the prefix list
Context	**configure** filter match-list ip-prefix-list *string* prefix-exclude *string*
Tree	prefix-exclude
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

ipv6-prefix-list [prefix-list-name] *string*

Synopsis	Enter the **ipv6-prefix-list** list instance
Context	**configure** filter match-list ipv6-prefix-list *string*
Tree	ipv6-prefix-list
Introduced	16.0.R1
Platforms	All

[**prefix-list-name**] *string*

Synopsis	IP prefix list name
Context	**configure** filter match-list ipv6-prefix-list *string*
Tree	ipv6-prefix-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

apply-path

Synopsis	Enter the **apply-path** context
Context	**configure** filter match-list ipv6-prefix-list *string* apply-path
Tree	apply-path
Introduced	16.0.R1
Platforms	All

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bgp-peers [criterion-index] *number*

Synopsis	Enter the **bgp-peers** list instance
Context	**configure** filter match-list ipv6-prefix-list *string* apply-path bgp-peers *number*
Tree	bgp-peers
Introduced	16.0.R1
Platforms	All

[**criterion-index**] *number*

Synopsis	BGP peers auto-generation configuration index
Context	**configure** filter match-list ipv6-prefix-list *string* apply-path bgp-peers *number*
Tree	bgp-peers
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

group *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Regular expression to match against the base router BGP instance group configuration
Context	**configure** filter match-list ipv6-prefix-list *string* apply-path bgp-peers *number* group *string*
Tree	group
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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neighbor *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Regular expression to match against the base router BGP instance neighbor configuration
Context	**configure** filter match-list ipv6-prefix-list *string* apply-path bgp-peers *number* neighbor *string*
Tree	neighbor
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

router-instance *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Target routing instance
Context	**configure** filter match-list ipv6-prefix-list *string* apply-path bgp-peers *number* router-instance *string*
Tree	router-instance
Default	Base
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** filter match-list ipv6-prefix-list *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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prefix [ipv6-prefix] *string*

Synopsis	Add a list entry for **prefix**
Context	**configure** filter match-list ipv6-prefix-list *string* prefix *string*
Tree	prefix
Max. Instances	8192
Introduced	16.0.R1
Platforms	All

[**ipv6-prefix**] *string*

Synopsis	IPv6 prefix to be added to the prefix list
Context	**configure** filter match-list ipv6-prefix-list *string* prefix *string*
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

prefix-exclude [ipv6-prefix] *string*

Synopsis	Add a list entry for **prefix-exclude**
Context	**configure** filter match-list ipv6-prefix-list *string* prefix-exclude *string*
Tree	prefix-exclude
Description	Commands in this context exclude IPv6 prefixes from the prefix match list. This command is mutually exclusive with the **apply-path** command.
Max. Instances	512
Introduced	16.0.R4
Platforms	All

[**ipv6-prefix**] *string*

Synopsis	IPv6 prefix to be added to the prefix list
Context	**configure** filter match-list ipv6-prefix-list *string* prefix-exclude *string*

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Tree	prefix-exclude
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

port-list [port-list-name] *string*

Synopsis	Enter the **port-list** list instance
Context	**configure** filter match-list port-list *string*
Tree	port-list
Max. Instances	5120
Introduced	16.0.R1
Platforms	All

[**port-list-name**] *string*

Synopsis	Port list name
Context	**configure** filter match-list port-list *string*
Tree	port-list
Description	This command specifies the port list name. If special characters are used (#, $, spaces, and so on), the string must be enclosed within double quotes.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** filter match-list port-list *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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port [value] *number*

Synopsis	Add a list entry for **port**
Context	**configure** filter match-list port-list *string* port *number*
Tree	port
Introduced	16.0.R1
Platforms	All

[**value**] *number*

Synopsis	Port value
Context	**configure** filter match-list port-list *string* port *number*
Tree	port
Range	0 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

range start *number* end *number*

Synopsis	Add a list entry for **range**
Context	**configure** filter match-list port-list *string* range start *number* end *number*
Tree	range
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the port list range
Context	**configure** filter match-list port-list *string* range start *number* end *number*
Tree	range
Range	0 to 65534
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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end *number*

Synopsis	Upper bound of the port list range
Context	**configure** filter match-list port-list *string* range start *number* end *number*
Tree	range
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

protocol-list [protocol-list-name] *string*

Synopsis	Enter the **protocol-list** list instance
Context	**configure** filter match-list protocol-list *string*
Tree	protocol-list
Max. Instances	512
Introduced	20.7.R1
Platforms	All

[**protocol-list-name**] *string*

Synopsis	Protocol list name
Context	**configure** filter match-list protocol-list *string*
Tree	protocol-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** filter match-list protocol-list *string* description *string*
Tree	description

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String Length	1 to 80
Introduced	20.7.R1
Platforms	All

protocol [protocol-id] *(number | keyword)*

Synopsis	Add a list entry for **protocol**
Context	**configure** filter match-list protocol-list *string* protocol *(number | keyword)*
Tree	protocol
Max. Instances	32
Introduced	20.7.R1
Platforms	All

[**protocol-id**] *(number | keyword)*

Synopsis	IP protocol identifier
Context	**configure** filter match-list protocol-list *string* protocol *(number | keyword)*
Tree	protocol
Range	0 to 255
Options	icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

md-auto-id

Synopsis	Enter the **md-auto-id** context
Context	**configure** filter md-auto-id
Tree	md-auto-id
Introduced	16.0.R1
Platforms	All

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filter-id-range

Synopsis	Enable the **filter-id-range** context
Context	**configure** filter md-auto-id filter-id-range
Tree	filter-id-range
Introduced	16.0.R1
Platforms	All

end *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the ID range
Context	**configure** filter md-auto-id filter-id-range end *number*
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the ID range
Context	**configure** filter md-auto-id filter-id-range start *number*
Tree	start
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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redirect-policy [redirect-policy-name] *string*

Synopsis	Enter the **redirect-policy** list instance
Context	**configure** filter redirect-policy *string*
Tree	redirect-policy
Introduced	16.0.R1
Platforms	All

[**redirect-policy-name**] *string*

Synopsis	Redirect policy name
Context	**configure** filter redirect-policy *string*
Tree	redirect-policy
Description	This command specifies the redirect policy name. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the redirect policy
Context	**configure** filter redirect-policy *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** filter redirect-policy *string* description *string*
Tree	description

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String Length	1 to 80
Introduced	16.0.R1
Platforms	All

destination [destination-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **destination** list instance
Context	**configure** filter redirect-policy *string* destination *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	destination
Introduced	16.0.R1
Platforms	All

[**destination-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address and type of destination
Context	**configure** filter redirect-policy *string* destination *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	destination
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the destination
Context	**configure** filter redirect-policy *string* destination *(ipv4-address-no-zone | ipv6-address-no-zone)* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** filter redirect-policy *string* destination *(ipv4-address-no-zone | ipv6-address-no-zone)* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

ping-test

Synopsis	Enable the **ping-test** context
Context	**configure** filter redirect-policy *string* destination *(ipv4-address-no-zone | ipv6-address-no-zone)* ping-test
Tree	ping-test
Introduced	16.0.R1
Platforms	All

drop-count *number*

Synopsis	Number of consecutive requests that fail before destination is declared unreachable
Context	**configure** filter redirect-policy *string* destination *(ipv4-address-no-zone | ipv6-address-no-zone)* ping-test drop-count *number*
Tree	drop-count
Range	1 to 60
Default	3
Introduced	16.0.R1
Platforms	All

hold-down *number*

Synopsis	Time for the system to be held down if this test has marked it unreachable
Context	**configure** filter redirect-policy *string* destination *(ipv4-address-no-zone | ipv6-address-no-zone)* ping-test hold-down *number*
Tree	hold-down
Range	0 to 86400

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Units	seconds
Default	0
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Time between consecutive requests which are sent to the far end host
Context	**configure** filter redirect-policy *string* destination *(ipv4-address-no-zone | ipv6-address-no-zone)* ping-test interval *number*
Tree	interval
Range	1 to 60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

source-address *(ipv4-address-no-zone \| ipv6-address-no-zone)*

Synopsis	Source address to use in the IP packet of the ping test
Context	**configure** filter redirect-policy *string* destination *(ipv4-address-no-zone | ipv6-address-no-zone)* ping-test source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-address
Introduced	16.0.R4
Platforms	All

timeout *number*

Synopsis	Time required to receive a response from the far end host
Context	**configure** filter redirect-policy *string* destination *(ipv4-address-no-zone | ipv6-address-no-zone)* ping-test timeout *number*
Tree	timeout
Range	1 to 60
Units	seconds
Default	1
Introduced	16.0.R1

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Platforms	All

priority *number*

Synopsis	Priority for this destination
Context	**configure** filter redirect-policy *string* destination *(ipv4-address-no-zone | ipv6-address-no-zone)* priority *number*
Tree	priority
Range	1 to 255
Default	100
Introduced	16.0.R1
Platforms	All

unicast-rt-test

Synopsis	Enable the **unicast-rt-test** context
Context	**configure** filter redirect-policy *string* destination *(ipv4-address-no-zone | ipv6-address-no-zone)* unicast-rt-test
Tree	unicast-rt-test
Introduced	16.0.R1
Platforms	All

notify-dest-change *boolean*

Synopsis	Send notifications when the active destination changes
Context	**configure** filter redirect-policy *string* notify-dest-change *boolean*
Tree	notify-dest-change
Description	When configured to **true**, notifications (such as Log and SNMP) are sent when the active destination of a redirect policy changes. No notification is sent when there are no more active destinations (as this scenario is covered by another notification). When configured to **false**, the notification generation is disabled.
Default	false
Introduced	16.0.R4
Platforms	All

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router-instance *string*

Synopsis	Routing context to use for route lookup
Context	**configure** filter redirect-policy *string* router-instance *string*
Tree	router-instance
Introduced	16.0.R1
Platforms	All

sticky-dest *(number | keyword)*

Synopsis	Time required by system before applying the current best destination as active destination
Context	**configure** filter redirect-policy *string* sticky-dest *(number | keyword)*
Tree	sticky-dest
Range	0 to 65535
Units	seconds
Options	no-hold-time-up
Introduced	16.0.R1
Platforms	All

redirect-policy-binding [binding-name] *string*

Synopsis	Enter the **redirect-policy-binding** list instance
Context	**configure** filter redirect-policy-binding *string*
Tree	redirect-policy-binding
Max. Instances	16
Introduced	16.0.R4
Platforms	All

[**binding-name**] *string*

Synopsis	Binding name
Context	**configure** filter redirect-policy-binding *string*
Tree	redirect-policy-binding
String Length	1 to 32

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Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

binding-operator *keyword*

Synopsis	Logical operator used to obtain the master test result
Context	**configure** filter redirect-policy-binding *string* binding-operator *keyword*
Tree	binding-operator
Description	This command configures the logical operator to use with the destinations' test results to obtain the master test result (the redirect policy binding test result).
Options	and, or
Default	and
Introduced	16.0.R4
Platforms	All

redirect-policy [redirect-policy-name] *reference*

Synopsis	Enter the **redirect-policy** list instance
Context	**configure** filter redirect-policy-binding *string* redirect-policy *reference*
Tree	redirect-policy
Introduced	16.0.R4
Platforms	All

[**redirect-policy-name**] *reference*

Synopsis	Redirect policy name
Context	**configure** filter redirect-policy-binding *string* redirect-policy *reference*
Tree	redirect-policy
Reference	**configure** filter redirect-policy *string*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

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destination [destination-address] *reference*

Synopsis	Add a list entry for **destination**
Context	**configure** filter redirect-policy-binding *string* redirect-policy *reference* destination *reference*
Tree	destination
Min. Instances	1
Introduced	16.0.R4
Platforms	All

[**destination-address**] *reference*

Synopsis	IP address of redirect policy destination to binding
Context	**configure** filter redirect-policy-binding *string* redirect-policy *reference* destination *reference*
Tree	destination
Reference	**configure** filter redirect-policy *string* destination *(ipv4-address-no-zone* | *ipv6-address-no-zone)*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

system-filter

Synopsis	Enter the **system-filter** context
Context	**configure** filter system-filter
Tree	system-filter
Introduced	16.0.R1
Platforms	All

ip [ip-filter] *reference*

Synopsis	Add a list entry for **ip**
Context	**configure** filter system-filter ip *reference*
Tree	ip

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Max. Instances	1
Introduced	16.0.R1
Platforms	All

[**ip-filter**] *reference*

Synopsis	Active IPv4 system filter policy
Context	**configure** filter system-filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

ipv6 [ipv6-filter] *reference*

Synopsis	Add a list entry for **ipv6**
Context	**configure** filter system-filter ipv6 *reference*
Tree	ipv6
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[**ipv6-filter**] *reference*

Synopsis	Active IPv6 system filter policy
Context	**configure** filter system-filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

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3.18 fwd-path-ext commands

```
configure
   –  fwd-path-ext
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  fpe number
         –  application
            –  pw-port-extension
               –  interface-a
                  –  qos
                     –  network-policy reference
               –  interface-b
                  –  qos
                     –  network-policy reference
            –  srv6
               –  interface-a
                  –  qos
                     –  network-policy reference
               –  interface-b
                  –  mtu number
                  –  qos
                     –  network-policy reference
               –  type keyword
            –  sub-mgmt-extension boolean
            –  vxlan
               –  router-instance string
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  description string
         –  multi-path
            –  path number
               –  apply-groups reference
               –  apply-groups-exclude reference
               –  pxc reference
               –  xc-lag-a reference
               –  xc-lag-b reference
         –  path
            –  pxc reference
            –  xc-lag-a reference
            –  xc-lag-b reference
      –  sdp-id-range
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  end number
         –  start number
```


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3.18.1 fwd-path-ext command descriptions

fwd-path-ext

Synopsis	Enter the **fwd-path-ext** context
Context	**configure** fwd-path-ext
Tree	fwd-path-ext
Description	Commands in this context configure a Forwarding Path Extension (FPE). Some applications that rely on PXC functionality utilize FPE to simplify the configuration of these applications.
Introduced	16.0.R1
Platforms	All

fpe [fpe-id] *number*

Synopsis	Enter the **fpe** list instance
Context	**configure** fwd-path-ext fpe *number*
Tree	fpe
Description	Commands in this context configure the Forwarding Path Extension (FPE), which associates an application with a PXC (a paired set of PXC sub-ports or a paired set of PXC-based LAGs).
Introduced	16.0.R1
Platforms	All

[**fpe-id**] *number*

Synopsis	FPE ID
Context	**configure** fwd-path-ext fpe *number*
Tree	fpe
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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application

Synopsis	Enter the **application** context
Context	**configure** fwd-path-ext fpe *number* application
Tree	application
Description	Commands in this context configure the attributes of the FPE application.
Introduced	16.0.R1
Platforms	All

pw-port-extension

Synopsis	Enable the **pw-port-extension** context
Context	**configure** fwd-path-ext fpe *number* application pw-port-extension
Tree	pw-port-extension
Description	Commands in this context configure the type of the cross-connect required to terminate an external tunnel to an anchored PW port. The system automatically builds the internal infrastructure required to perform the tunnel termination on a PW port. PW ports support the following types of tunnels: • GRE/MPLS PW with SDP of type MPLS or GRE • L2oGRE bridged Ethernet over GRE, where GRE protocol number is 0x6558
Introduced	22.2.R1
Platforms	All

interface-a

Synopsis	Enter the **interface-a** context
Context	**configure** fwd-path-ext fpe *number* application pw-port-extension interface-a
Tree	interface-a
Description	Commands in this context configure the command options for network interface-a of the PW port extension FPE.
Introduced	22.10.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** fwd-path-ext fpe *number* application pw-port-extension interface-a qos

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Tree	qos
Introduced	22.10.R1
Platforms	All

network-policy *reference*

Synopsis	Network QoS policy applied to the FPE interface
Context	**configure** fwd-path-ext fpe *number* application pw-port-extension interface-a qos network-policy *reference*
Tree	network-policy
Reference	**configure** qos network *string*
Introduced	22.10.R1
Platforms	All

interface-b

Synopsis	Enter the **interface-b** context
Context	**configure** fwd-path-ext fpe *number* application pw-port-extension interface-b
Tree	interface-b
Description	Commands in this context configure command options for network interface-b of the PW port extension FPE.
Introduced	22.10.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** fwd-path-ext fpe *number* application pw-port-extension interface-b qos
Tree	qos
Introduced	22.10.R1
Platforms	All

network-policy *reference*

Synopsis	Network QoS policy applied to the FPE interface

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Context	**configure** fwd-path-ext fpe *number* application pw-port-extension interface-b qos network-policy *reference*
Tree	network-policy
Reference	**configure** qos network *string*
Introduced	22.10.R1
Platforms	All

srv6

Synopsis	Enable the **srv6** context
Context	**configure** fwd-path-ext fpe *number* application srv6
Tree	srv6
Description	Commands in this context configure the SRv6 FPE application used for origination or termination of SRv6 tunnels.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

interface-a

Synopsis	Enter the **interface-a** context
Context	**configure** fwd-path-ext fpe *number* application srv6 interface-a
Tree	interface-a
Description	Commands in this context configure the parameters of network interface-a of the SRv6 FPE.
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

qos

Synopsis	Enter the **qos** context
Context	**configure** fwd-path-ext fpe *number* application srv6 interface-a qos
Tree	qos
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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network-policy *reference*

Synopsis	Network QoS policy applied to the FPE interface
Context	**configure** fwd-path-ext fpe *number* application srv6 interface-a qos network-policy *reference*
Tree	network-policy
Reference	**configure** qos network *string*
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

interface-b

Synopsis	Enter the **interface-b** context
Context	**configure** fwd-path-ext fpe *number* application srv6 interface-b
Tree	interface-b
Description	Commands in this context configure the parameters of network interface-b of the SRv6 FPE.
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

mtu *number*

Synopsis	MTU size of SRv6 origination FPE interface-b
Context	**configure** fwd-path-ext fpe *number* application srv6 interface-b mtu *number*
Tree	mtu
Description	This command configures the Maximum Transfer Unit (MTU) of interface-b of the SRv6 origination FPE. The MTU is used to check if an IPv4 service packet should be fragmented and if an IPv6 service packet should be dropped when tunneled over SRv6. The minimum value is the IPv6 minimum MTU value. The maximum value is set to the maximum Ethernet port MTU (9800) minus 14 bytes for Null Ethernet encapsulation.
Range	0 | 1280 to 9786
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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qos

Synopsis	Enter the **qos** context
Context	**configure** fwd-path-ext fpe *number* application srv6 interface-b qos
Tree	qos
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

network-policy *reference*

Synopsis	Network QoS policy applied to the FPE interface
Context	**configure** fwd-path-ext fpe *number* application srv6 interface-b qos network-policy *reference*
Tree	network-policy
Reference	**configure** qos network *string*
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

type *keyword*

Synopsis	SRv6 FPE application type
Context	**configure** fwd-path-ext fpe *number* application srv6 type *keyword*
Tree	type
Description	This command specifies if the SRv6 FPE application is used for origination or termination of SRv6 tunnels. A dedicated SRv6 FPE is required for origination and termination of SRv6 tunnels on services and they cannot share the same FPE. A single FPE can be configured for SRv6 origination. One or more FPEs can be configured for SRv6 termination, where a termination SRv6 FPE is assigned one or more configured locators. Transit SRv6 routers do not require SRv6 FPEs.
Options	origination, termination
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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sub-mgmt-extension *boolean*

Synopsis	Enable FPE for subscrber management extensions
Context	**configure** fwd-path-ext fpe *number* application sub-mgmt-extension *boolean*
Tree	sub-mgmt-extension
Description	When configured to **true**, the FPE is used for subscriber management extensions. The FPE can be used for multiple subscriber management applications, but it cannot be used for other applications. When configured to **false**, the FPE is not used for subscriber management extensions.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vxlan

Synopsis	Enable the **vxlan** context
Context	**configure** fwd-path-ext fpe *number* application vxlan
Tree	vxlan
Introduced	22.2.R1
Platforms	All

router-instance *string*

Synopsis	Router instance for VXLAN termination
Context	**configure** fwd-path-ext fpe *number* application vxlan router-instance *string*
Tree	router-instance
Default	Base
Introduced	22.2.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** fwd-path-ext fpe *number* description *string*
Tree	description
String Length	1 to 80

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Introduced	16.0.R1
Platforms	All

multi-path

Synopsis	Enable the **multi-path** context
Context	**configure** fwd-path-ext fpe *number* multi-path
Tree	multi-path
Description	Commands in this context configure a multipath FPE that can contain multiple PXC ports or LAGs of PXC ports.
Notes	The following elements are part of a choice: **multi-path** or **path**.
Introduced	21.10.R1
Platforms	All

path [path-id] *number*

Synopsis	Enter the **path** list instance
Context	**configure** fwd-path-ext fpe *number* multi-path path *number*
Tree	path
Description	Commands in this context configure a multipath FPE forwarding path. A single path in a multipath FPE can contain a single PXC port or a LAG of PXC ports.
Introduced	21.10.R1
Platforms	All

[**path-id**] *number*

Synopsis	Multipath FPE forwarding path ID
Context	**configure** fwd-path-ext fpe *number* multi-path path *number*
Tree	path
Range	1 to 64
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

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pxc *reference*

Synopsis	Dedicated PXC ID used by the FPE path
Context	**configure** fwd-path-ext fpe *number* multi-path path *number* pxc *reference*
Tree	pxc
Reference	**configure** port-xc pxc *number*
Notes	The following elements are part of a choice: **pxc** or (**xc-lag-a** and **xc-lag-b**).
Introduced	21.10.R1
Platforms	All

xc-lag-a *reference*

Synopsis	PXC LAG identifier dedicated to the FPE path
Context	**configure** fwd-path-ext fpe *number* multi-path path *number* xc-lag-a *reference*
Tree	xc-lag-a
Description	This command specifies the LAG identifier associated with one side of the PXC. The operator can associate **xc-lag-a** with the LAG containing either subports.a or subports.b. The system does not enforce a match between **xc-lag-a** and the LAG ID containing subports.a.
Reference	**configure** lag *string*
Notes	The following elements are part of a choice: **pxc** or (**xc-lag-a** and **xc-lag-b**).
Introduced	21.10.R1
Platforms	All

xc-lag-b *reference*

Synopsis	PXC LAG identifier dedicated to the FPE path
Context	**configure** fwd-path-ext fpe *number* multi-path path *number* xc-lag-b *reference*
Tree	xc-lag-b
Description	This command specifies the LAG identifier associated with one side of the PXC. The operator can associate **xc-lag-b** with the LAG containing either subports.a or subports.b. The system does not enforce a match between **xc-lag-b** and the LAG ID containing subports.b.
Reference	**configure** lag *string*
Notes	The following elements are part of a choice: **pxc** or (**xc-lag-a** and **xc-lag-b**).
Introduced	21.10.R1

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Platforms	All

path

Synopsis	Enter the **path** context
Context	**configure** fwd-path-ext fpe *number* path
Tree	path
Notes	The following elements are part of a choice: **multi-path** or **path**.
Introduced	16.0.R1
Platforms	All

pxc *reference*

Synopsis	Dedicated PXC ID used by the FPE path
Context	**configure** fwd-path-ext fpe *number* path pxc *reference*
Tree	pxc
Reference	**configure** port-xc pxc *number*
Notes	The following elements are part of a choice: **pxc** or (**xc-lag-a** and **xc-lag-b**).
Introduced	16.0.R1
Platforms	All

xc-lag-a *reference*

Synopsis	PXC LAG identifier dedicated to the FPE path
Context	**configure** fwd-path-ext fpe *number* path xc-lag-a *reference*
Tree	xc-lag-a
Description	This command specifies the LAG identifier associated with one side of the PXC. The operator can associate **xc-lag-a** with the LAG containing either subports.a or subports.b. The system does not enforce a match between **xc-lag-a** and the LAG ID containing subports.a.
Reference	**configure** lag *string*
Notes	The following elements are part of a choice: **pxc** or (**xc-lag-a** and **xc-lag-b**).
Introduced	16.0.R4
Platforms	All

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xc-lag-b *reference*

Synopsis	PXC LAG identifier dedicated to the FPE path
Context	**configure** fwd-path-ext fpe *number* path xc-lag-b *reference*
Tree	xc-lag-b
Description	This command specifies the LAG identifier associated with one side of the PXC. The operator can associate **xc-lag-b** with the LAG containing either subports.a or subports.b. The system does not enforce a match between **xc-lag-b** and the LAG ID containing subports.b.
Reference	**configure** lag *string*
Notes	The following elements are part of a choice: **pxc** or (**xc-lag-a** and **xc-lag-b**).
Introduced	16.0.R4
Platforms	All

sdp-id-range

Synopsis	Enable the **sdp-id-range** context
Context	**configure** fwd-path-ext sdp-id-range
Tree	sdp-id-range
Description	Commands in this context configure the SDP ID range used by the FPE based PW port and VXLAN termination applications. Each configured FPE-based PW port is associated with two internal SDPs (one in each direction) whose IDs are allocated from the configured SDP ID range. When the FPE is associated with VXLAN termination, an internal SDP is allocated from the configured SDP ID range and is used for R-VPLS services that terminate VXLAN IPv6. A spoke SDP per VXLAN IPv6 R-VPLS service is created on that SDP for egress processing of the packets. The SDP ID range cannot be modified if any of its IDs are currently in use.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the SDP ID range
Context	**configure** fwd-path-ext sdp-id-range end *number*
Tree	end
Range	1 to 32767
Notes	This element is mandatory.
Introduced	16.0.R1

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Platforms	All

start *number*

Synopsis	Lower bound of the SDP ID range
Context	**configure** fwd-path-ext sdp-id-range start *number*
Tree	start
Range	1 to 32767
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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3.19 group-encryption commands

```
configure
   –  group-encryption
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  encryption-keygroup number
         –  active-outbound-security-association reference
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  authentication-algorithm keyword
         –  description string
         –  encryption-algorithm keyword
         –  keygroup-name string
         –  security-association number
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  authentication-key string
            –  encryption-key string
      –  group-encryption-label number
```


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3.19.1 group-encryption command descriptions

group-encryption

Synopsis	Enter the **group-encryption** context
Context	**configure** group-encryption
Tree	group-encryption
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encryption-keygroup [id] *number*

Synopsis	Enter the **encryption-keygroup** list instance
Context	**configure** group-encryption encryption-keygroup *number*
Tree	encryption-keygroup
Max. Instances	127
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	Encryption key group ID
Context	**configure** group-encryption encryption-keygroup *number*
Tree	encryption-keygroup
Range	1 to 127
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

active-outbound-security-association *reference*

Synopsis	SPI to use for egressing packets for the key group
Context	**configure** group-encryption encryption-keygroup *number* active-outbound-security-association *reference*

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Tree	active-outbound-security-association
Reference	**configure** group-encryption encryption-keygroup *number* security-association *number*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication-algorithm *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Hashing algorithm used for the authentication function
Context	**configure** group-encryption encryption-keygroup *number* authentication-algorithm *keyword*
Tree	authentication-algorithm
Options	sha256, sha512
Default	sha256
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** group-encryption encryption-keygroup *number* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encryption-algorithm *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Encryption algorithm for encryption on ESP
Context	**configure** group-encryption encryption-keygroup *number* encryption-algorithm *keyword*

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Tree	encryption-algorithm
Options	aes128, aes256
Default	aes128
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keygroup-name *string*

Synopsis	Key group name
Context	**configure** group-encryption encryption-keygroup *number* keygroup-name *string*
Tree	keygroup-name
String Length	0 to 64
Default	
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

security-association [security-parameter-index] *number*

Synopsis	Enter the **security-association** list instance
Context	**configure** group-encryption encryption-keygroup *number* security-association *number*
Tree	security-association
Max. Instances	4
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**security-parameter-index**] *number*

Synopsis	Security Parameter Index (SPI)
Context	**configure** group-encryption encryption-keygroup *number* security-association *number*
Tree	security-association
Range	1 to 1023
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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authentication-key *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the authentication algorithm
Context	**configure** group-encryption encryption-keygroup *number* security-association *number* authentication-key *string*
Tree	authentication-key
String Length	1 to 115
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encryption-key *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the encryption algorithm
Context	**configure** group-encryption encryption-keygroup *number* security-association *number* encryption-key *string*
Tree	encryption-key
String Length	1 to 71
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

group-encryption-label *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Network-wide unique MPLS label for group encryption
Context	**configure** group-encryption group-encryption-label *number*

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Tree	group-encryption-label
Range	32 to 2047
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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3.20 ipsec commands

```
configure
   - ipsec
      - apply-groups reference
      - apply-groups-exclude reference
      - cert-profile string
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - entry number
            - apply-groups reference
            - apply-groups-exclude reference
            - cert string
            - key string
            - rsa-signature keyword
            - send-chain
               - ca-profile reference
      - client-db string
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - client number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - client-name string
            - credential
               - pre-shared-key string
            - identification
               - idi
                  - any boolean
                  - fqdn string
                  - fqdn-suffix string
                  - ipv4-prefix string
                  - ipv4-prefix-any boolean
                  - ipv6-prefix string
                  - ipv6-prefix-any boolean
                  - rfc822 string
                  - rfc822-suffix string
               - peer-ip-prefix
                  - ip-prefix (ipv4-prefix | ipv6-prefix)
                  - ipv4-only boolean
                  - ipv6-only boolean
            - private-interface string
            - private-service-name string
            - ts-list string
            - tunnel-template number
         - description string
         - match-list
            - idi boolean
            - peer-ip-prefix boolean
      - ike-policy number
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - dpd
            - interval number
            - max-retries number
            - reply-only boolean
         - ike-transform reference
```


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configure ipsec ike-policy ike-version-1

```
        - ike-version-1
          - auth-method keyword
          - ike-mode keyword
          - own-auth-method keyword
          - ph1-responder-delete-notify boolean
        - ike-version-2
          - auth-method keyword
          - auto-eap-method keyword
          - ikev2-fragment
            - mtu number
            - reassembly-timeout number
          - own-auth-method keyword
          - own-auto-eap-method keyword
          - send-idr-after-eap-success boolean
        - ipsec-lifetime number
        - limit-init-exchange
          - admin-state keyword
          - reduced-max-exchange-timeout (number | keyword)
        - lockout
          - block (number | keyword)
          - duration number
          - failed-attempts number
          - max-port-per-ip number
        - match-peer-id-to-cert boolean
        - nat-traversal
          - force boolean
          - force-keep-alive boolean
          - keep-alive-interval number
        - pfs
          - dh-group keyword
        - relay-unsolicited-cfg-attribute
          - internal-ip4-address boolean
          - internal-ip4-dns boolean
          - internal-ip4-netmask boolean
          - internal-ip6-address boolean
          - internal-ip6-dns boolean
    - ike-transform number
        - apply-groups reference
        - apply-groups-exclude reference
        - dh-group keyword
        - ike-auth-algorithm keyword
        - ike-encryption-algorithm keyword
        - ike-prf-algorithm keyword
        - isakmp-lifetime number
    - ipsec-transform number
        - apply-groups reference
        - apply-groups-exclude reference
        - esp-auth-algorithm keyword
        - esp-encryption-algorithm keyword
        - extended-sequence-number boolean
        - ipsec-lifetime number
        - pfs-dh-group keyword
    - ipsec-transport-mode-profile string
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
        - key-exchange
          - dynamic
            - auto-establish boolean
            - cert
              - cert-profile reference
              - status-verify
                - default-result keyword
                - primary keyword
```


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configure ipsec ipsec-transport-mode-profile key-exchange dynamic cert status-verify secondary

```
                    - secondary keyword
                  - trust-anchor-profile reference
               - id
                  - fqdn string
                  - ipv4 string
                  - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
               - ike-policy reference
               - ipsec-transform reference
               - pre-shared-key string
            - max-history-key-records
               - esp number
               - ike number
            - replay-window number
         - radius
            - accounting-policy string
               - apply-groups reference
               - apply-groups-exclude reference
               - include-radius-attribute
                  - acct-stats boolean
                  - called-station-id boolean
                  - calling-station-id boolean
                  - framed-ip-addr boolean
                  - framed-ipv6-prefix boolean
                  - nas-identifier boolean
                  - nas-ip-addr boolean
                  - nas-port-id boolean
               - radius-server-policy reference
               - update-interval
                  - jitter number
                  - value number
            - authentication-policy string
               - apply-groups reference
               - apply-groups-exclude reference
               - include-radius-attribute
                  - called-station-id boolean
                  - calling-station-id boolean
                  - client-cert-subject-key-id boolean
                  - nas-identifier boolean
                  - nas-ip-addr boolean
                  - nas-port-id boolean
               - password string
               - radius-server-policy reference
         - show-ipsec-keys boolean
         - static-sa string
            - apply-groups reference
            - apply-groups-exclude reference
            - authentication
               - algorithm keyword
               - key string
            - description string
            - direction keyword
            - protocol keyword
            - spi number
         - trust-anchor-profile string
            - apply-groups reference
            - apply-groups-exclude reference
            - trust-anchor reference
         - ts-list string
            - apply-groups reference
            - apply-groups-exclude reference
            - local
               - entry number
                  - address
                     - prefix (ipv4-prefix | ipv6-prefix)
```


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```
                  - range
                     - begin (ipv4-address-no-zone | ipv6-address-no-zone)
                     - end (ipv4-address-no-zone | ipv6-address-no-zone)
               - apply-groups reference
               - apply-groups-exclude reference
               - protocol
                  - any
                  - id
                     - icmp
                        - opaque
                        - port-range
                           - begin-icmp-code number
                           - begin-icmp-type number
                           - end-icmp-code number
                           - end-icmp-type number
                     - icmp6
                        - opaque
                        - port-range
                           - begin-icmp-code number
                           - begin-icmp-type number
                           - end-icmp-code number
                           - end-icmp-type number
                     - mipv6
                        - opaque
                        - port-range
                           - begin number
                           - end number
                     - protocol-id-with-any-port (keyword | number)
                     - sctp
                        - opaque
                        - port-range
                           - begin number
                           - end number
                     - tcp
                        - opaque
                        - port-range
                           - begin number
                           - end number
                     - udp
                        - opaque
                        - port-range
                           - begin number
                           - end number
         - remote
            - entry number
               - address
                  - prefix (ipv4-prefix | ipv6-prefix)
                  - range
                     - begin (ipv4-address-no-zone | ipv6-address-no-zone)
                     - end (ipv4-address-no-zone | ipv6-address-no-zone)
               - apply-groups reference
               - apply-groups-exclude reference
               - protocol
                  - any
                  - id
                     - icmp
                        - opaque
                        - port-range
                           - begin-icmp-code number
                           - begin-icmp-type number
                           - end-icmp-code number
                           - end-icmp-type number
                     - icmp6
                        - opaque
```


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configure ipsec ts-list remote entry protocol id icmp6 port-range

```
                        – port-range
                          – begin-icmp-code number
                          – begin-icmp-type number
                          – end-icmp-code number
                          – end-icmp-type number
                    – mipv6
                        – opaque
                        – port-range
                          – begin number
                          – end number
                    – protocol-id-with-any-port (keyword | number)
                    – sctp
                        – opaque
                        – port-range
                          – begin number
                          – end number
                    – tcp
                        – opaque
                        – port-range
                          – begin number
                          – end number
                    – udp
                        – opaque
                        – port-range
                          – begin number
                          – end number
  – tunnel-template number
    – apply-groups reference
    – apply-groups-exclude reference
    – clear-df-bit boolean
    – copy-traffic-class-upon-decapsulation boolean
    – description string
    – encapsulated-ip-mtu number
    – icmp-generation
      – frag-required
        – admin-state keyword
        – interval number
        – message-count number
    – icmp6-generation
      – pkt-too-big
        – admin-state keyword
        – interval number
        – message-count number
    – ignore-default-route boolean
    – ip-mtu number
    – ipsec-transform reference
    – pmtu-discovery-aging number
    – private-tcp-mss-adjust number
    – propagate-pmtu-v4 boolean
    – propagate-pmtu-v6 boolean
    – public-tcp-mss-adjust (number | keyword)
    – replay-window number
    – sp-reverse-route keyword
```


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3.20.1 ipsec command descriptions

ipsec

Synopsis	Enter the **ipsec** context
Context	**configure** ipsec
Tree	ipsec
Description	Commands in this context configure Internet Protocol Security (IPsec) commands.
Introduced	16.0.R4
Platforms	All

cert-profile [name] *string*

Synopsis	Enter the **cert-profile** list instance
Context	**configure** ipsec cert-profile *string*
Tree	cert-profile
Description	Commands in this context configure the certificate profile.
Max. Instances	10200
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Certificate profile name
Context	**configure** ipsec cert-profile *string*
Tree	cert-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the certificate profile

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Context	**configure** ipsec cert-profile *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** ipsec cert-profile *string* entry *number*
Tree	entry
Description	Commands in this context configure the certificate profile entry.
Max. Instances	8
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	Certificate profile entry ID
Context	**configure** ipsec cert-profile *string* entry *number*
Tree	entry
Range	1 to 8
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cert *string*

Synopsis	File name of the imported certificate for the entry
Context	**configure** ipsec cert-profile *string* entry *number* cert *string*
Tree	cert
String Length	1 to 95
Introduced	19.7.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

key *string*

Synopsis	File name of the imported key used for authentication
Context	**configure** ipsec cert-profile *string* entry *number* key *string*
Tree	key
String Length	1 to 95
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rsa-signature *keyword*

Synopsis	Signature scheme for the RSA key
Context	**configure** ipsec cert-profile *string* entry *number* rsa-signature *keyword*
Tree	rsa-signature
Options	pkcs1, pss
Default	pkcs1
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

send-chain

Synopsis	Enter the **send-chain** context
Context	**configure** ipsec cert-profile *string* entry *number* send-chain
Tree	send-chain
Description	Commands in this context allow the system to send additional CA certificates to the peer. These additional CA certificates must be in the certificate chain of the certificate specified by the **cert** command in the same entry.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ca-profile *reference*

Synopsis	CA certificate to send to the peer
Context	**configure** ipsec cert-profile *string* entry *number* send-chain ca-profile *reference*

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Tree	ca-profile
Reference	**configure** system security pki ca-profile *string*
Max. Instances	7
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

client-db [name] *string*

Synopsis	Enter the **client-db** list instance
Context	**configure** ipsec client-db *string*
Tree	client-db
Max. Instances	1000
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	IPsec client database name
Context	**configure** ipsec client-db *string*
Tree	client-db
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the client database
Context	**configure** ipsec client-db *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.7.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

client [id] *number*

Synopsis	Enter the **client** list instance
Context	**configure** ipsec client-db *string* client *number*
Tree	client
Description	Commands in this context configure the IPsec client entry in the client database.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	Client ID
Context	**configure** ipsec client-db *string* client *number*
Tree	client
Range	1 to 8000
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the database client
Context	**configure** ipsec client-db *string* client *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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client-name *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Client name
Context	**configure** ipsec client-db *string* client *number* client-name *string*
Tree	client-name
String Length	1 to 32
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

credential

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **credential** context
Context	**configure** ipsec client-db *string* client *number* credential
Tree	credential
Description	Commands in this context authenticate peers.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pre-shared-key *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pre-shared key used to authenticate peers
Context	**configure** ipsec client-db *string* client *number* credential pre-shared-key *string*
Tree	pre-shared-key
String Length	1 to 115
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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identification

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **identification** context
Context	**configure** ipsec client-db *string* client *number* identification
Tree	identification
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

idi

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **idi** context
Context	**configure** ipsec client-db *string* client *number* identification idi
Tree	idi
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

any *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept any IDi value as a match
Context	**configure** ipsec client-db *string* client *number* identification idi any *boolean*
Tree	any
Notes	The following elements are part of a mandatory choice: **any**, **fqdn**, **fqdn-suffix**, **ipv4-prefix**, **ipv4-prefix-any**, **ipv6-prefix**, **ipv6-prefix-any**, **rfc822**, or **rfc822-suffix**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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fqdn *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN used as the match criteria for the IDi
Context	**configure** ipsec client-db *string* client *number* identification idi fqdn *string*
Tree	fqdn
String Length	0 to 255
Notes	The following elements are part of a mandatory choice: **any**, **fqdn**, **fqdn-suffix**, **ipv4-prefix**, **ipv4-prefix-any**, **ipv6-prefix**, **ipv6-prefix-any**, **rfc822**, or **rfc822-suffix**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fqdn-suffix *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN suffix used as the match criteria for the IDi
Context	**configure** ipsec client-db *string* client *number* identification idi fqdn-suffix *string*
Tree	fqdn-suffix
String Length	0 to 255
Notes	The following elements are part of a mandatory choice: **any**, **fqdn**, **fqdn-suffix**, **ipv4-prefix**, **ipv4-prefix-any**, **ipv6-prefix**, **ipv6-prefix-any**, **rfc822**, or **rfc822-suffix**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4-prefix *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 prefix used as the match criteria for the IDi
Context	**configure** ipsec client-db *string* client *number* identification idi ipv4-prefix *string*

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Tree	ipv4-prefix
Notes	The following elements are part of a mandatory choice: **any**, **fqdn**, **fqdn-suffix**, **ipv4-prefix**, **ipv4-prefix-any**, **ipv6-prefix**, **ipv6-prefix-any**, **rfc822**, or **rfc822-suffix**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4-prefix-any *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept any valid IPv4 prefix as a match for the IDi
Context	**configure** ipsec client-db *string* client *number* identification idi ipv4-prefix-any *boolean*
Tree	ipv4-prefix-any
Notes	The following elements are part of a mandatory choice: **any**, **fqdn**, **fqdn-suffix**, **ipv4-prefix**, **ipv4-prefix-any**, **ipv6-prefix**, **ipv6-prefix-any**, **rfc822**, or **rfc822-suffix**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-prefix *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 prefix used as the match criteria for the IDi
Context	**configure** ipsec client-db *string* client *number* identification idi ipv6-prefix *string*
Tree	ipv6-prefix
Notes	The following elements are part of a mandatory choice: **any**, **fqdn**, **fqdn-suffix**, **ipv4-prefix**, **ipv4-prefix-any**, **ipv6-prefix**, **ipv6-prefix-any**, **rfc822**, or **rfc822-suffix**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ipv6-prefix-any *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept any valid IPv6 prefix as a match for the IDi
Context	**configure** ipsec client-db *string* client *number* identification idi ipv6-prefix-any *boolean*
Tree	ipv6-prefix-any
Notes	The following elements are part of a mandatory choice: **any**, **fqdn**, **fqdn-suffix**, **ipv4-prefix**, **ipv4-prefix-any**, **ipv6-prefix**, **ipv6-prefix-any**, **rfc822**, or **rfc822-suffix**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rfc822 *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Email address (RFC 822) used as match criteria for IDi
Context	**configure** ipsec client-db *string* client *number* identification idi rfc822 *string*
Tree	rfc822
String Length	0 to 255
Notes	The following elements are part of a mandatory choice: **any**, **fqdn**, **fqdn-suffix**, **ipv4-prefix**, **ipv4-prefix-any**, **ipv6-prefix**, **ipv6-prefix-any**, **rfc822**, or **rfc822-suffix**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rfc822-suffix *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Email address domain (RFC 822) as IDi match criteria
Context	**configure** ipsec client-db *string* client *number* identification idi rfc822-suffix *string*
Tree	rfc822-suffix
String Length	0 to 255

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Notes	The following elements are part of a mandatory choice: **any**, **fqdn**, **fqdn-suffix**, **ipv4-prefix**, **ipv4-prefix-any**, **ipv6-prefix**, **ipv6-prefix-any**, **rfc822**, or **rfc822-suffix**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-ip-prefix

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **peer-ip-prefix** context
Context	**configure** ipsec client-db *string* client *number* identification peer-ip-prefix
Tree	peer-ip-prefix
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix *(ipv4-prefix | ipv6-prefix)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP prefix used as the match criteria
Context	**configure** ipsec client-db *string* client *number* identification peer-ip-prefix ip-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	ip-prefix
Notes	The following elements are part of a mandatory choice: **ip-prefix**, **ipv4-only**, or **ipv6-only**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4-only *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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Synopsis	Accept any valid IPv4 address as a match
Context	**configure** ipsec client-db *string* client *number* identification peer-ip-prefix ipv4-only *boolean*
Tree	ipv4-only
Notes	The following elements are part of a mandatory choice: **ip-prefix**, **ipv4-only**, or **ipv6-only**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-only *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept any valid IPv6 address as a match
Context	**configure** ipsec client-db *string* client *number* identification peer-ip-prefix ipv6-only *boolean*
Tree	ipv6-only
Notes	The following elements are part of a mandatory choice: **ip-prefix**, **ipv4-only**, or **ipv6-only**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

private-interface *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private interface name used for tunnel setup
Context	**configure** ipsec client-db *string* client *number* private-interface *string*
Tree	private-interface
String Length	1 to 32
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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private-service-name *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the private service used for tunnel setup
Context	**configure** ipsec client-db *string* client *number* private-service-name *string*
Tree	private-service-name
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ts-list *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Traffic selector list used by the tunnel
Context	**configure** ipsec client-db *string* client *number* ts-list *string*
Tree	ts-list
String Length	1 to 32
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-template *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Tunnel template ID
Context	**configure** ipsec client-db *string* client *number* tunnel-template *number*
Tree	tunnel-template
Range	1 to 2048
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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description *string*

Synopsis	Text description
Context	**configure** ipsec client-db *string* description *string*
Tree	description
String Length	1 to 80
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

match-list

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **match-list** context
Context	**configure** ipsec client-db *string* match-list
Tree	match-list
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

idi *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use IDi type in the IPsec client matching process
Context	**configure** ipsec client-db *string* match-list idi *boolean*
Tree	idi
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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peer-ip-prefix *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use the peer tunnel IP address in the matching process
Context	**configure** ipsec client-db *string* match-list peer-ip-prefix *boolean*
Tree	peer-ip-prefix
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-policy [id] *number*

Synopsis	Enter the **ike-policy** list instance
Context	**configure** ipsec ike-policy *number*
Tree	ike-policy
Description	Commands in this context configure an Internet Key Exchange (IKE) policy.
Max. Instances	2048
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	IKE policy ID
Context	**configure** ipsec ike-policy *number*
Tree	ike-policy
Range	1 to 2048
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description

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Context	**configure** ipsec ike-policy *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dpd

Synopsis	Enable the **dpd** context
Context	**configure** ipsec ike-policy *number* dpd
Tree	dpd
Description	Commands in this context configure the dead peer detection mechanism.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	DPD interval
Context	**configure** ipsec ike-policy *number* dpd interval *number*
Tree	interval
Description	This command specifies the DPD interval. Because more time is necessary to determine if there is incoming traffic, the actual time needed to bring down the tunnel is larger than the DPD interval multiplied by the value configured for maximum retry attempts.
Range	10 to 300
Units	seconds
Default	30
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-retries *number*

Synopsis	Maximum number of retries before the tunnel is removed
Context	**configure** ipsec ike-policy *number* dpd max-retries *number*
Tree	max-retries

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Range	2 to 5
Default	3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reply-only *boolean*

Synopsis	Initiate DPD request for incoming ESP or IKE packets
Context	**configure** ipsec ike-policy *number* dpd reply-only *boolean*
Tree	reply-only
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-transform *reference*

Synopsis	IKE transform instance associated with the IKE policy
Context	**configure** ipsec ike-policy *number* ike-transform *reference*
Tree	ike-transform
Description	This command specifies the IKE transform instance associated with the IKE policy. If multiple IDs are specified, the system selects an IKE transform based on the proposal of the peer. If the system is a tunnel initiator, it uses the configured IKE transform to generate the SA payload.
Reference	**configure** ipsec ike-transform *number*
Max. Instances	4
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-version-1

Synopsis	Enter the **ike-version-1** context
Context	**configure** ipsec ike-policy *number* ike-version-1
Tree	ike-version-1
Description	Commands in this context configure the IKE version 1 mode of operation that the IKE policy uses.

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Notes	The following elements are part of a choice: **ike-version-1** or **ike-version-2**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

auth-method *keyword*

Synopsis	Authentication method used with the IKE policy
Context	**configure** ipsec ike-policy *number* ike-version-1 auth-method *keyword*
Tree	auth-method
Options	psk, plain-psk-xauth
Default	psk
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-mode *keyword*

Synopsis	Mode of operation
Context	**configure** ipsec ike-policy *number* ike-version-1 ike-mode *keyword*
Tree	ike-mode
Options	main, aggressive
Default	main
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

own-auth-method *keyword*

Synopsis	Authentication method used with policy on its own side
Context	**configure** ipsec ike-policy *number* ike-version-1 own-auth-method *keyword*
Tree	own-auth-method
Options	symmetric
Default	symmetric
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ph1-responder-delete-notify *boolean*

Synopsis	Send delete notification for IKEv1 phase 1 removal
Context	**configure** ipsec ike-policy *number* ike-version-1 ph1-responder-delete-notify *boolean*
Tree	ph1-responder-delete-notify
Description	When configured to **true**, a delete notification is sent to the peer when deleting an IKEv1 phase 1 SA for which it was the responder. When configured to **false**, no notification is sent.
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-version-2

Synopsis	Enable the **ike-version-2** context
Context	**configure** ipsec ike-policy *number* ike-version-2
Tree	ike-version-2
Description	Commands in this context configure the IKE version 2 mode of operation that the IKE policy uses.
Notes	The following elements are part of a choice: **ike-version-1** or **ike-version-2**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

auth-method *keyword*

Synopsis	Authentication method used with the IKE policy
Context	**configure** ipsec ike-policy *number* ike-version-2 auth-method *keyword*
Tree	auth-method
Options	psk, cert, psk-radius, cert-radius, eap, auto-eap-radius, auto-eap
Default	psk
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

auto-eap-method *keyword*

Synopsis	Authentication method used for the remote peer

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Context	**configure** ipsec ike-policy *number* ike-version-2 auto-eap-method *keyword*
Tree	auto-eap-method
Description	This command specifies the behavior for the IKEv2 remote-access tunnel when the authentication method uses EAP or potentially another method to authenticate the remote peer.
Options	psk, cert, psk-or-cert
Default	cert
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ikev2-fragment

Synopsis	Enable the **ikev2-fragment** context
Context	**configure** ipsec ike-policy *number* ike-version-2 ikev2-fragment
Tree	ikev2-fragment
Description	Commands in this context configure IKEv2 protocol level fragmentation (RFC 7383).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtu *number*

Synopsis	Maximum size of the IKEv2 packet
Context	**configure** ipsec ike-policy *number* ike-version-2 ikev2-fragment mtu *number*
Tree	mtu
Range	512 to 9000
Units	octets
Default	1500
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reassembly-timeout *number*

Synopsis	Timeout for reassembly of IKEv2 message fragments
Context	**configure** ipsec ike-policy *number* ike-version-2 ikev2-fragment reassembly-timeout *number*
Tree	reassembly-timeout

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Range	1 to 5
Units	seconds
Default	2
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

own-auth-method *keyword*

Synopsis	Authentication method used with IKE policy on own side
Context	**configure** ipsec ike-policy *number* ike-version-2 own-auth-method *keyword*
Tree	own-auth-method
Options	symmetric, psk, cert, eap-only
Default	symmetric
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

own-auto-eap-method *keyword*

Synopsis	Authentication method used on its own side
Context	**configure** ipsec ike-policy *number* ike-version-2 own-auto-eap-method *keyword*
Tree	own-auto-eap-method
Description	This command specifies the behavior for the IKEv2 remote-access tunnel when the authentication method uses EAP or potentially another method to authenticate the peer.
Options	psk, cert
Default	cert
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

send-idr-after-eap-success *boolean*

Synopsis	Send IDr payload in last IKE authentication response
Context	**configure** ipsec ike-policy *number* ike-version-2 send-idr-after-eap-success *boolean*
Tree	send-idr-after-eap-success
Description	When configured to **true**, the Identification Responder (IDr) payload is added in the last IKE authentication response after an Extensible Authentication Protocol (EAP) Success packet is received.

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When configured to **false**, the IDr payload is not included in the last IKE.

Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-lifetime *number*

Synopsis	Lifetime of the Phase 2 IKE key
Context	**configure** ipsec ike-policy *number* ipsec-lifetime *number*
Tree	ipsec-lifetime
Range	1200 to 31536000
Units	seconds
Default	3600
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

limit-init-exchange

Synopsis	Enter the **limit-init-exchange** context
Context	**configure** ipsec ike-policy *number* limit-init-exchange
Tree	limit-init-exchange
Description	Commands in this context limit the number of ongoing IKEv2 initial exchanges per tunnel.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of limiting initial IKE exchanges
Context	**configure** ipsec ike-policy *number* limit-init-exchange admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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reduced-max-exchange-timeout *(number | keyword)*

Synopsis	Maximum timeout for in-progress initial IKE exchange
Context	**configure** ipsec ike-policy *number* limit-init-exchange reduced-max-exchange-timeout *(number | keyword)*
Tree	reduced-max-exchange-timeout
Description	This command configures the maximum timeout for the in-progress initial IKE exchange. If a new IKEv2 IKE_SA_INIT request is received when there is an ongoing IKEv2 initial exchange from the same peer, the timeout value of the existing exchange is set to this specified value. If the **none** option is configured for this command, the timeout value remains unchanged.
Range	2 to 60
Units	seconds
Options	none
Default	2
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lockout

Synopsis	Enable the **lockout** context
Context	**configure** ipsec ike-policy *number* lockout
Tree	lockout
Description	Commands in this context specify the lockout mechanism for the IPsec tunnel. These commands apply only when the system acts as a tunnel responder.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block *(number | keyword)*

Synopsis	Time a client is blocked for failed authentications
Context	**configure** ipsec ike-policy *number* lockout block *(number | keyword)*
Tree	block
Description	This command configures the time the client is blocked if the number of failed authentications exceeds the configured value within the specified duration.
Range	1 to 1440
Units	minutes

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Options	infinite
Default	10
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	Time interval for failed attempts threshold
Context	**configure** ipsec ike-policy *number* lockout duration *number*
Tree	duration
Description	This command specifies the time interval in which the configured failed authentication count must be exceeded to trigger a lockout.
Range	1 to 60
Units	minutes
Default	5
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

failed-attempts *number*

Synopsis	Maximum failed authentications allowed in the duration
Context	**configure** ipsec ike-policy *number* lockout failed-attempts *number*
Tree	failed-attempts
Range	1 to 64
Default	3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-port-per-ip *number*

Synopsis	Maximum number of ports allowed under same IP address
Context	**configure** ipsec ike-policy *number* lockout max-port-per-ip *number*
Tree	max-port-per-ip
Description	This command configures the maximum number of ports allowed under the same IP address. When the threshold is exceeded and the client is locked out, all ports behind the IP address are blocked.

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Range	1 to 32000
Default	16
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

match-peer-id-to-cert *boolean*

Synopsis	Check IKE peer ID during certificate authentication
Context	**configure** ipsec ike-policy *number* match-peer-id-to-cert *boolean*
Tree	match-peer-id-to-cert
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-traversal

Synopsis	Enable the **nat-traversal** context
Context	**configure** ipsec ike-policy *number* nat-traversal
Tree	nat-traversal
Description	Commands in this context configure the Network Address Translation Traversal (NAT-T) functionality.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

force *boolean*

Synopsis	Enable NAT-T in forced mode
Context	**configure** ipsec ike-policy *number* nat-traversal force *boolean*
Tree	force
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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force-keep-alive *boolean*

Synopsis	Continue sending keepalive packets (no expiry)
Context	**configure** ipsec ike-policy *number* nat-traversal force-keep-alive *boolean*
Tree	force-keep-alive
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keep-alive-interval *number*

Synopsis	Keepalive interval for NAT-T
Context	**configure** ipsec ike-policy *number* nat-traversal keep-alive-interval *number*
Tree	keep-alive-interval
Range	120 to 600
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pfs

Synopsis	Enable the **pfs** context
Context	**configure** ipsec ike-policy *number* pfs
Tree	pfs
Description	Commands in this context configure perfect forward secrecy on the IPsec tunnel using the policy. PFS provides for a new Diffie-Hellman (DH) key exchange each time the Security Association (SA) key is renegotiated. When the SA key expires, another key is generated (if the SA remains up).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dh-group *keyword*

Synopsis	Diffie-Helman group used to calculate session keys
Context	**configure** ipsec ike-policy *number* pfs dh-group *keyword*
Tree	dh-group

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Description	This command specifies which DH group to use for calculating session keys. More bits provide a higher level of security, but require more processing.
Options	group-1, group-2, group-5, group-14, group-15, group-19, group-20, group-21
Default	group-2
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

relay-unsolicited-cfg-attribute

Synopsis	Enter the **relay-unsolicited-cfg-attribute** context
Context	**configure** ipsec ike-policy *number* relay-unsolicited-cfg-attribute
Tree	relay-unsolicited-cfg-attribute
Description	Commands in this context configure attributes returned from the source (such as a RADIUS server) that are returned to the IKEv2 remote-access tunnel client regardless if the client has requested the attribute in the CFG_REQUEST payload.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

internal-ip4-address *boolean*

Synopsis	Return the IPv4 address from the source to the client
Context	**configure** ipsec ike-policy *number* relay-unsolicited-cfg-attribute internal-ip4-address *boolean*
Tree	internal-ip4-address
Description	When configured to **true**, the system returns the IPv4 address from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the address in the CFG_REQUEST payload.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

internal-ip4-dns *boolean*

Synopsis	Return IPv4 DNS server address from source to client
Context	**configure** ipsec ike-policy *number* relay-unsolicited-cfg-attribute internal-ip4-dns *boolean*
Tree	internal-ip4-dns

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Description	When configured to **true**, the system returns the IPv4 DNS server address from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the address in the CFG_REQUEST payload.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

internal-ip4-netmask *boolean*

Synopsis	Return the IPv4 netmask from the source to the client
Context	**configure** ipsec ike-policy *number* relay-unsolicited-cfg-attribute internal-ip4-netmask *boolean*
Tree	internal-ip4-netmask
Description	When configured to **true**, the system returns the IPv4 netmask from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the netmask in the CFG_REQUEST payload.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

internal-ip6-address *boolean*

Synopsis	Return the IPv6 address from the source to the client
Context	**configure** ipsec ike-policy *number* relay-unsolicited-cfg-attribute internal-ip6-address *boolean*
Tree	internal-ip6-address
Description	When configured to **true**, the system returns the IPv6 address from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the address in the CFG_REQUEST payload.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

internal-ip6-dns *boolean*

Synopsis	Return IPv6 DNS server address from source to client
Context	**configure** ipsec ike-policy *number* relay-unsolicited-cfg-attribute internal-ip6-dns *boolean*

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Tree	internal-ip6-dns
Description	When configured to **true**, the system returns the IPv6 DNS server address from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the address in the CFG_REQUEST payload.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-transform [id] *number*

Synopsis	Enter the **ike-transform** list instance
Context	**configure** ipsec ike-transform *number*
Tree	ike-transform
Max. Instances	4096
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	IKE transform instance ID
Context	**configure** ipsec ike-transform *number*
Tree	ike-transform
Range	1 to 4096
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dh-group *keyword*

Synopsis	Diffie-Helman group used to calculate session keys
Context	**configure** ipsec ike-transform *number* dh-group *keyword*
Tree	dh-group
Options	group-1, group-2, group-5, group-14, group-15, group-19, group-20, group-21
Default	group-2
Introduced	16.0.R4

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-auth-algorithm *keyword*

Synopsis	IKE authentication algorithm for IKE transform instance
Context	**configure** ipsec ike-transform *number* ike-auth-algorithm *keyword*
Tree	ike-auth-algorithm
Options	md-5, sha-1, sha-256, sha-384, sha-512, aes-xcbc, auth-encryption
Default	sha-1
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-encryption-algorithm *keyword*

Synopsis	IKE encryption algorith for the IKE transform instance
Context	**configure** ipsec ike-transform *number* ike-encryption-algorithm *keyword*
Tree	ike-encryption-algorithm
Options	des, des-3, aes-128, aes-192, aes-256, aes128-gcm8, aes128-gcm16, aes256-gcm8, aes256-gcm16
Default	aes-128
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-prf-algorithm *keyword*

Synopsis	PRF algorithm for the IKE transform instance
Context	**configure** ipsec ike-transform *number* ike-prf-algorithm *keyword*
Tree	ike-prf-algorithm
Description	This command specifies the pseudo-random function algorithm used for IKE security association. If an encrypted algorithm such as AES-GCM is used for the IKE encryption algorithm, **same-as-auth** cannot be used for the IKE PRF algorithm.
Options	md-5, sha-1, sha-256, sha-384, sha-512, aes-xcbc, same-as-auth
Default	same-as-auth
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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isakmp-lifetime *number*

Synopsis	Phase 1 lifetime for the IKE transform instance
Context	**configure** ipsec ike-transform *number* isakmp-lifetime *number*
Tree	isakmp-lifetime
Range	1200 to 31536000
Units	seconds
Default	86400
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-transform [id] *number*

Synopsis	Enter the **ipsec-transform** list instance
Context	**configure** ipsec ipsec-transform *number*
Tree	ipsec-transform
Description	Commands in this context create an IPsec transform policy. IPsec transform policies can be shared. A change to the IPsec transform is allowed at any time. The change does not impact tunnels that have been established until they are renegotiated. If the change is required immediately, the tunnel must be cleared (reset) for force renegotiation.
Max. Instances	2048
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	IPsec transform policy ID
Context	**configure** ipsec ipsec-transform *number*
Tree	ipsec-transform
Range	1 to 2048
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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esp-auth-algorithm *keyword*

Synopsis	Encapsulating Security Payload (ESP) authentication
Context	**configure** ipsec ipsec-transform *number* esp-auth-algorithm *keyword*
Tree	esp-auth-algorithm
Description	This command specifies the hashing algorithm used for the authentication function. Both ends of a manually configured tunnel must share the same configuration for the IPsec tunnel to enter the operational state.
Options	null, md-5, sha-1, sha-256, sha-384, sha-512, aes-xcbc, auth-encryption
Default	sha-1
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esp-encryption-algorithm *keyword*

Synopsis	Encryption algorithm for the IPsec transform session
Context	**configure** ipsec ipsec-transform *number* esp-encryption-algorithm *keyword*
Tree	esp-encryption-algorithm
Description	This command specifies the encryption algorithm used for the IPsec session. Encryption applies only to ESP configurations. If encryption is not defined, ESP is not used. Both ends of a manually configured tunnel must share the same encryption algorithm for the IPsec tunnel to enter the operational state. When AES-GCM or AES-GMAC is configured: • the authentication encryption must be set to **auth-encryption** • the system does not include the authentication algorithm in the ESP proposal of the SA payload • IPsec transform cannot be used for manual keying
Options	null, des, des-3, aes-128, aes-192, aes-256, aes128-gcm8, aes128-gcm12, aes128-gcm16, aes192-gcm8, aes192-gcm12, aes192-gcm16, aes256-gcm8, aes256-gcm12, aes256-gcm16, null-aes128-gmac, null-aes192-gmac, null-aes256-gmac
Default	aes-128
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

extended-sequence-number *boolean*

Synopsis	Enable extended sequence numbering support

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Context	**configure** ipsec ipsec-transform *number* extended-sequence-number *boolean*
Tree	extended-sequence-number
Description	When configured to **true**, this command enables 64-bit extended sequence numbering support. This numbering is used for high throughput CHILD_SA to avoid frequent re-keying caused by sequence numbering wrap around. When configured to **false**, only 32-bit sequence numbering is supported.
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-lifetime *number*

Synopsis	Phase 2 lifetime for the IPsec transform session
Context	**configure** ipsec ipsec-transform *number* ipsec-lifetime *number*
Tree	ipsec-lifetime
Description	This command configures the lifetime of the Phase 2 IKE key. When unconfigured, the value is inherited from the IPsec lifetime configured in the corresponding IKE policy configured for the same IPsec gateway or IPsec tunnel.
Range	1200 to 31536000
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pfs-dh-group *keyword*

Synopsis	Diffie-Hellman group used for PFS compilation
Context	**configure** ipsec ipsec-transform *number* pfs-dh-group *keyword*
Tree	pfs-dh-group
Description	This command specifies the DH group used for Perfect Forward Secrecy (PFS) compilation during CHILD_SA rekeying. When unconfigured, the value is inherited from the DH group value from the IPsec gateway or IPsec tunnel.
Options	none, group-1, group-2, group-5, group-14, group-15, group-19, group-20, group-21
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ipsec-transport-mode-profile [name] *string*

Synopsis	Enter the **ipsec-transport-mode-profile** list instance
Context	**configure** ipsec ipsec-transport-mode-profile *string*
Tree	ipsec-transport-mode-profile
Description	Commands in this context configure IPsec-specific attributes that allow an IP tunnel (for example, GRE) to be protected by using IPsec transport mode.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	IPsec transport mode profile name string
Context	**configure** ipsec ipsec-transport-mode-profile *string*
Tree	ipsec-transport-mode-profile
Description	This command specifies the name of the IPsec transport mode profile.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** ipsec ipsec-transport-mode-profile *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

key-exchange

Synopsis	Enter the **key-exchange** context
Context	**configure** ipsec ipsec-transport-mode-profile *string* key-exchange
Tree	key-exchange

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Description	Commands in this context configure the key exchange used each time the Security Association (SA) key is renegotiated.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic

Synopsis	Enter the **dynamic** context
Context	**configure** ipsec ipsec-transport-mode-profile *string* key-exchange dynamic
Tree	dynamic
Description	Commands in this context configure dynamic keying for the transport mode profile.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

auto-establish *boolean*

Synopsis	Attempt to establish a phase 1 exchange automatically
Context	**configure** ipsec ipsec-transport-mode-profile *string* key-exchange dynamic auto-establish *boolean*
Tree	auto-establish
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cert

Synopsis	Enter the **cert** context
Context	**configure** ipsec ipsec-transport-mode-profile *string* key-exchange dynamic cert
Tree	cert
Description	Commands in this context configure the attributes of the dynamic keying certificate.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cert-profile *reference*

Synopsis	Certificate profile name

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Context	**configure** ipsec ipsec-transport-mode-profile *string* key-exchange dynamic cert cert-profile *reference*
Tree	cert-profile
Reference	**configure** ipsec cert-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

status-verify

Synopsis	Enter the **status-verify** context
Context	**configure** ipsec ipsec-transport-mode-profile *string* key-exchange dynamic cert status-verify
Tree	status-verify
Description	Commands in this context configure attributes of Certificate Status Verification (CSV).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-result *keyword*

Synopsis	Default result for Certificate Status Verification
Context	**configure** ipsec ipsec-transport-mode-profile *string* key-exchange dynamic cert status-verify default-result *keyword*
Tree	default-result
Description	This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.
Options	revoked, good
Default	revoked
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

primary *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	**configure** ipsec ipsec-transport-mode-profile *string* key-exchange dynamic cert status-verify primary *keyword*
Tree	primary

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Description	This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.
Options	crl, ocsp
Default	crl
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

secondary *keyword*

Synopsis	Secondary method used to verify certificate revocation
Context	**configure** ipsec ipsec-transport-mode-profile *string* key-exchange dynamic cert status-verify secondary *keyword*
Tree	secondary
Description	This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.
Options	none, crl, ocsp
Default	none
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

trust-anchor-profile *reference*

Synopsis	Trust anchor profile name
Context	**configure** ipsec ipsec-transport-mode-profile *string* key-exchange dynamic cert trust-anchor-profile *reference*
Tree	trust-anchor-profile
Reference	**configure** ipsec trust-anchor-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id

Synopsis	Enter the **id** context
Context	**configure** ipsec ipsec-transport-mode-profile *string* key-exchange dynamic id
Tree	id
Description	Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation.

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The default behavior depends on the local authentication method as follows:

- Psk: local tunnel IP address
- Cert-auth: subject of the local certificate

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fqdn *string*

Synopsis FQDN used as the local ID IKE type

Context **configure** ipsec ipsec-transport-mode-profile *string* key-exchange dynamic id fqdn *string*

Tree fqdn

String Length 1 to 255

Notes The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4 *string*

Synopsis IPv4 as the local ID type

Context **configure** ipsec ipsec-transport-mode-profile *string* key-exchange dynamic id ipv4 *string*

Tree ipv4

Notes The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6 *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis IPv6 used as the local IKE ID type

Context **configure** ipsec ipsec-transport-mode-profile *string* key-exchange dynamic id ipv6 *(ipv4-address-no-zone | ipv6-address-no-zone)*

Tree ipv6

Notes The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ike-policy *reference*

Synopsis	IKE policy ID
Context	**configure** ipsec ipsec-transport-mode-profile *string* key-exchange dynamic ike-policy *reference*
Tree	ike-policy
Description	This command specifies the ID of the IKE policy used for IKE negotiation. The **ipsec-transport-mode-profile** configuration only supports IKEv2.
Reference	**configure** ipsec ike-policy *number*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-transform *reference*

Synopsis	IPsec transform IDs used by the dynamic key
Context	**configure** ipsec ipsec-transport-mode-profile *string* key-exchange dynamic ipsec-transform *reference*
Tree	ipsec-transform
Description	This command specifies IPsec transform IDs used for CHILD_SA negotiation.
Reference	**configure** ipsec ipsec-transform *number*
Max. Instances	4
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pre-shared-key *string*

Synopsis	Pre-shared key for IKE authentication
Context	**configure** ipsec ipsec-transport-mode-profile *string* key-exchange dynamic pre-shared-key *string*
Tree	pre-shared-key
String Length	1 to 115
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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max-history-key-records

Synopsis	Enter the **max-history-key-records** context
Context	**configure** ipsec ipsec-transport-mode-profile *string* max-history-key-records
Tree	max-history-key-records
Description	Commands in this context configure the settings for recording historical IPsec keys.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esp *number*

Synopsis	Maximum number of recent records
Context	**configure** ipsec ipsec-transport-mode-profile *string* max-history-key-records esp *number*
Tree	esp
Range	1 to 48
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike *number*

Synopsis	Maximum number of historical IKE key records
Context	**configure** ipsec ipsec-transport-mode-profile *string* max-history-key-records ike *number*
Tree	ike
Range	1 to 3
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

replay-window *number*

Synopsis	Anti-replay window size
Context	**configure** ipsec ipsec-transport-mode-profile *string* replay-window *number*
Tree	replay-window
Description	This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.
Range	32 | 64 | 128 | 256 | 512

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Units	packets
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius

Synopsis	Enter the **radius** context
Context	**configure** ipsec radius
Tree	radius
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy [name] *string*

Synopsis	Enter the **accounting-policy** list instance
Context	**configure** ipsec radius accounting-policy *string*
Tree	accounting-policy
Description	Commands in this context configure RADIUS accounting policies to collect accounting statistics.
Max. Instances	100
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	RADIUS accounting policy name
Context	**configure** ipsec radius accounting-policy *string*
Tree	accounting-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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include-radius-attribute

Synopsis	Enter the **include-radius-attribute** context
Context	**configure** ipsec radius accounting-policy *string* include-radius-attribute
Tree	include-radius-attribute
Description	Commands in this context specify the RADIUS attributes that are to be included in the RADIUS Authentication-Request messages.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

acct-stats *boolean*

Synopsis	Include accounting attributes in RADIUS packets
Context	**configure** ipsec radius accounting-policy *string* include-radius-attribute acct-stats *boolean*
Tree	acct-stats
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

called-station-id *boolean*

Synopsis	Include the Called-Station-Id attribute
Context	**configure** ipsec radius accounting-policy *string* include-radius-attribute called-station-id *boolean*
Tree	called-station-id
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

calling-station-id *boolean*

Synopsis	Include the Calling-Station-Id attribute
Context	**configure** ipsec radius accounting-policy *string* include-radius-attribute calling-station-id *boolean*
Tree	calling-station-id
Default	false

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Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

framed-ip-addr *boolean*

Synopsis	Include the Framed-IP-Address attribute
Context	**configure** ipsec radius accounting-policy *string* include-radius-attribute framed-ip-addr *boolean*
Tree	framed-ip-addr
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

framed-ipv6-prefix *boolean*

Synopsis	Include the Framed-IPv6-Prefix attribute
Context	**configure** ipsec radius accounting-policy *string* include-radius-attribute framed-ipv6-prefix *boolean*
Tree	framed-ipv6-prefix
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-identifier *boolean*

Synopsis	Include the NAS-Identifier attribute
Context	**configure** ipsec radius accounting-policy *string* include-radius-attribute nas-identifier *boolean*
Tree	nas-identifier
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-ip-addr *boolean*

Synopsis	Include the NAS-IP-Address attribute

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Context	**configure** ipsec radius accounting-policy *string* include-radius-attribute nas-ip-addr *boolean*
Tree	nas-ip-addr
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-port-id *boolean*

Synopsis	Include the NAS-Port-Id attribute
Context	**configure** ipsec radius accounting-policy *string* include-radius-attribute nas-port-id *boolean*
Tree	nas-port-id
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-server-policy *reference*

Synopsis	Referenced RADIUS server policy
Context	**configure** ipsec radius accounting-policy *string* radius-server-policy *reference*
Tree	radius-server-policy
Reference	**configure** aaa radius server-policy *string*
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

update-interval

Synopsis	Enter the **update-interval** context
Context	**configure** ipsec radius accounting-policy *string* update-interval
Tree	update-interval
Description	Commands in this context determine how RADIUS interim-update packets are sent for IKEv2 remote-access tunnels.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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jitter *number*

Synopsis	Jitter interval for sending each interim-update packet
Context	**configure** ipsec radius accounting-policy *string* update-interval jitter *number*
Tree	jitter
Description	This command specifies the jitter interval for the RADIUS interim-update packets. When unconfigured, the system uses 10% of the update interval value.
Range	0 to 3600
Units	seconds
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Update interval of the RADIUS accounting data
Context	**configure** ipsec radius accounting-policy *string* update-interval value *number*
Tree	value
Description	This command configures the update interval of the RADIUS accounting data. If a value of 0 is configured, no intermediate updates are sent.
Range	0 | 5 to 259200
Units	minutes
Default	10
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication-policy [name] *string*

Synopsis	Enter the **authentication-policy** list instance
Context	**configure** ipsec radius authentication-policy *string*
Tree	authentication-policy
Description	Commands in this context configure the RADIUS authentication policy associated with the IPsec gateway.
Max. Instances	100
Introduced	19.7.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	RADIUS authentication policy name
Context	**configure** ipsec radius authentication-policy *string*
Tree	authentication-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

include-radius-attribute

Synopsis	Enter the **include-radius-attribute** context
Context	**configure** ipsec radius authentication-policy *string* include-radius-attribute
Tree	include-radius-attribute
Description	Commands in this context specify the RADIUS attributes to be included in the RADIUS Authentication-Request messages.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

called-station-id *boolean*

Synopsis	Include the Called-Station-Id attribute
Context	**configure** ipsec radius authentication-policy *string* include-radius-attribute called-station-id *boolean*
Tree	called-station-id
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

calling-station-id *boolean*

Synopsis	Include the Calling-Station-Id attribute

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Context	**configure** ipsec radius authentication-policy *string* include-radius-attribute calling-station-id *boolean*
Tree	calling-station-id
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

client-cert-subject-key-id *boolean*

Synopsis	Include the Subject Key Identifier
Context	**configure** ipsec radius authentication-policy *string* include-radius-attribute client-cert-subject-key-id *boolean*
Tree	client-cert-subject-key-id
Description	When configured to **true**, the Subject Key Identifier of the certificate of the peer is included in the RADIUS Access-Request packet as VSA: Alc-Subject-Key-Identifier. See the *7450 ESS, 7750 SR, 7950 XRS, and VSR RADIUS Attributes Reference Guide* for more information.
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-identifier *boolean*

Synopsis	Include the NAS-Identifier attribute
Context	**configure** ipsec radius authentication-policy *string* include-radius-attribute nas-identifier *boolean*
Tree	nas-identifier
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-ip-addr *boolean*

Synopsis	Include the NAS-IP-Address attribute
Context	**configure** ipsec radius authentication-policy *string* include-radius-attribute nas-ip-addr *boolean*
Tree	nas-ip-addr

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Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-port-id *boolean*

Synopsis	Include the NAS-Port-Id attribute
Context	**configure** ipsec radius authentication-policy *string* include-radius-attribute nas-port-id *boolean*
Tree	nas-port-id
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	Password used in RADIUS access requests
Context	**configure** ipsec radius authentication-policy *string* password *string*
Tree	password
String Length	1 to 115
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-server-policy *reference*

Synopsis	Referenced RADIUS server policy
Context	**configure** ipsec radius authentication-policy *string* radius-server-policy *reference*
Tree	radius-server-policy
Reference	**configure** aaa radius server-policy *string*
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

show-ipsec-keys *boolean*

Synopsis	Show IPsec IKE and ESP keys in the output

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Context	**configure** ipsec show-ipsec-keys *boolean*
Tree	show-ipsec-keys
Description	When configured to **true**, this command allows IPsec keys to be (optionally) included in the display output of certain **debug** and **admin** commands. When configured to **false**, the key display is disabled.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

static-sa [name] *string*

Synopsis	Enter the **static-sa** list instance
Context	**configure** ipsec static-sa *string*
Tree	static-sa
Max. Instances	1000
Introduced	16.0.R6
Platforms	All

[**name**] *string*

Synopsis	Static SA name
Context	**configure** ipsec static-sa *string*
Tree	static-sa
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R6
Platforms	All

authentication

Synopsis	Enable the **authentication** context
Context	**configure** ipsec static-sa *string* authentication
Tree	authentication
Introduced	16.0.R6

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Platforms	All

algorithm *keyword*

Synopsis	Authentication algorithm used for an IPsec manual SA
Context	**configure** ipsec static-sa *string* authentication algorithm *keyword*
Tree	algorithm
Options	md5, sha1
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

key *string*

Synopsis	Key used for the authentication algorithm
Context	**configure** ipsec static-sa *string* authentication key *string*
Tree	key
String Length	1 to 54
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** ipsec static-sa *string* description *string*
Tree	description
String Length	1 to 32
Introduced	16.0.R6
Platforms	All

direction *keyword*

Synopsis	Direction to which the static SA entry can be applied
Context	**configure** ipsec static-sa *string* direction *keyword*

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Tree	direction
Options	inbound, outbound, bidirectional
Default	bidirectional
Introduced	16.0.R6
Platforms	All

protocol *keyword*

Synopsis	IPsec protocol used with the static SA
Context	**configure** ipsec static-sa *string* protocol *keyword*
Tree	protocol
Options	ah, esp
Default	esp
Introduced	16.0.R6
Platforms	All

spi *number*

Synopsis	Security Parameter Index (SPI) for the static SA
Context	**configure** ipsec static-sa *string* spi *number*
Tree	spi
Description	This command specifies the SPI for the static SA. When the **direction** command is set to **inbound**, the SPI is used to look up the instruction to verify and decrypt the incoming IPsec packets. When the **direction** command is set to **outbound**, the SPI is used in the encoding of the outgoing packets. The remote node can use the SPI to look up the instruction to verify and decrypt the packet. When unconfigured, the static SA cannot be used.
Range	256 to 16383
Introduced	16.0.R6
Platforms	All

trust-anchor-profile [name] *string*

Synopsis	Enter the **trust-anchor-profile** list instance
Context	**configure** ipsec trust-anchor-profile *string*

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Tree	trust-anchor-profile
Max. Instances	10128
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Trust anchor profile name for IPsec tunnel or gateway
Context	**configure** ipsec trust-anchor-profile *string*
Tree	trust-anchor-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

trust-anchor [ca-profile] *reference*

Synopsis	Add a list entry for **trust-anchor**
Context	**configure** ipsec trust-anchor-profile *string* trust-anchor *reference*
Tree	trust-anchor
Description	Commands in this context configure a CA profile as a trust anchor CA.
Max. Instances	8
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**ca-profile**] *reference*

Synopsis	Name of the CA profile as a trust anchor profile
Context	**configure** ipsec trust-anchor-profile *string* trust-anchor *reference*
Tree	trust-anchor
Reference	**configure** system security pki ca-profile *string*
Notes	This element is part of a list key.
Introduced	19.7.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ts-list [name] *string*

Synopsis	Enter the **ts-list** list instance
Context	**configure** ipsec ts-list *string*
Tree	ts-list
Description	Commands in this context configure Traffic Selector (TS) settings.
Max. Instances	32768
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Traffic Selector (TS) list name
Context	**configure** ipsec ts-list *string*
Tree	ts-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local

Synopsis	Enter the **local** context
Context	**configure** ipsec ts-list *string* local
Tree	local
Description	Commands in this context configure a local TS list, a traffic selector, such as TSr, when the system acts as an IKEv2 responder.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [id] *number*

Synopsis	Enter the **entry** list instance

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Context	**configure** ipsec ts-list *string* local entry *number*
Tree	entry
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	TS list entry ID
Context	**configure** ipsec ts-list *string* local entry *number*
Tree	entry
Range	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address

Synopsis	Enable the **address** context
Context	**configure** ipsec ts-list *string* local entry *number* address
Tree	address
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP prefix for address range in IKEv2 traffic selector
Context	**configure** ipsec ts-list *string* local entry *number* address prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Notes	The following elements are part of a mandatory choice: **prefix** or **range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the **range** context

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Context	**configure** ipsec ts-list *string* local entry *number* address range
Tree	range
Notes	The following elements are part of a mandatory choice: **prefix** or **range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Lower bound of the IP address range for the entry
Context	**configure** ipsec ts-list *string* local entry *number* address range begin *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	begin
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Upper bound of the IP address range
Context	**configure** ipsec ts-list *string* local entry *number* address range end *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	end
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocol

Synopsis	Enable the **protocol** context
Context	**configure** ipsec ts-list *string* local entry *number* protocol
Tree	protocol
Description	Commands in this context specify the protocol settings for the IKEv2 traffic selector.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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any

Synopsis	Match any protocol ID
Context	**configure** ipsec ts-list *string* local entry *number* protocol any
Tree	any
Notes	The following elements are part of a mandatory choice: **any** or **id**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id

Synopsis	Enable the **id** context
Context	**configure** ipsec ts-list *string* local entry *number* protocol id
Tree	id
Notes	The following elements are part of a mandatory choice: **any** or **id**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp

Synopsis	Enter the **icmp** context
Context	**configure** ipsec ts-list *string* local entry *number* protocol id icmp
Tree	icmp
Notes	The following elements are part of a mandatory choice: **icmp**, **icmp6**, **mipv6**, **protocol-id-with-any-port**, **sctp**, **tcp**, or **udp**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	**configure** ipsec ts-list *string* local entry *number* protocol id icmp opaque
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: **opaque** or **port-range**.

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Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the **port-range** context
Context	**configure** ipsec ts-list *string* local entry *number* protocol id icmp port-range
Tree	port-range
Description	Commands in this context configure port range information for the protocol.
Notes	The following elements are part of a choice: **opaque** or **port-range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin-icmp-code *number*

Synopsis	Lower bound of the ICMP code range
Context	**configure** ipsec ts-list *string* local entry *number* protocol id icmp port-range begin-icmp-code *number*
Tree	begin-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin-icmp-type *number*

Synopsis	Lower bound of the ICMP type range
Context	**configure** ipsec ts-list *string* local entry *number* protocol id icmp port-range begin-icmp-type *number*
Tree	begin-icmp-type
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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end-icmp-code *number*

Synopsis	Upper bound of the ICMP code range
Context	**configure** ipsec ts-list *string* local entry *number* protocol id icmp port-range end-icmp-code *number*
Tree	end-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end-icmp-type *number*

Synopsis	Upper bound of the ICMP type range
Context	**configure** ipsec ts-list *string* local entry *number* protocol id icmp port-range end-icmp-type *number*
Tree	end-icmp-type
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp6

Synopsis	Enter the **icmp6** context
Context	**configure** ipsec ts-list *string* local entry *number* protocol id icmp6
Tree	icmp6
Notes	The following elements are part of a mandatory choice: **icmp**, **icmp6**, **mipv6**, **protocol-id-with-any-port**, **sctp**, **tcp**, or **udp**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	**configure** ipsec ts-list *string* local entry *number* protocol id icmp6 opaque

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Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: **opaque** or **port-range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the **port-range** context
Context	**configure** ipsec ts-list *string* local entry *number* protocol id icmp6 port-range
Tree	port-range
Description	Commands in this context configure port range information for the protocol.
Notes	The following elements are part of a choice: **opaque** or **port-range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin-icmp-code *number*

Synopsis	Lower bound of the ICMP code range
Context	**configure** ipsec ts-list *string* local entry *number* protocol id icmp6 port-range begin-icmp-code *number*
Tree	begin-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin-icmp-type *number*

Synopsis	Lower bound of the ICMP type range
Context	**configure** ipsec ts-list *string* local entry *number* protocol id icmp6 port-range begin-icmp-type *number*
Tree	begin-icmp-type
Range	0 to 255

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Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end-icmp-code *number*

Synopsis	Upper bound of the ICMP code range
Context	**configure** ipsec ts-list *string* local entry *number* protocol id icmp6 port-range end-icmp-code *number*
Tree	end-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end-icmp-type *number*

Synopsis	Upper bound of the ICMP type range
Context	**configure** ipsec ts-list *string* local entry *number* protocol id icmp6 port-range end-icmp-type *number*
Tree	end-icmp-type
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mipv6

Synopsis	Enter the **mipv6** context
Context	**configure** ipsec ts-list *string* local entry *number* protocol id mipv6
Tree	mipv6
Notes	The following elements are part of a mandatory choice: **icmp**, **icmp6**, **mipv6**, **protocol-id-with-any-port**, **sctp**, **tcp**, or **udp**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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opaque

Synopsis	Support OPAQUE ports
Context	**configure** ipsec ts-list *string* local entry *number* protocol id mipv6 opaque
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: **opaque** or **port-range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the **port-range** context
Context	**configure** ipsec ts-list *string* local entry *number* protocol id mipv6 port-range
Tree	port-range
Notes	The following elements are part of a choice: **opaque** or **port-range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin *number*

Synopsis	Lower bound of the port range
Context	**configure** ipsec ts-list *string* local entry *number* protocol id mipv6 port-range begin *number*
Tree	begin
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the port range
Context	**configure** ipsec ts-list *string* local entry *number* protocol id mipv6 port-range end *number*

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Tree	end
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocol-id-with-any-port *(keyword | number)*

Synopsis	Protocol ID that accepts any port value
Context	**configure** ipsec ts-list *string* local entry *number* protocol id protocol-id-with-any-port *(keyword | number)*
Tree	protocol-id-with-any-port
Range	1 to 255
Options	icmp, tcp, udp, icmp6, sctp, mipv6
Notes	The following elements are part of a mandatory choice: **icmp**, **icmp6**, **mipv6**, **protocol-id-with-any-port**, **sctp**, **tcp**, or **udp**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sctp

Synopsis	Enter the **sctp** context
Context	**configure** ipsec ts-list *string* local entry *number* protocol id sctp
Tree	sctp
Notes	The following elements are part of a mandatory choice: **icmp**, **icmp6**, **mipv6**, **protocol-id-with-any-port**, **sctp**, **tcp**, or **udp**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	**configure** ipsec ts-list *string* local entry *number* protocol id sctp opaque
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.

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Notes	The following elements are part of a choice: **opaque** or **port-range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the **port-range** context
Context	**configure** ipsec ts-list *string* local entry *number* protocol id sctp port-range
Tree	port-range
Notes	The following elements are part of a choice: **opaque** or **port-range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin *number*

Synopsis	Lower bound of the port range
Context	**configure** ipsec ts-list *string* local entry *number* protocol id sctp port-range begin *number*
Tree	begin
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the port range
Context	**configure** ipsec ts-list *string* local entry *number* protocol id sctp port-range end *number*
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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tcp

Synopsis	Enter the **tcp** context
Context	**configure** ipsec ts-list *string* local entry *number* protocol id tcp
Tree	tcp
Notes	The following elements are part of a mandatory choice: **icmp**, **icmp6**, **mipv6**, **protocol-id-with-any-port**, **sctp**, **tcp**, or **udp**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	**configure** ipsec ts-list *string* local entry *number* protocol id tcp opaque
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: **opaque** or **port-range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the **port-range** context
Context	**configure** ipsec ts-list *string* local entry *number* protocol id tcp port-range
Tree	port-range
Notes	The following elements are part of a choice: **opaque** or **port-range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin *number*

Synopsis	Lower bound of the port range
Context	**configure** ipsec ts-list *string* local entry *number* protocol id tcp port-range begin *number*
Tree	begin
Range	0 to 65535

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Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the port range
Context	**configure** ipsec ts-list *string* local entry *number* protocol id tcp port-range end *number*
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp

Synopsis	Enter the **udp** context
Context	**configure** ipsec ts-list *string* local entry *number* protocol id udp
Tree	udp
Notes	The following elements are part of a mandatory choice: **icmp**, **icmp6**, **mipv6**, **protocol-id-with-any-port**, **sctp**, **tcp**, or **udp**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	**configure** ipsec ts-list *string* local entry *number* protocol id udp opaque
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: **opaque** or **port-range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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port-range

Synopsis	Enable the **port-range** context
Context	**configure** ipsec ts-list *string* local entry *number* protocol id udp port-range
Tree	port-range
Notes	The following elements are part of a choice: **opaque** or **port-range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin *number*

Synopsis	Lower bound of the port range
Context	**configure** ipsec ts-list *string* local entry *number* protocol id udp port-range begin *number*
Tree	begin
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the port range
Context	**configure** ipsec ts-list *string* local entry *number* protocol id udp port-range end *number*
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote

Synopsis	Enter the **remote** context
Context	**configure** ipsec ts-list *string* remote
Tree	remote

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Description	Commands in this context configure a remote TS list, a traffic selector, such as TSr, when the system acts as an IKEv2 responder.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** ipsec ts-list *string* remote entry *number*
Tree	entry
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	TS list entry ID
Context	**configure** ipsec ts-list *string* remote entry *number*
Tree	entry
Range	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address

Synopsis	Enable the **address** context
Context	**configure** ipsec ts-list *string* remote entry *number* address
Tree	address
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP prefix for address range in IKEv2 traffic selector
Context	**configure** ipsec ts-list *string* remote entry *number* address prefix *(ipv4-prefix | ipv6-prefix)*

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Tree	prefix
Notes	The following elements are part of a mandatory choice: **prefix** or **range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the **range** context
Context	**configure** ipsec ts-list *string* remote entry *number* address range
Tree	range
Notes	The following elements are part of a mandatory choice: **prefix** or **range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Lower bound of the IP address range for the entry
Context	**configure** ipsec ts-list *string* remote entry *number* address range begin *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	begin
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Upper bound of the IP address range
Context	**configure** ipsec ts-list *string* remote entry *number* address range end *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	end
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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protocol

Synopsis	Enable the **protocol** context
Context	**configure** ipsec ts-list *string* remote entry *number* protocol
Tree	protocol
Description	Commands in this context specify the protocol settings for the IKEv2 traffic selector.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

any

Synopsis	Match any protocol ID
Context	**configure** ipsec ts-list *string* remote entry *number* protocol any
Tree	any
Notes	The following elements are part of a mandatory choice: **any** or **id**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id

Synopsis	Enable the **id** context
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id
Tree	id
Notes	The following elements are part of a mandatory choice: **any** or **id**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp

Synopsis	Enter the **icmp** context
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id icmp
Tree	icmp
Notes	The following elements are part of a mandatory choice: **icmp**, **icmp6**, **mipv6**, **protocol-id-with-any-port**, **sctp**, **tcp**, or **udp**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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opaque

Synopsis	Support OPAQUE ports
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id icmp opaque
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: **opaque** or **port-range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the **port-range** context
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id icmp port-range
Tree	port-range
Description	Commands in this context configure port range information for the protocol.
Notes	The following elements are part of a choice: **opaque** or **port-range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin-icmp-code *number*

Synopsis	Lower bound of the ICMP code range
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id icmp port-range begin-icmp-code *number*
Tree	begin-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin-icmp-type *number*

Synopsis	Lower bound of the ICMP type range

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Context	**configure** ipsec ts-list *string* remote entry *number* protocol id icmp port-range begin-icmp-type *number*
Tree	begin-icmp-type
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end-icmp-code *number*

Synopsis	Upper bound of the ICMP code range
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id icmp port-range end-icmp-code *number*
Tree	end-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end-icmp-type *number*

Synopsis	Upper bound of the ICMP type range
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id icmp port-range end-icmp-type *number*
Tree	end-icmp-type
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp6

Synopsis	Enter the **icmp6** context
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id icmp6
Tree	icmp6

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Notes	The following elements are part of a mandatory choice: **icmp**, **icmp6**, **mipv6**, **protocol-id-with-any-port**, **sctp**, **tcp**, or **udp**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id icmp6 opaque
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: **opaque** or **port-range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the **port-range** context
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id icmp6 port-range
Tree	port-range
Description	Commands in this context configure port range information for the protocol.
Notes	The following elements are part of a choice: **opaque** or **port-range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin-icmp-code *number*

Synopsis	Lower bound of the ICMP code range
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id icmp6 port-range begin-icmp-code *number*
Tree	begin-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin-icmp-type *number*

Synopsis	Lower bound of the ICMP type range
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id icmp6 port-range begin-icmp-type *number*
Tree	begin-icmp-type
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end-icmp-code *number*

Synopsis	Upper bound of the ICMP code range
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id icmp6 port-range end-icmp-code *number*
Tree	end-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end-icmp-type *number*

Synopsis	Upper bound of the ICMP type range
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id icmp6 port-range end-icmp-type *number*
Tree	end-icmp-type
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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mipv6

Synopsis	Enter the **mipv6** context
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id mipv6
Tree	mipv6
Notes	The following elements are part of a mandatory choice: **icmp**, **icmp6**, **mipv6**, **protocol-id-with-any-port**, **sctp**, **tcp**, or **udp**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id mipv6 opaque
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: **opaque** or **port-range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the **port-range** context
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id mipv6 port-range
Tree	port-range
Notes	The following elements are part of a choice: **opaque** or **port-range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin *number*

Synopsis	Lower bound of the port range
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id mipv6 port-range begin *number*
Tree	begin

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Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the port range
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id mipv6 port-range end *number*
Tree	end
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocol-id-with-any-port *(keyword | number)*

Synopsis	Protocol ID that accepts any port value
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id protocol-id-with-any-port *(keyword | number)*
Tree	protocol-id-with-any-port
Range	1 to 255
Options	icmp, tcp, udp, icmp6, sctp, mipv6
Notes	The following elements are part of a mandatory choice: **icmp**, **icmp6**, **mipv6**, **protocol-id-with-any-port**, **sctp**, **tcp**, or **udp**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sctp

Synopsis	Enter the **sctp** context
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id sctp
Tree	sctp
Notes	The following elements are part of a mandatory choice: **icmp**, **icmp6**, **mipv6**, **protocol-id-with-any-port**, **sctp**, **tcp**, or **udp**.

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Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id sctp opaque
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: **opaque** or **port-range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the **port-range** context
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id sctp port-range
Tree	port-range
Notes	The following elements are part of a choice: **opaque** or **port-range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin *number*

Synopsis	Lower bound of the port range
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id sctp port-range begin *number*
Tree	begin
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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end *number*

Synopsis	Upper bound of the port range
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id sctp port-range end *number*
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp

Synopsis	Enter the **tcp** context
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id tcp
Tree	tcp
Notes	The following elements are part of a mandatory choice: **icmp**, **icmp6**, **mipv6**, **protocol-id-with-any-port**, **sctp**, **tcp**, or **udp**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id tcp opaque
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: **opaque** or **port-range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the **port-range** context
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id tcp port-range

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Tree	port-range
Notes	The following elements are part of a choice: **opaque** or **port-range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin *number*

Synopsis	Lower bound of the port range
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id tcp port-range begin *number*
Tree	begin
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the port range
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id tcp port-range end *number*
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp

Synopsis	Enter the **udp** context
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id udp
Tree	udp
Notes	The following elements are part of a mandatory choice: **icmp**, **icmp6**, **mipv6**, **protocol-id-with-any-port**, **sctp**, **tcp**, or **udp**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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opaque

Synopsis	Support OPAQUE ports
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id udp opaque
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: **opaque** or **port-range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the **port-range** context
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id udp port-range
Tree	port-range
Notes	The following elements are part of a choice: **opaque** or **port-range**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin *number*

Synopsis	Lower bound of the port range
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id udp port-range begin *number*
Tree	begin
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the port range
Context	**configure** ipsec ts-list *string* remote entry *number* protocol id udp port-range end *number*

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Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-template [id] *number*

Synopsis	Enter the **tunnel-template** list instance
Context	**configure** ipsec tunnel-template *number*
Tree	tunnel-template
Max. Instances	2048
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	Tunnel template ID
Context	**configure** ipsec tunnel-template *number*
Tree	tunnel-template
Range	1 to 2048
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

clear-df-bit *boolean*

Synopsis	Clear the Do-not-Fragment (DF) bit
Context	**configure** ipsec tunnel-template *number* clear-df-bit *boolean*
Tree	clear-df-bit
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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copy-traffic-class-upon-decapsulation *boolean*

Synopsis	Enable traffic class copy upon decapsulation
Context	**configure** ipsec tunnel-template *number* copy-traffic-class-upon-decapsulation *boolean*
Tree	copy-traffic-class-upon-decapsulation
Description	When configured to **true**, the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private). When configured to **false**, the system does not copy the traffic class from the outer IP packet to the payload IP packet header upon decapsulation.
Default	false
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** ipsec tunnel-template *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encapsulated-ip-mtu *number*

Synopsis	Maximum size of the encapsulated tunnel packet
Context	**configure** ipsec tunnel-template *number* encapsulated-ip-mtu *number*
Tree	encapsulated-ip-mtu
Description	This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	octets
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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icmp-generation

Synopsis	Enter the **icmp-generation** context
Context	**configure** ipsec tunnel-template *number* icmp-generation
Tree	icmp-generation
Description	Commands in this context configure settings for ICMPv4 message generation.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

frag-required

Synopsis	Enter the **frag-required** context
Context	**configure** ipsec tunnel-template *number* icmp-generation frag-required
Tree	frag-required
Description	Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of sending ICMP messages
Context	**configure** ipsec tunnel-template *number* icmp-generation frag-required admin-state *keyword*
Tree	admin-state
Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Options	enable, disable
Default	enable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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interval *number*

Synopsis	Interval for sending ICMP messages
Context	**configure** ipsec tunnel-template *number* icmp-generation frag-required interval *number*
Tree	interval
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Units	seconds
Default	10
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

message-count *number*

Synopsis	Maximum number of ICMP messages that can be sent
Context	**configure** ipsec tunnel-template *number* icmp-generation frag-required message-count *number*
Tree	message-count
Description	This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp6-generation

Synopsis	Enter the **icmp6-generation** context
Context	**configure** ipsec tunnel-template *number* icmp6-generation
Tree	icmp6-generation
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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pkt-too-big

Synopsis	Enter the **pkt-too-big** context
Context	**configure** ipsec tunnel-template *number* icmp6-generation pkt-too-big
Tree	pkt-too-big
Description	Commands in this context configure values for the ICMPv6 Packet Too Big (PTB) messages. The system sends PTB messages if an IPv6 packet is received on the private side that is larger than 1280 bytes and also exceeds the private MTU of the tunnel.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of Packet Too Big message sends
Context	**configure** ipsec tunnel-template *number* icmp6-generation pkt-too-big admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Maximum interval during which PTB messages can be sent
Context	**configure** ipsec tunnel-template *number* icmp6-generation pkt-too-big interval *number*
Tree	interval
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

message-count *number*

Synopsis	Max ICMPv6 messages that can be sent during interval

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Context	**configure** ipsec tunnel-template *number* icmp6-generation pkt-too-big message-count *number*
Tree	message-count
Range	10 to 1000
Default	100
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ignore-default-route *boolean*

Synopsis	Ignore any full range traffic selector in TSi
Context	**configure** ipsec tunnel-template *number* ignore-default-route *boolean*
Tree	ignore-default-route
Description	When configured to **true**, any full range traffic selector is ignored when creating a reverse route. When configured to **false**, no CHILD_SA is created if any full range traffic selector is included in TSi.
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis	Maximum size of the IP MTU for the payload packets
Context	**configure** ipsec tunnel-template *number* ip-mtu *number*
Tree	ip-mtu
Range	512 to 9000
Units	octets
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-transform *reference*

Synopsis	IPsec transform ID for the tunnel template
Context	**configure** ipsec tunnel-template *number* ipsec-transform *reference*
Tree	ipsec-transform

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Reference	**configure** ipsec ipsec-transform *number*
Max. Instances	4
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pmtu-discovery-aging *number*

Synopsis	Aging out time of the learned path MTU
Context	**configure** ipsec tunnel-template *number* pmtu-discovery-aging *number*
Tree	pmtu-discovery-aging
Description	This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation.
Range	900 to 3600
Units	seconds
Default	900
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

private-tcp-mss-adjust *number*

Synopsis	New TCP MSS value on the private side
Context	**configure** ipsec tunnel-template *number* private-tcp-mss-adjust *number*
Tree	private-tcp-mss-adjust
Description	This command specifies the new (adjusted) TCP MSS value of TCP SYN packets on the private side. When unconfigured, the MSS value is derived from the received TCP SYN packet on the private side.
Range	512 to 9000
Units	octets
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

propagate-pmtu-v4 *boolean*

Synopsis	Enable propagation of the path MTU to IPv4 hosts

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Context	**configure** ipsec tunnel-template *number* propagate-pmtu-v4 *boolean*
Tree	propagate-pmtu-v4
Description	When configured to **true**, the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).
Default	true
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

propagate-pmtu-v6 *boolean*

Synopsis	Enable propagation of the path MTU to IPv6 hosts
Context	**configure** ipsec tunnel-template *number* propagate-pmtu-v6 *boolean*
Tree	propagate-pmtu-v6
Description	When configured to **true**, the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).
Default	true
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

public-tcp-mss-adjust *(number | keyword)*

Synopsis	New TCP MSS value on the public side
Context	**configure** ipsec tunnel-template *number* public-tcp-mss-adjust *(number | keyword)*
Tree	public-tcp-mss-adjust
Description	This command specifies the new (adjusted) TCP MSS value for the TCP traffic in an IPsec tunnel which is sent from the public network to the private network. The system can use this value to adjust or insert the MSS option in the TCP SYN packet. When unconfigured, the MSS value is derived from the public MTU and IPsec overhead.
Range	512 to 9000
Units	octets
Options	auto
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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replay-window *number*

Synopsis	Anti-replay window size for the tunnel template
Context	**configure** ipsec tunnel-template *number* replay-window *number*
Tree	replay-window
Range	32 | 64 | 128 | 256 | 512
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sp-reverse-route *keyword*

Synopsis	Reverse route creation method in private service
Context	**configure** ipsec tunnel-template *number* sp-reverse-route *keyword*
Tree	sp-reverse-route
Description	This command allows the system to automatically create a reverse route based on dynamic LAN-to-LAN tunnel's TSi in private service.
Options	none, use-security-policy
Default	none
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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3.21 isa commands

```
configure
   - isa
      - application-assurance-group number
         - aa-sub-scale keyword
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - backup
            - esa number vm number
            - isa string
         - description string
         - divert-fc keyword
         - failure-mode keyword
         - flow-attribute string
         - http-enrich-max-packet-size number
         - isa-capacity-cost-high-threshold number
         - isa-capacity-cost-low-threshold number
         - minimum-isa-generation number
         - overload-cut-through boolean
         - overload-sub-quarantine
            - admin-state keyword
         - primary
            - esa number vm number
            - isa string
         - qos
            - egress
               - from-subscriber
                  - buffer-pool
                     - name string
                     - resv-cbs number
                     - slope-policy reference
                  - port-scheduler-policy reference
                  - queue-policy reference
                  - wa-shared-high-wmark (number | keyword)
                  - wa-shared-low-wmark number
               - to-subscriber
                  - buffer-pool
                     - name string
                     - resv-cbs number
                     - slope-policy reference
                  - port-scheduler-policy reference
                  - queue-policy reference
                  - wa-shared-high-wmark (number | keyword)
                  - wa-shared-low-wmark number
         - shared-resources
            - gtp-tunnel-database number
            - tcp-advanced-functions number
            - url-filter-web-service-cache number
         - statistics
            - stats-type keyword
               - accounting-policy reference
               - apply-groups reference
               - apply-groups-exclude reference
               - collect-stats boolean
         - transit-prefix-limits
            - ipv4-entries number
            - ipv4-remote-entries number
            - ipv6-entries number
            - ipv6-remote-entries number
```


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configure isa application-assurance-group vm-traffic-distribute-by-ip

```
        - vm-traffic-distribute-by-ip boolean
        - vm-traffic-distribute-by-teid boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - lns-group number
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
        - esa reference vm reference
            - apply-groups reference
            - apply-groups-exclude reference
            - drain boolean
        - mda string
            - apply-groups reference
            - apply-groups-exclude reference
            - drain boolean
        - port-policy reference
    - nat-group number
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
        - esa reference vm reference
        - log
            - suppress-lsn-events boolean
            - suppress-lsn-sub-blocks-free boolean
        - mda string
        - radius-accounting-policy reference
        - redundancy
            - active-mda-limit number
            - inter-chassis
                - flow-timeout-on-switchover number
                - ip-mtu number
                - keepalive
                    - dropcount number
                    - interval number
                - local-ip-range-start string
                - monitor-oper-group reference
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - health-drop number
                - monitor-port string
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - health-drop number
                - preferred boolean
                - remote-ip-range-start string
                - replication-threshold number
                - router-instance string
                - sync boolean
            - intra-chassis
                - active-active
                    - failed-mda-limit number
                - active-standby
                - l2aware-bypass
        - scaling-profile keyword
        - session-limits
            - reserved number
            - upnp-mappings number
            - watermarks
                - high number
                - low number
    - tunnel-group number
```


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configure isa tunnel-group admin-state

```
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - backup string
        - description string
        - ipsec-responder-only boolean
        - isa-scale-mode keyword
        - multi-active
          - active-isa-number number
          - esa reference vm reference
          - isa string
          - member-pool reference
        - primary string
        - reassembly
          - max-wait-time number
        - stats-collection
          - isa-dp-cpu-usage boolean
        - strict-esp-sequence-number-ordering boolean
    - tunnel-member-pool string
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
        - esa reference vm reference
        - isa string
    - video-group number
        - admin-state keyword
        - analyzer boolean
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
        - fcc-server boolean
        - local-rt-server boolean
        - mda string
        - resv-ret number
        - stream-selection boolean
        - vapp reference vapp-id reference
        - watermark
          - bandwidth
            - fcc number
            - ret number
            - total number
          - session
            - fcc number
            - ret number
            - total number
    - wlan-gw-group number
        - active-iom-limit number
        - active-mda-limit number
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
        - distributed-sub-mgmt
          - isa-aa-group reference
          - isa-aa-oversubscription-factor number
        - esa reference vm reference
        - iom reference
        - mda string
        - nat
          - log
            - suppress-lsn-events boolean
            - suppress-lsn-sub-blocks-free boolean
          - lsn boolean
          - radius-accounting-policy reference
```


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configure isa wlan-gw-group nat session-limits

```
            – session-limits
               – reserved number
               – upnp-mappings number
               – watermarks
                  – high number
                  – low number
         – port-policy reference
         – redundancy keyword
         – scaling-profile keyword
         – tunnel-port-policy reference
         – watermarks
            – mark keyword
               – apply-groups reference
               – apply-groups-exclude reference
               – high number
               – low number
```


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3.21.1 isa command descriptions

isa

Synopsis	Enter the **isa** context
Context	**configure** isa
Tree	isa
Introduced	16.0.R1
Platforms	All

application-assurance-group [aa-group-id] *number*

Synopsis	Enter the **application-assurance-group** list instance
Context	**configure** isa application-assurance-group *number*
Tree	application-assurance-group
Max. Instances	7
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[aa-group-id] *number*

Synopsis	AA group ID
Context	**configure** isa application-assurance-group *number*
Tree	application-assurance-group
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub-scale *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

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Synopsis	AA group sub-scale
Context	**configure** isa application-assurance-group *number* aa-sub-scale *keyword*
Tree	aa-sub-scale
Options	residential, vpn, mobile-gateway, lightweight-internet, residential-8k, residential-16k, residential-32k, residential-64k, vpn-1k, vpn-2k, vpn-4k, vpn-8k, mobile-gateway-1m, mobile-gateway-2m, lightweight-internet-512k
Default	residential
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of this AA group
Context	**configure** isa application-assurance-group *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

backup

Synopsis	Enter the **backup** context
Context	**configure** isa application-assurance-group *number* backup
Tree	backup
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esa [esa-id] *number* vm *number*

Synopsis	Add a list entry for **esa**
Context	**configure** isa application-assurance-group *number* backup esa *number* vm *number*
Tree	esa
Max. Instances	1
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**esa-id**] *number*

Synopsis	ESA ID
Context	**configure** isa application-assurance-group *number* backup esa *number* vm *number*
Tree	esa
Range	1 to 16
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vm *number*

Synopsis	VM ID within the ESA
Context	**configure** isa application-assurance-group *number* backup esa *number* vm *number*
Tree	esa
Range	1 to 4
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isa [mda-id] *string*

Synopsis	Add a list entry for **isa**
Context	**configure** isa application-assurance-group *number* backup isa *string*
Tree	isa
Max. Instances	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**mda-id**] *string*

Synopsis	MDA/ISA ID

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Context	**configure** isa application-assurance-group *number* backup isa *string*
Tree	isa
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** isa application-assurance-group *number* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

divert-fc *keyword*

Synopsis	Diverted traffic forwarding class
Context	**configure** isa application-assurance-group *number* divert-fc *keyword*
Tree	divert-fc
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

failure-mode *keyword*

Synopsis	Mode of operation when no ISA-AA cards are available
Context	**configure** isa application-assurance-group *number* failure-mode *keyword*
Tree	failure-mode
Options	fail-to-open
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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flow-attribute [flow-attribute-name] *string*

Synopsis	Add a list entry for **flow-attribute**
Context	**configure** isa application-assurance-group *number* flow-attribute *string*
Tree	flow-attribute
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**flow-attribute-name**] *string*

Synopsis	Flow attribute name
Context	**configure** isa application-assurance-group *number* flow-attribute *string*
Tree	flow-attribute
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-enrich-max-packet-size *number*

Synopsis	Maximum HTTP enriched packet size
Context	**configure** isa application-assurance-group *number* http-enrich-max-packet-size *number*
Tree	http-enrich-max-packet-size
Range	576 to 9212
Units	octets
Default	1500
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isa-capacity-cost-high-threshold *number*

Synopsis	Capacity cost high threshold for the ISA-AA group
Context	**configure** isa application-assurance-group *number* isa-capacity-cost-high-threshold *number*
Tree	isa-capacity-cost-high-threshold
Range	0 to 4294967294

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isa-capacity-cost-low-threshold *number*

Synopsis	Capacity cost low threshold for the ISA-AA group
Context	**configure** isa application-assurance-group *number* isa-capacity-cost-low-threshold *number*
Tree	isa-capacity-cost-low-threshold
Range	1 to 4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

minimum-isa-generation *number*

Synopsis	Minimum ISA generation for this AA group
Context	**configure** isa application-assurance-group *number* minimum-isa-generation *number*
Tree	minimum-isa-generation
Range	1 to 2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

overload-cut-through *boolean*

Synopsis	Enable cut-through of traffic if ISA is in overload
Context	**configure** isa application-assurance-group *number* overload-cut-through *boolean*
Tree	overload-cut-through
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

overload-sub-quarantine

Synopsis	Enter the **overload-sub-quarantine** context
Context	**configure** isa application-assurance-group *number* overload-sub-quarantine
Tree	overload-sub-quarantine

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of overload subscriber quarantine
Context	**configure** isa application-assurance-group *number* overload-sub-quarantine admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

primary

Synopsis	Enter the **primary** context
Context	**configure** isa application-assurance-group *number* primary
Tree	primary
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esa [esa-id] *number* vm *number*

Synopsis	Add a list entry for **esa**
Context	**configure** isa application-assurance-group *number* primary esa *number* vm *number*
Tree	esa
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**esa-id**] *number*

Synopsis	ESA ID
Context	**configure** isa application-assurance-group *number* primary esa *number* vm *number*
Tree	esa
Range	1 to 16

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Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vm *number*

Synopsis	VM ID within the ESA
Context	**configure** isa application-assurance-group *number* primary esa *number* vm *number*
Tree	esa
Range	1 to 4
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isa [mda-id] *string*

Synopsis	Add a list entry for **isa**
Context	**configure** isa application-assurance-group *number* primary isa *string*
Tree	isa
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**mda-id**] *string*

Synopsis	MDA/ISA ID
Context	**configure** isa application-assurance-group *number* primary isa *string*
Tree	isa
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the **qos** context
Context	**configure** isa application-assurance-group *number* qos

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Tree	qos
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the **egress** context
Context	**configure** isa application-assurance-group *number* qos egress
Tree	egress
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

from-subscriber

Synopsis	Enter the **from-subscriber** context
Context	**configure** isa application-assurance-group *number* qos egress from-subscriber
Tree	from-subscriber
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

buffer-pool

Synopsis	Enter the **buffer-pool** context
Context	**configure** isa application-assurance-group *number* qos egress from-subscriber buffer-pool
Tree	buffer-pool
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the buffer pool used for this ISA group

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Context	**configure** isa application-assurance-group *number* qos egress from-subscriber buffer-pool name *string*
Tree	name
String Length	1 to 32
Default	default
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

resv-cbs *number*

Synopsis	Reserved CBS for this ISA group
Context	**configure** isa application-assurance-group *number* qos egress from-subscriber buffer-pool resv-cbs *number*
Tree	resv-cbs
Range	0 to 100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

slope-policy *reference*

Synopsis	Slope policy name
Context	**configure** isa application-assurance-group *number* qos egress from-subscriber buffer-pool slope-policy *reference*
Tree	slope-policy
Reference	**configure** qos slope-policy *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-scheduler-policy *reference*

Synopsis	Port scheduler policy name
Context	**configure** isa application-assurance-group *number* qos egress from-subscriber port-scheduler-policy *reference*
Tree	port-scheduler-policy
Reference	**configure** qos port-scheduler-policy *string*
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue-policy *reference*

Synopsis	Queue policy name
Context	**configure** isa application-assurance-group *number* qos egress from-subscriber queue-policy *reference*
Tree	queue-policy
Reference	**configure** qos network-queue *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wa-shared-high-wmark *(number | keyword)*

Synopsis	High watermark for weighted average utilization
Context	**configure** isa application-assurance-group *number* qos egress from-subscriber wa-shared-high-wmark *(number | keyword)*
Tree	wa-shared-high-wmark
Range	1 to 100
Units	percent
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wa-shared-low-wmark *number*

Synopsis	Low watermark for the weighted average utilization
Context	**configure** isa application-assurance-group *number* qos egress from-subscriber wa-shared-low-wmark *number*
Tree	wa-shared-low-wmark
Range	0 to 99
Units	percent
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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to-subscriber

Synopsis	Enter the **to-subscriber** context
Context	**configure** isa application-assurance-group *number* qos egress to-subscriber
Tree	to-subscriber
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

buffer-pool

Synopsis	Enter the **buffer-pool** context
Context	**configure** isa application-assurance-group *number* qos egress to-subscriber buffer-pool
Tree	buffer-pool
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the buffer pool used for this ISA group
Context	**configure** isa application-assurance-group *number* qos egress to-subscriber buffer-pool name *string*
Tree	name
String Length	1 to 32
Default	default
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

resv-cbs *number*

Synopsis	Reserved CBS for this ISA group
Context	**configure** isa application-assurance-group *number* qos egress to-subscriber buffer-pool resv-cbs *number*
Tree	resv-cbs

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Range	0 to 100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

slope-policy *reference*

Synopsis	Slope policy name
Context	**configure** isa application-assurance-group *number* qos egress to-subscriber buffer-pool slope-policy *reference*
Tree	slope-policy
Reference	**configure** qos slope-policy *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-scheduler-policy *reference*

Synopsis	Port scheduler policy name
Context	**configure** isa application-assurance-group *number* qos egress to-subscriber port-scheduler-policy *reference*
Tree	port-scheduler-policy
Reference	**configure** qos port-scheduler-policy *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue-policy *reference*

Synopsis	Queue policy name
Context	**configure** isa application-assurance-group *number* qos egress to-subscriber queue-policy *reference*
Tree	queue-policy
Reference	**configure** qos network-queue *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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wa-shared-high-wmark *(number | keyword)*

Synopsis	High watermark for weighted average utilization
Context	**configure** isa application-assurance-group *number* qos egress to-subscriber wa-shared-high-wmark *(number | keyword)*
Tree	wa-shared-high-wmark
Range	1 to 100
Units	percent
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wa-shared-low-wmark *number*

Synopsis	Low watermark for the weighted average utilization
Context	**configure** isa application-assurance-group *number* qos egress to-subscriber wa-shared-low-wmark *number*
Tree	wa-shared-low-wmark
Range	0 to 99
Units	percent
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

shared-resources

Synopsis	Enter the **shared-resources** context
Context	**configure** isa application-assurance-group *number* shared-resources
Tree	shared-resources
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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gtp-tunnel-database *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Percentage of allocated memory resources
Context	**configure** isa application-assurance-group *number* shared-resources gtp-tunnel-database *number*
Tree	gtp-tunnel-database
Range	1 to 100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-advanced-functions *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allocation of resources for TCP advanced functions
Context	**configure** isa application-assurance-group *number* shared-resources tcp-advanced-functions *number*
Tree	tcp-advanced-functions
Range	1 to 100
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

url-filter-web-service-cache *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Amount of shared memory as a percentage
Context	**configure** isa application-assurance-group *number* shared-resources url-filter-web-service-cache *number*
Tree	url-filter-web-service-cache
Range	1 to 100

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

statistics

Synopsis	Enter the **statistics** context
Context	**configure** isa application-assurance-group *number* statistics
Tree	statistics
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

stats-type [isa-aa-group-stats-type] *keyword*

Synopsis	Enter the **stats-type** list instance
Context	**configure** isa application-assurance-group *number* statistics stats-type *keyword*
Tree	stats-type
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**isa-aa-group-stats-type**] *keyword*

Synopsis	Group performance statistics type
Context	**configure** isa application-assurance-group *number* statistics stats-type *keyword*
Tree	stats-type
Options	aa-performance
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	Accounting policy ID used by AA
Context	**configure** isa application-assurance-group *number* statistics stats-type *keyword* accounting-policy *reference*
Tree	accounting-policy

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Reference	**configure** log accounting-policy *number*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Enable the collection of statistics
Context	**configure** isa application-assurance-group *number* statistics stats-type *keyword* collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

transit-prefix-limits

Synopsis	Enter the **transit-prefix-limits** context
Context	**configure** isa application-assurance-group *number* transit-prefix-limits
Tree	transit-prefix-limits
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4-entries *number*

Synopsis	Limit of transit prefix IPv4 entries per AA group
Context	**configure** isa application-assurance-group *number* transit-prefix-limits ipv4-entries *number*
Tree	ipv4-entries
Range	1 to 16383
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4-remote-entries *number*

Synopsis	Limit of transit prefix IPv4 remote entries per group

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Context	**configure** isa application-assurance-group *number* transit-prefix-limits ipv4-remote-entries *number*
Tree	ipv4-remote-entries
Range	1 to 2047
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-entries *number*

Synopsis	Limit of transit prefix IPv6 entries per AA group
Context	**configure** isa application-assurance-group *number* transit-prefix-limits ipv6-entries *number*
Tree	ipv6-entries
Range	1 to 8191
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-remote-entries *number*

Synopsis	Limit of transit prefix IPv6 remote entries per group
Context	**configure** isa application-assurance-group *number* transit-prefix-limits ipv6-remote-entries *number*
Tree	ipv6-remote-entries
Range	1 to 1023
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vm-traffic-distribute-by-ip *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow packet distribution by IP address for virtual AA
Context	**configure** isa application-assurance-group *number* vm-traffic-distribute-by-ip *boolean*
Tree	vm-traffic-distribute-by-ip
Default	false

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vm-traffic-distribute-by-teid *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable load balancing of the traffic using TEID
Context	**configure** isa application-assurance-group *number* vm-traffic-distribute-by-teid *boolean*
Tree	vm-traffic-distribute-by-teid
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lns-group [id] *number*

Synopsis	Enter the **lns-group** list instance
Context	**configure** isa lns-group *number*
Tree	lns-group
Description	Commands in this context configure the ISA L2TP Network Server (LNS) group.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	LNS group ID
Context	**configure** isa lns-group *number*
Tree	lns-group
Range	1 to 4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of the ISA LNS group
Context	**configure** isa lns-group *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** isa lns-group *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esa [esa-id] *reference* vm *reference*

Synopsis	Enter the **esa** list instance
Context	**configure** isa lns-group *number* esa *reference* vm *reference*
Tree	esa
Max. Instances	6
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

[**esa-id**] *reference*

Synopsis	ESA ID
Context	**configure** isa lns-group *number* esa *reference* vm *reference*
Tree	esa
Reference	**configure** esa *number*
Notes	This element is part of a list key.

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Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

vm *reference*

Synopsis	VM ID
Context	**configure** isa lns-group *number* esa *reference* vm *reference*
Tree	esa
Reference	**configure** esa *number* vm *number*
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

drain *boolean*

Synopsis	Redirect subscribers to other ESA VMs
Context	**configure** isa lns-group *number* esa *reference* vm *reference* drain *boolean*
Tree	drain
Description	When configured to **true**, the ESA VM redirects new subscribers to use other ESA VMs. The drain function gracefully redirects subscribers to other ESA VMs and does not allow new subscribers to use the ESA VM. As the existing subscribers terminate their sessions, the ESA VM no longer services any subscribers and can be decommissioned gracefully. When configured to **false**, the ESA VM is set to the normal working operational state and accepts new LNS subscribers.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

mda [mda-id] *string*

Synopsis	Enter the **mda** list instance
Context	**configure** isa lns-group *number* mda *string*
Tree	mda
Description	Commands in this context configure an ISA LNS group MDA.

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Max. Instances	6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**mda-id**] *string*

Synopsis	MDA ID for the ISA LNS group
Context	**configure** isa lns-group *number* mda *string*
Tree	mda
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

drain *boolean*

Synopsis	Prevent new L2TP sessions from associating with ISA
Context	**configure** isa lns-group *number* mda *string* drain *boolean*
Tree	drain
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-policy *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Port policy for the ISA LNS group
Context	**configure** isa lns-group *number* port-policy *reference*
Tree	port-policy
Reference	**configure** port-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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nat-group [id] *number*

Synopsis	Enter the **nat-group** list instance
Context	**configure** isa nat-group *number*
Tree	nat-group
Max. Instances	4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	NAT group ID
Context	**configure** isa nat-group *number*
Tree	nat-group
Range	1 to 4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the NAT group
Context	**configure** isa nat-group *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** isa nat-group *number* description *string*
Tree	description

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String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esa [esa-id] *reference* vm *reference*

Synopsis	Add a list entry for **esa**
Context	**configure** isa nat-group *number* esa *reference* vm *reference*
Tree	esa
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

[**esa-id**] *reference*

Synopsis	Provisioned ESA ID
Context	**configure** isa nat-group *number* esa *reference* vm *reference*
Tree	esa
Reference	**configure** esa *number*
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

vm *reference*

Synopsis	VM ID for the provisioned BB ISA
Context	**configure** isa nat-group *number* esa *reference* vm *reference*
Tree	esa
Reference	**configure** esa *number* vm *number*
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

log

Synopsis	Enter the **log** context

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Context	**configure** isa nat-group *number* log
Tree	log
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

suppress-lsn-events *boolean*

Synopsis	Suppress LSN events when RADIUS accounting is enabled
Context	**configure** isa nat-group *number* log suppress-lsn-events *boolean*
Tree	suppress-lsn-events
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

suppress-lsn-sub-blocks-free *boolean*

Synopsis	Suppress LSN Free block and NAT pool block notification
Context	**configure** isa nat-group *number* log suppress-lsn-sub-blocks-free *boolean*
Tree	suppress-lsn-sub-blocks-free
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mda [mda-id] *string*

Synopsis	Add a list entry for **mda**
Context	**configure** isa nat-group *number* mda *string*
Tree	mda
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**mda-id**] *string*

Synopsis	MDA ID for ISA NAT group
Context	**configure** isa nat-group *number* mda *string*

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Tree	mda
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy *reference*

Synopsis	RADIUS accounting policy for ISA group
Context	**configure** isa nat-group *number* radius-accounting-policy *reference*
Tree	radius-accounting-policy
Reference	**configure** aaa radius isa-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

redundancy

Synopsis	Enter the **redundancy** context
Context	**configure** isa nat-group *number* redundancy
Tree	redundancy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

active-mda-limit *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Number of active MS-ISAs in the NAT group
Context	**configure** isa nat-group *number* redundancy active-mda-limit *number*
Tree	active-mda-limit
Range	1 to 14
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inter-chassis

Synopsis	Enable the **inter-chassis** context
Context	**configure** isa nat-group *number* redundancy inter-chassis
Tree	inter-chassis
Notes	The following elements are part of a choice: **inter-chassis** or **intra-chassis**.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-timeout-on-switchover *number*

Synopsis	Flow timeout immediately following a switchover
Context	**configure** isa nat-group *number* redundancy inter-chassis flow-timeout-on-switchover *number*
Tree	flow-timeout-on-switchover
Description	This command configures the initial flow timeout on the newly active node for the NAT group after a switchover. The timeout is in effect only if there is no traffic present over the flow; otherwise, the first packet over the flow resets the flow timeout to the originally configured value (under the NAT policy configuration). This command configuration restricts the flow timeout to a portion of the originally configured value.
Range	1 to 50
Units	percent
Default	50
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis	IP MTU for ISA-to-ISA communication
Context	**configure** isa nat-group *number* redundancy inter-chassis ip-mtu *number*
Tree	ip-mtu
Description	This command configures the IP MTU size used to transport flow synchronization records between the ISAs. Multiple flow synchronization events can be packed into a single frame up to the IP MTU size.

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Range	512 to 9000
Default	1500
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keepalive

Synopsis	Enter the **keepalive** context
Context	**configure** isa nat-group *number* redundancy inter-chassis keepalive
Tree	keepalive
Description	Commands in this context configure keepalive messages between the CPMs residing on different chassis and are used to detect the presence of the peering node. If the redundant peer connectivity is lost beyond the limit defined by the keepalive messages, each node in the redundant pair transitions to standalone mode. Keepalive messages use UDP transport.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dropcount *number*

Synopsis	Threshold for lost consecutive keepalive messages
Context	**configure** isa nat-group *number* redundancy inter-chassis keepalive dropcount *number*
Tree	dropcount
Description	This command configures the threshold for the number of consecutive keepalive messages that are lost between the redundant nodes before the connection is declared down. When the peer is considered unreachable, each node transitions to standalone mode.
Range	2 to 20
Default	2
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Interval between two consecutive keepalive messages
Context	**configure** isa nat-group *number* redundancy inter-chassis keepalive interval *number*
Tree	interval

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Description	This command configures the interval at which the keepalive messages are periodically sent between the redundant nodes (CPMs) to verify the presence of the peer. If peer connectivity is lost, each node transitions to standalone mode.
Range	2 to 250
Units	deciseconds
Default	30
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-ip-range-start *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Starting IP address for ISAs in the NAT group
Context	**configure** isa nat-group *number* redundancy inter-chassis local-ip-range-start *string*
Tree	local-ip-range-start
Description	This command configures the initial IP address for the ISAs in the NAT group. Consecutive IP addresses are automatically assigned for the remaining ISAs. The IP addresses are used to communicate between the ISAs on redundant nodes for the purpose of flow synchronization. Traffic from the member ISA with the initial IP address is sent to the initial IP address from the remote IP range.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

monitor-oper-group [oper-group] *reference*

Synopsis	Enter the **monitor-oper-group** list instance
Context	**configure** isa nat-group *number* redundancy inter-chassis monitor-oper-group *reference*
Tree	monitor-oper-group
Description	Commands in this context specify monitoring settings for objects in an operational group, such as SAPs, BFD sessions, or VRRP sessions, in order to adjust the overall health of the node in a redundant inter-chassis NAT system. A state change of the objects in the operational group influences the health of a NAT node in a redundant configuration.

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Max. Instances	4
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**oper-group**] *reference*

Synopsis	Operational group name
Context	**configure** isa nat-group *number* redundancy inter-chassis monitor-oper-group *reference*
Tree	monitor-oper-group
Reference	**configure** service oper-group *string*
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

health-drop *number*

Synopsis	Overall health drop of the NAT group on a state change
Context	**configure** isa nat-group *number* redundancy inter-chassis monitor-oper-group *reference* health-drop *number*
Tree	health-drop
Range	1 to 255
Default	1
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

monitor-port [port-id] *string*

Synopsis	Enter the **monitor-port** list instance
Context	**configure** isa nat-group *number* redundancy inter-chassis monitor-port *string*
Tree	monitor-port
Description	Commands in this context specify monitoring settings for a port carrying NAT traffic, in order to adjust the overall health of the node in a redundant inter-chassis NAT system. A state change of a monitored port influences the health of a NAT node in a redundant configuration.
Max. Instances	16

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Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**port-id**] *string*

Synopsis	Port ID
Context	**configure** isa nat-group *number* redundancy inter-chassis monitor-port *string*
Tree	monitor-port
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

health-drop *number*

Synopsis	Overall health drop of the NAT group on a state change
Context	**configure** isa nat-group *number* redundancy inter-chassis monitor-port *string* health-drop *number*
Tree	health-drop
Range	1 to 255
Default	1
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

preferred *boolean*

Synopsis	Set the preferred activity status for the node
Context	**configure** isa nat-group *number* redundancy inter-chassis preferred *boolean*
Tree	preferred
Description	When configured to **true**, the system designates the node in a redundant NAT system with the preferred activity status. The preferred status comes into consideration only when both redundant nodes have equal health values. If the peer traffic-serving node has an equal health value but does not have the preferred designation, a switch of activity occurs to route traffic to the preferred node. The switchover could cause a brief interruption in traffic flow. When configured to **false**, the preferred designation is not set for the node.
Default	false
Introduced	20.7.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-ip-range-start *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Starting IP address for ISAs on the remote node
Context	**configure** isa nat-group *number* redundancy inter-chassis remote-ip-range-start *string*
Tree	remote-ip-range-start
Description	This command configures the initial IP address for the ISAs in the NAT group on the remote node. Consecutive IP addresses are automatically assigned for the remaining ISAs. The IP addresses are used to communicate between the ISAs on redundant nodes for the purpose of flow synchronization. Traffic from the member ISA with the initial local IP address is sent to the initial IP address from the remote IP range.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

replication-threshold *number*

Synopsis	Minimum time to wait before a NAT flow is synchronized
Context	**configure** isa nat-group *number* redundancy inter-chassis replication-threshold *number*
Tree	replication-threshold
Description	This command configures the minimum time to wait before a NAT flow is replicated (synchronized) to the standby node.
Range	0 to 300
Units	seconds
Default	20
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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router-instance *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Router instance for the ISA-to-ISA communication
Context	**configure** isa nat-group *number* redundancy inter-chassis router-instance *string*
Tree	router-instance
Description	This command specifies the routing instance through which ISAs on redundant nodes communicate with each other and synchronize their flow state.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sync *boolean*

Synopsis	Synchronize NAT flows between nodes
Context	**configure** isa nat-group *number* redundancy inter-chassis sync *boolean*
Tree	sync
Default	true
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

intra-chassis

Synopsis	Enter the **intra-chassis** context
Context	**configure** isa nat-group *number* redundancy intra-chassis
Tree	intra-chassis
Notes	The following elements are part of a choice: **inter-chassis** or **intra-chassis**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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active-active

Synopsis	Enter the **active-active** context
Context	**configure** isa nat-group *number* redundancy intra-chassis active-active
Tree	active-active
Notes	The following elements are part of a choice: **active-active**, **active-standby**, or **l2aware-bypass**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

failed-mda-limit *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Maximum failed MDAs allowed in ICR for the NAT group
Context	**configure** isa nat-group *number* redundancy intra-chassis active-active failed-mda-limit *number*
Tree	failed-mda-limit
Range	1 to 2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

active-standby

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Active-standby intra-chassis NAT redundancy model
Context	**configure** isa nat-group *number* redundancy intra-chassis active-standby
Tree	active-standby

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Notes	The following elements are part of a choice: **active-active**, **active-standby**, or **l2aware-bypass**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2aware-bypass

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	L2-aware-bypass NAT redundancy model
Context	**configure** isa nat-group *number* redundancy intra-chassis l2aware-bypass
Tree	l2aware-bypass
Notes	The following elements are part of a choice: **active-active**, **active-standby**, or **l2aware-bypass**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

scaling-profile *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Scaling profile for the NAT group
Context	**configure** isa nat-group *number* scaling-profile *keyword*
Tree	scaling-profile
Description	This command determines profiles for NAT scaling. Lower profile numbers allocate less resources, thus supporting lower scaling. Contact your Nokia representative for more information about NAT scaling figures in each profile.
Options	profile1, profile2, profile3

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Default	profile1
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-limits

Synopsis	Enter the **session-limits** context
Context	**configure** isa nat-group *number* session-limits
Tree	session-limits
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reserved *number*

Synopsis	Number of sessions reserved for prioritized sessions
Context	**configure** isa nat-group *number* session-limits reserved *number*
Tree	reserved
Range	1 to 6291456
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

upnp-mappings *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Maximum number of UPnP mappings per member
Context	**configure** isa nat-group *number* session-limits upnp-mappings *number*
Tree	upnp-mappings
Description	This command specifies the maximum number of Universal Plug and Play (UPnP) mappings per member.
Range	1 to 524288
Default	524288

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the **watermarks** context
Context	**configure** isa nat-group *number* session-limits watermarks
Tree	watermarks
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis	Session limit high watermark for each MDA in the group
Context	**configure** isa nat-group *number* session-limits watermarks high *number*
Tree	high
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low *number*

Synopsis	Session limit low watermark for each MDA in the group
Context	**configure** isa nat-group *number* session-limits watermarks low *number*
Tree	low
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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tunnel-group [id] *number*

Synopsis	Enter the **tunnel-group** list instance
Context	**configure** isa tunnel-group *number*
Tree	tunnel-group
Description	Commands in this context create or edit a tunnel group. A tunnel group is a set of one or more MS-ISAs that support the origination and termination of IPsec and IP/GRE tunnels. On a VSR, the **isa-scale-mode** command must be specified, which defines the maximum number of tunnels on each ISA.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	Tunnel group ID
Context	**configure** isa tunnel-group *number*
Tree	tunnel-group
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the ISA tunnel group
Context	**configure** isa tunnel-group *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

backup *string*

Synopsis	IPsec module configured in the slot to the IPsec group
Context	**configure** isa tunnel-group *number* backup *string*
Tree	backup

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Notes	The following elements are part of a choice: **multi-active** or (**backup** and **primary**).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** isa tunnel-group *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-responder-only *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Act as an IKE responder except upon MC-IPsec switchover
Context	**configure** isa tunnel-group *number* ipsec-responder-only *boolean*
Tree	ipsec-responder-only
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isa-scale-mode *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tunnel limit on each ISA for the tunnel group
Context	**configure** isa tunnel-group *number* isa-scale-mode *keyword*
Tree	isa-scale-mode
Options	tunnel-limit-2k, tunnel-limit-32k, tunnel-limit-64k, tunnel-limit-8, tunnel-limit-32

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Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-active

Synopsis	Enable the **multi-active** context
Context	**configure** isa tunnel-group *number* multi-active
Tree	multi-active
Notes	The following elements are part of a choice: **multi-active** or (**backup** and **primary**).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

active-isa-number *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of active MS-ISAs in the tunnel group
Context	**configure** isa tunnel-group *number* multi-active active-isa-number *number*
Tree	active-isa-number
Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esa [esa-id] *reference* vm *reference*

Synopsis	Add a list entry for **esa**
Context	**configure** isa tunnel-group *number* multi-active esa *reference* vm *reference*
Tree	esa
Notes	The following elements are part of a choice: **esa**, **isa**, or **member-pool**.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

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[**esa-id**] *reference*

Synopsis	ESA ID
Context	**configure** isa tunnel-group *number* multi-active esa *reference* vm *reference*
Tree	esa
Reference	**configure** esa *number*
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

vm *reference*

Synopsis	ESM-VM ID
Context	**configure** isa tunnel-group *number* multi-active esa *reference* vm *reference*
Tree	esa
Reference	**configure** esa *number* vm *number*
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

isa [isa-id] *string*

Synopsis	Add a list entry for **isa**
Context	**configure** isa tunnel-group *number* multi-active isa *string*
Tree	isa
Notes	The following elements are part of a choice: **esa**, **isa**, or **member-pool**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**isa-id**] *string*

Synopsis	ISA ID associated with the tunnel member pool
Context	**configure** isa tunnel-group *number* multi-active isa *string*
Tree	isa

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Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

member-pool *reference*

Synopsis	Tunnel-member pool name
Context	**configure** isa tunnel-group *number* multi-active member-pool *reference*
Tree	member-pool
Reference	**configure** isa tunnel-member-pool *string*
Notes	The following elements are part of a choice: **esa**, **isa**, or **member-pool**.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

primary *string*

Synopsis	Primary ISA IPsec module assigned for the tunnel group
Context	**configure** isa tunnel-group *number* primary *string*
Tree	primary
Notes	The following elements are part of a choice: **multi-active** or (**backup** and **primary**).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reassembly

Synopsis	Enter the **reassembly** context
Context	**configure** isa tunnel-group *number* reassembly
Tree	reassembly
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-wait-time *number*

Synopsis	Maximum time to receive fragments for packet reassembly
Context	**configure** isa tunnel-group *number* reassembly max-wait-time *number*

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Tree	max-wait-time
Range	1 to 5000
Units	milliseconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

stats-collection

Synopsis	Enter the **stats-collection** context
Context	**configure** isa tunnel-group *number* stats-collection
Tree	stats-collection
Description	Commands in this context configure the ISA statistics collection.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isa-dp-cpu-usage *boolean*

Synopsis	Collect statistics used to derive ISA DP CPU usage
Context	**configure** isa tunnel-group *number* stats-collection isa-dp-cpu-usage *boolean*
Tree	isa-dp-cpu-usage
Description	When configured to **true**, this command collects statistics used to derive ISA CPU DP usage and impacts the ISA performance. When configured to **false**, statistics are not collected.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

strict-esp-sequence-number-ordering *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable strict ESP sequence number ordering
Context	**configure** isa tunnel-group *number* strict-esp-sequence-number-ordering *boolean*
Tree	strict-esp-sequence-number-ordering

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Description	When configured to **true**, the router enables strict ESP sequence number ordering. When ESP sequence number ordering is enabled, the outbound ESP sequence number of a CHILD_SA must be in the same order as when clear packets are received by the same CHILD_SA.
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

tunnel-member-pool [name] *string*

Synopsis	Enter the **tunnel-member-pool** list instance
Context	**configure** isa tunnel-member-pool *string*
Tree	tunnel-member-pool
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	ISA tunnel-member pool name
Context	**configure** isa tunnel-member-pool *string*
Tree	tunnel-member-pool
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** isa tunnel-member-pool *string* description *string*
Tree	description
String Length	1 to 80
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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esa [esa-id] *reference* vm *reference*

Synopsis	Add a list entry for **esa**
Context	**configure** isa tunnel-member-pool *string* esa *reference* vm *reference*
Tree	esa
Description	Commands in this context add specified ESA-VMs to the pool.
Max. Instances	16
Notes	The following elements are part of a choice: **esa** or **isa**.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

[**esa-id**] *reference*

Synopsis	ESA ID
Context	**configure** isa tunnel-member-pool *string* esa *reference* vm *reference*
Tree	esa
Reference	**configure** esa *number*
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

vm *reference*

Synopsis	ESM-VM ID
Context	**configure** isa tunnel-member-pool *string* esa *reference* vm *reference*
Tree	esa
Reference	**configure** esa *number* vm *number*
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

isa [isa-id] *string*

Synopsis	Add a list entry for **isa**

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Context	**configure** isa tunnel-member-pool *string* isa *string*
Tree	isa
Max. Instances	16
Notes	The following elements are part of a choice: **esa** or **isa**.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**isa-id**] *string*

Synopsis	ISA ID associated with the tunnel member pool
Context	**configure** isa tunnel-member-pool *string* isa *string*
Tree	isa
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

video-group [video-group-id] *number*

Synopsis	Enter the **video-group** list instance
Context	**configure** isa video-group *number*
Tree	video-group
Max. Instances	4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[**video-group-id**] *number*

Synopsis	Video group identifier
Context	**configure** isa video-group *number*
Tree	video-group
Range	1 to 4
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

admin-state *keyword*

Synopsis	Administrative state of the video group
Context	**configure** isa video-group *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

analyzer *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable the analyzer for all streams on the video group
Context	**configure** isa video-group *number* analyzer *boolean*
Tree	analyzer
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	**configure** isa video-group *number* description *string*
Tree	description
String Length	1 to 80

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-server *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allow FCC server capability for the group
Context	**configure** isa video-group *number* fcc-server *boolean*
Tree	fcc-server
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-rt-server *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable the local RET server for the group
Context	**configure** isa video-group *number* local-rt-server *boolean*
Tree	local-rt-server
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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mda [mda-id] *string*

Synopsis	Add a list entry for **mda**
Context	**configure** isa video-group *number* mda *string*
Tree	mda
Max. Instances	6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[**mda-id**] *string*

Synopsis	MDA identifier
Context	**configure** isa video-group *number* mda *string*
Tree	mda
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

resv-ret *number*

Synopsis	Egress bandwidth reserved for retransmission
Context	**configure** isa video-group *number* resv-ret *number*
Tree	resv-ret
Range	0 to 10500
Units	megabps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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stream-selection *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allow stream selection for the group
Context	**configure** isa video-group *number* stream-selection *boolean*
Tree	stream-selection
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

vapp [esa-id] *reference* vapp-id *reference*

Synopsis	Add a list entry for **vapp**
Context	**configure** isa video-group *number* vapp *reference* vapp-id *reference*
Tree	vapp
Description	This command adds a list entry for the ESA and VM ID to the list of video group member ESA virtual applications.
Max. Instances	6
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[**esa-id**] *reference*

Synopsis	ESA ID
Context	**configure** isa video-group *number* vapp *reference* vapp-id *reference*
Tree	vapp
Reference	**configure** esa *number*
Notes	This element is part of a list key.
Introduced	21.5.R1

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Platforms	7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

vapp-id *reference*

Synopsis	Virtual application ID
Context	**configure** isa video-group *number* vapp *reference* vapp-id *reference*
Tree	vapp
Reference	**configure** esa *number* vm *number*
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

watermark

Synopsis	Enter the **watermark** context
Context	**configure** isa video-group *number* watermark
Tree	watermark
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

bandwidth

Synopsis	Enter the **bandwidth** context
Context	**configure** isa video-group *number* watermark bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc *number*

Synopsis	FCC watermark parameters based on the bandwidth
Context	**configure** isa video-group *number* watermark bandwidth fcc *number*
Tree	fcc
Range	1 to 99

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Units	percent
Default	90
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ret *number*

Synopsis	RET watermark parameters based on the bandwidth
Context	**configure** isa video-group *number* watermark bandwidth ret *number*
Tree	ret
Range	1 to 99
Units	percent
Default	90
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

total *number*

Synopsis	Total watermark parameters based on the bandwidth
Context	**configure** isa video-group *number* watermark bandwidth total *number*
Tree	total
Range	1 to 99
Units	percent
Default	90
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

session

Synopsis	Enter the **session** context
Context	**configure** isa video-group *number* watermark session
Tree	session
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc *number*

Synopsis	FCC watermark parameters based on the session
Context	**configure** isa video-group *number* watermark session fcc *number*
Tree	fcc
Range	1 to 99
Units	percent
Default	90
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ret *number*

Synopsis	RET watermark parameters based on the session
Context	**configure** isa video-group *number* watermark session ret *number*
Tree	ret
Range	1 to 99
Units	percent
Default	90
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

total *number*

Synopsis	Total watermark parameters based on the session
Context	**configure** isa video-group *number* watermark session total *number*
Tree	total
Range	1 to 99
Units	percent
Default	90
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

wlan-gw-group [id] *number*

Synopsis	Enter the **wlan-gw-group** list instance
Context	**configure** isa wlan-gw-group *number*
Tree	wlan-gw-group
Max. Instances	1
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	WLAN-GW ISA group ID
Context	**configure** isa wlan-gw-group *number*
Tree	wlan-gw-group
Range	1 to 4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

active-iom-limit *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Number of WLAN-GW IOMs used as active IOMs
Context	**configure** isa wlan-gw-group *number* active-iom-limit *number*
Tree	active-iom-limit
Range	1 to 14
Introduced	16.0.R1

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Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

active-mda-limit *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Maximum number of ISA MDAs in active use by the group
Context	**configure** isa wlan-gw-group *number* active-mda-limit *number*
Tree	active-mda-limit
Range	1 to 14
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of the WLAN Gateway group
Context	**configure** isa wlan-gw-group *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** isa wlan-gw-group *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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distributed-sub-mgmt

Synopsis	Enter the **distributed-sub-mgmt** context
Context	**configure** isa wlan-gw-group *number* distributed-sub-mgmt
Tree	distributed-sub-mgmt
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

isa-aa-group *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA AA group for WLAN-GW DSM subscribers
Context	**configure** isa wlan-gw-group *number* distributed-sub-mgmt isa-aa-group *reference*
Tree	isa-aa-group
Reference	**configure** isa application-assurance-group *number*
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

isa-aa-oversubscription-factor *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of WLAN GW ISAs that a single ISA can serve
Context	**configure** isa wlan-gw-group *number* distributed-sub-mgmt isa-aa-oversubscription-factor *number*
Tree	isa-aa-oversubscription-factor
Range	1 to 10
Default	1
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

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esa [esa-id] *reference* vm *reference*

Synopsis	Add a list entry for **esa**
Context	**configure** isa wlan-gw-group *number* esa *reference* vm *reference*
Tree	esa
Introduced	20.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

[**esa-id**] *reference*

Synopsis	ESA ID
Context	**configure** isa wlan-gw-group *number* esa *reference* vm *reference*
Tree	esa
Reference	**configure** esa *number*
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

vm *reference*

Synopsis	VM ID
Context	**configure** isa wlan-gw-group *number* esa *reference* vm *reference*
Tree	esa
Reference	**configure** esa *number* vm *number*
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

iom [slot-number] *reference*

Synopsis	Add a list entry for **iom**
Context	**configure** isa wlan-gw-group *number* iom *reference*
Tree	iom
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**slot-number**] *reference*

Synopsis	IOM slot to use in the WLAN-GW group
Context	**configure** isa wlan-gw-group *number* iom *reference*
Tree	iom
Reference	**configure** card *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mda [mda-id] *string*

Synopsis	Add a list entry for **mda**
Context	**configure** isa wlan-gw-group *number* mda *string*
Tree	mda
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

[**mda-id**] *string*

Synopsis	MDA slot value
Context	**configure** isa wlan-gw-group *number* mda *string*
Tree	mda
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

nat

Synopsis	Enter the **nat** context
Context	**configure** isa wlan-gw-group *number* nat
Tree	nat
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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log

Synopsis	Enter the **log** context
Context	**configure** isa wlan-gw-group *number* nat log
Tree	log
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

suppress-lsn-events *boolean*

Synopsis	Suppress LSN events when RADIUS accounting is enabled
Context	**configure** isa wlan-gw-group *number* nat log suppress-lsn-events *boolean*
Tree	suppress-lsn-events
Default	true
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

suppress-lsn-sub-blocks-free *boolean*

Synopsis	Suppress LSN Free block and NAT pool block notification
Context	**configure** isa wlan-gw-group *number* nat log suppress-lsn-sub-blocks-free *boolean*
Tree	suppress-lsn-sub-blocks-free
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lsn *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use Large Scale NAT
Context	**configure** isa wlan-gw-group *number* nat lsn *boolean*
Tree	lsn
Default	true

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Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy *reference*

Synopsis	RADIUS accounting policy for ISA group
Context	**configure** isa wlan-gw-group *number* nat radius-accounting-policy *reference*
Tree	radius-accounting-policy
Reference	**configure** aaa radius isa-policy *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-limits

Synopsis	Enter the **session-limits** context
Context	**configure** isa wlan-gw-group *number* nat session-limits
Tree	session-limits
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

reserved *number*

Synopsis	Number of sessions reserved for prioritized sessions
Context	**configure** isa wlan-gw-group *number* nat session-limits reserved *number*
Tree	reserved
Range	1 to 6291456
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

upnp-mappings *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Maximum number of UPnP mappings per member
Context	**configure** isa wlan-gw-group *number* nat session-limits upnp-mappings *number*
Tree	upnp-mappings
Description	This command specifies the maximum number of Universal Plug and Play (UPnP) mappings per member.
Range	1 to 524288
Default	524288
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the **watermarks** context
Context	**configure** isa wlan-gw-group *number* nat session-limits watermarks
Tree	watermarks
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis	Session limit high watermark for each MDA in the group
Context	**configure** isa wlan-gw-group *number* nat session-limits watermarks high *number*
Tree	high
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

low *number*

Synopsis	Session limit low watermark for each MDA in the group
Context	**configure** isa wlan-gw-group *number* nat session-limits watermarks low *number*

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Tree	low
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-policy *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Port policy used to configure ports for the ISA group
Context	**configure** isa wlan-gw-group *number* port-policy *reference*
Tree	port-policy
Reference	**configure** port-policy *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

redundancy *keyword*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Hardware unit subject to redundancy
Context	**configure** isa wlan-gw-group *number* redundancy *keyword*
Tree	redundancy
Options	iom, mda
Default	iom
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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scaling-profile *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	ISA scaling profile identifier
Context	**configure** isa wlan-gw-group *number* scaling-profile *keyword*
Tree	scaling-profile
Options	profile1, profile2, profile3
Default	profile1
Introduced	20.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

tunnel-port-policy *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Tunnel port policy for per-tunnel QoS processing
Context	**configure** isa wlan-gw-group *number* tunnel-port-policy *reference*
Tree	tunnel-port-policy
Reference	**configure** port-policy *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enter the **watermarks** context
Context	**configure** isa wlan-gw-group *number* watermarks
Tree	watermarks
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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mark [entity] *keyword*

Synopsis	Enter the **mark** list instance
Context	**configure** isa wlan-gw-group *number* watermarks mark *keyword*
Tree	mark
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**entity**] *keyword*

Synopsis	Entity to be monitored
Context	**configure** isa wlan-gw-group *number* watermarks mark *keyword*
Tree	mark
Options	user-equipment, bridge-domain, radius-proxy-client
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis	High watermark for the WLAN-GW group
Context	**configure** isa wlan-gw-group *number* watermarks mark *keyword* high *number*
Tree	high
Range	1 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

low *number*

Synopsis	Low watermark for the WLAN-GW group
Context	**configure** isa wlan-gw-group *number* watermarks mark *keyword* low *number*
Tree	low
Range	0 to 99

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Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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3.22 lag commands

```
configure
   –  lag string
      –  access
         –  adapt-qos
            –  include-egr-hash-cfg boolean
            –  mode keyword
         –  bandwidth number
         –  booking-factor number
         –  per-fp-egr-queuing boolean
         –  per-fp-ing-queuing boolean
         –  per-fp-sap-instance boolean
      –  adaptive-load-balancing
         –  bandwidth-threshold number
         –  interval number
         –  tolerance number
      –  admin-state keyword
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  bfd-liveness
         –  ipv4
            –  admin-state keyword
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  bfd-on-distributing-only boolean
            –  local-ip-address string
            –  max-admin-down-time (number | keyword)
            –  max-setup-time (number | keyword)
            –  multiplier number
            –  receive-interval number
            –  remote-ip-address string
            –  transmit-interval number
         –  ipv6
            –  admin-state keyword
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  bfd-on-distributing-only boolean
            –  local-ip-address string
            –  max-admin-down-time (number | keyword)
            –  max-setup-time (number | keyword)
            –  multiplier number
            –  receive-interval number
            –  remote-ip-address string
            –  transmit-interval number
         –  soft-reset-extension boolean
      –  description string
      –  dynamic-cost boolean
      –  encap-type keyword
      –  eth-cfm
         –  mep md-admin-name reference ma-admin-name reference mep-id number
            –  admin-state keyword
            –  ais
               –  client-meg-level number
               –  interface-support boolean
               –  interval number
               –  low-priority-defect keyword
               –  priority number
            –  alarm-notification
               –  fng-alarm-time number
               –  fng-reset-time number
```


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configure lag eth-cfm mep apply-groups

```
            - apply-groups reference
            - apply-groups-exclude reference
            - ccm boolean
            - ccm-ltm-priority number
            - ccm-padding-size number
            - ccm-tlv-ignore keyword
            - collect-lmm-stats boolean
            - csf
              - multiplier decimal-number
            - description string
            - eth-test
              - bit-error-threshold number
              - test-pattern
                - crc-tlv boolean
                - pattern keyword
            - facility-fault boolean
            - grace
              - eth-ed
                - max-rx-defect-window number
                - priority number
                - rx-eth-ed boolean
                - tx-eth-ed boolean
              - eth-vsm-grace
                - rx-eth-vsm-grace boolean
                - tx-eth-vsm-grace boolean
            - low-priority-defect keyword
            - mac-address string
            - one-way-delay-threshold number
            - vlan (number | keyword)
      - hash-weight-threshold
        - action keyword
        - cost number
        - value number
      - hold-time-down number
      - lacp
        - administrative-key number
        - mode keyword
        - system-id string
        - system-priority number
      - lacp-mux-control keyword
      - lacp-xmit-interval keyword
      - lacp-xmit-stdby boolean
      - link-map-profile number
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
        - failure-mode keyword
        - link reference
          - apply-groups reference
          - apply-groups-exclude reference
          - port-type keyword
      - mac-address string
      - max-ports number
      - mode keyword
      - monitor-oper-group reference
      - per-link-hash
        - weighted
          - auto-rebalance boolean
          - subscriber-hash-mode keyword
      - port reference
        - apply-groups reference
        - apply-groups-exclude reference
        - hash-weight (number | keyword)
        - priority number
```


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configure lag port sub-group

```
        – sub-group (number | keyword)
    – port-threshold
        – action keyword
        – cost number
        – value number
    – port-type keyword
    – selection-criteria
        – mode keyword
        – slave-to-partner boolean
        – subgroup-hold-time (number | keyword)
    – standby-signaling keyword
```


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3.22.1 lag command descriptions

lag [lag-name] *string*

Synopsis	Enter the **lag** list instance
Context	**configure** lag *string*
Tree	lag
Introduced	16.0.R1
Platforms	All

[**lag-name**] *string*

Synopsis	LAG name
Context	**configure** lag *string*
Tree	lag
String Length	1 to 27
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

access

Synopsis	Enter the **access** context
Context	**configure** lag *string* access
Tree	access
Introduced	16.0.R1
Platforms	All

adapt-qos

Synopsis	Enter the **adapt-qos** context
Context	**configure** lag *string* access adapt-qos
Tree	adapt-qos
Introduced	16.0.R1

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Platforms	All

include-egr-hash-cfg *boolean*

Synopsis	Factor egress hashing into buffer and rate distribution
Context	**configure** lag *string* access adapt-qos include-egr-hash-cfg *boolean*
Tree	include-egr-hash-cfg
Default	false
Introduced	16.0.R1
Platforms	All

mode *keyword*

Synopsis	QoS adaptation mode
Context	**configure** lag *string* access adapt-qos mode *keyword*
Tree	mode
Options	link, distribute, port-fair
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Administrative bandwidth applied to this LAG
Context	**configure** lag *string* access bandwidth *number*
Tree	bandwidth
Range	1 to 6400000000
Units	bps
Introduced	16.0.R1
Platforms	All

booking-factor *number*

Synopsis	Booking factor against the administrative bandwidth
Context	**configure** lag *string* access booking-factor *number*
Tree	booking-factor

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Range	1 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

per-fp-egr-queuing *boolean*

Synopsis	Per FP egress queuing
Context	**configure** lag *string* access per-fp-egr-queuing *boolean*
Tree	per-fp-egr-queuing
Default	false
Introduced	16.0.R1
Platforms	All

per-fp-ing-queuing *boolean*

Synopsis	Enable ingress queuing per forwarding port
Context	**configure** lag *string* access per-fp-ing-queuing *boolean*
Tree	per-fp-ing-queuing
Default	false
Introduced	16.0.R1
Platforms	All

per-fp-sap-instance *boolean*

Synopsis	SAP instance allocation on a LAG
Context	**configure** lag *string* access per-fp-sap-instance *boolean*
Tree	per-fp-sap-instance
Default	false
Introduced	16.0.R1
Platforms	All

adaptive-load-balancing

Synopsis	Enable the **adaptive-load-balancing** context

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Context	**configure** lag *string* adaptive-load-balancing
Tree	adaptive-load-balancing
Introduced	20.10.R1
Platforms	All

bandwidth-threshold *number*

Synopsis	Minimum bandwidth for adaptive load balancing
Context	**configure** lag *string* adaptive-load-balancing bandwidth-threshold *number*
Tree	bandwidth-threshold
Range	0 to 100
Units	percent
Introduced	22.10.R1
Platforms	All

interval *number*

Synopsis	The statistics pooling interval for the LAG ports
Context	**configure** lag *string* adaptive-load-balancing interval *number*
Tree	interval
Range	15 | 30 | 60 | 120
Units	seconds
Default	30
Introduced	21.5.R1
Platforms	All

tolerance *number*

Synopsis	Threshold that triggers link utilization optimization
Context	**configure** lag *string* adaptive-load-balancing tolerance *number*
Tree	tolerance
Description	This command configures the threshold value that is based on the difference between the most-loaded and least-loaded links in a LAG. When the threshold value is exceeded, the adaptive load balancing operation attempts to optimize traffic distribution between LAG links.
Range	1 to 100

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Units	percent
Default	20
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LAG
Context	**configure** lag *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enter the **bfd-liveness** context
Context	**configure** lag *string* bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** lag *string* bfd-liveness ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of micro-BFD session for IP family
Context	**configure** lag *string* bfd-liveness ipv4 admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

bfd-on-distributing-only *boolean*

Synopsis	Restrict micro-BFD sessions to LACP state distributing
Context	**configure** lag *string* bfd-liveness ipv4 bfd-on-distributing-only *boolean*
Tree	bfd-on-distributing-only
Default	false
Introduced	16.0.R1
Platforms	All

local-ip-address *string*

Synopsis	BFD source address
Context	**configure** lag *string* bfd-liveness ipv4 local-ip-address *string*
Tree	local-ip-address
Introduced	16.0.R1
Platforms	All

max-admin-down-time *(number | keyword)*

Synopsis	Maximum time to forward traffic after micro-BFD is down
Context	**configure** lag *string* bfd-liveness ipv4 max-admin-down-time *(number | keyword)*
Tree	max-admin-down-time
Range	0 to 3600
Units	seconds
Options	infinite
Default	0
Introduced	16.0.R1
Platforms	All

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max-setup-time *(number | keyword)*

Synopsis	Maximum time to forward traffic during micro-BFD setup
Context	**configure** lag *string* bfd-liveness ipv4 max-setup-time *(number | keyword)*
Tree	max-setup-time
Range	0 to 60000
Units	milliseconds
Options	infinite
Default	infinite
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Interval multiplier to detect BFD packets not received
Context	**configure** lag *string* bfd-liveness ipv4 multiplier *number*
Tree	multiplier
Range	3 to 20
Default	3
Introduced	16.0.R1
Platforms	All

receive-interval *number*

Synopsis	Receive timer for micro-BFD session over the LAG links
Context	**configure** lag *string* bfd-liveness ipv4 receive-interval *number*
Tree	receive-interval
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

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remote-ip-address *string*

Synopsis	BFD destination address
Context	**configure** lag *string* bfd-liveness ipv4 remote-ip-address *string*
Tree	remote-ip-address
Introduced	16.0.R1
Platforms	All

transmit-interval *number*

Synopsis	Transmit timer for micro-BFD session over the LAG links
Context	**configure** lag *string* bfd-liveness ipv4 transmit-interval *number*
Tree	transmit-interval
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** lag *string* bfd-liveness ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of micro-BFD session for IP family
Context	**configure** lag *string* bfd-liveness ipv6 admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

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bfd-on-distributing-only *boolean*

Synopsis	Restrict micro-BFD sessions to LACP state distributing
Context	**configure** lag *string* bfd-liveness ipv6 bfd-on-distributing-only *boolean*
Tree	bfd-on-distributing-only
Default	false
Introduced	16.0.R1
Platforms	All

local-ip-address *string*

Synopsis	BFD source address
Context	**configure** lag *string* bfd-liveness ipv6 local-ip-address *string*
Tree	local-ip-address
Introduced	16.0.R1
Platforms	All

max-admin-down-time *(number | keyword)*

Synopsis	Maximum time to forward traffic after micro-BFD is down
Context	**configure** lag *string* bfd-liveness ipv6 max-admin-down-time *(number | keyword)*
Tree	max-admin-down-time
Range	0 to 3600
Units	seconds
Options	infinite
Default	0
Introduced	16.0.R1
Platforms	All

max-setup-time *(number | keyword)*

Synopsis	Maximum time to forward traffic during micro-BFD setup
Context	**configure** lag *string* bfd-liveness ipv6 max-setup-time *(number | keyword)*
Tree	max-setup-time
Range	0 to 60000

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Units	milliseconds
Options	infinite
Default	infinite
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Interval multiplier to detect BFD packets not received
Context	**configure** lag *string* bfd-liveness ipv6 multiplier *number*
Tree	multiplier
Range	3 to 20
Default	3
Introduced	16.0.R1
Platforms	All

receive-interval *number*

Synopsis	Receive timer for micro-BFD session over the LAG links
Context	**configure** lag *string* bfd-liveness ipv6 receive-interval *number*
Tree	receive-interval
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

remote-ip-address *string*

Synopsis	BFD destination address
Context	**configure** lag *string* bfd-liveness ipv6 remote-ip-address *string*
Tree	remote-ip-address
Introduced	16.0.R1
Platforms	All

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transmit-interval *number*

Synopsis	Transmit timer for micro-BFD session over the LAG links
Context	**configure** lag *string* bfd-liveness ipv6 transmit-interval *number*
Tree	transmit-interval
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

soft-reset-extension *boolean*

Synopsis	Extend BFD timers during soft reset
Context	**configure** lag *string* bfd-liveness soft-reset-extension *boolean*
Tree	soft-reset-extension
Default	true
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** lag *string* description *string*
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

dynamic-cost *boolean*

Synopsis	Allow LAG costing using operational aggregate bandwidth
Context	**configure** lag *string* dynamic-cost *boolean*
Tree	dynamic-cost
Default	false

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Introduced	16.0.R1
Platforms	All

encap-type *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Encapsulation type
Context	**configure** lag *string* encap-type *keyword*
Tree	encap-type
Options	null, dot1q, qinq
Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the **eth-cfm** context
Context	**configure** lag *string* eth-cfm
Tree	eth-cfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*

Synopsis	Enter the **mep** list instance
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string* association *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais

Synopsis	Enable the **ais** context
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais
Tree	ais
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

client-meg-level *number*

Synopsis	Client MEG level for AIS message generation
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais client-meg-level *number*
Tree	client-meg-level
Range	1 to 7
Max. Instances	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interface-support *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais interface-support *boolean*

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Tree	interface-support
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number*

Synopsis	Transmission interval for AIS messages
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais interval *number*
Tree	interval
Range	1 | 60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais low-priority-defect *keyword*
Tree	low-priority-defect
Options	all-def, mac-rem-err-xcon
Default	all-def
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Priority of the AIS messages generated by the node
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais priority *number*
Tree	priority
Range	0 to 7
Default	7

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the **alarm-notification** context
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification
Tree	alarm-notification
Description	Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm. Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-alarm-time *number*
Tree	fng-alarm-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-reset-time *number*
Tree	fng-reset-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis	Generate CCM messages
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm *boolean*
Tree	ccm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-ltm-priority *number*
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-padding-size *number*
Tree	ccm-padding-size
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU. This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through **configure eth-cfm domain association ccm-interval)** is less than 1 second.
Range	3 to 1500
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-tlv-ignore *keyword*

Synopsis	TLV to ignore on reception
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-tlv-ignore *keyword*
Tree	ccm-tlv-ignore
Description	This command configures the receiving MEP to ignore the specified TLVs in the CCM PDU. The ignored TLVs are reported as absent and have no impact on the MEP state machine. When unconfigured, the MEP processes all the recognized TLVs.
Options	interface-status, port-status
Max. Instances	2
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* collect-lmm-stats *boolean*
Tree	collect-lmm-stats
Description	When configured to **true**, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings. The **show eth-cfm collect-lmm-stats** command displays entities that have been enabled to collect transit and receive counters. When configured to **false**, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

csf

Synopsis	Enable the **csf** context

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Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* csf
Tree	csf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* csf multiplier *decimal-number*
Tree	multiplier
Range	0.0 | 2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the **eth-test** context
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the **oam eth-cfm eth-test** command.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test bit-error-threshold *number*
Tree	bit-error-threshold
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis	Enter the **test-pattern** context
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern crc-tlv *boolean*
Tree	crc-tlv
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern pattern *keyword*
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

facility-fault *boolean*

Synopsis	Allow the facility MEP to generate a network action
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* facility-fault *boolean*
Tree	facility-fault
Description	When configured to **true**, the system facility MEP responds to a fault with a network-actionable function instead of just reporting the defect condition. When configured to **false**, the system monitors transmissions and reports fault conditions.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the **grace** context
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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eth-ed

Synopsis	Enter the **eth-ed** context
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed max-rx-defect-window *number*
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed priority *number*
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed rx-eth-ed *boolean*

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Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed tx-eth-ed *boolean*
Tree	tx-eth-ed
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis	Enter the **eth-vsm-grace** context
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace rx-eth-vsm-grace *boolean*
Tree	rx-eth-vsm-grace
Description	When configured to **true**, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to **false**, the router disables the Nokia Grace function.

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Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace tx-eth-vsm-grace *boolean*
Tree	tx-eth-vsm-grace
Description	When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards. The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED). When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* low-priority-defect *keyword*
Tree	low-priority-defect
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MEP

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Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* mac-address *string*
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* one-way-delay-threshold *number*
Tree	one-way-delay-threshold
Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vlan *(number | keyword)*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outer VLAN ID of the tunnel
Context	**configure** lag *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* vlan *(number | keyword)*
Tree	vlan
Range	1 to 4094
Options	none
Default	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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hash-weight-threshold

Synopsis	Enter the **hash-weight-threshold** context
Context	**configure** lag *string* hash-weight-threshold
Tree	hash-weight-threshold
Introduced	19.10.R1
Platforms	All

action *keyword*

Synopsis	Action when the sum of the hash weight is not exceeded
Context	**configure** lag *string* hash-weight-threshold action *keyword*
Tree	action
Options	down, dynamic-cost, static-cost
Default	down
Introduced	19.10.R1
Platforms	All

cost *number*

Synopsis	Static cost of the LAG
Context	**configure** lag *string* hash-weight-threshold cost *number*
Tree	cost
Range	1 to 16777215
Introduced	19.10.R1
Platforms	All

value *number*

Synopsis	Sum of the hash weight values of all active LAG ports
Context	**configure** lag *string* hash-weight-threshold value *number*
Tree	value
Range	1 to 6400000
Introduced	19.10.R1
Platforms	All

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hold-time-down *number*

Synopsis	Delay time for reporting the LAG is down
Context	**configure** lag *string* hold-time-down *number*
Tree	hold-time-down
Range	1 to 2000
Units	deciseconds
Introduced	16.0.R1
Platforms	All

lacp

Synopsis	Enable the **lacp** context
Context	**configure** lag *string* lacp
Tree	lacp
Introduced	16.0.R1
Platforms	All

administrative-key *number*

Synopsis	Key to identify the channel group on each LACP port
Context	**configure** lag *string* lacp administrative-key *number*
Tree	administrative-key
Description	This command configures the administrative key that identifies the channel group on each port configured to use LACP. In an MC-LAG configuration, both redundant nodes must be configured with the same key values. In any other case, the key is only locally significant.
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mode *keyword*

Synopsis	Mode in which LACP operates

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Context	**configure** lag *string* lacp mode *keyword*
Tree	mode
Options	passive, active
Default	passive
Introduced	16.0.R1
Platforms	All

system-id *string*

Synopsis	System ID
Context	**configure** lag *string* lacp system-id *string*
Tree	system-id
Default	00:00:00:00:00:00
Introduced	16.0.R1
Platforms	All

system-priority *number*

Synopsis	System priority value
Context	**configure** lag *string* lacp system-priority *number*
Tree	system-priority
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

lacp-mux-control *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MUX machine control for LACP LAG in active/passive mode
Context	**configure** lag *string* lacp-mux-control *keyword*
Tree	lacp-mux-control
Options	coupled, independent
Default	coupled

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Introduced	16.0.R1
Platforms	All

lacp-xmit-interval *keyword*

Synopsis	Time for periodic transmission
Context	**configure** lag *string* lacp-xmit-interval *keyword*
Tree	lacp-xmit-interval
Options	slow, fast
Default	fast
Introduced	16.0.R1
Platforms	All

lacp-xmit-stdby *boolean*

Synopsis	Allow LACP message transmission on standby links
Context	**configure** lag *string* lacp-xmit-stdby *boolean*
Tree	lacp-xmit-stdby
Default	true
Introduced	16.0.R1
Platforms	All

link-map-profile [link-map-profile-id] *number*

Synopsis	Enter the **link-map-profile** list instance
Context	**configure** lag *string* link-map-profile *number*
Tree	link-map-profile
Introduced	16.0.R1
Platforms	All

[**link-map-profile-id**] *number*

Synopsis	Link map profile to control LAG ports
Context	**configure** lag *string* link-map-profile *number*
Tree	link-map-profile

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Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** lag *string* link-map-profile *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

failure-mode *keyword*

Synopsis	Failure mode of LAG link profile
Context	**configure** lag *string* link-map-profile *number* failure-mode *keyword*
Tree	failure-mode
Options	per-link-hash, discard
Default	per-link-hash
Introduced	16.0.R1
Platforms	All

link [port-id] *reference*

Synopsis	Enter the **link** list instance
Context	**configure** lag *string* link-map-profile *number* link *reference*
Tree	link
Introduced	16.0.R1
Platforms	All

[**port-id**] *reference*

Synopsis	Port associated with the link map profile

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Context	**configure** lag *string* link-map-profile *number* link *reference*
Tree	link
Reference	**configure** lag *string* port *reference*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

port-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Type of the associated port for this entry
Context	**configure** lag *string* link-map-profile *number* link *reference* port-type *keyword*
Tree	port-type
Options	primary, secondary
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mac-address *string*

Synopsis	MAC address of the LAG
Context	**configure** lag *string* mac-address *string*
Tree	mac-address
Default	00:00:00:00:00:00
Introduced	16.0.R1
Platforms	All

max-ports *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

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Synopsis	Maximum number of ports allowed in the LAG
Context	**configure** lag *string* max-ports *number*
Tree	max-ports
Description	This command configures the maximum number of ports allowed in the LAG. This command must be configured to 64 when the LAG name is a numeric identifier in the range of 1 to 64. If the LAG name is a numeric identifier in the range of 65 to 800, this command must be configured to 32.
Range	32 | 64
Introduced	21.2.R1
Platforms	All

mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Operation mode of the LAG
Context	**configure** lag *string* mode *keyword*
Tree	mode
Options	access, network, hybrid
Default	network
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference*

Synopsis	Operational group to monitor
Context	**configure** lag *string* monitor-oper-group *reference*
Tree	monitor-oper-group
Reference	**configure** service oper-group *string*
Introduced	19.5.R1
Platforms	All

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per-link-hash

Synopsis	Enable the **per-link-hash** context
Context	**configure** lag *string* per-link-hash
Tree	per-link-hash
Introduced	16.0.R1
Platforms	All

weighted

Synopsis	Enable the **weighted** context
Context	**configure** lag *string* per-link-hash weighted
Tree	weighted
Introduced	16.0.R1
Platforms	All

auto-rebalance *boolean*

Synopsis	Auto-rebalance SAPs, users, or interfaces for new links
Context	**configure** lag *string* per-link-hash weighted auto-rebalance *boolean*
Tree	auto-rebalance
Default	false
Introduced	16.0.R1
Platforms	All

subscriber-hash-mode *keyword*

Synopsis	Subscriber traffic load balance over LAG member links
Context	**configure** lag *string* per-link-hash weighted subscriber-hash-mode *keyword*
Tree	subscriber-hash-mode
Description	This command configures weighted subscriber traffic to be load balanced over LAG member links. Traffic hashing can be performed based on SAPs or Vports. SAP-based hashing supports weights configured at the subscriber level in the subscriber profile. The SAP hashing mode supports only SAP to subscriber (1:1) deployment models.

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	Vport-based load balancing supports SAP to subscriber (1:1) and SAP to service (N:1) deployment models.
Options	sap, vport
Default	sap
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

port [port-id] *reference*

Synopsis	Enter the **port** list instance
Context	**configure** lag *string* port *reference*
Tree	port
Introduced	16.0.R1
Platforms	All

[**port-id**] *reference*

Synopsis	Identifier to uniquely identify the port in the LAG
Context	**configure** lag *string* port *reference*
Tree	port
Reference	**configure** port *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

hash-weight *(number | keyword)*

Synopsis	Flow hashing distribution between LAG ports
Context	**configure** lag *string* port *reference* hash-weight *(number | keyword)*
Tree	hash-weight
Range	1 to 100000
Options	port-speed
Introduced	19.5.R1
Platforms	All

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priority *number*

Synopsis	Priority of the port in the LAG
Context	**configure** lag *string* port *reference* priority *number*
Tree	priority
Range	1 to 65535
Default	32768
Introduced	16.0.R1
Platforms	All

sub-group *(number | keyword)*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Subgroup of the port in the LAG
Context	**configure** lag *string* port *reference* sub-group *(number | keyword)*
Tree	sub-group
Range	1 to 8
Options	auto-iom, auto-mda
Default	1
Introduced	16.0.R1
Platforms	All

port-threshold

Synopsis	Enter the **port-threshold** context
Context	**configure** lag *string* port-threshold
Tree	port-threshold
Introduced	16.0.R1
Platforms	All

action *keyword*

Synopsis	Action when the active links are at or below threshold
Context	**configure** lag *string* port-threshold action *keyword*

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Tree	action
Options	down, dynamic-cost, static-cost
Default	down
Introduced	16.0.R1
Platforms	All

cost *number*

Synopsis	Static cost of the LAG
Context	**configure** lag *string* port-threshold cost *number*
Tree	cost
Range	1 to 16777215
Introduced	16.0.R3
Platforms	All

value *number*

Synopsis	Active link threshold at which action is taken
Context	**configure** lag *string* port-threshold value *number*
Tree	value
Range	0 to 63
Introduced	16.0.R1
Platforms	All

port-type *keyword*

Synopsis	Port type of the LAG
Context	**configure** lag *string* port-type *keyword*
Tree	port-type
Options	standard, hs
Default	standard
Introduced	16.0.R1
Platforms	All

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selection-criteria

Synopsis	Enter the **selection-criteria** context
Context	**configure** lag *string* selection-criteria
Tree	selection-criteria
Introduced	16.0.R1
Platforms	All

mode *keyword*

Synopsis	Criteria to select the active subgroup
Context	**configure** lag *string* selection-criteria mode *keyword*
Tree	mode
Options	highest-count, highest-weight, best-port
Default	highest-count
Introduced	16.0.R1
Platforms	All

slave-to-partner *boolean*

Synopsis	Use slave-to-partner for selection criteria
Context	**configure** lag *string* selection-criteria slave-to-partner *boolean*
Tree	slave-to-partner
Default	false
Introduced	16.0.R1
Platforms	All

subgroup-hold-time *(number | keyword)*

Synopsis	Delay time when switching to a new active subgroup
Context	**configure** lag *string* selection-criteria subgroup-hold-time *(number | keyword)*
Tree	subgroup-hold-time
Range	0 to 2000
Units	deciseconds
Options	infinite
Default	0

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Introduced	16.0.R1
Platforms	All

standby-signaling *keyword*

Synopsis	Way of signaling a member port to the remote side
Context	**configure** lag *string* standby-signaling *keyword*
Tree	standby-signaling
Options	lacp, power-off
Default	lacp
Introduced	16.0.R1
Platforms	All

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3.23 li commands

```
li
   –  li-filter
      –  associations
         –  li-ip-filter reference
            –  ip-filter string
         –  li-ipv6-filter reference
            –  ipv6-filter string
         –  li-mac-filter reference
            –  mac-filter string
      –  li-ip-filter string
         –  description string
         –  entry number
            –  description string
            –  match
               –  dst-ip
                  –  address (ipv4-prefix-with-host-bits | ipv4-address)
                  –  mask string
               –  dst-port
                  –  eq number
                  –  gt number
                  –  lt number
                  –  range
                     –  end number
                     –  start number
               –  fragment keyword
               –  protocol (number | keyword)
               –  src-ip
                  –  address (ipv4-prefix-with-host-bits | ipv4-address)
                  –  mask string
               –  src-port
                  –  eq number
                  –  gt number
                  –  lt number
                  –  range
                     –  end number
                     –  start number
      –  li-ipv6-filter string
         –  description string
         –  entry number
            –  description string
            –  match
               –  dst-ip
                  –  address (ipv6-prefix-with-host-bits | ipv6-address)
                  –  mask string
               –  dst-port
                  –  eq number
                  –  gt number
                  –  lt number
                  –  range
                     –  end number
                     –  start number
               –  next-header (number | keyword)
               –  src-ip
                  –  address (ipv6-prefix-with-host-bits | ipv6-address)
                  –  mask string
               –  src-port
                  –  eq number
                  –  gt number
                  –  lt number
```


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```
                  -  range
                     -  end number
                     -  start number
      -  li-mac-filter string
         -  description string
         -  entry number
            -  description string
            -  match
               -  dst-mac
                  -  address string
                  -  mask string
               -  frame-type keyword
               -  src-mac
                  -  address string
                  -  mask string
      -  lock-filter keyword
      -  reserved-block string
         -  description string
         -  entry-range
            -  end number
            -  start number
         -  ip-filter string
         -  ipv6-filter string
         -  mac-filter string
   -  li-source string
      -  admin-state keyword
      -  li-ip-filter reference
         -  entry reference
            -  intercept-id number
            -  session-id number
      -  li-ipv6-filter reference
         -  entry reference
            -  intercept-id number
            -  session-id number
      -  li-mac-filter reference
         -  entry reference
            -  intercept-id number
            -  session-id number
      -  nat
         -  dslite string b4 string
            -  intercept-id number
            -  session-id number
         -  ethernet-header
            -  destination-address string
            -  source-address string
            -  type number
         -  l2-aware string
            -  intercept-id number
            -  session-id number
         -  nat44 string ip string
            -  intercept-id number
            -  session-id number
         -  nat64 string ip string
            -  intercept-id number
            -  session-id number
      -  port string
         -  egress boolean
         -  ingress boolean
      -  sap string
         -  egress boolean
         -  ingress boolean
         -  intercept-id number
         -  session-id number
      -  subscriber string
```


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```
        - egress boolean
        - fc keyword
        - host-type keyword
        - ingress boolean
        - intercept-id number
        - ip-address string
        - ip-family keyword
        - mac-address string
        - sap-id string
        - session-id number
        - sla-profile string
     - wlan-gw-dsm-ue string
        - intercept-id number
        - session-id number
  - log
     - log-id string
        - admin-state keyword
        - description string
        - destination
           - memory
              - max-entries number
           - netconf
              - max-entries number
           - snmp
              - max-entries number
        - filter string
        - netconf-stream string
        - source
           - li boolean
        - time-format keyword
  - mirror-dest-reservation
     - end number
     - start number
  - mirror-dest-template string
     - layer-3-encap
        - direction-bit boolean
        - encap-type keyword
        - ip-source string
        - router-instance string
        - udp
           - destination number
           - source number
     - type keyword
  - nat
     - use-outside-ip-address boolean
  - radius
     - mirror-dest-template reference
  - x-interfaces
     - admin-state keyword
     - correlation-id
        - ipoe keyword
        - pppoe keyword
     - ine-identifier string
     - lic string
        - authentication
           - password string
           - private-ki string
           - sequence-group string
        - description string
        - identifier string
        - ipv4
           - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - port number
        - router-instance string
```


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```
      –  user-db string
      –  x1
         –  ipv4
            –  local-address (ipv4-address-no-zone | ipv6-address-no-zone)
         –  lic-peer reference
         –  local-tcp-port number
         –  timeouts
            –  message-timeout number
      –  x2
         –  ipv4
            –  local-address (ipv4-address-no-zone | ipv6-address-no-zone)
         –  lic-peer reference
         –  timeouts
            –  keep-alive number
            –  request number
      –  x3
         –  alarms
            –  cpu-alarm
               –  high-threshold number
               –  low-threshold number
            –  memory-alarm
               –  high-threshold number
               –  low-threshold number
            –  throughput-alarm
               –  high-threshold number
               –  low-threshold number
         –  ipv4
            –  local-address-range
               –  end string
               –  start string
         –  li-group number
         –  lic-peers reference
         –  session-limit number
         –  timeouts
            –  keep-alive number
            –  request number
            –  target-retry-wait number
```


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3.23.1 li command descriptions

li

Synopsis	Configure lawful intercept
Context	li
Tree	li
Introduced	19.10.R1
Platforms	All

li-filter

Synopsis	Enter the **li-filter** context
Context	li li-filter
Tree	li-filter
Introduced	19.10.R1
Platforms	All

associations

Synopsis	Enter the **associations** context
Context	li li-filter associations
Tree	associations
Introduced	19.10.R1
Platforms	All

li-ip-filter [li-filter-name] *reference*

Synopsis	Enter the **li-ip-filter** list instance
Context	li li-filter associations li-ip-filter *reference*
Tree	li-ip-filter
Introduced	19.10.R1
Platforms	All

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[**li-filter-name**] *reference*

Synopsis	Name of an existing LI IP filter
Context	li li-filter associations li-ip-filter *reference*
Tree	li-ip-filter
Reference	li li-filter li-ip-filter *string*
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

ip-filter [filter-name] *string*

Synopsis	Add a list entry for **ip-filter**
Context	li li-filter associations li-ip-filter *reference* ip-filter *string*
Tree	ip-filter
Max. Instances	1
Min. Instances	1
Introduced	19.10.R1
Platforms	All

[**filter-name**] *string*

Synopsis	IP filter to be associated with specified LI IP filter
Context	li li-filter associations li-ip-filter *reference* ip-filter *string*
Tree	ip-filter
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

li-ipv6-filter [li-filter-name] *reference*

Synopsis	Enter the **li-ipv6-filter** list instance
Context	li li-filter associations li-ipv6-filter *reference*

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Tree	li-ipv6-filter
Introduced	19.10.R1
Platforms	All

[**li-filter-name**] *reference*

Synopsis	LI IPv6 filter name
Context	li li-filter associations li-ipv6-filter *reference*
Tree	li-ipv6-filter
Reference	li li-filter li-ipv6-filter *string*
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

ipv6-filter [filter-name] *string*

Synopsis	Add a list entry for **ipv6-filter**
Context	li li-filter associations li-ipv6-filter *reference* ipv6-filter *string*
Tree	ipv6-filter
Max. Instances	1
Min. Instances	1
Introduced	19.10.R1
Platforms	All

[**filter-name**] *string*

Synopsis	IP filter to be associated with specified LI IP filter
Context	li li-filter associations li-ipv6-filter *reference* ipv6-filter *string*
Tree	ipv6-filter
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

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li-mac-filter [li-filter-name] *reference*

Synopsis	Enter the **li-mac-filter** list instance
Context	li li-filter associations li-mac-filter *reference*
Tree	li-mac-filter
Introduced	19.10.R1
Platforms	All

[**li-filter-name**] *reference*

Synopsis	LI MAC filter name
Context	li li-filter associations li-mac-filter *reference*
Tree	li-mac-filter
Reference	li li-filter li-mac-filter *string*
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

mac-filter [filter-name] *string*

Synopsis	Add a list entry for **mac-filter**
Context	li li-filter associations li-mac-filter *reference* mac-filter *string*
Tree	mac-filter
Max. Instances	1
Min. Instances	1
Introduced	19.10.R1
Platforms	All

[**filter-name**] *string*

Synopsis	IP filter to be associated with specified LI IP filter
Context	li li-filter associations li-mac-filter *reference* mac-filter *string*
Tree	mac-filter

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String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

li-ip-filter [li-filter-name] *string*

Synopsis	Enter the **li-ip-filter** list instance
Context	li li-filter li-ip-filter *string*
Tree	li-ip-filter
Description	Commands in this context create LI IPv4 filter lists, which can be used to create confidential IPv4 filter based LI source entries. The LI IPv4 filter entries are merged into normal IPv4 filters configured with the **li li-filter associations** and **li li-filter reserved-block** commands. The LI IPv4 filter entries are visible only to users with LI permissions.
Introduced	19.10.R1
Platforms	All

[**li-filter-name**] *string*

Synopsis	LI filter name
Context	li li-filter li-ip-filter *string*
Tree	li-ip-filter
Description	This command specifies the LI filter name. Filter names cannot start with an underscore character (for example, “_my-filter”) and cannot use the name “default”.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	li li-filter li-ip-filter *string* description *string*
Tree	description
String Length	1 to 80

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Introduced	19.10.R1
Platforms	All

entry [li-entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	li li-filter li-ip-filter *string* entry *number*
Tree	entry
Description	Commands in this context configure an entry for the LI filter. Multiple entries can be created using unique entry ID numbers within the filter. An entry in an LI filter always has an implicit action of “forward”. LI filter entries can be used as LI source entries. The entry numbers for LI filters serve only as keys for managing the entries (deleting entries, and so on). The order of the LI filter entries is not guaranteed to match the entry numbers and the software may reorder entries. Operators must therefore use LI entries in such a way that their relative order is not important. Entries removed from the filter are immediately removed from all services or network ports where the associated filter is applied.
Introduced	19.10.R1
Platforms	All

[**li-entry-id**] *number*

Synopsis	LI filter entry ID
Context	li li-filter li-ip-filter *string* entry *number*
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	li li-filter li-ip-filter *string* entry *number* description *string*
Tree	description
String Length	1 to 80

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Introduced	19.10.R1
Platforms	All

match

Synopsis	Enter the **match** context
Context	li li-filter li-ip-filter *string* entry *number* match
Tree	match
Description	Commands in this context configure match criteria for the filter entry. If more than one match criteria (within one match statement) are configured, all criteria must be satisfied (and function) for a match to occur. A match context may consist of multiple match criteria, but multiple match statements cannot be configured per entry.
Introduced	19.10.R1
Platforms	All

dst-ip

Synopsis	Enter the **dst-ip** context
Context	li li-filter li-ip-filter *string* entry *number* match dst-ip
Tree	dst-ip
Introduced	19.10.R1
Platforms	All

address *(ipv4-prefix-with-host-bits | ipv4-address)*

Synopsis	IP address to match
Context	li li-filter li-ip-filter *string* entry *number* match dst-ip address *(ipv4-prefix-with-host-bits | ipv4-address)*
Tree	address
Introduced	19.10.R1
Platforms	All

mask *string*

Synopsis	Mask that is applied as an AND to the IP address

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Context	li li-filter li-ip-filter *string* entry *number* match dst-ip mask *string*
Tree	mask
Introduced	19.10.R1
Platforms	All

dst-port

Synopsis	Enter the **dst-port** context
Context	li li-filter li-ip-filter *string* entry *number* match dst-port
Tree	dst-port
Introduced	19.10.R1
Platforms	All

eq *number*

Synopsis	Condition on equality to specified value
Context	li li-filter li-ip-filter *string* entry *number* match dst-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	19.10.R1
Platforms	All

gt *number*

Synopsis	Condition on being greater than the specified value
Context	li li-filter li-ip-filter *string* entry *number* match dst-port gt *number*
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	19.10.R1
Platforms	All

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lt *number*

Synopsis	Condition on being less than the specified value
Context	li li-filter li-ip-filter *string* entry *number* match dst-port lt *number*
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	19.10.R1
Platforms	All

range

Synopsis	Enable the **range** context
Context	li li-filter li-ip-filter *string* entry *number* match dst-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	19.10.R1
Platforms	All

end *number*

Synopsis	Upper bound port to match
Context	li li-filter li-ip-filter *string* entry *number* match dst-port range end *number*
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

start *number*

Synopsis	Lower bound port to match
Context	li li-filter li-ip-filter *string* entry *number* match dst-port range start *number*
Tree	start
Range	0 to 65534

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Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

fragment *keyword*

Synopsis	Fragmentation state as the match criterion
Context	li li-filter li-ip-filter *string* entry *number* match fragment *keyword*
Tree	fragment
Options	false, true
Introduced	20.2.R1
Platforms	All

protocol *(number | keyword)*

Synopsis	IP protocol to match
Context	li li-filter li-ip-filter *string* entry *number* match protocol *(number | keyword)*
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	19.10.R1
Platforms	All

src-ip

Synopsis	Enter the **src-ip** context
Context	li li-filter li-ip-filter *string* entry *number* match src-ip
Tree	src-ip
Introduced	19.10.R1
Platforms	All

address *(ipv4-prefix-with-host-bits | ipv4-address)*

Synopsis	IP address to match

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Context	li li-filter li-ip-filter *string* entry *number* match src-ip address *(ipv4-prefix-with-host-bits | ipv4-address)*
Tree	address
Introduced	19.10.R1
Platforms	All

mask *string*

Synopsis	Mask that is applied as an AND to the IP address
Context	li li-filter li-ip-filter *string* entry *number* match src-ip mask *string*
Tree	mask
Introduced	19.10.R1
Platforms	All

src-port

Synopsis	Enter the **src-port** context
Context	li li-filter li-ip-filter *string* entry *number* match src-port
Tree	src-port
Introduced	19.10.R1
Platforms	All

eq *number*

Synopsis	Condition on equality to specified value
Context	li li-filter li-ip-filter *string* entry *number* match src-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	19.10.R1
Platforms	All

gt *number*

Synopsis	Condition on being greater than the specified value

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Context	li li-filter li-ip-filter *string* entry *number* match src-port gt *number*
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	19.10.R1
Platforms	All

lt *number*

Synopsis	Condition on being less than the specified value
Context	li li-filter li-ip-filter *string* entry *number* match src-port lt *number*
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	19.10.R1
Platforms	All

range

Synopsis	Enable the **range** context
Context	li li-filter li-ip-filter *string* entry *number* match src-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	19.10.R1
Platforms	All

end *number*

Synopsis	Upper bound port to match
Context	li li-filter li-ip-filter *string* entry *number* match src-port range end *number*
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	19.10.R1

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Platforms	All

start *number*

Synopsis	Lower bound port to match
Context	li li-filter li-ip-filter *string* entry *number* match src-port range start *number*
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

li-ipv6-filter [li-filter-name] *string*

Synopsis	Enter the **li-ipv6-filter** list instance
Context	li li-filter li-ipv6-filter *string*
Tree	li-ipv6-filter
Description	Commands in this context create LI IPv6 filter lists, which can be used to create confidential IPv6 filter based LI source entries. The LI IPv6 filter entries are merged into normal IPv6 filters configured with the **li li-filter associations** and **li li-filter reserved-block** commands. However, the LI IPv6 filter entries are visible only to users with LI permissions.
Introduced	19.10.R1
Platforms	All

[**li-filter-name**] *string*

Synopsis	LI filter name
Context	li li-filter li-ipv6-filter *string*
Tree	li-ipv6-filter
Description	This command specifies the LI filter name. Filter names cannot start with an underscore character (for example, “_my-filter”) and cannot use the name “default”.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	li li-filter li-ipv6-filter *string* description *string*
Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

entry [li-entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	li li-filter li-ipv6-filter *string* entry *number*
Tree	entry
Description	Commands in this context configure an entry for the LI filter. Multiple entries can be created using unique entry ID numbers within the filter. An entry in an LI filter always has an implicit action of “forward”. LI filter entries can be used as LI source entries. The entry numbers for LI filters serve only as keys for managing the entries (deleting entries, and so on). The order of the LI filter entries is not guaranteed to match the entry numbers and the software may reorder entries. Operators must therefore use LI entries in such a way that their relative order is not important. Entries removed from the filter are immediately removed from all services or network ports where the associated filter is applied.
Introduced	19.10.R1
Platforms	All

[**li-entry-id**] *number*

Synopsis	LI filter entry ID
Context	li li-filter li-ipv6-filter *string* entry *number*
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	li li-filter li-ipv6-filter *string* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

match

Synopsis	Enter the **match** context
Context	li li-filter li-ipv6-filter *string* entry *number* match
Tree	match
Description	Commands in this context configure match criteria for the filter entry. If more than one match criteria (within one match statement) are configured, all criteria must be satisfied (and function) for a match to occur. A match context may consist of multiple match criteria, but multiple match statements cannot be configured per entry.
Introduced	19.10.R1
Platforms	All

dst-ip

Synopsis	Enter the **dst-ip** context
Context	li li-filter li-ipv6-filter *string* entry *number* match dst-ip
Tree	dst-ip
Introduced	19.10.R1
Platforms	All

address *(ipv6-prefix-with-host-bits | ipv6-address)*

Synopsis	IP address to match
Context	li li-filter li-ipv6-filter *string* entry *number* match dst-ip address *(ipv6-prefix-with-host-bits | ipv6-address)*
Tree	address

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Introduced	19.10.R1
Platforms	All

mask *string*

Synopsis	Mask that is applied as an AND to the IPv6 address
Context	li li-filter li-ipv6-filter *string* entry *number* match dst-ip mask *string*
Tree	mask
Introduced	19.10.R1
Platforms	All

dst-port

Synopsis	Enter the **dst-port** context
Context	li li-filter li-ipv6-filter *string* entry *number* match dst-port
Tree	dst-port
Introduced	19.10.R1
Platforms	All

eq *number*

Synopsis	Condition on equality to specified value
Context	li li-filter li-ipv6-filter *string* entry *number* match dst-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	19.10.R1
Platforms	All

gt *number*

Synopsis	Condition on being greater than the specified value
Context	li li-filter li-ipv6-filter *string* entry *number* match dst-port gt *number*
Tree	gt
Range	0 to 65534

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Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	19.10.R1
Platforms	All

lt *number*

Synopsis	Condition on being less than the specified value
Context	li li-filter li-ipv6-filter *string* entry *number* match dst-port lt *number*
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	19.10.R1
Platforms	All

range

Synopsis	Enable the **range** context
Context	li li-filter li-ipv6-filter *string* entry *number* match dst-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	19.10.R1
Platforms	All

end *number*

Synopsis	Upper bound port to match
Context	li li-filter li-ipv6-filter *string* entry *number* match dst-port range end *number*
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

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start *number*

Synopsis	Lower bound port to match
Context	li li-filter li-ipv6-filter *string* entry *number* match dst-port range start *number*
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

next-header *(number | keyword)*

Synopsis	IP protocol to match
Context	li li-filter li-ipv6-filter *string* entry *number* match next-header *(number | keyword)*
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	19.10.R1
Platforms	All

src-ip

Synopsis	Enter the **src-ip** context
Context	li li-filter li-ipv6-filter *string* entry *number* match src-ip
Tree	src-ip
Introduced	19.10.R1
Platforms	All

address *(ipv6-prefix-with-host-bits | ipv6-address)*

Synopsis	IP address to match
Context	li li-filter li-ipv6-filter *string* entry *number* match src-ip address *(ipv6-prefix-with-host-bits | ipv6-address)*
Tree	address
Introduced	19.10.R1

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Platforms	All

mask *string*

Synopsis	Mask that is applied as an AND to the IPv6 address
Context	li li-filter li-ipv6-filter *string* entry *number* match src-ip mask *string*
Tree	mask
Introduced	19.10.R1
Platforms	All

src-port

Synopsis	Enter the **src-port** context
Context	li li-filter li-ipv6-filter *string* entry *number* match src-port
Tree	src-port
Introduced	19.10.R1
Platforms	All

eq *number*

Synopsis	Condition on equality to specified value
Context	li li-filter li-ipv6-filter *string* entry *number* match src-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	19.10.R1
Platforms	All

gt *number*

Synopsis	Condition on being greater than the specified value
Context	li li-filter li-ipv6-filter *string* entry *number* match src-port gt *number*
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

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Introduced	19.10.R1
Platforms	All

lt *number*

Synopsis	Condition on being less than the specified value
Context	li li-filter li-ipv6-filter *string* entry *number* match src-port lt *number*
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	19.10.R1
Platforms	All

range

Synopsis	Enable the **range** context
Context	li li-filter li-ipv6-filter *string* entry *number* match src-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	19.10.R1
Platforms	All

end *number*

Synopsis	Upper bound port to match
Context	li li-filter li-ipv6-filter *string* entry *number* match src-port range end *number*
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

start *number*

Synopsis	Lower bound port to match

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Context	li li-filter li-ipv6-filter *string* entry *number* match src-port range start *number*
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

li-mac-filter [li-filter-name] *string*

Synopsis	Enter the **li-mac-filter** list instance
Context	li li-filter li-mac-filter *string*
Tree	li-mac-filter
Description	Commands in this context configure LI MAC filter lists, which can be used to create confidential MAC filter based LI source entries. The LI MAC filter entries are merged into normal MAC filters as configured using the **li-filter associations** and **li-filter reserved-block** commands. The LI MAC filter entries are visible only to users with LI permissions.
Introduced	19.10.R1
Platforms	All

[**li-filter-name**] *string*

Synopsis	LI filter name
Context	li li-filter li-mac-filter *string*
Tree	li-mac-filter
Description	This command specifies the LI filter name. Filter names cannot start with an underscore character (for example, “_my-filter”) and cannot use the name “default”.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	li li-filter li-mac-filter *string* description *string*

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Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

entry [li-entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	li li-filter li-mac-filter *string* entry *number*
Tree	entry
Description	Commands in this context configure an entry for the LI filter. Multiple entries can be created using unique entry ID numbers within the filter. An entry in an LI filter always has an implicit action of “forward”. LI filter entries can be used as LI source entries. The entry numbers for LI filters serve only as keys for managing the entries (deleting entries, and so on). The order of the LI filter entries is not guaranteed to match the entry numbers and the software may reorder entries. Operators must therefore use LI entries in such a way that their relative order is not important. Entries removed from the filter are immediately removed from all services or network ports where the associated filter is applied.
Introduced	19.10.R1
Platforms	All

[**li-entry-id**] *number*

Synopsis	LI filter entry ID
Context	li li-filter li-mac-filter *string* entry *number*
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	li li-filter li-mac-filter *string* entry *number* description *string*

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Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

match

Synopsis	Enter the **match** context
Context	li li-filter li-mac-filter *string* entry *number* match
Tree	match
Description	Commands in this context configure match criteria for the filter entry. If more than one match criteria (within one match statement) are configured, all criteria must be satisfied (and function) for a match to occur. A match context may consist of multiple match criteria, but multiple match statements cannot be configured per entry.
Introduced	19.10.R1
Platforms	All

dst-mac

Synopsis	Enable the **dst-mac** context
Context	li li-filter li-mac-filter *string* entry *number* match dst-mac
Tree	dst-mac
Introduced	19.10.R1
Platforms	All

address *string*

Synopsis	MAC address for filter match
Context	li li-filter li-mac-filter *string* entry *number* match dst-mac address *string*
Tree	address
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

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mask *string*

Synopsis	MAC address mask for filter match
Context	li li-filter li-mac-filter *string* entry *number* match dst-mac mask *string*
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	19.10.R1
Platforms	All

frame-type *keyword*

Synopsis	Frame type for MAC filter match
Context	li li-filter li-mac-filter *string* entry *number* match frame-type *keyword*
Tree	frame-type
Description	This command specifies the frame type for MAC filter entry matching. A filter can be edited even if an LI source references an entry in the filter.
Options	802dot3, 802dot2-llc, 802dot2-snap, ethernet-ii
Default	802dot3
Introduced	19.10.R1
Platforms	All

src-mac

Synopsis	Enable the **src-mac** context
Context	li li-filter li-mac-filter *string* entry *number* match src-mac
Tree	src-mac
Introduced	19.10.R1
Platforms	All

address *string*

Synopsis	MAC address for filter match
Context	li li-filter li-mac-filter *string* entry *number* match src-mac address *string*
Tree	address
Notes	This element is mandatory.
Introduced	19.10.R1

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Platforms	All

mask *string*

Synopsis	MAC address mask for filter match
Context	li li-filter li-mac-filter *string* entry *number* match src-mac mask *string*
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	19.10.R1
Platforms	All

lock-filter *keyword*

Synopsis	Lock state of LI filters
Context	li li-filter lock-filter *keyword*
Tree	lock-filter
Options	lock, unlock
Default	lock
Introduced	19.10.R1
Platforms	All

reserved-block [block-name] *string*

Synopsis	Enter the **reserved-block** list instance
Context	li li-filter reserved-block *string*
Tree	reserved-block
Max. Instances	8
Introduced	19.10.R1
Platforms	All

[**block-name**] *string*

Synopsis	Object uniquely identifying an LI reserved block
Context	li li-filter reserved-block *string*
Tree	reserved-block

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String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	li li-filter reserved-block *string* description *string*
Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

entry-range

Synopsis	Enable the **entry-range** context
Context	li li-filter reserved-block *string* entry-range
Tree	entry-range
Introduced	19.10.R1
Platforms	All

end *number*

Synopsis	Upper bound of the range
Context	li li-filter reserved-block *string* entry-range end *number*
Tree	end
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

start *number*

Synopsis	Lower bound of the range

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Context	li li-filter reserved-block *string* entry-range start *number*
Tree	start
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

ip-filter [filter-name] *string*

Synopsis	Add a list entry for **ip-filter**
Context	li li-filter reserved-block *string* ip-filter *string*
Tree	ip-filter
Introduced	19.10.R1
Platforms	All

[**filter-name**] *string*

Synopsis	IP filter ID for LI filter reserved block
Context	li li-filter reserved-block *string* ip-filter *string*
Tree	ip-filter
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

ipv6-filter [filter-name] *string*

Synopsis	Add a list entry for **ipv6-filter**
Context	li li-filter reserved-block *string* ipv6-filter *string*
Tree	ipv6-filter
Introduced	19.10.R1
Platforms	All

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[**filter-name**] *string*

Synopsis	IP filter ID for LI filter reserved block
Context	li li-filter reserved-block *string* ipv6-filter *string*
Tree	ipv6-filter
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

mac-filter [filter-name] *string*

Synopsis	Add a list entry for **mac-filter**
Context	li li-filter reserved-block *string* mac-filter *string*
Tree	mac-filter
Introduced	19.10.R1
Platforms	All

[**filter-name**] *string*

Synopsis	IP filter ID for LI filter reserved block
Context	li li-filter reserved-block *string* mac-filter *string*
Tree	mac-filter
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

li-source [service-name] *string*

Synopsis	Enter the **li-source** list instance
Context	li li-source *string*
Tree	li-source
Introduced	19.10.R1
Platforms	All

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[**service-name**] *string*

Synopsis	Administrative service name
Context	li li-source *string*
Tree	li-source
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of mirror service
Context	li li-source *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	19.10.R1
Platforms	All

li-ip-filter [li-filter-name] *reference*

Synopsis	Enter the **li-ip-filter** list instance
Context	li li-source *string* li-ip-filter *reference*
Tree	li-ip-filter
Introduced	19.10.R1
Platforms	All

[**li-filter-name**] *reference*

Synopsis	A unique ID for an li-ip-filter
Context	li li-source *string* li-ip-filter *reference*
Tree	li-ip-filter
Reference	li li-filter li-ip-filter *string*
Notes	This element is part of a list key.

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Introduced	19.10.R1
Platforms	All

entry [li-entry-id] *reference*

Synopsis	Enter the **entry** list instance
Context	li li-source *string* li-ip-filter *reference* entry *reference*
Tree	entry
Min. Instances	1
Introduced	19.10.R1
Platforms	All

[**li-entry-id**] *reference*

Synopsis	A unique ID for an li-ip-filter entry
Context	li li-source *string* li-ip-filter *reference* entry *reference*
Tree	entry
Reference	li li-filter li-ip-filter *string* entry *number*
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

intercept-id *number*

Synopsis	Intercept ID of the traffic flow
Context	li li-source *string* li-ip-filter *reference* entry *reference* intercept-id *number*
Tree	intercept-id
Description	This command configures the intercept ID that is inserted into the packet header for all mirrrored packets of the associated LI source entry. This intercept ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs. For LI source entries, when the **configure mirror mirror-dest encap layer-3-encap header-type** command is configured with **ip-udp-shim** routable encap, an intercept-id field (as part of the routable encap) is always present in the mirrored packets. If there is no intercept ID configured for an LI source entry, the default value is inserted.

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When the mirror service is configured with **ip-gre** routable encap under the **header-type** command, no intercept ID is inserted and none should be specified against the LI source entries.

Range 1 to 1073741823

Introduced 19.10.R1

Platforms All

session-id *number*

Synopsis Session ID of the traffic flow

Context li li-source *string* li-ip-filter *reference* entry *reference* session-id *number*

Tree session-id

Description This command configures the session ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This session ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.

The session ID is only valid and used for mirror services that are configured with **ip-udp-shim** routable encap under the **configure mirror mirror-dest encap layer-3-encap header-type** command. For all types of LI source entries, when the mirror service is configured with **ip-udp-shim** routable encap, a session ID field (as part of the routable encap) is always present in the mirrored packets. If no session ID is configured for an LI source entry, the default value is inserted.

When a mirror service is configured with **ip-gre** routable encap under the header-type command, no session ID is inserted and none is specified against the LI source entries.

Range 1 to 4294967295

Introduced 19.10.R1

Platforms All

li-ipv6-filter [li-filter-name] *reference*

Synopsis Enter the **li-ipv6-filter** list instance

Context li li-source *string* li-ipv6-filter *reference*

Tree li-ipv6-filter

Introduced 19.10.R1

Platforms All

[**li-filter-name**] *reference*

Synopsis A unique ID for an li-ipv6-filter

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Context	li li-source *string* li-ipv6-filter *reference*
Tree	li-ipv6-filter
Reference	li li-filter li-ipv6-filter *string*
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

entry [li-entry-id] *reference*

Synopsis	Enter the **entry** list instance
Context	li li-source *string* li-ipv6-filter *reference* entry *reference*
Tree	entry
Min. Instances	1
Introduced	19.10.R1
Platforms	All

[**li-entry-id**] *reference*

Synopsis	A unique ID for an li-ipv6-filter entry
Context	li li-source *string* li-ipv6-filter *reference* entry *reference*
Tree	entry
Reference	li li-filter li-ipv6-filter *string* entry *number*
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

intercept-id *number*

Synopsis	Intercept ID of the traffic flow
Context	li li-source *string* li-ipv6-filter *reference* entry *reference* intercept-id *number*
Tree	intercept-id
Description	This command configures the intercept ID that is inserted into the packet header for all mirrrored packets of the associated LI source entry. This intercept ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.

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For LI source entries, when the **configure mirror mirror-dest encap layer-3-encap header-type** command is configured with **ip-udp-shim** routable encap, an intercept-id field (as part of the routable encap) is always present in the mirrored packets. If there is no intercept ID configured for an LI source entry, the default value is inserted.

When the mirror service is configured with **ip-gre** routable encap under the **header-type** command, no intercept ID is inserted and none should be specified against the LI source entries.

Range 1 to 1073741823

Introduced 19.10.R1

Platforms All

session-id *number*

Synopsis Session ID of the traffic flow

Context li li-source *string* li-ipv6-filter *reference* entry *reference* session-id *number*

Tree session-id

Description This command configures the session ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This session ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.

The session ID is only valid and used for mirror services that are configured with **ip-udp-shim** routable encap under the **configure mirror mirror-dest encap layer-3-encap header-type** command. For all types of LI source entries, when the mirror service is configured with **ip-udp-shim** routable encap, a session ID field (as part of the routable encap) is always present in the mirrored packets. If no session ID is configured for an LI source entry, the default value is inserted.

When a mirror service is configured with **ip-gre** routable encap under the header-type command, no session ID is inserted and none is specified against the LI source entries.

Range 1 to 4294967295

Introduced 19.10.R1

Platforms All

li-mac-filter [li-filter-name] *reference*

Synopsis Enter the **li-mac-filter** list instance

Context li li-source *string* li-mac-filter *reference*

Tree li-mac-filter

Introduced 19.10.R1

Platforms All

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[**li-filter-name**] *reference*

Synopsis	A unique ID for an li-mac-filter
Context	li li-source *string* li-mac-filter *reference*
Tree	li-mac-filter
Reference	li li-filter li-mac-filter *string*
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

entry [li-entry-id] *reference*

Synopsis	Enter the **entry** list instance
Context	li li-source *string* li-mac-filter *reference* entry *reference*
Tree	entry
Min. Instances	1
Introduced	19.10.R1
Platforms	All

[**li-entry-id**] *reference*

Synopsis	A unique ID for an li-mac-filter entry
Context	li li-source *string* li-mac-filter *reference* entry *reference*
Tree	entry
Reference	li li-filter li-mac-filter *string* entry *number*
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

intercept-id *number*

Synopsis	Intercept ID of the traffic flow
Context	li li-source *string* li-mac-filter *reference* entry *reference* intercept-id *number*
Tree	intercept-id

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Description This command configures the intercept ID that is inserted into the packet header for all mirrrored packets of the associated LI source entry. This intercept ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.

For LI source entries, when the **configure mirror mirror-dest encap layer-3-encap header-type** command is configured with **ip-udp-shim** routable encap, an intercept-id field (as part of the routable encap) is always present in the mirrored packets. If there is no intercept ID configured for an LI source entry, the default value is inserted.

When the mirror service is configured with **ip-gre** routable encap under the **header-type** command, no intercept ID is inserted and none should be specified against the LI source entries.

Range 1 to 1073741823

Introduced 19.10.R1

Platforms All

session-id *number*

Synopsis Session ID of the traffic flow

Context li li-source *string* li-mac-filter *reference* entry *reference* session-id *number*

Tree session-id

Description This command configures the session ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This session ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.

The session ID is only valid and used for mirror services that are configured with **ip-udp-shim** routable encap under the **configure mirror mirror-dest encap layer-3-encap header-type** command. For all types of LI source entries, when the mirror service is configured with **ip-udp-shim** routable encap, a session ID field (as part of the routable encap) is always present in the mirrored packets. If no session ID is configured for an LI source entry, the default value is inserted.

When a mirror service is configured with **ip-gre** routable encap under the header-type command, no session ID is inserted and none is specified against the LI source entries.

Range 1 to 4294967295

Introduced 19.10.R1

Platforms All

nat

Synopsis Enter the **nat** context

Context li li-source *string* nat

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Tree	nat
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dslite [router-instance] *string* b4 *string*

Synopsis	Enter the **dslite** list instance
Context	li li-source *string* nat dslite *string* b4 *string*
Tree	dslite
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**router-instance**] *string*

Synopsis	Name of the service
Context	li li-source *string* nat dslite *string* b4 *string*
Tree	dslite
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

b4 *string*

Synopsis	B4 prefix of the subscriber
Context	li li-source *string* nat dslite *string* b4 *string*
Tree	dslite
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

intercept-id *number*

Synopsis	The intercept id of the traffic flow
Context	li li-source *string* nat dslite *string* b4 *string* intercept-id *number*

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Tree	intercept-id
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-id *number*

Synopsis	The session id of the traffic flow
Context	li li-source *string* nat dslite *string* b4 *string* session-id *number*
Tree	session-id
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ethernet-header

Synopsis	Enter the **ethernet-header** context
Context	li li-source *string* nat ethernet-header
Tree	ethernet-header
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

destination-address *string*

Synopsis	Destination MAC address field of Ethernet encapsulation
Context	li li-source *string* nat ethernet-header destination-address *string*
Tree	destination-address
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source-address *string*

Synopsis	Source MAC address field of the Ethernet encapsulation
Context	li li-source *string* nat ethernet-header source-address *string*
Tree	source-address

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Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	Ethertype of the ethernet encapsulation
Context	li li-source *string* nat ethernet-header type *number*
Tree	type
Range	1536 to 65535
Default	1792
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2-aware [subscriber-id] *string*

Synopsis	Enter the **l2-aware** list instance
Context	li li-source *string* nat l2-aware *string*
Tree	l2-aware
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**subscriber-id**] *string*

Synopsis	The string identifying the subscribe
Context	li li-source *string* nat l2-aware *string*
Tree	l2-aware
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

intercept-id *number*

Synopsis	The intercept id of the traffic flow
Context	li li-source *string* nat l2-aware *string* intercept-id *number*

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Tree	intercept-id
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-id *number*

Synopsis	The session id of the traffic flow
Context	li li-source *string* nat l2-aware *string* session-id *number*
Tree	session-id
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat44 [router-instance] *string* ip *string*

Synopsis	Enter the **nat44** list instance
Context	li li-source *string* nat nat44 *string* ip *string*
Tree	nat44
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**router-instance**] *string*

Synopsis	Name of the service
Context	li li-source *string* nat nat44 *string* ip *string*
Tree	nat44
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip *string*

Synopsis	IP address of the subscriber

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Context	li li-source *string* nat nat44 *string* ip *string*
Tree	nat44
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

intercept-id *number*

Synopsis	The intercept id of the traffic flow
Context	li li-source *string* nat nat44 *string* ip *string* intercept-id *number*
Tree	intercept-id
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-id *number*

Synopsis	The session id of the traffic flow
Context	li li-source *string* nat nat44 *string* ip *string* session-id *number*
Tree	session-id
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat64 [router-instance] *string* ip *string*

Synopsis	Enter the **nat64** list instance
Context	li li-source *string* nat nat64 *string* ip *string*
Tree	nat64
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**router-instance**] *string*

Synopsis	Name of the service

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Context	li li-source *string* nat nat64 *string* ip *string*
Tree	nat64
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip *string*

Synopsis	IP prefix of the subscriber
Context	li li-source *string* nat nat64 *string* ip *string*
Tree	nat64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

intercept-id *number*

Synopsis	The intercept id of the traffic flow
Context	li li-source *string* nat nat64 *string* ip *string* intercept-id *number*
Tree	intercept-id
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-id *number*

Synopsis	The session id of the traffic flow
Context	li li-source *string* nat nat64 *string* ip *string* session-id *number*
Tree	session-id
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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port [port-id] *string*

Synopsis	Enter the **port** list instance
Context	li li-source *string* port *string*
Tree	port
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**port-id**] *string*

Synopsis	Port ID
Context	li li-source *string* port *string*
Tree	port
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

egress *boolean*

Synopsis	Perform lawful intercept on egress traffic
Context	li li-source *string* port *string* egress *boolean*
Tree	egress
Description	When configured to **true**, the router allows lawful intercept on egress traffic. This command configures packets that egress the SAP to be mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ingress *boolean*

Synopsis	Perform lawful intercept on ingress traffic
Context	li li-source *string* port *string* ingress *boolean*
Tree	ingress
Description	When configured to **true**, the router allows lawful intercept on ingress traffic. This command configures packets that ingress the SAP to be mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.

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Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sap [sap-id] *string*

Synopsis	Enter the **sap** list instance
Context	li li-source *string* sap *string*
Tree	sap
Description	Commands in this context create a service access point (SAP) within an LI configuration. The specified SAP must define a FastE, GigE, or XGigE, or XGigE access port with a dot1q, null, or q-in-q encapsulation type.
Introduced	19.10.R1
Platforms	All

[**sap-id**] *string*

Synopsis	SAP ID
Context	li li-source *string* sap *string*
Tree	sap
Description	This command specifies the physical port identifier portion of the SAP definition.
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

egress *boolean*

Synopsis	Perform lawful intercept on egress traffic
Context	li li-source *string* sap *string* egress *boolean*
Tree	egress
Description	When configured to **true**, the router allows lawful intercept on egress traffic. This command configures packets that egress the SAP to be mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	19.10.R1

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Platforms All

ingress *boolean*

Synopsis Perform lawful intercept on ingress traffic

Context li li-source *string* sap *string* ingress *boolean*

Tree ingress

Description When configured to **true**, the router allows lawful intercept on ingress traffic. This command configures packets that ingress the SAP to be mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.

Default false

Introduced 19.10.R1

Platforms All

intercept-id *number*

Synopsis Intercept ID of the traffic flow

Context li li-source *string* sap *string* intercept-id *number*

Tree intercept-id

Description This command configures the intercept ID that is inserted into the packet header for all mirrrored packets of the associated LI source entry. This intercept ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.

For LI source entries, when the **configure mirror mirror-dest encap layer-3-encap header-type** command is configured with **ip-udp-shim** routable encap, an intercept-id field (as part of the routable encap) is always present in the mirrored packets. If there is no intercept ID configured for an LI source entry, the default value is inserted.

When the mirror service is configured with **ip-gre** routable encap under the **header-type** command, no intercept ID is inserted and none should be specified against the LI source entries.

Range 1 to 1073741823

Introduced 19.10.R1

Platforms All

session-id *number*

Synopsis Session ID of the traffic flow

Context li li-source *string* sap *string* session-id *number*

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Tree	session-id
Description	This command configures the session ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This session ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs. The session ID is only valid and used for mirror services that are configured with **ip-udp-shim** routable encap under the **configure mirror mirror-dest encap layer-3-encap header-type** command. For all types of LI source entries, when the mirror service is configured with **ip-udp-shim** routable encap, a session ID field (as part of the routable encap) is always present in the mirrored packets. If no session ID is configured for an LI source entry, the default value is inserted. When a mirror service is configured with **ip-gre** routable encap under the header-type command, no session ID is inserted and none is specified against the LI source entries.
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

subscriber [subscriber-id] *string*

Synopsis	Enter the **subscriber** list instance
Context	li li-source *string* subscriber *string*
Tree	subscriber
Description	Commands in this context add hosts of a subscriber to a mirroring service.
Introduced	19.10.R1
Platforms	All

[**subscriber-id**] *string*

Synopsis	Subscriber ID
Context	li li-source *string* subscriber *string*
Tree	subscriber
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

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egress *boolean*

Synopsis	Perform lawful intercept on egress traffic
Context	li li-source *string* subscriber *string* egress *boolean*
Tree	egress
Description	When configured to **true**, the router allows lawful intercept on egress traffic. This command configures packets that egress the SAP to be mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding classes to be mirrored
Context	li li-source *string* subscriber *string* fc *keyword*
Tree	fc
Description	This command specifies the name of the forwarding class with which to associate LI traffic. The forwarding class name must already be defined within the system. If the FC name is not already defined, an error is returned and this command has no effect. If the FC name is defined, the forwarding class associated with the FC name overrides the default forwarding class.
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	19.10.R1
Platforms	All

host-type *keyword*

Synopsis	Subscriber host type to be monitored
Context	li li-source *string* subscriber *string* host-type *keyword*
Tree	host-type
Description	This command specifies the host type for LI.
Options	ipoe, ppp
Introduced	19.10.R1
Platforms	All

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ingress *boolean*

Synopsis	Perform lawful intercept on ingress traffic
Context	li li-source *string* subscriber *string* ingress *boolean*
Tree	ingress
Description	When configured to **true**, the router allows lawful intercept on ingress traffic. This command configures packets that ingress the SAP to be mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

intercept-id *number*

Synopsis	Intercept ID of the traffic flow
Context	li li-source *string* subscriber *string* intercept-id *number*
Tree	intercept-id
Description	This command configures the intercept ID that is inserted into the packet header for all mirrrored packets of the associated LI source entry. This intercept ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs. For LI source entries, when the **configure mirror mirror-dest encap layer-3-encap header-type** command is configured with **ip-udp-shim** routable encap, an intercept-id field (as part of the routable encap) is always present in the mirrored packets. If there is no intercept ID configured for an LI source entry, the default value is inserted. When the mirror service is configured with **ip-gre** routable encap under the **header-type** command, no intercept ID is inserted and none should be specified against the LI source entries.
Range	1 to 1073741823
Introduced	19.10.R1
Platforms	All

ip-address *string*

Synopsis	IP address of the subscriber
Context	li li-source *string* subscriber *string* ip-address *string*
Tree	ip-address

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Description	This command specifies the service IP address (system IP address) of the remote device sending LI traffic. If 0.0.0.0 is specified, any remote router is allowed to send to this service.
Notes	The following elements are part of a choice: (**ip-address**, **mac-address**, and **sap-id**) or **sla-profile**.
Introduced	19.10.R1
Platforms	All

ip-family *keyword*

Synopsis	IP family for LI
Context	li li-source *string* subscriber *string* ip-family *keyword*
Tree	ip-family
Description	This command specifies the IP family for LI.
Options	ipv4, ipv6
Introduced	19.10.R1
Platforms	All

mac-address *string*

Synopsis	The source MAC address
Context	li li-source *string* subscriber *string* mac-address *string*
Tree	mac-address
Description	This command specifies a MAC address when defining a static host. Multiple static hosts may be configured with the same MAC address because each definition is distinguished by a unique IP address.
Notes	The following elements are part of a choice: (**ip-address**, **mac-address**, and **sap-id**) or **sla-profile**.
Introduced	19.10.R1
Platforms	All

sap-id *string*

Synopsis	SAP ID
Context	li li-source *string* subscriber *string* sap-id *string*
Tree	sap-id

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String Length	1 to 45
Notes	The following elements are part of a choice: (**ip-address**, **mac-address**, and **sap-id**) or **sla-profile**.
Introduced	19.10.R1
Platforms	All

session-id *number*

Synopsis	Session ID of the traffic flow
Context	li li-source *string* subscriber *string* session-id *number*
Tree	session-id
Description	This command configures the session ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This session ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs. The session ID is only valid and used for mirror services that are configured with **ip-udp-shim** routable encap under the **configure mirror mirror-dest encap layer-3-encap header-type** command. For all types of LI source entries, when the mirror service is configured with **ip-udp-shim** routable encap, a session ID field (as part of the routable encap) is always present in the mirrored packets. If no session ID is configured for an LI source entry, the default value is inserted. When a mirror service is configured with **ip-gre** routable encap under the header-type command, no session ID is inserted and none is specified against the LI source entries.
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

sla-profile *string*

Synopsis	SLA profile
Context	li li-source *string* subscriber *string* sla-profile *string*
Tree	sla-profile
Description	This command specifies an SLA profile name. Each host of a subscriber can use a different SLA profile. This option allows interception of only the hosts using the specified SLA profile. In some deployments, SLA profiles are assigned per type of traffic. There can be, for example, a specific SLA profile for voice traffic (which could be used for all SIP hosts).
String Length	1 to 32

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Notes	The following elements are part of a choice: (**ip-address**, **mac-address**, and **sap-id**) or **sla-profile**.
Introduced	19.10.R1
Platforms	All

wlan-gw-dsm-ue [mac] *string*

Synopsis	Enter the **wlan-gw-dsm-ue** list instance
Context	li li-source *string* wlan-gw-dsm-ue *string*
Tree	wlan-gw-dsm-ue
Introduced	19.10.R1
Platforms	All

[**mac**] *string*

Synopsis	MAC address of the DSM UE
Context	li li-source *string* wlan-gw-dsm-ue *string*
Tree	wlan-gw-dsm-ue
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

intercept-id *number*

Synopsis	Intercept identifier
Context	li li-source *string* wlan-gw-dsm-ue *string* intercept-id *number*
Tree	intercept-id
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

session-id *number*

Synopsis	Session identifier
Context	li li-source *string* wlan-gw-dsm-ue *string* session-id *number*

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Tree	session-id
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

log

Synopsis	Enter the **log** context
Context	li log
Tree	log
Introduced	19.10.R1
Platforms	All

log-id [name] *string*

Synopsis	Enter the **log-id** list instance
Context	li log log-id *string*
Tree	log-id
Max. Instances	30
Introduced	19.10.R1
Platforms	All

[**name**] *string*

Synopsis	Log ID
Context	li log log-id *string*
Tree	log-id
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

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admin-state *keyword*

Synopsis	The administrative state of the log
Context	li log log-id *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	19.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	li log log-id *string* description *string*
Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

destination

Synopsis	Enter the **destination** context
Context	li log log-id *string* destination
Tree	destination
Introduced	19.10.R1
Platforms	All

memory

Synopsis	Enable the **memory** context
Context	li log log-id *string* destination memory
Tree	memory
Notes	The following elements are part of a choice: **memory**, **netconf**, or **snmp**.
Introduced	19.10.R1
Platforms	All

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max-entries *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this memory log
Context	li log log-id *string* destination memory max-entries *number*
Tree	max-entries
Range	50 to 1024
Default	100
Introduced	19.10.R1
Platforms	All

netconf

Synopsis	Enable the **netconf** context
Context	li log log-id *string* destination netconf
Tree	netconf
Notes	The following elements are part of a choice: **memory**, **netconf**, or **snmp**.
Introduced	20.2.R1
Platforms	All

max-entries *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maximum number of events stored in the NETCONF log
Context	li log log-id *string* destination netconf max-entries *number*
Tree	max-entries
Description	This command configures the maximum number of events stored in the NETCONF log. If this setting needs to be modified, the log ID must be removed and re-created.
Range	50 to 1024
Default	100

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Introduced	20.2.R1
Platforms	All

snmp

Synopsis	Enable the **snmp** context
Context	li log log-id *string* destination snmp
Tree	snmp
Notes	The following elements are part of a choice: **memory**, **netconf**, or **snmp**.
Introduced	19.10.R1
Platforms	All

max-entries *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this snmp log
Context	li log log-id *string* destination snmp max-entries *number*
Tree	max-entries
Range	50 to 1024
Default	100
Introduced	19.10.R1
Platforms	All

filter *string*

Synopsis	Event filter ID to associate with log ID configuration
Context	li log log-id *string* filter *string*
Tree	filter
String Length	1 to 64
Introduced	19.10.R1
Platforms	All

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netconf-stream *string*

Synopsis	Destination NETCONF stream name
Context	li log log-id *string* netconf-stream *string*
Tree	netconf-stream
String Length	1 to 32
Introduced	20.2.R1
Platforms	All

source

Synopsis	Enter the **source** context
Context	li log log-id *string* source
Tree	source
Introduced	19.10.R1
Platforms	All

li *boolean*

Synopsis	Event stream for events configured for LI activities
Context	li log log-id *string* source li *boolean*
Tree	li
Default	false
Introduced	19.10.R1
Platforms	All

time-format *keyword*

Synopsis	Time zone to display date and time
Context	li log log-id *string* time-format *keyword*
Tree	time-format
Options	utc, local
Default	utc
Introduced	19.10.R1
Platforms	All

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mirror-dest-reservation

Synopsis	Enter the **mirror-dest-reservation** context
Context	li mirror-dest-reservation
Tree	mirror-dest-reservation
Description	Commands in this context configure the attributes to reserve mirror destination resources.
Introduced	19.10.R1
Platforms	All

end *number*

Synopsis	Upper bound of the mirror destination ID
Context	li mirror-dest-reservation end *number*
Tree	end
Range	1 to 2147483647
Introduced	19.10.R1
Platforms	All

start *number*

Synopsis	Lower bound of the mirror destination ID
Context	li mirror-dest-reservation start *number*
Tree	start
Range	1 to 2147483647
Introduced	19.10.R1
Platforms	All

mirror-dest-template [name] *string*

Synopsis	Enter the **mirror-dest-template** list instance
Context	li mirror-dest-template *string*
Tree	mirror-dest-template
Max. Instances	8
Introduced	19.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Mirror destination template name
Context	li mirror-dest-template *string*
Tree	mirror-dest-template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

layer-3-encap

Synopsis	Enter the **layer-3-encap** context
Context	li mirror-dest-template *string* layer-3-encap
Tree	layer-3-encap
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction-bit *boolean*

Synopsis	Use highest bit in interception ID for flow direction
Context	li mirror-dest-template *string* layer-3-encap direction-bit *boolean*
Tree	direction-bit
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encap-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	The header type of the layer 3 encapsulation.

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Context	li mirror-dest-template *string* layer-3-encap encap-type *keyword*
Tree	encap-type
Options	ip-udp-shim, ip-gre
Default	ip-udp-shim
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-source *string*

Synopsis	Source IPv4 address for Layer 3 encapsulation
Context	li mirror-dest-template *string* layer-3-encap ip-source *string*
Tree	ip-source
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Virtual router instance to inject mirrored packets
Context	li mirror-dest-template *string* layer-3-encap router-instance *string*
Tree	router-instance
String Length	1 to 64
Default	Base
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp

Synopsis	Enter the **udp** context
Context	li mirror-dest-template *string* layer-3-encap udp
Tree	udp
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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destination *number*

Synopsis	Destination UDP port
Context	li mirror-dest-template *string* layer-3-encap udp destination *number*
Tree	destination
Range	1 to 65535
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source *number*

Synopsis	Source UDP port
Context	li mirror-dest-template *string* layer-3-encap udp source *number*
Tree	source
Range	1 to 65535
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Encapsulation type supported by the mirror service
Context	li mirror-dest-template *string* type *keyword*
Tree	type
Options	ether, ip-only
Default	ether
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat

Synopsis	Enter the **nat** context
Context	li nat
Tree	nat

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Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

use-outside-ip-address *boolean*

Synopsis	Report outside IP address for L2-Aware NAT subscribers
Context	li nat use-outside-ip-address *boolean*
Tree	use-outside-ip-address
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius

Synopsis	Enter the **radius** context
Context	li radius
Tree	radius
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mirror-dest-template *reference*

Synopsis	RADIUS triggered mirror destination template
Context	li radius mirror-dest-template *reference*
Tree	mirror-dest-template
Reference	li mirror-dest-template *string*
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

x-interfaces

Synopsis	Enter the **x-interfaces** context
Context	li x-interfaces
Tree	x-interfaces
Introduced	21.5.R1

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Platforms	7750 SR-1, 7750 SR-7/12/12e

admin-state *keyword*

Synopsis	Administrative state of the x-interfaces
Context	li x-interfaces admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

correlation-id

Synopsis	Enter the **correlation-id** context
Context	li x-interfaces correlation-id
Tree	correlation-id
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

ipoe *keyword*

Synopsis	RADIUS accounting ID type for subscriber correlation
Context	li x-interfaces correlation-id ipoe *keyword*
Tree	ipoe
Options	radius-host-acct-id, radius-queue-acct-id, radius-session-acct-id
Default	radius-host-acct-id
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

pppoe *keyword*

Synopsis	RADIUS accounting ID type for subscriber correlation
Context	li x-interfaces correlation-id pppoe *keyword*
Tree	pppoe

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Options	radius-host-acct-id, radius-queue-acct-id, radius-session-acct-id
Default	radius-host-acct-id
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

ine-identifier *string*

Synopsis	Intercepting Network Element (INE) ID
Context	li x-interfaces ine-identifier *string*
Tree	ine-identifier
String Length	1 to 32
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

lic [name] *string*

Synopsis	Enter the **lic** list instance
Context	li x-interfaces lic *string*
Tree	lic
Max. Instances	18
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

[**name**] *string*

Synopsis	LIC name
Context	li x-interfaces lic *string*
Tree	lic
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

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authentication

Synopsis	Enter the **authentication** context
Context	li x-interfaces lic *string* authentication
Tree	authentication
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

password *string*

Synopsis	Password for the X1 and X2 interfaces
Context	li x-interfaces lic *string* authentication password *string*
Tree	password
String Length	1 to 50
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

private-ki *string*

Synopsis	Private Ki string for the X1 and X2 interfaces
Context	li x-interfaces lic *string* authentication private-ki *string*
Tree	private-ki
String Length	1 to 50
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

sequence-group *string*

Synopsis	Sequence group for the X1 and X2 interfaces
Context	li x-interfaces lic *string* authentication sequence-group *string*
Tree	sequence-group
String Length	1 to 42
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

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description *string*

Synopsis	Text description
Context	li x-interfaces lic *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

identifier *string*

Synopsis	LIC ID
Context	li x-interfaces lic *string* identifier *string*
Tree	identifier
String Length	1 to 32
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

ipv4

Synopsis	Enter the **ipv4** context
Context	li x-interfaces lic *string* ipv4
Tree	ipv4
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the LIC
Context	li x-interfaces lic *string* ipv4 ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-address
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

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port *number*

Synopsis	TCP port associated with the LIC
Context	li x-interfaces lic *string* port *number*
Tree	port
Range	0 to 65535
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

router-instance *string*

Synopsis	Virtual router instance used by the X-interfaces
Context	li x-interfaces lic *string* router-instance *string*
Tree	router-instance
String Length	0 to 64
Default	
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

user-db *string*

Synopsis	Location of the data-trigger host for the LIC
Context	li x-interfaces user-db *string*
Tree	user-db
String Length	1 to 32
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

x1

Synopsis	Enter the **x1** context
Context	li x-interfaces x1
Tree	x1
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

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ipv4

Synopsis	Enter the **ipv4** context
Context	li x-interfaces x1 ipv4
Tree	ipv4
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

local-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	X1 interface IP address
Context	li x-interfaces x1 ipv4 local-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	local-address
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

lic-peer *reference*

Synopsis	Peer LIC for the X1 interface
Context	li x-interfaces x1 lic-peer *reference*
Tree	lic-peer
Reference	li x-interfaces lic *string*
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

local-tcp-port *number*

Synopsis	Local TCP port used for the X1 interface
Context	li x-interfaces x1 local-tcp-port *number*
Tree	local-tcp-port
Range	1 to 65535
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

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timeouts

Synopsis	Enter the **timeouts** context
Context	li x-interfaces x1 timeouts
Tree	timeouts
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

message-timeout *number*

Synopsis	Maximum time for the LIC to reply to an X1 message
Context	li x-interfaces x1 timeouts message-timeout *number*
Tree	message-timeout
Range	180 to 300
Units	seconds
Default	180
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

x2

Synopsis	Enter the **x2** context
Context	li x-interfaces x2
Tree	x2
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

ipv4

Synopsis	Enter the **ipv4** context
Context	li x-interfaces x2 ipv4
Tree	ipv4
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

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local-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	X2 interface IP address
Context	li x-interfaces x2 ipv4 local-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	local-address
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

lic-peer *reference*

Synopsis	Peer LIC for the X2 interface
Context	li x-interfaces x2 lic-peer *reference*
Tree	lic-peer
Reference	li x-interfaces lic *string*
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

timeouts

Synopsis	Enter the **timeouts** context
Context	li x-interfaces x2 timeouts
Tree	timeouts
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

keep-alive *number*

Synopsis	Keep-alive timeout
Context	li x-interfaces x2 timeouts keep-alive *number*
Tree	keep-alive
Range	300 to 600
Units	seconds
Default	300
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

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request *number*

Synopsis	Tx2-normal timeout
Context	li x-interfaces x2 timeouts request *number*
Tree	request
Range	5 to 30
Units	seconds
Default	5
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

x3

Synopsis	Enter the **x3** context
Context	li x-interfaces x3
Tree	x3
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

alarms

Synopsis	Enter the **alarms** context
Context	li x-interfaces x3 alarms
Tree	alarms
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

cpu-alarm

Synopsis	Enter the **cpu-alarm** context
Context	li x-interfaces x3 alarms cpu-alarm
Tree	cpu-alarm
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

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high-threshold *number*

Synopsis	High threshold value of the CPU usage alarm
Context	li x-interfaces x3 alarms cpu-alarm high-threshold *number*
Tree	high-threshold
Range	1 to 100
Units	percent
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

low-threshold *number*

Synopsis	Low threshold value of the CPU usage alarm
Context	li x-interfaces x3 alarms cpu-alarm low-threshold *number*
Tree	low-threshold
Range	0 to 99
Units	percent
Default	0
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

memory-alarm

Synopsis	Enter the **memory-alarm** context
Context	li x-interfaces x3 alarms memory-alarm
Tree	memory-alarm
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

high-threshold *number*

Synopsis	High threshold of the packet buffer memory usage alarm
Context	li x-interfaces x3 alarms memory-alarm high-threshold *number*
Tree	high-threshold
Range	1 to 100

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Units	percent
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

low-threshold *number*

Synopsis	Low threshold of the packet buffer memory usage alarm
Context	li x-interfaces x3 alarms memory-alarm low-threshold *number*
Tree	low-threshold
Range	0 to 99
Units	percent
Default	0
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

throughput-alarm

Synopsis	Enter the **throughput-alarm** context
Context	li x-interfaces x3 alarms throughput-alarm
Tree	throughput-alarm
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

high-threshold *number*

Synopsis	High threshold value of the throughput alarm
Context	li x-interfaces x3 alarms throughput-alarm high-threshold *number*
Tree	high-threshold
Range	1 to 4294967295
Units	megabps
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

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low-threshold *number*

Synopsis	Low threshold value of the throughput alarm
Context	li x-interfaces x3 alarms throughput-alarm low-threshold *number*
Tree	low-threshold
Range	1 to 4294967295
Units	megabps
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

ipv4

Synopsis	Enter the **ipv4** context
Context	li x-interfaces x3 ipv4
Tree	ipv4
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

local-address-range

Synopsis	Enter the **local-address-range** context
Context	li x-interfaces x3 ipv4 local-address-range
Tree	local-address-range
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

end *string*

Synopsis	Upper bound of the range
Context	li x-interfaces x3 ipv4 local-address-range end *string*
Tree	end
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

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start *string*

Synopsis	Lower bound of the range
Context	li x-interfaces x3 ipv4 local-address-range start *string*
Tree	start
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

li-group *number*

Synopsis	ISA group of the X3 interface
Context	li x-interfaces x3 li-group *number*
Tree	li-group
Range	1 to 4
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

lic-peers [name] *reference*

Synopsis	Add a list entry for **lic-peers**
Context	li x-interfaces x3 lic-peers *reference*
Tree	lic-peers
Max. Instances	16
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

[**name**] *reference*

Synopsis	Peer LIC for the X3 interface
Context	li x-interfaces x3 lic-peers *reference*
Tree	lic-peers
Reference	li x-interfaces lic *string*
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

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session-limit *number*

Synopsis	Maximum number of X3 sessions initiated to the LIC
Context	li x-interfaces x3 session-limit *number*
Tree	session-limit
Range	1 to 32
Default	32
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

timeouts

Synopsis	Enter the **timeouts** context
Context	li x-interfaces x3 timeouts
Tree	timeouts
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

keep-alive *number*

Synopsis	Keep-alive timeout
Context	li x-interfaces x3 timeouts keep-alive *number*
Tree	keep-alive
Range	300 to 600
Units	seconds
Default	300
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

request *number*

Synopsis	Tx3-normal timeout
Context	li x-interfaces x3 timeouts request *number*
Tree	request
Range	5 to 30

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Units	seconds
Default	5
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

target-retry-wait *number*

Synopsis	Retry interval for target tunnel setup
Context	li x-interfaces x3 timeouts target-retry-wait *number*
Tree	target-retry-wait
Range	300 to 1200
Units	seconds
Default	300
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

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3.24 log commands

```
configure
   - log
      - accounting-policy number
         - admin-state keyword
         - align boolean
         - apply-groups reference
         - apply-groups-exclude reference
         - collection-interval number
         - custom-record
            - aa-specific
               - aa-sub-attributes
                  - app-profile boolean
                  - app-service-options boolean
               - aa-sub-counters
                  - long-duration-flow-count boolean
                  - medium-duration-flow-count boolean
                  - short-duration-flow-count boolean
                  - total-flow-duration boolean
                  - total-flows-completed-count boolean
               - from-aa-sub-counters
                  - flows-active-count boolean
                  - flows-admitted-count boolean
                  - flows-denied-count boolean
                  - forwarding-class boolean
                  - max-throughput-octet-count boolean
                  - max-throughput-packet-count boolean
                  - max-throughput-timestamp boolean
                  - octets-admitted-count boolean
                  - octets-denied-count boolean
                  - packets-admitted-count boolean
                  - packets-denied-count boolean
               - to-aa-sub-counters
                  - flows-active-count boolean
                  - flows-admitted-count boolean
                  - flows-denied-count boolean
                  - forwarding-class boolean
                  - max-throughput-octet-count boolean
                  - max-throughput-packet-count boolean
                  - max-throughput-timestamp boolean
                  - octets-admitted-count boolean
                  - octets-denied-count boolean
                  - packets-admitted-count boolean
                  - packets-denied-count boolean
            - apply-groups reference
            - apply-groups-exclude reference
            - policer number
               - apply-groups reference
               - apply-groups-exclude reference
               - e-counters
                  - exceed-profile-octets-discarded-count boolean
                  - exceed-profile-octets-forwarded-count boolean
                  - exceed-profile-octets-offered-count boolean
                  - exceed-profile-packets-discarded-count boolean
                  - exceed-profile-packets-forwarded-count boolean
                  - exceed-profile-packets-offered-count boolean
                  - in-plus-profile-octets-discarded-count boolean
                  - in-plus-profile-octets-forwarded-count boolean
                  - in-plus-profile-octets-offered-count boolean
                  - in-plus-profile-packets-discarded-count boolean
```


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configure log accounting-policy custom-record policer e-counters in-plus-profile-packets-forwarded-count

```
                - in-plus-profile-packets-forwarded-count boolean
                - in-plus-profile-packets-offered-count boolean
                - in-profile-octets-discarded-count boolean
                - in-profile-octets-forwarded-count boolean
                - in-profile-octets-offered-count boolean
                - in-profile-packets-discarded-count boolean
                - in-profile-packets-forwarded-count boolean
                - in-profile-packets-offered-count boolean
                - out-profile-octets-discarded-count boolean
                - out-profile-octets-forwarded-count boolean
                - out-profile-octets-offered-count boolean
                - out-profile-packets-discarded-count boolean
                - out-profile-packets-forwarded-count boolean
                - out-profile-packets-offered-count boolean
                - uncoloured-octets-offered-count boolean
                - uncoloured-packets-offered-count boolean
            - i-counters
                - in-profile-octets-discarded-count boolean
                - in-profile-octets-forwarded-count boolean
                - in-profile-octets-offered-count boolean
                - in-profile-packets-discarded-count boolean
                - in-profile-packets-forwarded-count boolean
                - in-profile-packets-offered-count boolean
                - out-profile-octets-discarded-count boolean
                - out-profile-octets-forwarded-count boolean
                - out-profile-octets-offered-count boolean
                - out-profile-packets-discarded-count boolean
                - out-profile-packets-forwarded-count boolean
                - out-profile-packets-offered-count boolean
                - uncoloured-octets-offered-count boolean
                - uncoloured-packets-offered-count boolean
        - queue number
            - apply-groups reference
            - apply-groups-exclude reference
            - e-counters
                - in-profile-octets-discarded-count boolean
                - in-profile-octets-forwarded-count boolean
                - in-profile-packets-discarded-count boolean
                - in-profile-packets-forwarded-count boolean
                - out-profile-octets-discarded-count boolean
                - out-profile-octets-forwarded-count boolean
                - out-profile-packets-discarded-count boolean
                - out-profile-packets-forwarded-count boolean
            - i-counters
                - all-octets-offered-count boolean
                - all-packets-offered-count boolean
                - high-octets-discarded-count boolean
                - high-octets-offered-count boolean
                - high-packets-discarded-count boolean
                - high-packets-offered-count boolean
                - in-profile-octets-forwarded-count boolean
                - in-profile-packets-forwarded-count boolean
                - low-octets-discarded-count boolean
                - low-octets-offered-count boolean
                - low-packets-discarded-count boolean
                - low-packets-offered-count boolean
                - out-profile-octets-forwarded-count boolean
                - out-profile-packets-forwarded-count boolean
                - uncoloured-octets-offered-count boolean
                - uncoloured-packets-offered-count boolean
        - ref-aa-specific-counter
            - any boolean
        - ref-policer
            - all
```


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```
            - e-counters
              - exceed-profile-octets-discarded-count boolean
              - exceed-profile-octets-forwarded-count boolean
              - exceed-profile-octets-offered-count boolean
              - exceed-profile-packets-discarded-count boolean
              - exceed-profile-packets-forwarded-count boolean
              - exceed-profile-packets-offered-count boolean
              - in-plus-profile-octets-discarded-count boolean
              - in-plus-profile-octets-forwarded-count boolean
              - in-plus-profile-octets-offered-count boolean
              - in-plus-profile-packets-discarded-count boolean
              - in-plus-profile-packets-forwarded-count boolean
              - in-plus-profile-packets-offered-count boolean
              - in-profile-octets-discarded-count boolean
              - in-profile-octets-forwarded-count boolean
              - in-profile-octets-offered-count boolean
              - in-profile-packets-discarded-count boolean
              - in-profile-packets-forwarded-count boolean
              - in-profile-packets-offered-count boolean
              - out-profile-octets-discarded-count boolean
              - out-profile-octets-forwarded-count boolean
              - out-profile-octets-offered-count boolean
              - out-profile-packets-discarded-count boolean
              - out-profile-packets-forwarded-count boolean
              - out-profile-packets-offered-count boolean
              - uncoloured-octets-offered-count boolean
              - uncoloured-packets-offered-count boolean
            - i-counters
              - in-profile-octets-discarded-count boolean
              - in-profile-octets-forwarded-count boolean
              - in-profile-octets-offered-count boolean
              - in-profile-packets-discarded-count boolean
              - in-profile-packets-forwarded-count boolean
              - in-profile-packets-offered-count boolean
              - out-profile-octets-discarded-count boolean
              - out-profile-octets-forwarded-count boolean
              - out-profile-octets-offered-count boolean
              - out-profile-packets-discarded-count boolean
              - out-profile-packets-forwarded-count boolean
              - out-profile-packets-offered-count boolean
              - uncoloured-octets-offered-count boolean
              - uncoloured-packets-offered-count boolean
            - id reference
          - ref-queue
            - all
            - e-counters
              - in-profile-octets-discarded-count boolean
              - in-profile-octets-forwarded-count boolean
              - in-profile-packets-discarded-count boolean
              - in-profile-packets-forwarded-count boolean
              - out-profile-octets-discarded-count boolean
              - out-profile-octets-forwarded-count boolean
              - out-profile-packets-discarded-count boolean
              - out-profile-packets-forwarded-count boolean
            - i-counters
              - all-octets-offered-count boolean
              - all-packets-offered-count boolean
              - high-octets-discarded-count boolean
              - high-octets-offered-count boolean
              - high-packets-discarded-count boolean
              - high-packets-offered-count boolean
              - in-profile-octets-forwarded-count boolean
              - in-profile-packets-forwarded-count boolean
              - low-octets-discarded-count boolean
```


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configure log accounting-policy custom-record ref-queue i-counters low-octets-offered-count

```
                  - low-octets-offered-count boolean
                  - low-packets-discarded-count boolean
                  - low-packets-offered-count boolean
                  - out-profile-octets-forwarded-count boolean
                  - out-profile-packets-forwarded-count boolean
                  - uncoloured-octets-offered-count boolean
                  - uncoloured-packets-offered-count boolean
               - id reference
            - significant-change number
         - default boolean
         - description string
         - destination
            - file reference
            - null
         - include-system-info boolean
         - record keyword
      - app-route-notifications
         - cold-start-wait number
         - route-recovery-wait number
      - apply-groups reference
      - apply-groups-exclude reference
      - encryption-key string
      - event-damping boolean
      - event-handling
         - handler string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - description string
               - min-delay number
               - script-policy
                  - name reference
                  - owner reference
      - event-trigger
         - adp event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - debounce
                  - time number
                  - value number
               - description string
               - filter reference
               - handler reference
         - anysec event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - debounce
```


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configure log event-trigger anysec entry debounce time

```
                  -  time number
                  -  value number
               -  description string
               -  filter reference
               -  handler reference
         -  application-assurance event keyword
            -  admin-state keyword
            -  apply-groups reference
            -  apply-groups-exclude reference
            -  description string
            -  entry number
               -  admin-state keyword
               -  apply-groups reference
               -  apply-groups-exclude reference
               -  debounce
                  -  time number
                  -  value number
               -  description string
               -  filter reference
               -  handler reference
         -  aps event keyword
            -  admin-state keyword
            -  apply-groups reference
            -  apply-groups-exclude reference
            -  description string
            -  entry number
               -  admin-state keyword
               -  apply-groups reference
               -  apply-groups-exclude reference
               -  debounce
                  -  time number
                  -  value number
               -  description string
               -  filter reference
               -  handler reference
         -  auto-prov event keyword
            -  admin-state keyword
            -  apply-groups reference
            -  apply-groups-exclude reference
            -  description string
            -  entry number
               -  admin-state keyword
               -  apply-groups reference
               -  apply-groups-exclude reference
               -  debounce
                  -  time number
                  -  value number
               -  description string
               -  filter reference
               -  handler reference
         -  bfd event keyword
            -  admin-state keyword
            -  apply-groups reference
            -  apply-groups-exclude reference
            -  description string
            -  entry number
               -  admin-state keyword
               -  apply-groups reference
               -  apply-groups-exclude reference
               -  debounce
                  -  time number
                  -  value number
               -  description string
               -  filter reference
```


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```
            - handler reference
        - bgp event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - debounce
                    - time number
                    - value number
                - description string
                - filter reference
                - handler reference
        - bier event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - debounce
                    - time number
                    - value number
                - description string
                - filter reference
                - handler reference
        - calltrace event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - debounce
                    - time number
                    - value number
                - description string
                - filter reference
                - handler reference
        - cflowd event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - debounce
                    - time number
                    - value number
                - description string
                - filter reference
                - handler reference
        - chassis event keyword
            - admin-state keyword
            - apply-groups reference
```


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```
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - debounce
                  - time number
                  - value number
               - description string
               - filter reference
               - handler reference
         - debug event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - debounce
                  - time number
                  - value number
               - description string
               - filter reference
               - handler reference
         - dhcp event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - debounce
                  - time number
                  - value number
               - description string
               - filter reference
               - handler reference
         - dhcps event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - debounce
                  - time number
                  - value number
               - description string
               - filter reference
               - handler reference
         - diameter event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
```


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configure log event-trigger diameter entry apply-groups

```
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
               - time number
               - value number
            - description string
            - filter reference
            - handler reference
      - dotlx event keyword
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
               - time number
               - value number
            - description string
            - filter reference
            - handler reference
      - dynsvc event keyword
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
               - time number
               - value number
            - description string
            - filter reference
            - handler reference
      - efm-oam event keyword
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
               - time number
               - value number
            - description string
            - filter reference
            - handler reference
      - elmi event keyword
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
               - time number
```


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configure log event-trigger elmi entry debounce value

```
                - value number
            - description string
            - filter reference
            - handler reference
        - ering event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - debounce
                    - time number
                    - value number
                - description string
                - filter reference
                - handler reference
        - eth-cfm event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - debounce
                    - time number
                    - value number
                - description string
                - filter reference
                - handler reference
        - etun event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - debounce
                    - time number
                    - value number
                - description string
                - filter reference
                - handler reference
        - filter event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - debounce
                    - time number
                    - value number
                - description string
                - filter reference
                - handler reference
```


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```
        - gsmp event keyword
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
              - time number
              - value number
            - description string
            - filter reference
            - handler reference
        - igmp event keyword
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
              - time number
              - value number
            - description string
            - filter reference
            - handler reference
        - igmp-snooping event keyword
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
              - time number
              - value number
            - description string
            - filter reference
            - handler reference
        - ip event keyword
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
              - time number
              - value number
            - description string
            - filter reference
            - handler reference
        - ipsec event keyword
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
```


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```
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - debounce
                  - time number
                  - value number
               - description string
               - filter reference
               - handler reference
         - isis event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - debounce
                  - time number
                  - value number
               - description string
               - filter reference
               - handler reference
         - l2tp event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - debounce
                  - time number
                  - value number
               - description string
               - filter reference
               - handler reference
         - lag event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - debounce
                  - time number
                  - value number
               - description string
               - filter reference
               - handler reference
         - ldap event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
```


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```
            - apply-groups-exclude reference
            - debounce
               - time number
               - value number
            - description string
            - filter reference
            - handler reference
      - ldap event keyword
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
               - time number
               - value number
            - description string
            - filter reference
            - handler reference
      - li event keyword
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
               - time number
               - value number
            - description string
            - filter reference
            - handler reference
      - lldp event keyword
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
               - time number
               - value number
            - description string
            - filter reference
            - handler reference
      - logger event keyword
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
               - time number
               - value number
```


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```
            - description string
            - filter reference
            - handler reference
      - macsec event keyword
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
               - time number
               - value number
            - description string
            - filter reference
            - handler reference
      - mc-redundancy event keyword
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
               - time number
               - value number
            - description string
            - filter reference
            - handler reference
      - mcpath event keyword
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
               - time number
               - value number
            - description string
            - filter reference
            - handler reference
      - mgmt-core event keyword
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
               - time number
               - value number
            - description string
            - filter reference
            - handler reference
      - mirror event keyword
```


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```
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - debounce
                  - time number
                  - value number
               - description string
               - filter reference
               - handler reference
         - mld event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - debounce
                  - time number
                  - value number
               - description string
               - filter reference
               - handler reference
         - mld-snooping event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - debounce
                  - time number
                  - value number
               - description string
               - filter reference
               - handler reference
         - mpls event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - debounce
                  - time number
                  - value number
               - description string
               - filter reference
               - handler reference
         - mpls-tp event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
```


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```
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - debounce
                  - time number
                  - value number
               - description string
               - filter reference
               - handler reference
         - msdp event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - debounce
                  - time number
                  - value number
               - description string
               - filter reference
               - handler reference
         - nat event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - debounce
                  - time number
                  - value number
               - description string
               - filter reference
               - handler reference
         - ntp event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - debounce
                  - time number
                  - value number
               - description string
               - filter reference
               - handler reference
         - oam event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
```


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```
            - debounce
              - time number
              - value number
            - description string
            - filter reference
            - handler reference
        - openflow event keyword
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
              - time number
              - value number
            - description string
            - filter reference
            - handler reference
        - ospf event keyword
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
              - time number
              - value number
            - description string
            - filter reference
            - handler reference
        - pcap event keyword
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
              - time number
              - value number
            - description string
            - filter reference
            - handler reference
        - pcep event keyword
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
              - time number
              - value number
            - description string
```


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configure log event-trigger pcep entry filter

```
            - filter reference
            - handler reference
      - pfcp event keyword
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
               - time number
               - value number
            - description string
            - filter reference
            - handler reference
      - pim event keyword
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
               - time number
               - value number
            - description string
            - filter reference
            - handler reference
      - pim-snooping event keyword
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
               - time number
               - value number
            - description string
            - filter reference
            - handler reference
      - port event keyword
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
               - time number
               - value number
            - description string
            - filter reference
            - handler reference
      - pppoe event keyword
         - admin-state keyword
```


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configure log event-trigger pppoe apply-groups

```
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - debounce
                  - time number
                  - value number
               - description string
               - filter reference
               - handler reference
         - pppoe-clnt event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - debounce
                  - time number
                  - value number
               - description string
               - filter reference
               - handler reference
         - ptp event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - debounce
                  - time number
                  - value number
               - description string
               - filter reference
               - handler reference
         - python event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - debounce
                  - time number
                  - value number
               - description string
               - filter reference
               - handler reference
         - radius event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
```


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```
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
               - time number
               - value number
            - description string
            - filter reference
            - handler reference
      - rip event keyword
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
               - time number
               - value number
            - description string
            - filter reference
            - handler reference
      - ripng event keyword
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
               - time number
               - value number
            - description string
            - filter reference
            - handler reference
      - route-policy event keyword
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
               - time number
               - value number
            - description string
            - filter reference
            - handler reference
      - rpki event keyword
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
```


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```
                  -  time number
                  -  value number
               -  description string
               -  filter reference
               -  handler reference
         -  rsvp event keyword
            -  admin-state keyword
            -  apply-groups reference
            -  apply-groups-exclude reference
            -  description string
            -  entry number
               -  admin-state keyword
               -  apply-groups reference
               -  apply-groups-exclude reference
               -  debounce
                  -  time number
                  -  value number
               -  description string
               -  filter reference
               -  handler reference
         -  satellite event keyword
            -  admin-state keyword
            -  apply-groups reference
            -  apply-groups-exclude reference
            -  description string
            -  entry number
               -  admin-state keyword
               -  apply-groups reference
               -  apply-groups-exclude reference
               -  debounce
                  -  time number
                  -  value number
               -  description string
               -  filter reference
               -  handler reference
         -  security event keyword
            -  admin-state keyword
            -  apply-groups reference
            -  apply-groups-exclude reference
            -  description string
            -  entry number
               -  admin-state keyword
               -  apply-groups reference
               -  apply-groups-exclude reference
               -  debounce
                  -  time number
                  -  value number
               -  description string
               -  filter reference
               -  handler reference
         -  sflow event keyword
            -  admin-state keyword
            -  apply-groups reference
            -  apply-groups-exclude reference
            -  description string
            -  entry number
               -  admin-state keyword
               -  apply-groups reference
               -  apply-groups-exclude reference
               -  debounce
                  -  time number
                  -  value number
               -  description string
               -  filter reference
```


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```
            - handler reference
        - snmp event keyword
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
              - time number
              - value number
            - description string
            - filter reference
            - handler reference
        - sr-mpls event keyword
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
              - time number
              - value number
            - description string
            - filter reference
            - handler reference
        - srv6 event keyword
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
              - time number
              - value number
            - description string
            - filter reference
            - handler reference
        - stp event keyword
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
              - time number
              - value number
            - description string
            - filter reference
            - handler reference
        - svcmgr event keyword
          - admin-state keyword
          - apply-groups reference
```


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```
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - debounce
                  - time number
                  - value number
               - description string
               - filter reference
               - handler reference
         - system event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - debounce
                  - time number
                  - value number
               - description string
               - filter reference
               - handler reference
         - tls event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - debounce
                  - time number
                  - value number
               - description string
               - filter reference
               - handler reference
         - tree-sid event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - debounce
                  - time number
                  - value number
               - description string
               - filter reference
               - handler reference
         - user event keyword
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - entry number
               - admin-state keyword
```


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configure log event-trigger user entry apply-groups

```
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
               - time number
               - value number
            - description string
            - filter reference
            - handler reference
      - video event keyword
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
               - time number
               - value number
            - description string
            - filter reference
            - handler reference
      - vrrp event keyword
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
               - time number
               - value number
            - description string
            - filter reference
            - handler reference
      - vrtr event keyword
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
               - time number
               - value number
            - description string
            - filter reference
            - handler reference
      - wlan-gw event keyword
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - entry number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - debounce
               - time number
```


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configure log event-trigger wlan-gw entry debounce value

```
                  -  value number
               -  description string
               -  filter reference
               -  handler reference
         -  wpp event keyword
            -  admin-state keyword
            -  apply-groups reference
            -  apply-groups-exclude reference
            -  description string
            -  entry number
               -  admin-state keyword
               -  apply-groups reference
               -  apply-groups-exclude reference
               -  debounce
                  -  time number
                  -  value number
               -  description string
               -  filter reference
               -  handler reference
      -  file string
         -  apply-groups reference
         -  apply-groups-exclude reference
         -  compact-flash-location
            -  backup keyword
            -  primary keyword
         -  description string
         -  retention number
         -  rollover number
      -  file-storage-control
         -  accounting-files-total-size number
         -  log-files-total-size number
      -  filter string
         -  apply-groups reference
         -  apply-groups-exclude reference
         -  default-action keyword
         -  description string
         -  named-entry string
            -  action keyword
            -  apply-groups reference
            -  apply-groups-exclude reference
            -  description string
            -  match
               -  application
                  -  eq keyword
                  -  neq keyword
               -  event
                  -  eq number
                  -  gt number
                  -  gte number
                  -  lt number
                  -  lte number
                  -  neq number
               -  message
                  -  eq string
                  -  neq string
                  -  regexp boolean
               -  severity
                  -  eq keyword
                  -  gt keyword
                  -  gte keyword
                  -  lt keyword
                  -  lte keyword
                  -  neq keyword
               -  subject
```


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configure log filter named-entry match subject eq

```
                  - eq string
                  - neq string
                  - regexp boolean
               - vrtr-name
                  - eq string
                  - neq string
                  - regexp boolean
      - log-events
         - adp event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
         - anysec event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
         - application-assurance event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
         - aps event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
         - auto-prov event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
         - bfd event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
```


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```
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - bgp event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - bier event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - calltrace event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - cflowd event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - chassis event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - debug event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
```


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```
        - dhcp event keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - generate boolean
          - repeat boolean
          - severity keyword
          - specific-throttle boolean
          - specific-throttle-interval number
          - specific-throttle-limit number
          - throttle boolean
        - dhcps event keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - generate boolean
          - repeat boolean
          - severity keyword
          - specific-throttle boolean
          - specific-throttle-interval number
          - specific-throttle-limit number
          - throttle boolean
        - diameter event keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - generate boolean
          - repeat boolean
          - severity keyword
          - specific-throttle boolean
          - specific-throttle-interval number
          - specific-throttle-limit number
          - throttle boolean
        - dot1x event keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - generate boolean
          - repeat boolean
          - severity keyword
          - specific-throttle boolean
          - specific-throttle-interval number
          - specific-throttle-limit number
          - throttle boolean
        - dynsvc event keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - generate boolean
          - repeat boolean
          - severity keyword
          - specific-throttle boolean
          - specific-throttle-interval number
          - specific-throttle-limit number
          - throttle boolean
        - efm-oam event keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - generate boolean
          - repeat boolean
          - severity keyword
          - specific-throttle boolean
          - specific-throttle-interval number
          - specific-throttle-limit number
          - throttle boolean
        - elmi event keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - generate boolean
```


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```
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - ering event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - eth-cfm event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - etun event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - filter event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - gsmp event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - igmp event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
```


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```
            - specific-throttle-limit number
            - throttle boolean
        - igmp-snooping event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - ip event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - ipsec event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - isis event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - l2tp event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - lag event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - ldap event keyword
            - apply-groups reference
```


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configure log log-events ldap apply-groups-exclude

```
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
         - ldp event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
         - li event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
         - lldp event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
         - logger event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
         - macsec event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
         - mc-redundancy event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
```


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```
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - mcpath event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - mgmt-core event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - mirror event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - mld event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - mld-snooping event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - mpls event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
```


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```
        - mpls-tp event keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - generate boolean
          - repeat boolean
          - severity keyword
          - specific-throttle boolean
          - specific-throttle-interval number
          - specific-throttle-limit number
          - throttle boolean
        - msdp event keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - generate boolean
          - repeat boolean
          - severity keyword
          - specific-throttle boolean
          - specific-throttle-interval number
          - specific-throttle-limit number
          - throttle boolean
        - nat event keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - generate boolean
          - repeat boolean
          - severity keyword
          - specific-throttle boolean
          - specific-throttle-interval number
          - specific-throttle-limit number
          - throttle boolean
        - ntp event keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - generate boolean
          - repeat boolean
          - severity keyword
          - specific-throttle boolean
          - specific-throttle-interval number
          - specific-throttle-limit number
          - throttle boolean
        - oam event keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - generate boolean
          - repeat boolean
          - severity keyword
          - specific-throttle boolean
          - specific-throttle-interval number
          - specific-throttle-limit number
          - throttle boolean
        - openflow event keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - generate boolean
          - repeat boolean
          - severity keyword
          - specific-throttle boolean
          - specific-throttle-interval number
          - specific-throttle-limit number
          - throttle boolean
        - ospf event keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - generate boolean
```


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```
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - pcap event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - pcep event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - pfcp event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - pim event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - pim-snooping event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - port event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
```


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```
            - specific-throttle-limit number
            - throttle boolean
        - pppoe event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - pppoe-clnt event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - ptp event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - python event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - radius event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - rip event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - ripng event keyword
            - apply-groups reference
```


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configure log log-events ripng apply-groups-exclude

```
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - route-policy event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - rpki event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - rsvp event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - satellite event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - security event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - sflow event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
```


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```
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - snmp event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - sr-mpls event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - srv6 event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - stp event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - svcmgr event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
        - system event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
```


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```
        - tls event keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - generate boolean
          - repeat boolean
          - severity keyword
          - specific-throttle boolean
          - specific-throttle-interval number
          - specific-throttle-limit number
          - throttle boolean
        - tree-sid event keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - generate boolean
          - repeat boolean
          - severity keyword
          - specific-throttle boolean
          - specific-throttle-interval number
          - specific-throttle-limit number
          - throttle boolean
        - user event keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - generate boolean
          - repeat boolean
          - severity keyword
          - specific-throttle boolean
          - specific-throttle-interval number
          - specific-throttle-limit number
          - throttle boolean
        - video event keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - generate boolean
          - repeat boolean
          - severity keyword
          - specific-throttle boolean
          - specific-throttle-interval number
          - specific-throttle-limit number
          - throttle boolean
        - vrrp event keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - generate boolean
          - repeat boolean
          - severity keyword
          - specific-throttle boolean
          - specific-throttle-interval number
          - specific-throttle-limit number
          - throttle boolean
        - vrtr event keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - generate boolean
          - repeat boolean
          - severity keyword
          - specific-throttle boolean
          - specific-throttle-interval number
          - specific-throttle-limit number
          - throttle boolean
        - wlan-gw event keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - generate boolean
```


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```
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
         - wpp event keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - generate boolean
            - repeat boolean
            - severity keyword
            - specific-throttle boolean
            - specific-throttle-interval number
            - specific-throttle-limit number
            - throttle boolean
      - log-id string
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - destination
            - cli
               - max-entries number
            - console
            - file reference
            - memory
               - max-entries number
            - netconf
               - max-entries number
            - snmp
               - max-entries number
            - syslog reference
         - filter reference
         - netconf-stream string
         - python-policy reference
         - source
            - change boolean
            - debug boolean
            - main boolean
            - security boolean
         - time-format keyword
      - route-preference
         - primary keyword
         - secondary keyword
      - services-all-events
         - service reference
      - snmp-trap-group string
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - trap-target string
            - address (ipv4-address-no-zone | ipv6-address-no-zone)
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - notify-community string
            - port number
            - replay boolean
            - security-level keyword
            - version keyword
      - syslog string
         - address (ipv4-address-no-zone | ipv6-address-no-zone)
         - apply-groups reference
```


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configure log syslog apply-groups-exclude

```
        – apply-groups-exclude reference
        – description string
        – facility keyword
        – hostname
          – use-system-name
          – value string
        – log-prefix (keyword | string)
        – port number
        – severity keyword
        – tls-client-profile reference
      – throttle-rate
        – interval number
        – limit number
```


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3.24.1 log command descriptions

log

Synopsis	Enter the **log** context
Context	**configure** log
Tree	log
Introduced	16.0.R1
Platforms	All

accounting-policy [policy-id] *number*

Synopsis	Enter the **accounting-policy** list instance
Context	**configure** log accounting-policy *number*
Tree	accounting-policy
Introduced	16.0.R1
Platforms	All

[**policy-id**] *number*

Synopsis	Accounting policy unique ID
Context	**configure** log accounting-policy *number*
Tree	accounting-policy
Range	1 to 99
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the accounting policy
Context	**configure** log accounting-policy *number* admin-state *keyword*
Tree	admin-state
Description	This command controls the administrative state of the accounting policy.

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When an accounting policy is disabled, no accounting data is written to the destination log ID. Counters in the billing data reflect totals, and not increments. When the policy is re-enabled, the counters include the data collected during the period the policy was administratively disabled.

Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

align *boolean*

Synopsis	Align statistics collection interval to absolute time
Context	**configure** log accounting-policy *number* align *boolean*
Tree	align
Description	When the **align** command is configured to **true**, statistics collection is aligned to the nearest interval within an hour. Statistics are generated when the absolute time can be divided by the collection-interval value, after which the collection interval continues. For example, if the interval is set to 15 minutes and the current time is 15:03, the statistics are collected at 15:15, 15:30, 15:45, 16:00, 16:15, and so on. This supports synchronized statistics intervals and collection across multiple nodes in the network. When the **align** command is configured to **false**, statistics collection occurs immediately after the configuration has been committed. For example, if the interval is set to 15 minutes and the current time is 15:03, the statistics are collected at 15:03, 15:18, 15:33, 15:48, 16:03, and so on.
Default	false
Introduced	19.10.R1
Platforms	All

collection-interval *number*

Synopsis	Accounting collection interval
Context	**configure** log accounting-policy *number* collection-interval *number*
Tree	collection-interval
Range	1 to 120
Units	minutes
Introduced	16.0.R1
Platforms	All

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custom-record

Synopsis	Enter the **custom-record** context
Context	**configure** log accounting-policy *number* custom-record
Tree	custom-record
Introduced	16.0.R1
Platforms	All

aa-specific

Synopsis	Enter the **aa-specific** context
Context	**configure** log accounting-policy *number* custom-record aa-specific
Tree	aa-specific
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub-attributes

Synopsis	Enter the **aa-sub-attributes** context
Context	**configure** log accounting-policy *number* custom-record aa-specific aa-sub-attributes
Tree	aa-sub-attributes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-profile *boolean*

Synopsis	Include application profile to be exported
Context	**configure** log accounting-policy *number* custom-record aa-specific aa-sub-attributes app-profile *boolean*
Tree	app-profile
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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app-service-options *boolean*

Synopsis	Include application service options
Context	**configure** log accounting-policy *number* custom-record aa-specific aa-sub-attributes app-service-options *boolean*
Tree	app-service-options
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub-counters

Synopsis	Enter the **aa-sub-counters** context
Context	**configure** log accounting-policy *number* custom-record aa-specific aa-sub-counters
Tree	aa-sub-counters
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

long-duration-flow-count *boolean*

Synopsis	Include the long duration flow count
Context	**configure** log accounting-policy *number* custom-record aa-specific aa-sub-counters long-duration-flow-count *boolean*
Tree	long-duration-flow-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

medium-duration-flow-count *boolean*

Synopsis	Include the medium duration flow
Context	**configure** log accounting-policy *number* custom-record aa-specific aa-sub-counters medium-duration-flow-count *boolean*
Tree	medium-duration-flow-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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short-duration-flow-count *boolean*

Synopsis	Include the short duration flow count
Context	**configure** log accounting-policy *number* custom-record aa-specific aa-sub-counters short-duration-flow-count *boolean*
Tree	short-duration-flow-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

total-flow-duration *boolean*

Synopsis	Include the total flow duration count
Context	**configure** log accounting-policy *number* custom-record aa-specific aa-sub-counters total-flow-duration *boolean*
Tree	total-flow-duration
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

total-flows-completed-count *boolean*

Synopsis	Include the total of completed flows count
Context	**configure** log accounting-policy *number* custom-record aa-specific aa-sub-counters total-flows-completed-count *boolean*
Tree	total-flows-completed-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

from-aa-sub-counters

Synopsis	Enter the **from-aa-sub-counters** context
Context	**configure** log accounting-policy *number* custom-record aa-specific from-aa-sub-counters
Tree	from-aa-sub-counters

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flows-active-count *boolean*

Synopsis	Include the active flows
Context	**configure** log accounting-policy *number* custom-record aa-specific from-aa-sub-counters flows-active-count *boolean*
Tree	flows-active-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flows-admitted-count *boolean*

Synopsis	Include the admitted flows
Context	**configure** log accounting-policy *number* custom-record aa-specific from-aa-sub-counters flows-admitted-count *boolean*
Tree	flows-admitted-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flows-denied-count *boolean*

Synopsis	Include the denied flows
Context	**configure** log accounting-policy *number* custom-record aa-specific from-aa-sub-counters flows-denied-count *boolean*
Tree	flows-denied-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

forwarding-class *boolean*

Synopsis	Include forwarding class

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Context	**configure** log accounting-policy *number* custom-record aa-specific from-aa-sub-counters forwarding-class *boolean*
Tree	forwarding-class
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-throughput-octet-count *boolean*

Synopsis	Include maximum throughput as measured in octet count
Context	**configure** log accounting-policy *number* custom-record aa-specific from-aa-sub-counters max-throughput-octet-count *boolean*
Tree	max-throughput-octet-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-throughput-packet-count *boolean*

Synopsis	Include maximum throughput as measured in packet count
Context	**configure** log accounting-policy *number* custom-record aa-specific from-aa-sub-counters max-throughput-packet-count *boolean*
Tree	max-throughput-packet-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-throughput-timestamp *boolean*

Synopsis	Include timestamp of the maximum throughput
Context	**configure** log accounting-policy *number* custom-record aa-specific from-aa-sub-counters max-throughput-timestamp *boolean*
Tree	max-throughput-timestamp
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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octets-admitted-count *boolean*

Synopsis	Include the admitted octets count
Context	**configure** log accounting-policy *number* custom-record aa-specific from-aa-sub-counters octets-admitted-count *boolean*
Tree	octets-admitted-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

octets-denied-count *boolean*

Synopsis	Include the denied octets count
Context	**configure** log accounting-policy *number* custom-record aa-specific from-aa-sub-counters octets-denied-count *boolean*
Tree	octets-denied-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packets-admitted-count *boolean*

Synopsis	Include the admitted packets count
Context	**configure** log accounting-policy *number* custom-record aa-specific from-aa-sub-counters packets-admitted-count *boolean*
Tree	packets-admitted-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packets-denied-count *boolean*

Synopsis	Include the denied packets count
Context	**configure** log accounting-policy *number* custom-record aa-specific from-aa-sub-counters packets-denied-count *boolean*
Tree	packets-denied-count

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Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

to-aa-sub-counters

Synopsis	Enter the **to-aa-sub-counters** context
Context	**configure** log accounting-policy *number* custom-record aa-specific to-aa-sub-counters
Tree	to-aa-sub-counters
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flows-active-count *boolean*

Synopsis	Include the active flows
Context	**configure** log accounting-policy *number* custom-record aa-specific to-aa-sub-counters flows-active-count *boolean*
Tree	flows-active-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flows-admitted-count *boolean*

Synopsis	Include the admitted flows
Context	**configure** log accounting-policy *number* custom-record aa-specific to-aa-sub-counters flows-admitted-count *boolean*
Tree	flows-admitted-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flows-denied-count *boolean*

Synopsis	Include the denied flows

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Context	**configure** log accounting-policy *number* custom-record aa-specific to-aa-sub-counters flows-denied-count *boolean*
Tree	flows-denied-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

forwarding-class *boolean*

Synopsis	Include forwarding class
Context	**configure** log accounting-policy *number* custom-record aa-specific to-aa-sub-counters forwarding-class *boolean*
Tree	forwarding-class
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-throughput-octet-count *boolean*

Synopsis	Include maximum throughput as measured in octet count
Context	**configure** log accounting-policy *number* custom-record aa-specific to-aa-sub-counters max-throughput-octet-count *boolean*
Tree	max-throughput-octet-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-throughput-packet-count *boolean*

Synopsis	Include maximum throughput as measured in packet count
Context	**configure** log accounting-policy *number* custom-record aa-specific to-aa-sub-counters max-throughput-packet-count *boolean*
Tree	max-throughput-packet-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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max-throughput-timestamp *boolean*

Synopsis	Include timestamp of the maximum throughput
Context	**configure** log accounting-policy *number* custom-record aa-specific to-aa-sub-counters max-throughput-timestamp *boolean*
Tree	max-throughput-timestamp
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

octets-admitted-count *boolean*

Synopsis	Include the admitted octets count
Context	**configure** log accounting-policy *number* custom-record aa-specific to-aa-sub-counters octets-admitted-count *boolean*
Tree	octets-admitted-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

octets-denied-count *boolean*

Synopsis	Include the denied octets count
Context	**configure** log accounting-policy *number* custom-record aa-specific to-aa-sub-counters octets-denied-count *boolean*
Tree	octets-denied-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packets-admitted-count *boolean*

Synopsis	Include the admitted packets count
Context	**configure** log accounting-policy *number* custom-record aa-specific to-aa-sub-counters packets-admitted-count *boolean*
Tree	packets-admitted-count

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Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packets-denied-count *boolean*

Synopsis	Include the denied packets count
Context	**configure** log accounting-policy *number* custom-record aa-specific to-aa-sub-counters packets-denied-count *boolean*
Tree	packets-denied-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer [id] *number*

Synopsis	Enter the **policer** list instance
Context	**configure** log accounting-policy *number* custom-record policer *number*
Tree	policer
Introduced	19.10.R1
Platforms	All

[**id**] *number*

Synopsis	Policer ID
Context	**configure** log accounting-policy *number* custom-record policer *number*
Tree	policer
Range	1 to 63
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

e-counters

Synopsis	Enter the **e-counters** context

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Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters
Tree	e-counters
Introduced	19.10.R1
Platforms	All

exceed-profile-octets-discarded-count *boolean*

Synopsis	Include the exceed profile octets discarded count
Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters exceed-profile-octets-discarded-count *boolean*
Tree	exceed-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-octets-forwarded-count *boolean*

Synopsis	Include the exceed profile octets forwarded count
Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters exceed-profile-octets-forwarded-count *boolean*
Tree	exceed-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-octets-offered-count *boolean*

Synopsis	Include the exceed profile octets offered count
Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters exceed-profile-octets-offered-count *boolean*
Tree	exceed-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

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exceed-profile-packets-discarded-count *boolean*

Synopsis	Include the exceed profile packets discarded count
Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters exceed-profile-packets-discarded-count *boolean*
Tree	exceed-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-packets-forwarded-count *boolean*

Synopsis	Include the exceed profile packets forwarded count
Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters exceed-profile-packets-forwarded-count *boolean*
Tree	exceed-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-packets-offered-count *boolean*

Synopsis	Include the exceed profile packets offered count
Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters exceed-profile-packets-offered-count *boolean*
Tree	exceed-profile-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

in-plus-profile-octets-discarded-count *boolean*

Synopsis	Include the in-plus profile octets discarded count
Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters in-plus-profile-octets-discarded-count *boolean*
Tree	in-plus-profile-octets-discarded-count
Default	false

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Introduced	19.10.R1
Platforms	All

in-plus-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-plus profile octets forwarded count
Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters in-plus-profile-octets-forwarded-count *boolean*
Tree	in-plus-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-plus-profile-octets-offered-count *boolean*

Synopsis	Include the in-plus profile octets offered count
Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters in-plus-profile-octets-offered-count *boolean*
Tree	in-plus-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

in-plus-profile-packets-discarded-count *boolean*

Synopsis	Include the in-plus profile packets discarded count
Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters in-plus-profile-packets-discarded-count *boolean*
Tree	in-plus-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-plus-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-plus profile packets forwarded count

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Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters in-plus-profile-packets-forwarded-count *boolean*
Tree	in-plus-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-plus-profile-packets-offered-count *boolean*

Synopsis	Include the in-plus profile packets offered count
Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters in-plus-profile-packets-offered-count *boolean*
Tree	in-plus-profile-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-octets-discarded-count *boolean*

Synopsis	Include the in profile octets discarded count
Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters in-profile-octets-discarded-count *boolean*
Tree	in-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in profile octets forwarded count
Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters in-profile-octets-forwarded-count *boolean*
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

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in-profile-octets-offered-count *boolean*

Synopsis	Include the in profile octets offered count
Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters in-profile-octets-offered-count *boolean*
Tree	in-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in profile packets discarded count
Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters in-profile-packets-discarded-count *boolean*
Tree	in-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in profile packets forwarded count
Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters in-profile-packets-forwarded-count *boolean*
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-offered-count *boolean*

Synopsis	Include the in profile packets offered count
Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters in-profile-packets-offered-count *boolean*
Tree	in-profile-packets-offered-count

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Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out profile octets discarded count
Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters out-profile-octets-discarded-count *boolean*
Tree	out-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out profile octets forwarded count
Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters out-profile-octets-forwarded-count *boolean*
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-offered-count *boolean*

Synopsis	Include the out profile octets offered count
Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters out-profile-octets-offered-count *boolean*
Tree	out-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

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out-profile-packets-discarded-count *boolean*

Synopsis	Include the out profile packets discarded count
Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters out-profile-packets-discarded-count *boolean*
Tree	out-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out profile packets forwarded count
Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters out-profile-packets-forwarded-count *boolean*
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-offered-count *boolean*

Synopsis	Include the out profile packets offered count
Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters out-profile-packets-offered-count *boolean*
Tree	out-profile-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

uncoloured-octets-offered-count *boolean*

Synopsis	Include the uncolored octets offered count
Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters uncoloured-octets-offered-count *boolean*
Tree	uncoloured-octets-offered-count
Default	false

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Introduced	19.10.R1
Platforms	All

uncoloured-packets-offered-count *boolean*

Synopsis	Include the uncolored packets offered count
Context	**configure** log accounting-policy *number* custom-record policer *number* e-counters uncoloured-packets-offered-count *boolean*
Tree	uncoloured-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

i-counters

Synopsis	Enter the **i-counters** context
Context	**configure** log accounting-policy *number* custom-record policer *number* i-counters
Tree	i-counters
Introduced	19.10.R1
Platforms	All

in-profile-octets-discarded-count *boolean*

Synopsis	Include the in profile octets discarded count
Context	**configure** log accounting-policy *number* custom-record policer *number* i-counters in-profile-octets-discarded-count *boolean*
Tree	in-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in profile octets forwarded count
Context	**configure** log accounting-policy *number* custom-record policer *number* i-counters in-profile-octets-forwarded-count *boolean*

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Tree	in-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-octets-offered-count *boolean*

Synopsis	Include the in profile octets offered count
Context	**configure** log accounting-policy *number* custom-record policer *number* i-counters in-profile-octets-offered-count *boolean*
Tree	in-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in profile packets discarded count
Context	**configure** log accounting-policy *number* custom-record policer *number* i-counters in-profile-packets-discarded-count *boolean*
Tree	in-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in profile packets forwarded count
Context	**configure** log accounting-policy *number* custom-record policer *number* i-counters in-profile-packets-forwarded-count *boolean*
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

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in-profile-packets-offered-count *boolean*

Synopsis	Include the in profile packets offered count
Context	**configure** log accounting-policy *number* custom-record policer *number* i-counters in-profile-packets-offered-count *boolean*
Tree	in-profile-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out profile octets discarded count
Context	**configure** log accounting-policy *number* custom-record policer *number* i-counters out-profile-octets-discarded-count *boolean*
Tree	out-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out profile octets forwarded count
Context	**configure** log accounting-policy *number* custom-record policer *number* i-counters out-profile-octets-forwarded-count *boolean*
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-offered-count *boolean*

Synopsis	Include the out profile octets offered count
Context	**configure** log accounting-policy *number* custom-record policer *number* i-counters out-profile-octets-offered-count *boolean*
Tree	out-profile-octets-offered-count
Default	false

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Introduced	19.10.R1
Platforms	All

out-profile-packets-discarded-count *boolean*

Synopsis	Include the out profile packets discarded count
Context	**configure** log accounting-policy *number* custom-record policer *number* i-counters out-profile-packets-discarded-count *boolean*
Tree	out-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out profile packets forwarded count
Context	**configure** log accounting-policy *number* custom-record policer *number* i-counters out-profile-packets-forwarded-count *boolean*
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-offered-count *boolean*

Synopsis	Include the out profile packets offered count
Context	**configure** log accounting-policy *number* custom-record policer *number* i-counters out-profile-packets-offered-count *boolean*
Tree	out-profile-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

uncoloured-octets-offered-count *boolean*

Synopsis	Include the uncolored octets offered count

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Context	**configure** log accounting-policy *number* custom-record policer *number* i-counters uncoloured-octets-offered-count *boolean*
Tree	uncoloured-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

uncoloured-packets-offered-count *boolean*

Synopsis	Include the uncolored packets offered count
Context	**configure** log accounting-policy *number* custom-record policer *number* i-counters uncoloured-packets-offered-count *boolean*
Tree	uncoloured-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

queue [id] *number*

Synopsis	Enter the **queue** list instance
Context	**configure** log accounting-policy *number* custom-record queue *number*
Tree	queue
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	Queue ID for which counters are collected in the record
Context	**configure** log accounting-policy *number* custom-record queue *number*
Tree	queue
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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e-counters

Synopsis	Enter the **e-counters** context
Context	**configure** log accounting-policy *number* custom-record queue *number* e-counters
Tree	e-counters
Introduced	16.0.R1
Platforms	All

in-profile-octets-discarded-count *boolean*

Synopsis	Include the in-profile octets discarded count
Context	**configure** log accounting-policy *number* custom-record queue *number* e-counters in-profile-octets-discarded-count *boolean*
Tree	in-profile-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	**configure** log accounting-policy *number* custom-record queue *number* e-counters in-profile-octets-forwarded-count *boolean*
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in-profile packets discarded count
Context	**configure** log accounting-policy *number* custom-record queue *number* e-counters in-profile-packets-discarded-count *boolean*
Tree	in-profile-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

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in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	**configure** log accounting-policy *number* custom-record queue *number* e-counters in-profile-packets-forwarded-count *boolean*
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out-profile octets discarded count
Context	**configure** log accounting-policy *number* custom-record queue *number* e-counters out-profile-octets-discarded-count *boolean*
Tree	out-profile-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	**configure** log accounting-policy *number* custom-record queue *number* e-counters out-profile-octets-forwarded-count *boolean*
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-packets-discarded-count *boolean*

Synopsis	Include the out-profile packets discarded count
Context	**configure** log accounting-policy *number* custom-record queue *number* e-counters out-profile-packets-discarded-count *boolean*
Tree	out-profile-packets-discarded-count

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Default	false
Introduced	16.0.R1
Platforms	All

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	**configure** log accounting-policy *number* custom-record queue *number* e-counters out-profile-packets-forwarded-count *boolean*
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

i-counters

Synopsis	Enter the **i-counters** context
Context	**configure** log accounting-policy *number* custom-record queue *number* i-counters
Tree	i-counters
Introduced	16.0.R1
Platforms	All

all-octets-offered-count *boolean*

Synopsis	Include the all octets offered count
Context	**configure** log accounting-policy *number* custom-record queue *number* i-counters all-octets-offered-count *boolean*
Tree	all-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

all-packets-offered-count *boolean*

Synopsis	Include all packets offered count

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Context	**configure** log accounting-policy *number* custom-record queue *number* i-counters all-packets-offered-count *boolean*
Tree	all-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

high-octets-discarded-count *boolean*

Synopsis	Include the high octets discarded count
Context	**configure** log accounting-policy *number* custom-record queue *number* i-counters high-octets-discarded-count *boolean*
Tree	high-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

high-octets-offered-count *boolean*

Synopsis	Include the high octets offered count
Context	**configure** log accounting-policy *number* custom-record queue *number* i-counters high-octets-offered-count *boolean*
Tree	high-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

high-packets-discarded-count *boolean*

Synopsis	Include the high packets discarded count
Context	**configure** log accounting-policy *number* custom-record queue *number* i-counters high-packets-discarded-count *boolean*
Tree	high-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

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high-packets-offered-count *boolean*

Synopsis	Include the high packets offered count
Context	**configure** log accounting-policy *number* custom-record queue *number* i-counters high-packets-offered-count *boolean*
Tree	high-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	**configure** log accounting-policy *number* custom-record queue *number* i-counters in-profile-octets-forwarded-count *boolean*
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	**configure** log accounting-policy *number* custom-record queue *number* i-counters in-profile-packets-forwarded-count *boolean*
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

low-octets-discarded-count *boolean*

Synopsis	Include the low octets discarded count
Context	**configure** log accounting-policy *number* custom-record queue *number* i-counters low-octets-discarded-count *boolean*
Tree	low-octets-discarded-count

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Default	false
Introduced	16.0.R1
Platforms	All

low-octets-offered-count *boolean*

Synopsis	Include the low octets offered count
Context	**configure** log accounting-policy *number* custom-record queue *number* i-counters low-octets-offered-count *boolean*
Tree	low-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

low-packets-discarded-count *boolean*

Synopsis	Include the low packets discarded count
Context	**configure** log accounting-policy *number* custom-record queue *number* i-counters low-packets-discarded-count *boolean*
Tree	low-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

low-packets-offered-count *boolean*

Synopsis	Include the low packets offered count
Context	**configure** log accounting-policy *number* custom-record queue *number* i-counters low-packets-offered-count *boolean*
Tree	low-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

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out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	**configure** log accounting-policy *number* custom-record queue *number* i-counters out-profile-octets-forwarded-count *boolean*
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	**configure** log accounting-policy *number* custom-record queue *number* i-counters out-profile-packets-forwarded-count *boolean*
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

uncoloured-octets-offered-count *boolean*

Synopsis	Include the uncolored octets offered count
Context	**configure** log accounting-policy *number* custom-record queue *number* i-counters uncoloured-octets-offered-count *boolean*
Tree	uncoloured-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

uncoloured-packets-offered-count *boolean*

Synopsis	Include the uncolored packets offered count
Context	**configure** log accounting-policy *number* custom-record queue *number* i-counters uncoloured-packets-offered-count *boolean*
Tree	uncoloured-packets-offered-count
Default	false

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Introduced	16.0.R1
Platforms	All

ref-aa-specific-counter

Synopsis	Enter the **ref-aa-specific-counter** context
Context	**configure** log accounting-policy *number* custom-record ref-aa-specific-counter
Tree	ref-aa-specific-counter
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

any *boolean*

Synopsis	Report a change to any counter
Context	**configure** log accounting-policy *number* custom-record ref-aa-specific-counter any *boolean*
Tree	any
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ref-policer

Synopsis	Enter the **ref-policer** context
Context	**configure** log accounting-policy *number* custom-record ref-policer
Tree	ref-policer
Introduced	19.10.R1
Platforms	All

all

Synopsis	Apply significant change to counters for all policers
Context	**configure** log accounting-policy *number* custom-record ref-policer all
Tree	all
Notes	The following elements are part of a choice: **all** or **id**.

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Introduced	19.10.R1
Platforms	All

e-counters

Synopsis	Enter the **e-counters** context
Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters
Tree	e-counters
Introduced	19.10.R1
Platforms	All

exceed-profile-octets-discarded-count *boolean*

Synopsis	Include the exceed profile octets discarded count
Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters exceed-profile-octets-discarded-count *boolean*
Tree	exceed-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-octets-forwarded-count *boolean*

Synopsis	Include the exceed profile octets forwarded count
Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters exceed-profile-octets-forwarded-count *boolean*
Tree	exceed-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-octets-offered-count *boolean*

Synopsis	Include the exceed profile octets offered count
Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters exceed-profile-octets-offered-count *boolean*

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Tree	exceed-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-packets-discarded-count *boolean*

Synopsis	Include the exceed profile packets discarded count
Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters exceed-profile-packets-discarded-count *boolean*
Tree	exceed-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-packets-forwarded-count *boolean*

Synopsis	Include the exceed profile packets forwarded count
Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters exceed-profile-packets-forwarded-count *boolean*
Tree	exceed-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-packets-offered-count *boolean*

Synopsis	Include the exceed profile packets offered count
Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters exceed-profile-packets-offered-count *boolean*
Tree	exceed-profile-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

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in-plus-profile-octets-discarded-count *boolean*

Synopsis	Include the in-plus profile octets discarded count
Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters in-plus-profile-octets-discarded-count *boolean*
Tree	in-plus-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-plus-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-plus profile octets forwarded count
Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters in-plus-profile-octets-forwarded-count *boolean*
Tree	in-plus-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-plus-profile-octets-offered-count *boolean*

Synopsis	Include the in-plus profile octets offered count
Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters in-plus-profile-octets-offered-count *boolean*
Tree	in-plus-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

in-plus-profile-packets-discarded-count *boolean*

Synopsis	Include the in-plus profile packets discarded count
Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters in-plus-profile-packets-discarded-count *boolean*
Tree	in-plus-profile-packets-discarded-count
Default	false

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Introduced	19.10.R1
Platforms	All

in-plus-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-plus profile packets forwarded count
Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters in-plus-profile-packets-forwarded-count *boolean*
Tree	in-plus-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-plus-profile-packets-offered-count *boolean*

Synopsis	Include the in-plus profile packets offered count
Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters in-plus-profile-packets-offered-count *boolean*
Tree	in-plus-profile-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-octets-discarded-count *boolean*

Synopsis	Include the in profile octets discarded count
Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters in-profile-octets-discarded-count *boolean*
Tree	in-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in profile octets forwarded count

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Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters in-profile-octets-forwarded-count *boolean*
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-octets-offered-count *boolean*

Synopsis	Include the in profile octets offered count
Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters in-profile-octets-offered-count *boolean*
Tree	in-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in profile packets discarded count
Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters in-profile-packets-discarded-count *boolean*
Tree	in-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in profile packets forwarded count
Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters in-profile-packets-forwarded-count *boolean*
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

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in-profile-packets-offered-count *boolean*

Synopsis	Include the in profile packets offered count
Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters in-profile-packets-offered-count *boolean*
Tree	in-profile-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out profile octets discarded count
Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters out-profile-octets-discarded-count *boolean*
Tree	out-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out profile octets forwarded count
Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters out-profile-octets-forwarded-count *boolean*
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-offered-count *boolean*

Synopsis	Include the out profile octets offered count
Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters out-profile-octets-offered-count *boolean*
Tree	out-profile-octets-offered-count

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Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-discarded-count *boolean*

Synopsis	Include the out profile packets discarded count
Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters out-profile-packets-discarded-count *boolean*
Tree	out-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out profile packets forwarded count
Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters out-profile-packets-forwarded-count *boolean*
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-offered-count *boolean*

Synopsis	Include the out profile packets offered count
Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters out-profile-packets-offered-count *boolean*
Tree	out-profile-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

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uncoloured-octets-offered-count *boolean*

Synopsis	Include the uncolored octets offered count
Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters uncoloured-octets-offered-count *boolean*
Tree	uncoloured-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

uncoloured-packets-offered-count *boolean*

Synopsis	Include the uncolored packets offered count
Context	**configure** log accounting-policy *number* custom-record ref-policer e-counters uncoloured-packets-offered-count *boolean*
Tree	uncoloured-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

i-counters

Synopsis	Enter the **i-counters** context
Context	**configure** log accounting-policy *number* custom-record ref-policer i-counters
Tree	i-counters
Introduced	19.10.R1
Platforms	All

in-profile-octets-discarded-count *boolean*

Synopsis	Include the in profile octets discarded count
Context	**configure** log accounting-policy *number* custom-record ref-policer i-counters in-profile-octets-discarded-count *boolean*
Tree	in-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

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in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in profile octets forwarded count
Context	**configure** log accounting-policy *number* custom-record ref-policer i-counters in-profile-octets-forwarded-count *boolean*
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-octets-offered-count *boolean*

Synopsis	Include the in profile octets offered count
Context	**configure** log accounting-policy *number* custom-record ref-policer i-counters in-profile-octets-offered-count *boolean*
Tree	in-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in profile packets discarded count
Context	**configure** log accounting-policy *number* custom-record ref-policer i-counters in-profile-packets-discarded-count *boolean*
Tree	in-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in profile packets forwarded count
Context	**configure** log accounting-policy *number* custom-record ref-policer i-counters in-profile-packets-forwarded-count *boolean*
Tree	in-profile-packets-forwarded-count

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Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-offered-count *boolean*

Synopsis	Include the in profile packets offered count
Context	**configure** log accounting-policy *number* custom-record ref-policer i-counters in-profile-packets-offered-count *boolean*
Tree	in-profile-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out profile octets discarded count
Context	**configure** log accounting-policy *number* custom-record ref-policer i-counters out-profile-octets-discarded-count *boolean*
Tree	out-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out profile octets forwarded count
Context	**configure** log accounting-policy *number* custom-record ref-policer i-counters out-profile-octets-forwarded-count *boolean*
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

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out-profile-octets-offered-count *boolean*

Synopsis	Include the out profile octets offered count
Context	**configure** log accounting-policy *number* custom-record ref-policer i-counters out-profile-octets-offered-count *boolean*
Tree	out-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-discarded-count *boolean*

Synopsis	Include the out profile packets discarded count
Context	**configure** log accounting-policy *number* custom-record ref-policer i-counters out-profile-packets-discarded-count *boolean*
Tree	out-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out profile packets forwarded count
Context	**configure** log accounting-policy *number* custom-record ref-policer i-counters out-profile-packets-forwarded-count *boolean*
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-offered-count *boolean*

Synopsis	Include the out profile packets offered count
Context	**configure** log accounting-policy *number* custom-record ref-policer i-counters out-profile-packets-offered-count *boolean*
Tree	out-profile-packets-offered-count
Default	false

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Introduced	19.10.R1
Platforms	All

uncoloured-octets-offered-count *boolean*

Synopsis	Include the uncolored octets offered count
Context	**configure** log accounting-policy *number* custom-record ref-policer i-counters uncoloured-octets-offered-count *boolean*
Tree	uncoloured-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

uncoloured-packets-offered-count *boolean*

Synopsis	Include the uncolored packets offered count
Context	**configure** log accounting-policy *number* custom-record ref-policer i-counters uncoloured-packets-offered-count *boolean*
Tree	uncoloured-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

id *reference*

Synopsis	Policer ID
Context	**configure** log accounting-policy *number* custom-record ref-policer id *reference*
Tree	id
Reference	**configure** log accounting-policy *number* custom-record policer *number*
Notes	The following elements are part of a choice: **all** or **id**.
Introduced	19.10.R1
Platforms	All

ref-queue

Synopsis	Enter the **ref-queue** context

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Context	**configure** log accounting-policy *number* custom-record ref-queue
Tree	ref-queue
Description	Commands in this context configure reference queue counters for significant change only reporting. The custom record is only generated when the change in the sum of all queue and policer reference counters equals or exceeds the configured (non-zero) significant change value.
Introduced	16.0.R1
Platforms	All

all

Synopsis	Apply significant change to counters for all queues
Context	**configure** log accounting-policy *number* custom-record ref-queue all
Tree	all
Notes	The following elements are part of a choice: **all** or **id**.
Introduced	16.0.R1
Platforms	All

e-counters

Synopsis	Enter the **e-counters** context
Context	**configure** log accounting-policy *number* custom-record ref-queue e-counters
Tree	e-counters
Introduced	16.0.R1
Platforms	All

in-profile-octets-discarded-count *boolean*

Synopsis	Include the in-profile octets discarded count
Context	**configure** log accounting-policy *number* custom-record ref-queue e-counters in-profile-octets-discarded-count *boolean*
Tree	in-profile-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

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in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	**configure** log accounting-policy *number* custom-record ref-queue e-counters in-profile-octets-forwarded-count *boolean*
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in-profile packets discarded count
Context	**configure** log accounting-policy *number* custom-record ref-queue e-counters in-profile-packets-discarded-count *boolean*
Tree	in-profile-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	**configure** log accounting-policy *number* custom-record ref-queue e-counters in-profile-packets-forwarded-count *boolean*
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out-profile octets discarded count
Context	**configure** log accounting-policy *number* custom-record ref-queue e-counters out-profile-octets-discarded-count *boolean*
Tree	out-profile-octets-discarded-count

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Default	false
Introduced	16.0.R1
Platforms	All

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	**configure** log accounting-policy *number* custom-record ref-queue e-counters out-profile-octets-forwarded-count *boolean*
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-packets-discarded-count *boolean*

Synopsis	Include the out-profile packets discarded count
Context	**configure** log accounting-policy *number* custom-record ref-queue e-counters out-profile-packets-discarded-count *boolean*
Tree	out-profile-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	**configure** log accounting-policy *number* custom-record ref-queue e-counters out-profile-packets-forwarded-count *boolean*
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

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i-counters

Synopsis	Enter the **i-counters** context
Context	**configure** log accounting-policy *number* custom-record ref-queue i-counters
Tree	i-counters
Introduced	16.0.R1
Platforms	All

all-octets-offered-count *boolean*

Synopsis	Include the all octets offered count
Context	**configure** log accounting-policy *number* custom-record ref-queue i-counters all-octets-offered-count *boolean*
Tree	all-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

all-packets-offered-count *boolean*

Synopsis	Include all packets offered count
Context	**configure** log accounting-policy *number* custom-record ref-queue i-counters all-packets-offered-count *boolean*
Tree	all-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

high-octets-discarded-count *boolean*

Synopsis	Include the high octets discarded count
Context	**configure** log accounting-policy *number* custom-record ref-queue i-counters high-octets-discarded-count *boolean*
Tree	high-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

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high-octets-offered-count *boolean*

Synopsis	Include the high octets offered count
Context	**configure** log accounting-policy *number* custom-record ref-queue i-counters high-octets-offered-count *boolean*
Tree	high-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

high-packets-discarded-count *boolean*

Synopsis	Include the high packets discarded count
Context	**configure** log accounting-policy *number* custom-record ref-queue i-counters high-packets-discarded-count *boolean*
Tree	high-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

high-packets-offered-count *boolean*

Synopsis	Include the high packets offered count
Context	**configure** log accounting-policy *number* custom-record ref-queue i-counters high-packets-offered-count *boolean*
Tree	high-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	**configure** log accounting-policy *number* custom-record ref-queue i-counters in-profile-octets-forwarded-count *boolean*
Tree	in-profile-octets-forwarded-count

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Default	false
Introduced	16.0.R1
Platforms	All

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	**configure** log accounting-policy *number* custom-record ref-queue i-counters in-profile-packets-forwarded-count *boolean*
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

low-octets-discarded-count *boolean*

Synopsis	Include the low octets discarded count
Context	**configure** log accounting-policy *number* custom-record ref-queue i-counters low-octets-discarded-count *boolean*
Tree	low-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

low-octets-offered-count *boolean*

Synopsis	Include the low octets offered count
Context	**configure** log accounting-policy *number* custom-record ref-queue i-counters low-octets-offered-count *boolean*
Tree	low-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

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low-packets-discarded-count *boolean*

Synopsis	Include the low packets discarded count
Context	**configure** log accounting-policy *number* custom-record ref-queue i-counters low-packets-discarded-count *boolean*
Tree	low-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

low-packets-offered-count *boolean*

Synopsis	Include the low packets offered count
Context	**configure** log accounting-policy *number* custom-record ref-queue i-counters low-packets-offered-count *boolean*
Tree	low-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	**configure** log accounting-policy *number* custom-record ref-queue i-counters out-profile-octets-forwarded-count *boolean*
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	**configure** log accounting-policy *number* custom-record ref-queue i-counters out-profile-packets-forwarded-count *boolean*
Tree	out-profile-packets-forwarded-count
Default	false

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Introduced	16.0.R1
Platforms	All

uncoloured-octets-offered-count *boolean*

Synopsis	Include the uncolored octets offered count
Context	**configure** log accounting-policy *number* custom-record ref-queue i-counters uncoloured-octets-offered-count *boolean*
Tree	uncoloured-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

uncoloured-packets-offered-count *boolean*

Synopsis	Include the uncolored packets offered count
Context	**configure** log accounting-policy *number* custom-record ref-queue i-counters uncoloured-packets-offered-count *boolean*
Tree	uncoloured-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

id *reference*

Synopsis	Queue ID
Context	**configure** log accounting-policy *number* custom-record ref-queue id *reference*
Tree	id
Reference	**configure** log accounting-policy *number* custom-record queue *number*
Notes	The following elements are part of a choice: **all** or **id**.
Introduced	16.0.R1
Platforms	All

significant-change *number*

Synopsis	Significant change required to generate the record

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Context	**configure** log accounting-policy *number* custom-record significant-change *number*
Tree	significant-change
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

default *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default accounting policy for all objects that do not have an accounting policy
Context	**configure** log accounting-policy *number* default *boolean*
Tree	default
Default	false
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log accounting-policy *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

destination

Synopsis	Enter the **destination** context
Context	**configure** log accounting-policy *number* destination
Tree	destination
Introduced	16.0.R1
Platforms	All

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file *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Unique file identifier when creating a log or accounting file
Context	**configure** log accounting-policy *number* destination file *reference*
Tree	file
Reference	**configure** log file *string*
Notes	The following elements are part of a choice: **file** or **null**.
Introduced	16.0.R1
Platforms	All

null

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Indicate no destination for accounting policy records
Context	**configure** log accounting-policy *number* destination null
Tree	null
Notes	The following elements are part of a choice: **file** or **null**.
Introduced	16.0.R1
Platforms	All

include-system-info *boolean*

Synopsis	Include system information in accounting policy records

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Context	**configure** log accounting-policy *number* include-system-info *boolean*
Tree	include-system-info
Default	false
Introduced	16.0.R1
Platforms	All

record *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Accounting policy record type
Context	**configure** log accounting-policy *number* record *keyword*
Tree	record
Description	This command adds the accounting record type to the accounting policy that is forwarded to the configured accounting file. A record name can only be used in one accounting policy. To obtain a list of all record types that can be configured, use the **show log accounting-records** command. To configure an accounting policy for access ports, select a service record (for example, service-ingress-octets). To change the record name to another service record, configure the new record name with this command. When configuring an accounting policy for network ports, select a network record. To change the record name to another network record, configure the new record name with this command. **Note:** AA, video, and subscriber records are not applicable to the 7950 XRS.
Options	service-ingress-octets, service-egress-octets, service-ingress-packets, service-egress-packets, network-ingress-octets, network-egress-octets, network-ingress-packets, network-egress-packets, compact-service-ingress-octets, combined-service-ingress, combined-network-ing-egr-octets, combined-service-ing-egr-octets, complete-service-ingress-egress, combined-sdp-ingress-egress, complete-sdp-ingress-egress, complete-subscriber-ingress-egress, aa-protocol, aa-application, aa-app-group, aa-subscriber-protocol, aa-subscriber-application, custom-record-subscriber, custom-record-service, custom-record-aa-sub, queue-group-octets, queue-group-packets, combined-queue-group, combined-mpls-lsp-ingress, combined-mpls-lsp-egress, combined-ldp-lsp-egress, saa, video, aa-performance, complete-ethernet-port, extended-service-ingress-egress, complete-network-ing-egr, aa-partition, complete-pm, aa-admit-deny, network-interface-ingress-octets,

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network-interface-egress-octets, network-interface-ingress-packets, network-interface-egress-packets, combined-network-interface-ingress, combined-network-interface-egress, complete-network-interface-ing-egr, access-egress-octets, access-egress-packets, combined-access-egress, combined-network-egress, complete-service-activation-test, combined-mpls-srte-egress, combined-sr-policy-egress

Introduced 16.0.R1

Platforms All

app-route-notifications

Synopsis Enter the **app-route-notifications** context

Context **configure** log app-route-notifications

Tree app-route-notifications

Introduced 16.0.R1

Platforms All

cold-start-wait *number*

Synopsis Time delay before notifying specific CPM applications for available route

Context **configure** log app-route-notifications cold-start-wait *number*

Tree cold-start-wait

Range 1 to 300

Introduced 16.0.R1

Platforms All

route-recovery-wait *number*

Synopsis Time delay before notifying specific CPM applications after route recovery or change

Context **configure** log app-route-notifications route-recovery-wait *number*

Tree route-recovery-wait

Range 1 to 100

Introduced 16.0.R1

Platforms All

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encryption-key *string*

Synopsis	Secret key for the encryption of log files
Context	**configure** log encryption-key *string*
Tree	encryption-key
Description	This command specifies the encryption key used by AES-256-CTR for log file encryption. The encryption key is used for all local log files on the system.
String Length	1 to 71
Introduced	22.7.R1
Platforms	All

event-damping *boolean*

Synopsis	Allow event damping algorithm to suppress QoS or filter change events
Context	**configure** log event-damping *boolean*
Tree	event-damping
Default	true
Introduced	16.0.R1
Platforms	All

event-handling

Synopsis	Enter the **event-handling** context
Context	**configure** log event-handling
Tree	event-handling
Introduced	16.0.R1
Platforms	All

handler [name] *string*

Synopsis	Enter the **handler** list instance
Context	**configure** log event-handling handler *string*
Tree	handler
Max. Instances	1500
Introduced	16.0.R1

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Platforms	All

[**name**] *string*

Synopsis	EHS handler name
Context	**configure** log event-handling handler *string*
Tree	handler
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS handler
Context	**configure** log event-handling handler *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-handling handler *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-handling handler *string* entry *number*

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Tree	entry
Max. Instances	1500
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	EHS handler entry ID
Context	**configure** log event-handling handler *string* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS handler entry
Context	**configure** log event-handling handler *string* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-handling handler *string* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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min-delay *number*

Synopsis	Minimum delay between subsequent executions of the script policy
Context	**configure** log event-handling handler *string* entry *number* min-delay *number*
Tree	min-delay
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

script-policy

Synopsis	Enable the **script-policy** context
Context	**configure** log event-handling handler *string* entry *number* script-policy
Tree	script-policy
Introduced	16.0.R1
Platforms	All

name *reference*

Synopsis	Script policy name
Context	**configure** log event-handling handler *string* entry *number* script-policy name *reference*
Tree	name
Reference	**configure** system script-control script-policy *string* owner *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

owner *reference*

Synopsis	Script policy owner
Context	**configure** log event-handling handler *string* entry *number* script-policy owner *reference*
Tree	owner
Default	TiMOS CLI
Reference	**configure** system script-control script-policy *string* owner *string*

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Introduced	16.0.R1
Platforms	All

event-trigger

Synopsis	Enter the **event-trigger** context
Context	**configure** log event-trigger
Tree	event-trigger
Introduced	16.0.R1
Platforms	All

adp event *keyword*

Synopsis	Enter the **adp** list instance
Context	**configure** log event-trigger adp event *keyword*
Tree	adp
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger adp event *keyword*
Tree	adp
Options	tmnxDiscoveryEndNotify, tmnxDiscoveryCellularReq
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger adp event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable

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Default	disable
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

description *string*

Synopsis	Text description
Context	**configure** log event-trigger adp event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger adp event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger adp event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger adp event *keyword* entry *number* admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger adp event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger adp event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger adp event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

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description *string*

Synopsis	Text description
Context	**configure** log event-trigger adp event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger adp event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger adp event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

anysec event *keyword*

Synopsis	Enter the **anysec** list instance
Context	**configure** log event-trigger anysec event *keyword*
Tree	anysec
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

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event *keyword*

Synopsis	ANYSec module event
Context	**configure** log event-trigger anysec event *keyword*
Tree	anysec
Options	tmnxAnySecMkaPskRollover, tmnxAnySecMkaOperStateChanged, tmnxAnySecMkaSessionInitiation, tmnxAnySecMkaSessionTermination, tmnxAnySecSessionEnabled, tmnxAnySecSessionDisabled
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger anysec event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

description *string*

Synopsis	Text description
Context	**configure** log event-trigger anysec event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

entry [id] *number*

Synopsis	Enter the **entry** list instance

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Context	**configure** log event-trigger anysec event *keyword* entry *number*
Tree	entry
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger anysec event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger anysec event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger anysec event *keyword* entry *number* debounce
Tree	debounce
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

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time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger anysec event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger anysec event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

description *string*

Synopsis	Text description
Context	**configure** log event-trigger anysec event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger anysec event *keyword* entry *number* filter *reference*

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Tree	filter
Reference	**configure** log filter *string*
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger anysec event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

application-assurance event *keyword*

Synopsis	Enter the **application-assurance** list instance
Context	**configure** log event-trigger application-assurance event *keyword*
Tree	application-assurance
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger application-assurance event *keyword*
Tree	application-assurance
Options	tmnxBsxIsaAaGrpFailureV2, tmnxBsxIsaAaGrpFailureClearV2, tmnxBsxIsaAaGrpNonRedundantV2, tmnxBsxIsaAaGrpSwitchover, tmnxBsxIsaAaGrpFlowFull, tmnxBsxIsaAaGrpFlowFullClear, tmnxBsxIsaAaSubLoadBalance, tmnxBsxIsaAaGrpCapCostThres, tmnxBsxIsaAaGrpCapCostThresClear, tmnxBsxAaSubscribersUnassigned, tmnxBsxAaSubscriberAcctDataLoss, tmnxBsxAaSubPolResExceeded, tmnxBsxAaSubPolResExceededClear, tmnxBsxIsaAaGrpFlowSetup, tmnxBsxIsaAaGrpFlowSetupClear, tmnxBsxIsaAaGrpPacketRate, tmnxBsxIsaAaGrpPacketRateClear, tmnxBsxIsaAaGrpBitRate, tmnxBsxIsaAaGrpBitRateClear, tmnxBsxTransIpPolAaSubCreated,

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tmnxBsxTransIpPolAaSubDeleted, tmnxBsxTransIpPolRadCoAAudit, tmnxBsxTransIpPolRadCoAError, tmnxBsxTransIpPolRadDiscError, tmnxBsxTransIpPolDhcpAddWarning, tmnxBsxTransIpPolDhcpDelWarning, tmnxBsxIsaAaGrpFmSbWaSBufOvld, tmnxBsxIsaAaGrpFmSbWaSBufOvldClr, tmnxBsxIsaAaGrpToSbWaSBufOvld, tmnxBsxIsaAaGrpToSbWaSBufOvldClr, tmnxBsxIsaAaGrpOvrldCutthru, tmnxBsxIsaAaGrpOvrldCutthruClr, tmnxBsxTransitIpPersistenceWarn, tmnxBsxAarpInstOperStateChanged, tmnxBsxAarpInstStateChanged, tmnxBsxRadApFailure, tmnxBsxRadApServOperStateChange, tmnxBsxMobileSubModifyFailure, tmnxBsxRadApIntrmUpdateSkipped, tmnxBsxHttpUrlParamLimitExceeded, tmnxBsxUrlFilterOperStateChange, tmnxBsxSubModifyFailure, tmnxBsxDnsIpCacheFull, tmnxBsxDnsIpCacheFullClear, tmnxBsxUrlListUpdate, tmnxBsxUrlListFailure, tmnxBsxIsaAaTimFileProcFailure, tmnxBsxStatTcaThreshCrossed, tmnxBsxStatTcaThreshCrossedClear, tmnxBsxStatPolcrTcaThreshCrossed, tmnxBsxStatPolcrTcaThreshCrClear, tmnxBsxStatFtrTcaThreshCrossed, tmnxBsxStatFtrTcaThreshCrClear, tmnxBsxStatFtrEnTcaThreshCrossed, tmnxBsxStatFtrEnTcaThreshCrClear, tmnxBsxTransIpPolDiamGxError, tmnxBsxDatapathCpuUsage, tmnxBsxDatapathCpuUsageClear, tmnxBsxTcpValTcaCrossed, tmnxBsxTcpValTcaCrossedClear, tmnxBsxCertProfileOperStateChngd, tmnxBsxSubQuarantined, tmnxBsxSubQuarantinedClear, tmnxBsxUrlFltrWebServOprStateChg

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger application-assurance event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** log event-trigger application-assurance event *keyword* description *string*
Tree	description
String Length	1 to 80

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger application-assurance event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger application-assurance event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger application-assurance event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

debounce

Synopsis	Enter the **debounce** context

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Context	**configure** log event-trigger application-assurance event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger application-assurance event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger application-assurance event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** log event-trigger application-assurance event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger application-assurance event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger application-assurance event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aps event *keyword*

Synopsis	Enter the **aps** list instance
Context	**configure** log event-trigger aps event *keyword*
Tree	aps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger aps event *keyword*
Tree	aps
Options	apsEventSwitchover, apsEventModeMismatch, apsEventChannelMismatch, apsEventPSBF, apsEventFEPLF, tApsModeMismatchClear, tApsChannelMismatchClear, tApsPSBFClear, tApsFEPLFClear, tApsLocalSwitchCommandSet, tApsLocalSwitchCommandClear,

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	tApsRemoteSwitchCommandSet, tApsRemoteSwitchCommandClear, tApsMcApsCtlLinkStateChange, tApsChanTxLaisStateChange, tApsPrimaryChannelChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger aps event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

description *string*

Synopsis	Text description
Context	**configure** log event-trigger aps event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger aps event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger aps event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger aps event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger aps event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger aps event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger aps event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

description *string*

Synopsis	Text description
Context	**configure** log event-trigger aps event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger aps event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger aps event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

auto-prov event *keyword*

Synopsis	Enter the **auto-prov** list instance
Context	**configure** log event-trigger auto-prov event *keyword*
Tree	auto-prov
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger auto-prov event *keyword*
Tree	auto-prov
Options	autoNodeProv
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger auto-prov event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger auto-prov event *keyword* description *string*

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Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger auto-prov event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger auto-prov event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger auto-prov event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

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debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger auto-prov event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger auto-prov event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger auto-prov event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger auto-prov event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1

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Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger auto-prov event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger auto-prov event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

bfd event *keyword*

Synopsis	Enter the **bfd** list instance
Context	**configure** log event-trigger bfd event *keyword*
Tree	bfd
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger bfd event *keyword*
Tree	bfd
Options	tmnxBfdOnLspSessDown, tmnxBfdOnLspSessUp, tmnxBfdOnLspSessDeleted, tmnxBfdOnLspSessProtChange, tmnxBfdOnLspSessNoCpmNpResources, tmnxBfdOnLspSessNoTailResources, tmnxBfdOnLspExtSessDown,

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	tmnxBfdOnLspExtSessUp, tmnxBfdOnLspExtSessDeleted, tmnxBfdOnLspExtSessProtChange, tmnxBfdOnLspExtSessNoCpmNpResrcs
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger bfd event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger bfd event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger bfd event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry

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Context	**configure** log event-trigger bfd event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger bfd event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger bfd event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger bfd event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

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value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger bfd event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger bfd event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger bfd event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger bfd event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

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bgp event *keyword*

Synopsis	Enter the **bgp** list instance
Context	**configure** log event-trigger bgp event *keyword*
Tree	bgp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger bgp event *keyword*
Tree	bgp
Options	sendNotification, receiveNotification, bgpInterfaceDown, bgpConnNoKA, bgpConnNoOpenRcvd, bgpRejectConnBadLocAddr, bgpRemoteEndClosedConn, bgpPeerNotFound, bgpConnMgrTerminated, bgpTerminated, bgpNoMemoryPeer, bgpVariableRangeViolation, bgpCfgViol, tBgpPeerGRStatusChange, tBgpNgEstablished, tBgpNgBackwardTransition, tBgpPeerNgHoldTimeInconsistent, tBgpFlowspecUnsupportdComAction, tBgp4RouteInvalid, tBgp4PathAttrInvalid, tBgp4WithdrawnRtFromUpdateError, tBgp4UpdateInvalid, tBgpGeneral, tBgpFibResourceFailPeer, tBgpReceivedInvalidNlri, tBgpMaxNgPfxLmt, tBgpMaxNgPfxLmtThresholdReached, tBgpInstanceDynamicPeerLmtReachd, tBgpPGDynamicPeerLmtReached, bgpEstablishedNotification, bgpBackwardTransNotification, tBgp4PathAttrDiscarded, tmnxBmpSessionStatusChange, tBgpInstConvStateTransition, tBgpPeerNgGRStatusChange, tBgpPGDynNbrIfMaxSessLmtReachd
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger bgp event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1

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Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger bgp event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger bgp event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger bgp event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger bgp event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable

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Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger bgp event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger bgp event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger bgp event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger bgp event *keyword* entry *number* description *string*

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Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger bgp event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger bgp event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

bier event *keyword*

Synopsis	Enter the **bier** list instance
Context	**configure** log event-trigger bier event *keyword*
Tree	bier
Introduced	19.5.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger bier event *keyword*

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Tree	bier
Options	vRtrBierBfrIdCollision, vRtrBierMtMismatch, vRtrBierSubDomainMismatch, vRtrBierUnsupportedNhop
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger bier event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger bier event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	19.5.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger bier event *keyword* entry *number*
Tree	entry
Introduced	19.5.R1
Platforms	All

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[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger bier event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger bier event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	19.5.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger bier event *keyword* entry *number* debounce
Tree	debounce
Introduced	19.5.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger bier event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	19.5.R1

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Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger bier event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	19.5.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger bier event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	19.5.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger bier event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	19.5.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger bier event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*

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Introduced	19.5.R1
Platforms	All

calltrace event *keyword*

Synopsis	Enter the **calltrace** list instance
Context	**configure** log event-trigger calltrace event *keyword*
Tree	calltrace
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger calltrace event *keyword*
Tree	calltrace
Options	tmnxCallTraceMaxFilesNumReached, tmnxCallTraceLocSizeLimitReached, calltraceDebugEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger calltrace event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description

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Context	**configure** log event-trigger calltrace event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger calltrace event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger calltrace event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger calltrace event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger calltrace event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger calltrace event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger calltrace event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** log event-trigger calltrace event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger calltrace event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger calltrace event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cflowd event *keyword*

Synopsis	Enter the **cflowd** list instance
Context	**configure** log event-trigger cflowd event *keyword*
Tree	cflowd
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger cflowd event *keyword*
Tree	cflowd
Options	tmnxCflowdCreateFailure, tmnxCflowdStateChange, tmnxCflowdFlowCreateFailure, tmnxCflowdPacketTxFailure

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger cflowd event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger cflowd event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger cflowd event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger cflowd event *keyword* entry *number*

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Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger cflowd event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger cflowd event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger cflowd event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

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value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger cflowd event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger cflowd event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger cflowd event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger cflowd event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

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chassis event *keyword*

Synopsis	Enter the **chassis** list instance
Context	**configure** log event-trigger chassis event *keyword*
Tree	chassis
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger chassis event *keyword*
Tree	chassis
Options	tmnxEqCardFailure, tmnxEqCardInserted, tmnxEqCardRemoved, tmnxEqWrongCard, tmnxEnvTempTooHigh, tmnxEqPowerSupplyInserted, tmnxEqPowerSupplyRemoved, tmnxRedPrimaryCPMFail, tmnxChassisNotificationClear, tmnxEqSyncIfTimingHoldover, tmnxEqSyncIfTimingHoldoverClear, tmnxEqSyncIfTimingRef1Alarm, tmnxEqSyncIfTimingRef1AlarmClear, tmnxEqSyncIfTimingRef2Alarm, tmnxEqSyncIfTimingRef2AlarmClear, tmnxEqFlashDataLoss, tmnxEqFlashDiskFull, tmnxPeSoftwareVersionMismatch, tmnxPeSoftwareLoadFailed, tmnxPeBootloaderVersionMismatch, tmnxPeBootromVersionMismatch, tmnxPeFPGAVersionMismatch, tmnxEqSyncIfTimingBITSAlarm, tmnxEqSyncIfTimingBITSAlarmClear, tmnxEqCardFirmwareUpgraded, tmnxChassisUpgradeInProgress, tmnxChassisUpgradeComplete, tmnxChassisHiBwMcastAlarm, tmnxEqOperStateChange, tmnxEqMdaCfgNotCompatible, tmnxCpmCardSyncFileNotPresent, tmnxEqMdaXplError, tmnxEqCardPChipError, tmnxEqCardSoftResetAlarm, tmnxEqMdaSyncENotCompatible, tmnxIPsecIsaGrpActiveIsaChgd, tmnxEqCardPChipMemoryEvent, tmnxIPsecIsaGrpUnableToSwitch, tmnxIPsecIsaGrpTnlLowWMark, tmnxIPsecIsaGrpTnlHighWMark, tmnxIPsecIsaGrpTnlMax, tmnxEqSyncIfTimingRef1Quality, tmnxEqSyncIfTimingRef2Quality, tmnxEqSyncIfTimingBITSQuality, tmnxEqSyncIfTimingBITS2Quality, tmnxEqSyncIfTimingRefSwitch, tmnxEqSyncIfTimingBITS2Alarm, tmnxEqSyncIfTimingBITS2AlarmClr, tmnxEqSyncIfTimingBITSOutRefChg, tmnxEqCardPChipCamEvent, tmnxEqSyncIfTimingSystemQuality, tmnxEqHwEnhancedCapability, tmnxEqSyncIfTimingPTPQuality, tmnxEqSyncIfTimingPTPAlarm, tmnxEqSyncIfTimingPTPAlarmClr, tmnxPeFirmwareVersionWarning, tmnxMDAIsaTunnelGroupChange, tmnxEqPowerCapacityExceeded, tmnxEqPowerCapacityExceededClear, tmnxEqPowerLostCapacity, tmnxEqPowerLostCapacityClear, tmnxEqPowerOverloadState, tmnxEqPowerOverloadStateClear, tmnxEqCardQChipBufMemoryEvent, tmnxEqCardQChipStatsMemoryEvent, tmnxEqCardQChipIntMemoryEvent, tmnxEqCardChipIfDownEvent, tmnxEqCardChipIfCellEvent, tmnxEqLowSwitchFabricCap, tmnxEqLowSwitchFabricCapClear,

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tmnxEqPowerSafetyAlertThreshold, tmnxEqPowerSafetyAlertClear, tmnxEqPowerSafetyLevelThreshold, tmnxEqPowerSafetyLevelClear, tmnxEqCardTChipParityEvent, tmnxEqProvPowerCapacityAlm, tmnxEqProvPowerCapacityAlmClr, tmnxPlcyAcctStatsPoolExcResource, tmnxPlcyAcctStatsPoolLowResource, tmnxPlcyAcctStatsEventOvrflwClr, tmnxPlcyAcctStatsEventOvrflw, tmnxIomResHighLimitReached, tmnxIomResExhausted, tmnxIomResStateClr, tmnxIomEventOverflow, tmnxIomEventOverflowClr, tmnxEqDataPathFailureProtImpact, tmnxExtStandbyCpmReboot, tmnxExtStandbyCpmRebootFail, tmnxEqMdaIngrXplError, tmnxSyncIfTimBITS2048khzUnsup, tmnxSyncIfTimBITS2048khzUnsupClr, tmnxEqMgmtEthRedStandbyRaise, tmnxEqMgmtEthRedStandbyClear, tmnxEqPhysChassPowerSupOvrTmp, tmnxEqPhysChassPowerSupOvrTmpClr, tmnxEqPhysChassPowerSupAcFail, tmnxEqPhysChassPowerSupAcFailClr, tmnxEqPhysChassPowerSupDcFail, tmnxEqPhysChassPowerSupDcFailClr, tmnxEqPhysChassPowerSupInFail, tmnxEqPhysChassPowerSupInFailClr, tmnxEqPhysChassPowerSupOutFail, tmnxEqPhysChassPowerSupOutFailCl, tmnxEqPhysChassisFanFailure, tmnxEqPhysChassisFanFailureClear, tIPsecIsaMemLowWatermark, tIPsecIsaMemHighWatermark, tIPsecIsaMemMax, tmnxCpmMemSizeMismatch, tmnxCpmMemSizeMismatchClear, tmnxPhysChassPwrSupWrgFanDir, tmnxPhysChassPwrSupWrgFanDirClr, tmnxPhysChassPwrSupPemACRect, tmnxPhysChassPwrSupPemACRectClr, tmnxPhysChassPwrSupInputFeed, tmnxPhysChassPwrSupInputFeedClr, tmnxEqBpEpromFail, tmnxEqBpEpromFailClear, tmnxEqBpEpromWarning, tmnxEqBpEpromWarningClear, tmnxPhysChassisPCMInputFeed, tmnxPhysChassisPCMInputFeedClr, tmnxIPMacQosIngOverload, tmnxIPMacQosIngOverloadClear, tmnxIPQosEgrOverload, tmnxIPQosEgrOverloadClear, tmnxIPv6QosIngOverload, tmnxIPv6QosIngOverloadClear, tmnxIPv6QosEgrOverload, tmnxIPv6QosEgrOverloadClear, tmnxIPMacFilterIngOverload, tmnxIPMacFilterIngOverloadClear, tmnxIPMacFilterEgrOverload, tmnxIPMacFilterEgrOverloadClear, tmnxIPv6FilterIngOverload, tmnxIPv6FilterIngOverloadClear, tmnxIPv6FilterEgrOverload, tmnxIPv6FilterEgrOverloadClear, tmnxIPMacCpmFilterOverload, tmnxIPMacCpmFilterOverloadClear, tmnxIPv6CpmFilterOverload, tmnxIPv6CpmFilterOverloadClear, tmnxBluetoothModuleConnectionChg, tmnxGnssAcquiringFix, tmnxGnssAcquiredFix, tmnxPhysChassisPMOutFail, tmnxPhysChassisPMOutFailClr, tmnxPhysChassisPMInputFeed, tmnxPhysChassisPMInputFeedClr, tmnxPhysChassisFilterDoorOpen, tmnxPhysChassisFilterDoorClosed, tmnxPhysChassisPMOverTemp, tmnxPhysChassisPMOverTempClr, tmnxEqFpgaSoftError, tmnxEqSyncIfTimingSyncEQuality, tmnxEqSyncIfTimingSyncE2Quality, tmnxEqSyncIfTimingSyncEAlarm, tmnxEqSyncIfTimingSyncEAlarmClr, tmnxEqSyncIfTimingSyncE2Alarm, tmnxEqSyncIfTimingSyncE2AlarmClr, tmnxEqHwEventDetected, tmnxTunnelGrpEsaVmActivity, tmnxEsaDiscovered, tmnxEsaConnected, tmnxEsaDisconnected, tmnxEsaFailure, tmnxEsaCleared, tmnxEsaVmCreated, tmnxEsaVmBooted, tmnxEsaVmRemoved, tmnxEsaVmCleared, tmnxEsaVmFailure, tIPsecEsaVmMemLowWatermark, tIPsecEsaVmMemHighWatermark, tmnxPeKernelVersionMismatch, tmnxFPResourcePolicyModified, tmnxFPResourcePolicyModifiedClr, tmnxEqSyncIfTimingGnssQuality, tmnxEqSyncIfTimingGnss2Quality, tmnxEqSyncIfTimingGnssAlarm, tmnxEqSyncIfTimingGnss2Alarm,

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tmnxEqSyncIfTimingGnssAlarmClr, tmnxEqSyncIfTimingGnss2AlarmClr, tmnxEsaFirmwareUpgradeStarted, tmnxPlcyAcctPlcrPoolExcResource, tmnxPlcyAcctPlcrPoolLowResource, tChassisAirflowDirMismatch, tChassisAirflowDirMismatchClr, tChassisPowerSupplyMismatch, tChassisPowerSupplyMismatchClr, tChassisPowerSupplyUnsup, tmnxHwAggShpSchedEventOvrflwClr, tmnxHwAggShpSchedEventOvrflw, tmnxFPResOversubscribed, tmnxFPResOversubscribedCleared, tmnxIPMacFilterIngNearFull, tmnxIPMacFilterIngNearFullClear, tmnxIPMacFilterEgrNearFull, tmnxIPMacFilterEgrNearFullClear, tmnxIPv6FilterIngNearFull, tmnxIPv6FilterIngNearFullClear, tmnxIPv6FilterEgrNearFull, tmnxIPv6FilterEgrNearFullClear, tmnxEsaHwStatusDegraded, tmnxEsaHwStatusDegradedClr, tmnxEsaHwStatusCritical, tmnxEsaHwStatusCriticalClr, tmnxEsaHwPwrSup1Degraded, tmnxEsaHwPwrSup1DegradedClr, tmnxEsaHwPwrSup1Failed, tmnxEsaHwPwrSup1FailedClr, tmnxEsaHwPwrSup2Degraded, tmnxEsaHwPwrSup2DegradedClr, tmnxEsaHwPwrSup2Failed, tmnxEsaHwPwrSup2FailedClr, tmnxEsaHwFanBankNonRedun, tmnxEsaHwFanBankNonRedunClr, tmnxEsaHwFanBankFailRedun, tmnxEsaHwFanBankFailRedunClr, tmnxEsaHwFanStatusDegraded, tmnxEsaHwFanStatusDegradedClr, tmnxEsaHwFanStatusFailed, tmnxEsaHwFanStatusFailedClr, tmnxEsaHwPwrSupMismatch, tmnxEsaHwPwrSupMismatchClr, tmnxEsaHwPwrSupBankNonRedun, tmnxEsaHwPwrSupBankNonRedunClr, tmnxEsaHwPwrSupBankFailRedun, tmnxEsaHwPwrSupBankFailRedunClr, tmnxEsaHwTemperatureDegraded, tmnxEsaHwTemperatureDegradedClr, tmnxEsaHwTemperatureFailed, tmnxEsaHwTemperatureFailedClr, tmnxPowerSupplyFanFailed, tmnxPowerSupplyFanFailedClear, tmnxIxrResourceHighUsage, tmnxIxrResourceExhausted, tmnxIxrResourceRecovered, tmnxIxrResourceHighUsageByOwner, tmnxIxrResourceExhaustedByOwner, tmnxIxrResourceRecoveredByOwner, tmnxSasAlarminput1StateChanged, tmnxSasAlarminput2StateChanged, tmnxSasAlarminput3StateChanged, tmnxSasAlarminput4StateChanged, tmnxAlarmInputVoltageFailure, tmnxIomRsrcUsageHighLimitReached, tmnxIomRsrcUsageExhausted, tmnxIomRsrcUsageRecovered, tmnxIomRsrcEventOverflow, tmnxIomRsrcEventOverflowClr, tmnxIomRsrcOwnerOversubscribed, tmnxIomRsrcOwnerOversubscrbdClr, tmnxInterChassisCommsDown, tmnxInterChassisCommsUp, tmnxCpmIcPortDown, tmnxCpmIcPortUp, tmnxCpmIcPortSFFInserted, tmnxCpmIcPortSFFRemoved, tmnxCpmANoLocalIcPort, tmnxCpmBNoLocalIcPort, tmnxCpmALocalIcPortAvail, tmnxCpmBLocalIcPortAvail, CpmIcPortSFFStatusFailure, CpmIcPortSFFStatusDDMCorrupt, CpmIcPortSFFStatusReadError, CpmIcPortSFFStatusUnsupported, tmnxCpmIcPortDDMFailure, tmnxCpmIcPortDDMClear, tmnxSfmIcPortDown, tmnxSfmIcPortUp, tmnxSfmIcPortSFFInserted, tmnxSfmIcPortSFFRemoved, SfmIcPortSFFStatusFailure, SfmIcPortSFFStatusDDMCorrupt, SfmIcPortSFFStatusReadError, SfmIcPortSFFStatusUnsupported, tmnxSfmIcPortDDMFailure, tmnxSfmIcPortDDMClear, tmnxSfmIcPortDegraded, tmnxSfmIcPortDegradedClear, tmnxCardResMacFdbHighUsgSet, tmnxCardResMacFdbHighUsgClr, tmnxPowerShelfInputPwrModeSwitch, tmnxPowerShelfCommsDown, tmnxPowerShelfCommsUp, tmnxPowerShelfOutputStatusSwitch, tmnxPowerShelfOutputStatusDown, tmnxPowerShelfOutputStatusUp

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger chassis event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger chassis event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger chassis event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger chassis event *keyword* entry *number*

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Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger chassis event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger chassis event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger chassis event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

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value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger chassis event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger chassis event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger chassis event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger chassis event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

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debug event *keyword*

Synopsis	Enter the **debug** list instance
Context	**configure** log event-trigger debug event *keyword*
Tree	debug
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger debug event *keyword*
Tree	debug
Options	traceEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger debug event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger debug event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1

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Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger debug event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger debug event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger debug event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger debug event *keyword* entry *number* debounce
Tree	debounce

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Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger debug event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger debug event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger debug event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger debug event *keyword* entry *number* filter *reference*

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Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger debug event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

dhcp event *keyword*

Synopsis	Enter the **dhcp** list instance
Context	**configure** log event-trigger dhcp event *keyword*
Tree	dhcp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger dhcp event *keyword*
Tree	dhcp
Options	svcDHCPLseStateRestoreProblem, sapDHCPLeaseEntriesExceeded, sapDHCPLseStateOverride, sapDHCPSuspiciousPcktRcvd, sapDHCPLseStatePopulateErr, sdpBindDHCPLeaseEntriesExceeded, sdpBindDHCPLseStateOverride, sdpBindDHCPSuspiciousPcktRcvd, sdpBindDHCPLseStatePopulateErr, tmnxVRtrDHCPSuspiciousPcktRcvd, sapStaticHostDynMacConflict, sapDHCPProxyServerError, tmnxVRtrDHCPIfLseStatesExceeded, sdpBindDHCPProxyServerError, tmnxVRtrDHCP6RelayLseStExceeded, tmnxVRtrDHCP6ServerLseStExceeded, tmnxVRtrDHCP6LseStateOverride, tmnxVRtrDHCP6RelayReplyStripUni, tmnxVRtrDHCP6IllegalClientAddr, tmnxVRtrDHCP6AssignedIllegSubnet, tmnxVRtrDHCP6ClientMacUnresolved, sapDHCPLseStateMobilityError,

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	sdpBindDHCPLseStateMobilityErr, svcDHCPMiscellaneousProblem, sapStatHost6DynMacConflict
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger dhcp event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger dhcp event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger dhcp event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry

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Context	**configure** log event-trigger dhcp event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger dhcp event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger dhcp event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger dhcp event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

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value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger dhcp event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger dhcp event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger dhcp event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger dhcp event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

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dhcps event *keyword*

Synopsis	Enter the **dhcps** list instance
Context	**configure** log event-trigger dhcps event *keyword*
Tree	dhcps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger dhcps event *keyword*
Tree	dhcps
Options	tmnxDhcpSvrSubnetMinFreeExc, tmnxDhcpSvrHostConflict, tmnxDhcpSvrPoolUnknown, tmnxDhcpSvrLeaseNotOwner, tmnxDhcpSvrDeclineStaticAddr, tmnxDhcpSvrMsgTooLong, tmnxDhcpsFoStateChange, tmnxDhcpsFoLeaseUpdateFailed, tmnxDhcpSvrUserDbUnknown, tmnxDhcpSvrMaxLeasesReached, tmnxDhcpSvrNoSubnetFixAddr, tmnxDhcpSvrLeaseDefaultTimers, tmnxDhcpSvrPoolMinFreeExc, tmnxDhcpSvrSubnetDepleted, tmnxDhcpSvrPoolDepleted, tmnxDhcpSvrIntLseConflict, tmnxDhcpSvrLeaseModify, tmnxDhcpSvrLeaseCreate, tmnxDhcpSvrLeaseDelete, tmnxLudbDhcpGroupIfTooLong, tmnxLudbPppoeGroupIfTooLong, tmnxDhcpSvrNoContFreeBlocks, tmnxDhcpsPoolFoStateChange, tmnxDhcpsPoolFoLeaseUpdateFailed, tmnxDhcpSvrPlThTooLowV6, tmnxDhcpSvrPlThDepletedV6, tmnxDhcpSvrPfxThTooLowV6, tmnxDhcpSvrPfxThDepletedV6, tmnxDhcpsLeaseOfferedExpired, tmnxDhcpsAddrAllocationFailure, tmnxDhcpsPacketDropped
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger dhcps event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** log event-trigger dhcps event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger dhcps event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger dhcps event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger dhcps event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable

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Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger dhcps event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger dhcps event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger dhcps event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** log event-trigger dhcps event *keyword* entry *number* description *string*

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Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger dhcps event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger dhcps event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

diameter event *keyword*

Synopsis	Enter the **diameter** list instance
Context	**configure** log event-trigger diameter event *keyword*
Tree	diameter
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger diameter event *keyword*

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Tree	diameter
Options	tmnxDiamPolicyPeerStateChange, tmnxDiamAppSessionFailure, tmnxDiamSessionEvent, tmnxDiamPpPrxMcLocStateChanged, tmnxDiamMessageDropped, tmnxDiamNdPeerStatActiveChanged
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger diameter event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger diameter event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger diameter event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

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[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger diameter event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger diameter event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger diameter event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger diameter event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds

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Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger diameter event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger diameter event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger diameter event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger diameter event *keyword* entry *number* handler *reference*

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Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

dot1x event *keyword*

Synopsis	Enter the **dot1x** list instance
Context	**configure** log event-trigger dot1x event *keyword*
Tree	dot1x
Introduced	23.7.R1
Platforms	All

event *keyword*

Synopsis	Events for dynsvc module.
Context	**configure** log event-trigger dot1x event *keyword*
Tree	dot1x
Options	alxDot1xHostAuthEvent
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger dot1x event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	23.7.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** log event-trigger dot1x event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	23.7.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger dot1x event *keyword* entry *number*
Tree	entry
Introduced	23.7.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger dot1x event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger dot1x event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	23.7.R1
Platforms	All

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debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger dot1x event *keyword* entry *number* debounce
Tree	debounce
Introduced	23.7.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger dot1x event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	23.7.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger dot1x event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	23.7.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger dot1x event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	23.7.R1
Platforms	All

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filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger dot1x event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	23.7.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger dot1x event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	23.7.R1
Platforms	All

dynsvc event *keyword*

Synopsis	Enter the **dynsvc** list instance
Context	**configure** log event-trigger dynsvc event *keyword*
Tree	dynsvc
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger dynsvc event *keyword*
Tree	dynsvc
Options	tmnxDynSvcSapFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger dynsvc event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger dynsvc event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger dynsvc event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger dynsvc event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger dynsvc event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger dynsvc event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger dynsvc event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger dynsvc event *keyword* entry *number* debounce value *number*
Tree	value

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Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger dynsvc event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger dynsvc event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger dynsvc event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

efm-oam event *keyword*

Synopsis	Enter the **efm-oam** list instance
Context	**configure** log event-trigger efm-oam event *keyword*

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Tree	efm-oam
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger efm-oam event *keyword*
Tree	efm-oam
Options	tmnxDot3OamPeerChanged, tmnxDot3OamLoopDetected, tmnxDot3OamLoopCleared, dot3OamThresholdEvent, dot3OamNonThresholdEvent, tmnxDot3OamSdThresholdEvent, tmnxDot3OamThresholdEventClr, tmnxDot3OamNonThresholdEventClr
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger efm-oam event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger efm-oam event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger efm-oam event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger efm-oam event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger efm-oam event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger efm-oam event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

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time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger efm-oam event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger efm-oam event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger efm-oam event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger efm-oam event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*

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Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger efm-oam event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

elmi event *keyword*

Synopsis	Enter the **elmi** list instance
Context	**configure** log event-trigger elmi event *keyword*
Tree	elmi
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger elmi event *keyword*
Tree	elmi
Options	tmnxElmiIfStatusChangeEvent, tmnxElmiEVCStatusChangeEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger elmi event *keyword* admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger elmi event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger elmi event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger elmi event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry

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Context	**configure** log event-trigger elmi event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger elmi event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger elmi event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger elmi event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** log event-trigger elmi event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger elmi event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger elmi event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

ering event *keyword*

Synopsis	Enter the **ering** list instance
Context	**configure** log event-trigger ering event *keyword*
Tree	ering
Introduced	16.0.R1
Platforms	All

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event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger ering event *keyword*
Tree	ering
Options	tmnxEthRingPathFwdStateChange, tmnxEthRingApsPrvsnRaiseAlarm, tmnxEthRingApsPrvsnClearAlarm
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger ering event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger ering event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger ering event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1

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Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger ering event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger ering event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger ering event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger ering event *keyword* entry *number* debounce time *number*
Tree	time

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Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger ering event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger ering event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger ering event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry

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Context	**configure** log event-trigger ering event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

eth-cfm event *keyword*

Synopsis	Enter the **eth-cfm** list instance
Context	**configure** log event-trigger eth-cfm event *keyword*
Tree	eth-cfm
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger eth-cfm event *keyword*
Tree	eth-cfm
Options	dot1agCfmFaultAlarm, tmnxDot1agCfmMepLbmTestComplete, tmnxDot1agCfmMepLtmTestComplete, tmnxDot1agCfmMepEthTestComplete, tmnxDot1agCfmMepDMTestComplete, tmnxDot1agCfmMepAisStateChanged, tmnxDot1agCfmMipEvaluation, tmnxDot1agCfmMepSLMTestComplete, tmnxDot1agCfmMepCsfStateChanged, tmnxDot1agCfmMepFcltyFaultRaise, tmnxDot1agCfmMepFcltyFaultClear
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger eth-cfm event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable

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Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger eth-cfm event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger eth-cfm event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger eth-cfm event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger eth-cfm event *keyword* entry *number* admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger eth-cfm event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger eth-cfm event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger eth-cfm event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description

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Context	**configure** log event-trigger eth-cfm event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger eth-cfm event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger eth-cfm event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

etun event *keyword*

Synopsis	Enter the **etun** list instance
Context	**configure** log event-trigger etun event *keyword*
Tree	etun
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers

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Context	**configure** log event-trigger etun event *keyword*
Tree	etun
Options	tmnxEthTunnelApsCfgRaiseAlarm, tmnxEthTunnelApsCfgClearAlarm, tmnxEthTunnelApsPrvsnRaiseAlarm, tmnxEthTunnelApsPrvsnClearAlarm, tmnxEthTunnelApsNoRspRaiseAlarm, tmnxEthTunnelApsNoRspClearAlarm, tmnxEthTunnelApsSwitchoverAlarm
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger etun event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger etun event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger etun event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

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[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger etun event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger etun event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger etun event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger etun event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds

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Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger etun event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger etun event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger etun event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger etun event *keyword* entry *number* handler *reference*
Tree	handler

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Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

filter event *keyword*

Synopsis	Enter the **filter** list instance
Context	**configure** log event-trigger filter event *keyword*
Tree	filter
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger filter event *keyword*
Tree	filter
Options	tIPFilterPBRPacketsDrop, tFilterSubInsSpaceAlarmRaised, tFilterSubInsSpaceAlarmCleared, tFilterSubInsFltrEntryDropped, tFilterBgpFlowSpecProblem, tFilterApplyPathProblem, tFilterRadSharedFltrAlarmRaised, tFilterRadSharedFltrAlarmClear, tFilterEmbeddingOperStateChange, tFilterEmbedOpenflowOperStateChg, tFilterOpenflowRequestRejected, tFilterEmbedFlowspecOperStateChg, tFilterRPActiveDestChangeEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger filter event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** log event-trigger filter event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger filter event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger filter event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger filter event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1

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Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger filter event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger filter event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger filter event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger filter event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80

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Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger filter event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger filter event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

gsmp event *keyword*

Synopsis	Enter the **gsmp** list instance
Context	**configure** log event-trigger gsmp event *keyword*
Tree	gsmp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger gsmp event *keyword*
Tree	gsmp

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Options	tmnxAncpIngRateMonitorEvent, tmnxAncpIngRateMonitorEventL, tmnxAncpEgrRateMonitorEvent, tmnxAncpEgrRateMonitorEventL, tmnxAncpShcvDisabledEvent, tmnxAncpShcvDisabledEventL, tmnxAncpSesRejected, tmnxAncpStringRejected
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger gsmp event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger gsmp event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger gsmp event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

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[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger gsmp event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger gsmp event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger gsmp event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger gsmp event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1

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Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger gsmp event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger gsmp event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger gsmp event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger gsmp event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*

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Introduced	16.0.R1
Platforms	All

igmp event *keyword*

Synopsis	Enter the **igmp** list instance
Context	**configure** log event-trigger igmp event *keyword*
Tree	igmp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger igmp event *keyword*
Tree	igmp
Options	vRtrIgmpIfRxQueryVerMismatch, vRtrIgmpIfCModeRxQueryMismatch, vRtrIgmpMaxGrpsLimitExceeded, vRtrIgmpMcacPlcyDropped, vRtrIgmpHostInstantiationFail, vRtrIgmpHostMaxGrpsLimitExceeded, vRtrIgmpHostMcacPlcyDropped, vRtrIgmpHostCModeRxQueryMismatch, vRtrIgmpHostRxQueryVerMismatch, vRtrIgmpHostMaxSrcsLimitExceeded, vRtrIgmpMaxSrcsLimitExceeded, vRtrIgmpGrpIfSapMaxGrpsLimExceed, vRtrIgmpGrpIfSapMaxSrcsLimExceed, vRtrIgmpGrpIfSapMcacPlcyDropped, vRtrIgmpGrpIfSapCModeRxQueryMism, vRtrIgmpGrpIfSapRxQueryVerMism, vRtrIgmpHostMaxGrpSrcsLimitExcd, vRtrIgmpMaxGrpSrcsLimitExceeded, vRtrIgmpGrpIfSapMaxGrpSrcLimExcd, vRtrIgmpHostQryIntervalConflict, vRtrIgmpNotifyNumOfIPsecIfLowWm, vRtrIgmpNotifyNumOfIPsecIfHighWm, vRtrIgmpNotifyNumOfIPsecIfMaxRch, vRtrIgmpSlaProfInstMcacPlcyDrop
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger igmp event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable

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Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger igmp event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger igmp event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger igmp event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger igmp event *keyword* entry *number* admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger igmp event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger igmp event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger igmp event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** log event-trigger igmp event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger igmp event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger igmp event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

igmp-snooping event *keyword*

Synopsis	Enter the **igmp-snooping** list instance
Context	**configure** log event-trigger igmp-snooping event *keyword*
Tree	igmp-snooping
Introduced	16.0.R1
Platforms	All

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event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger igmp-snooping event *keyword*
Tree	igmp-snooping
Options	sapIgmpSnpgGrpLimitExceeded, sapIgmpSnpgMcacPlcyDropped, sdpBndIgmpSnpgGrpLimitExceeded, sdpBndIgmpSnpgMcacPlcyDropped, sapIgmpSnpgMcsFailure, sapIgmpSnpgSrcLimitExceeded, sdpBndIgmpSnpgSrcLimitExceeded, sdpBndIgmpSnpgGrpSrcLimitExceed, sapIgmpSnpgGrpSrcLimitExceeded, eMplsIgmpSnpgMfibFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger igmp-snooping event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger igmp-snooping event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger igmp-snooping event *keyword* entry *number*

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Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger igmp-snooping event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger igmp-snooping event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger igmp-snooping event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

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time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger igmp-snooping event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger igmp-snooping event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger igmp-snooping event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger igmp-snooping event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*

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Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger igmp-snooping event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

ip event *keyword*

Synopsis	Enter the **ip** list instance
Context	**configure** log event-trigger ip event *keyword*
Tree	ip
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger ip event *keyword*
Tree	ip
Options	clearRTMError, ipEtherBroadcast, ipDuplicateAddress, ipArpInfoOverwritten, fibAddFailed, qosNetworkPolicyMallocFailed, ipArpBadInterface, ipArpDuplicateIpAddress, ipArpDuplicateMacAddress, ipAnyDuplicateAddress, labelIndexAllocFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger ip event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger ip event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger ip event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger ip event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger ip event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger ip event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger ip event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger ip event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1

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Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger ip event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger ip event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger ip event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

ipsec event *keyword*

Synopsis	Enter the **ipsec** list instance
Context	**configure** log event-trigger ipsec event *keyword*
Tree	ipsec
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger ipsec event *keyword*
Tree	ipsec
Options	tIPsecRUTnlFailToCreate, tIPsecRUSAFailToAddRoute, tIPsecBfdIntfSessStateChgd, tIPsecRadAcctPlcyFailure, tIPSecTrustAnchorPrfOprChg, tIPsecTunnelEncapIpMtuTooSmall, tIPsecRuTnlEncapIpMtuTooSmall, tmnxSecNotifCmptedCertHashChngd, tmnxSecNotifCmptedCertChnChngd, tmnxSecNotifSendChnNotInCmptChn, tmnxIPsecTunnelOperStateChange, tmnxIPsecGWOperStateChange, tIPsecRUTnlRemoved, tIPsecTunnelProtocolFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger ipsec event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** log event-trigger ipsec event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger ipsec event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger ipsec event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger ipsec event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger ipsec event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger ipsec event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger ipsec event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** log event-trigger ipsec event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger ipsec event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger ipsec event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isis event *keyword*

Synopsis	Enter the **isis** list instance
Context	**configure** log event-trigger isis event *keyword*
Tree	isis
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger isis event *keyword*
Tree	isis
Options	vRtrIsisSpbNbrMultAdjExists, vRtrIsisSpbNbrMultAdjExistsClear, vRtrSpbEctFidCfgChg, tmnxIsisDatabaseOverload, tmnxIsisManualAddressDrops, tmnxIsisCorruptedLSPDetected, tmnxIsisMaxSeqExceedAttempt, tmnxIsisIDLenMismatch, tmnxIsisMaxAreaAddrsMismatch, tmnxIsisOwnLSPPurge, tmnxIsisSequenceNumberSkip, tmnxIsisAutTypeFail, tmnxIsisAuthFail, tmnxIsisVersionSkew, tmnxIsisAreaMismatch, tmnxIsisRejectedAdjacency, tmnxIsisLSPTooLargeToPropagate, tmnxIsisOrigLSPBufSizeMismatch, tmnxIsisProtoSuppMismatch, tmnxIsisAdjacencyChange, tmnxIsisCircIdExhausted, tmnxIsisAdjRestartStatusChange, tmnxIsisLdpSyncTimerStarted, tmnxIsisLdpSyncExit, tmnxIsisExportLimitReached, tmnxIsisExportLimitWarning, tmnxIsisRoutesExpLmtDropped, tmnxIsisFailureDisabled, tmnxIsisSidError, tmnxIsisSidNotInLabelRange, tmnxIsisRejectedAdjacencySid, tmnxIsisLSPPurge, tmnxIsisPfxLimitOverloadWarning, tmnxIsisAdjBfdSessionSetupFail, tmnxIsisSrgbBadLabelRange, tmnxIsisCircMtuTooLow, tmnxIsisRejectedAdjacencySet, tmnxIsisCorruptRemainingLifetime, tmnxIsisSidStatsIndexAlloc,

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	tmnxIsisFaOperParticipationDown, tmnxIsisRejectedEndXSid, tmnxIsisRejectedPgId, tmnxIsisSrv6LocError
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger isis event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger isis event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger isis event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry

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Context	**configure** log event-trigger isis event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger isis event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger isis event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger isis event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

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value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger isis event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger isis event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger isis event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger isis event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

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l2tp event *keyword*

Synopsis	Enter the **l2tp** list instance
Context	**configure** log event-trigger l2tp event *keyword*
Tree	l2tp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger l2tp event *keyword*
Tree	l2tp
Options	tmnxL2tpPeerUnreachable, tmnxL2tpIsaMdaVRtrStateChange, tmnxL2tpLnsSePppSessionFailure, tmnxL2tpVappVRtrStateChange, tmnxL2tpTunnelBlacklisted, tmnxL2tpTunnelSelBlacklistFull, tmnxL2tpLnsPppNcpFailure, tmnxL2tpApFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger l2tp event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** log event-trigger l2tp event *keyword* description *string*
Tree	description

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String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger l2tp event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger l2tp event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger l2tp event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

debounce

Synopsis	Enter the **debounce** context

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Context	**configure** log event-trigger l2tp event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger l2tp event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger l2tp event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** log event-trigger l2tp event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger l2tp event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger l2tp event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lag event *keyword*

Synopsis	Enter the **lag** list instance
Context	**configure** log event-trigger lag event *keyword*
Tree	lag
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger lag event *keyword*
Tree	lag
Options	DynamicCostOn, DynamicCostOff, LagPortAddFailed, LagSubGroupSelected, LagPortAddFailureCleared, LagStateEvent, tLagMemberStateEvent, tmnxLagBfdMemStateChanged, tLagAdaptiveLoadbalancingChanged
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger lag event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger lag event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger lag event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger lag event *keyword* entry *number*
Tree	entry
Range	1 to 1500

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger lag event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger lag event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger lag event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response

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Context	**configure** log event-trigger lag event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger lag event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger lag event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger lag event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

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ldap event *keyword*

Synopsis	Enter the **ldap** list instance
Context	**configure** log event-trigger ldap event *keyword*
Tree	ldap
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger ldap event *keyword*
Tree	ldap
Options	tmnxLdapOperStateChange, tmnxLdapServerOperStateChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger ldap event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger ldap event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger ldap event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger ldap event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger ldap event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger ldap event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

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time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger ldap event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger ldap event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger ldap event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger ldap event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1

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Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger ldap event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

ldp event *keyword*

Synopsis	Enter the **ldp** list instance
Context	**configure** log event-trigger ldp event *keyword*
Tree	ldp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger ldp event *keyword*
Tree	ldp
Options	vRtrLdpStateChange, vRtrLdpGroupIdMismatch, vRtrLdpNgIpv4InstStateChange, vRtrLdpNgIpv6InstStateChange, vRtrLdpNgIfStateChange, vRtrLdpNgInetIfStateChange, vRtrLdpNgTargPeerStateChange, vRtrLdpNgSessionStateChange, vRtrLdpNgSessMaxFecThresChanged, vRtrLdpNgSessMaxFecLimitReached, vRtrLdpNgResourceExhaustion, vRtrLdpNgAddrFecCommMismatch
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger

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Context	**configure** log event-trigger ldp event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger ldp event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger ldp event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger ldp event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger ldp event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger ldp event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger ldp event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger ldp event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** log event-trigger ldp event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger ldp event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger ldp event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

li event *keyword*

Synopsis	Enter the **li** list instance
Context	**configure** log event-trigger li event *keyword*
Tree	li
Introduced	16.0.R1
Platforms	All

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event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger li event *keyword*
Tree	li
Options	sbiBootLiConfig, sourceEnabled, sourceDisabled, destinationEnabled, destinationDisabled, sourceSapChange, sourceSubscriberChange, tMirrorSourceIPFltrChangeReject, tMirrorSourceMacFltrChangeReject, tMirrorSourceFilterAssignReject, tMirrorDestinationChangeReject, tMirrorSourceFilterOverruled, tMirrorSourceFilterAssignWarn, tMirrorFilterAssignToSapWarn, tMirrorFilterAssignToSdpWarn, tMirrorFilterAssignToItfWarn, tMirrorSourceLiFilterChanged, tMirrorSourceLiSubProblem, tMirrorSourceIPv6FltrChangeRej, tMirrorLiNatLsnSubOperStateCh, tMirrorLiNatL2awSubOperStateCh, tMirrorLiNat64SubOperStateCh, tMirrorLiX2Alarm, tFltrLiRsvdBlockRangeChangeEvent, tMirrorLiSrcPortLicInvalid, tMirrorLiXIfLicenseInvalid, cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, ssh_user_login, ssh_user_logout, ssh_user_login_failed, ssh_user_login_max_attempts, cli_user_io, snmp_user_set, cli_config_io, cli_unauth_user_io, cli_unauth_config_io, grpc_user_login, grpc_user_logout, grpc_user_login_failed, grpc_user_login_max_attempts, host_snmp_attempts, radiusFailed, netconf_user_login, netconf_user_logout, netconf_user_login_failed, netconf_user_login_max_attempts, mdSaveCommitHistoryFailed, sbiBootMdReadCommitHistoryFailed, ssiSaveConfigSucceeded, ssiSaveConfigFailed, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, mdLiConfigChange, ssiSyncConfigOK, ssiSyncConfigFailed, md_cli_io, md_cli_unauth_io, tmnxClear, netconf_auth, netconf_unauth, grpc_auth, grpc_unauth
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger li event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** log event-trigger li event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger li event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger li event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger li event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1

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Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger li event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger li event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger li event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger li event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80

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Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger li event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger li event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

lldp event *keyword*

Synopsis	Enter the **lldp** list instance
Context	**configure** log event-trigger lldp event *keyword*
Tree	lldp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger lldp event *keyword*
Tree	lldp

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Options	lldpRemTablesChange, tmnxLldpRemEntryPeerAdded, tmnxLldpRemEntryPeerUpdated, tmnxLldpRemEntryPeerRemoved, tmnxLldpRemManAddrEntryAdded, tmnxLldpRemManAddrEntryRemoved
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger lldp event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger lldp event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger lldp event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

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[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger lldp event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger lldp event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger lldp event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger lldp event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1

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Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger lldp event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger lldp event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger lldp event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger lldp event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*

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Introduced	16.0.R1
Platforms	All

logger event *keyword*

Synopsis	Enter the **logger** list instance
Context	**configure** log event-trigger logger event *keyword*
Tree	logger
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger logger event *keyword*
Tree	logger
Options	STARTED, tmnxLogTraceError, tmnxLogSpaceContention, tmnxLogAdminLocFailed, tmnxLogBackupLocFailed, tmnxLogFileRollover, tmnxLogFileDeleted, tmnxClear, tmnxTestEvent, tmnxLogEventThrottled, tmnxSysLogTargetProblem, tmnxLogAccountingDataLoss, tmnxStdEventsReplayed, tmnxLogOnlyEventThrottled, tmnxLogEventOverrun, tmnxLogOnlyEventOverrun
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger logger event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** log event-trigger logger event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger logger event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger logger event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger logger event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

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debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger logger event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger logger event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger logger event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger logger event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger logger event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger logger event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

macsec event *keyword*

Synopsis	Enter the **macsec** list instance
Context	**configure** log event-trigger macsec event *keyword*
Tree	macsec
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger macsec event *keyword*
Tree	macsec
Options	tmnxMacsecConfiguredPortCA, tmnxMacsecUnconfiguredPortCA, tmnxMacsecEnabledPort, tmnxMacsecDisabledPort, tmnxMacsecMaxPeerLimitExceeded, tmnxMkaSessionEstablished, tmnxMkaPskRollover, tmnxMkaSessionEnded, tmnxMkaOperStateChanged, tmnxMacsecMaxPeerLimitCleared, tmnxMacsecCaCreate, tmnxMacsecSakCreate, tmnxMacsecSakInstalledRx, tmnxMacsecSakInstalledTx,

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	tmnxMacsecMkaReplayAttemptDisc, tmnxMacsecDpReplayAttempt, tmnxMacsecSakDelete
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger macsec event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger macsec event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger macsec event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry

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Context	**configure** log event-trigger macsec event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger macsec event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger macsec event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger macsec event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

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value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger macsec event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger macsec event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger macsec event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger macsec event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1

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Platforms	All

mc-redundancy event *keyword*

Synopsis	Enter the **mc-redundancy** list instance
Context	**configure** log event-trigger mc-redundancy event *keyword*
Tree	mc-redundancy
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger mc-redundancy event *keyword*
Tree	mc-redundancy
Options	tmnxMcRedundancyPeerStateChanged, tmnxMcRedundancyMismatchDetected, tmnxMcRedundancyMismatchResolved, tmnxMcPeerSyncStatusChanged, tmnxMcSyncClientAlarmRaised, tmnxMcSyncClientAlarmCleared, tmnxSrrpSubnetMismatch, tmnxSrrpSubnetMismatchCleared, tmnxSrrpInstanceIdMismatch, tmnxSrrpSapMismatch, tmnxSrrpSapTagMismatch, tmnxSrrpRedIfMismatch, tmnxSrrpDualMaster, tmnxMcLagInfoLagChanged, tmnxSrrpSystemIpNotSet, tmnxMcRingOperStateChanged, tmnxMcRingInbCtrlOperStateChgd, tmnxMcRingNodeLocOperStateChgd, tmnxMcSyncClockSkewRaised, tmnxMcSyncClockSkewCleared, tmnxSrrpDuplicateSubIfAddress, tmnxMcPeerRingsOperStateChanged, tmnxSrrpTrapNewMaster, tmnxSrrpBecameBackup, srrpPacketDiscarded, tmnxSrrpBfdIntfSessStateChgd, tmnxMcPeerEPBfdSessionOpen, tmnxMcPeerEPBfdSessionClose, tmnxMcPeerEPBfdSessionUp, tmnxMcPeerEPBfdSessionDown, tmnxMcPeerEPOperDown, tmnxMcPeerEPOperUp, tmnxMCEPSessionPsvModeEnabled, tmnxMCEPSessionPsvModeDisabled, tMcPeerIPsecTnlGrpMasterStateChg, tMcPeerIPsecTnlGrpProtStatusChg, tmnxMcOmcrStatFailedChanged, tmnxMcOmcrClientNumEntriesHigh, tmnxSrrpOperDownInvalidMac, tmnxSrrpOperDownInvalidMacClear, tmnxSrrpPrivRetailMismatch, tMcIPsecDomainActivityStateChg, tMcIpsecDomainProtStatusChg
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger mc-redundancy event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger mc-redundancy event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger mc-redundancy event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger mc-redundancy event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger mc-redundancy event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger mc-redundancy event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger mc-redundancy event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger mc-redundancy event *keyword* entry *number* debounce value *number*
Tree	value

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Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger mc-redundancy event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger mc-redundancy event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger mc-redundancy event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

mcpath event *keyword*

Synopsis	Enter the **mcpath** list instance

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Context	**configure** log event-trigger mcpath event *keyword*
Tree	mcpath
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger mcpath event *keyword*
Tree	mcpath
Options	tmnxMcPathSrcGrpBlackHole, tmnxMcPathSrcGrpBlackHoleCleared, tmnxMcPathAvailBwLimitExceeded, tmnxMcPathAvailBwLimitCleared
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger mcpath event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger mcpath event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger mcpath event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger mcpath event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger mcpath event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger mcpath event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

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time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger mcpath event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger mcpath event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger mcpath event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger mcpath event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*

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Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger mcpath event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

mgmt-core event *keyword*

Synopsis	Enter the **mgmt-core** list instance
Context	**configure** log event-trigger mgmt-core event *keyword*
Tree	mgmt-core
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger mgmt-core event *keyword*
Tree	mgmt-core
Options	none, mdConfigChange, mdOcConfigChange, mdBofConfigChange, mdDebugConfigChange, asyncOperationStatusChange, syncOperationStatusChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger mgmt-core event *keyword* admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger mgmt-core event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger mgmt-core event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger mgmt-core event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger mgmt-core event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger mgmt-core event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger mgmt-core event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger mgmt-core event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15

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Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger mgmt-core event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger mgmt-core event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger mgmt-core event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

mirror event *keyword*

Synopsis	Enter the **mirror** list instance
Context	**configure** log event-trigger mirror event *keyword*
Tree	mirror

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Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger mirror event *keyword*
Tree	mirror
Options	sourceEnabled, sourceDisabled, destinationEnabled, destinationDisabled, sourceIpFilterChange, sourceMacFilterChange, sourceSapChange, sourceSubscriberChange, tMirrorSourceIpv6FilterChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger mirror event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger mirror event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger mirror event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger mirror event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger mirror event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger mirror event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

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time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger mirror event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger mirror event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger mirror event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger mirror event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1

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Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger mirror event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

mld event *keyword*

Synopsis	Enter the **mld** list instance
Context	**configure** log event-trigger mld event *keyword*
Tree	mld
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger mld event *keyword*
Tree	mld
Options	vRtrMldIfRxQueryVerMismatch, vRtrMldIfCModeRxQueryMismatch, vRtrMldMaxGrpsLimitExceeded, vRtrMldMcacPlcyDropped, vRtrMldHostInstantiationFail, vRtrMldHostMaxGrpsLimitExceeded, vRtrMldHostMcacPlcyDropped, vRtrMldHostCModeRxQueryMismatch, vRtrMldHostRxQueryVerMismatch, vRtrMldHostMaxSrcsLimitExceeded, vRtrMldMaxSrcsLimitExceeded, vRtrMldGrpIfSapMaxGrpsLimExceed, vRtrMldGrpIfSapMaxSrcsLimExceed, vRtrMldGrpIfSapMcacPlcyDropped, vRtrMldGrpIfSapCModeRxQueryMism, vRtrMldGrpIfSapRxQueryVerMism, vRtrMldHostMaxGrpSrcsLimitExcd, vRtrMldMaxGrpSrcsLimitExceeded, vRtrMldGrpIfSapMaxGrpSrcLimExcd, vRtrMldHostQryIntervalConflict, vRtrMldSlaProfInstMcacPlcyDrop
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger mld event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger mld event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger mld event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger mld event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger mld event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger mld event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger mld event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger mld event *keyword* entry *number* debounce value *number*
Tree	value

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Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger mld event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger mld event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger mld event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

mld-snooping event *keyword*

Synopsis	Enter the **mld-snooping** list instance
Context	**configure** log event-trigger mld-snooping event *keyword*

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Tree	mld-snooping
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger mld-snooping event *keyword*
Tree	mld-snooping
Options	sapMldSnpgGrpLimitExceeded, sdpBndMldSnpgGrpLimitExceeded, sapMldSnpgMcsFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger mld-snooping event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger mld-snooping event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger mld-snooping event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger mld-snooping event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger mld-snooping event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger mld-snooping event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

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time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger mld-snooping event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger mld-snooping event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger mld-snooping event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger mld-snooping event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*

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Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger mld-snooping event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

mpls event *keyword*

Synopsis	Enter the **mpls** list instance
Context	**configure** log event-trigger mpls event *keyword*
Tree	mpls
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger mpls event *keyword*
Tree	mpls
Options	mplsXCUp, mplsXCDown, mplsTunnelUp, mplsTunnelDown, mplsTunnelRerouted, mplsTunnelReoptimized, vRtrMplsStateChange, vRtrMplsIfStateChange, vRtrMplsLspUp, vRtrMplsLspDown, vRtrMplsLspPathUp, vRtrMplsLspPathDown, vRtrMplsLspPathRerouted, vRtrMplsLspPathResignaled, vRtrMplsP2mpInstanceUp, vRtrMplsP2mpInstanceDown, vRtrMplsS2lSubLspUp, vRtrMplsS2lSubLspDown, vRtrMplsS2lSubLspRerouted, vRtrMplsS2lSubLspResignaled, vRtrMplsLspPathSoftPreempted, vRtrMplsLspPathLstFillReoptElig, vRtrMplsP2mpInstanceResignaled, vRtrMplsResignalTimerExpired, vRtrMplsLspPathMbbStatusEvent, vRtrMplsLspSwitchStbyFailure, vRtrMplsLspActivePathChanged, vRtrMplsXCBundleChange, vRtrMplsNodeInIgpOverload, vRtrMplsIPv6StateChange, vRtrMplsIfIPv6StateChange, vRtrMplsLspResourceExhaustion, vRtrMplsLspManualSwitchFailure,

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	vRtrMplsLspPathManualDegStateChg, vRtrMplsS2lSubLspPreempted, vRtrMplsNodeInIgpOverloadIpv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger mpls event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger mpls event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger mpls event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry

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Context	**configure** log event-trigger mpls event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger mpls event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger mpls event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger mpls event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

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value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger mpls event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger mpls event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger mpls event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger mpls event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

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mpls-tp event *keyword*

Synopsis	Enter the **mpls-tp** list instance
Context	**configure** log event-trigger mpls-tp event *keyword*
Tree	mpls-tp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger mpls-tp event *keyword*
Tree	mpls-tp
Options	vRtrMplsTpLspRevertMismatchAlarm, vRtrMplsTpLspRevertMismatchClear, vRtrMplsTpLspPtTypeMismatchAlarm, vRtrMplsTpLspPtTypeMismatchClear, vRtrMplsTpLspActivePathUp, vRtrMplsTpLspActivePathChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger mpls-tp event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger mpls-tp event *keyword* description *string*
Tree	description
String Length	1 to 80

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Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger mpls-tp event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger mpls-tp event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger mpls-tp event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger mpls-tp event *keyword* entry *number* debounce

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Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger mpls-tp event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger mpls-tp event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger mpls-tp event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry

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Context	**configure** log event-trigger mpls-tp event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger mpls-tp event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

msdp event *keyword*

Synopsis	Enter the **msdp** list instance
Context	**configure** log event-trigger msdp event *keyword*
Tree	msdp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger msdp event *keyword*
Tree	msdp
Options	msdpEstablished, msdpBackwardTransition, tmnxMsdpNgActSrcLimExcd, tmnxMsdpNgPeerActSrcLimExcd, tmnxMsdpNgRPFFailure, tmnxMsdpNgSourceSrcActMsgsExcd, tmnxMsdpNgGroupSrcActMsgsExcd
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger msdp event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger msdp event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger msdp event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger msdp event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger msdp event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger msdp event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger msdp event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger msdp event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1

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Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger msdp event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger msdp event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger msdp event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

nat event *keyword*

Synopsis	Enter the **nat** list instance
Context	**configure** log event-trigger nat event *keyword*
Tree	nat
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger nat event *keyword*
Tree	nat
Options	tmnxNatPlL2AwBlockUsageHigh, tmnxNatIsaMemberSessionUsageHigh, tmnxNatPlLsnMemberBlockUsageHigh, tmnxNatL2AwSubIcmpPortUsageHigh, tmnxNatL2AwSubUdpPortUsageHigh, tmnxNatL2AwSubTcpPortUsageHigh, tmnxNatL2AwSubSessionUsageHigh, tmnxNatPlBlockAllocationLsn, tmnxNatPlBlockAllocationL2Aw, tmnxNatResourceProblemDetected, tmnxNatResourceProblemCause, tmnxNatPlAddrFree, tmnxNatPlLsnRedActiveChanged, tmnxNatPcpSrvStateChanged, tmnxNatMdaActive, tmnxNatLsnSubBlksFree, tmnxNatDetPlcyChanged, tmnxNatMdaDetectsLoadSharingErr, tmnxNatIsaGrpOperStateChanged, tmnxNatIsaGrpIsDegraded, tmnxNatLsnSubIcmpPortUsgHigh, tmnxNatLsnSubUdpPortUsgHigh, tmnxNatLsnSubTcpPortUsgHigh, tmnxNatLsnSubSessionUsgHigh, tmnxNatInAddrPrefixBlksFree, tmnxNatFwd2EntryAdded, tmnxNatFwd2OperStateChanged, tmnxNatVrtrOutDnatOnlyRoutesHigh, tmnxNatMapRuleChange, tmnxNatMaxNbrSubsOrHostsExceeded, tmnxNatNbrSubsOrHostsBelowThrsh, tmnxNatVappActive, tmnxNatVappDetectsLoadSharingErr, tmnxNatDetPfxMapOperStateChanged, tmnxNatDetMap2OperStateChanged, tmnxNatDynamicConfigMismatch, tmnxNatPlL2AwMembrBlockUsageHigh, tmnxNatPlMemberExtBlockUsageHigh
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger nat event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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description *string*

Synopsis	Text description
Context	**configure** log event-trigger nat event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger nat event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger nat event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger nat event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger nat event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger nat event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger nat event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** log event-trigger nat event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger nat event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger nat event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ntp event *keyword*

Synopsis	Enter the **ntp** list instance
Context	**configure** log event-trigger ntp event *keyword*
Tree	ntp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger ntp event *keyword*
Tree	ntp
Options	tmnxNtpAuthMismatch, tmnxNtpNoServersAvail, tmnxNtpServersAvail, tmnxNtpOperChange, tmnxNtpServerChange
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger ntp event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger ntp event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger ntp event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger ntp event *keyword* entry *number*
Tree	entry
Range	1 to 1500

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger ntp event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger ntp event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger ntp event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response

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Context	**configure** log event-trigger ntp event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger ntp event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger ntp event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger ntp event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

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oam event *keyword*

Synopsis	Enter the **oam** list instance
Context	**configure** log event-trigger oam event *keyword*
Tree	oam
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger oam event *keyword*
Tree	oam
Options	tmnxOamPingProbeFailedV3, tmnxOamPingTestFailedV3, tmnxOamPingTestCompletedV3, tmnxAncpLoopbackTestCompleted, tmnxAncpLoopbackTestCompletedL, tmnxOamTrPathChange, tmnxOamTrTestFailed, tmnxOamTrTestCompleted, svcIdInvalid, svcIdWrongType, tmnxOamLdpTtraceAutoDiscState, tmnxOamLdpTtraceFecProbeState, tmnxOamLdpTtraceFecDisStatus, tmnxOamLdpTtraceFecPFailUpdate, tmnxOamSaaThreshold, tmnxOamDiagTestCompleted, tmnxTwampSrvInactivityTimeout, tmnxTwampSrvMaxConnsExceeded, tmnxTwampSrvPfxMaxConnsExceeded, tmnxTwampSrvMaxSessExceeded, tmnxTwampSrvPfxMaxSessExceeded, tmnxTwampRflInactivityTimeout, tmnxOamPmThrRaise, tmnxOamPmThrClear, tmnxOamSathSvcTestCompleted, tmnxOamSathSvcStrmCompleted
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger oam event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** log event-trigger oam event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger oam event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger oam event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger oam event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1

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Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger oam event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger oam event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger oam event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger oam event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80

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Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger oam event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger oam event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

openflow event *keyword*

Synopsis	Enter the **openflow** list instance
Context	**configure** log event-trigger openflow event *keyword*
Tree	openflow
Introduced	16.0.R2
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger openflow event *keyword*
Tree	openflow
Options	tmnxOFFlowEntryInsertFailed

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Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger openflow event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R2
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger openflow event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R2
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger openflow event *keyword* entry *number*
Tree	entry
Introduced	16.0.R2
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger openflow event *keyword* entry *number*

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Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger openflow event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R2
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger openflow event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R2
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger openflow event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R2
Platforms	All

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value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger openflow event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R2
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger openflow event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R2
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger openflow event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R2
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger openflow event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R2
Platforms	All

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ospf event *keyword*

Synopsis	Enter the **ospf** list instance
Context	**configure** log event-trigger ospf event *keyword*
Tree	ospf
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger ospf event *keyword*
Tree	ospf
Options	tmnxOspfVirtIfStateChange, tmnxOspfVirtNbrStateChange, tmnxOspfVirtIfConfigError, tmnxOspfVirtIfAuthFailure, tmnxOspfVirtIfRxBadPacket, tmnxOspfAreaOriginateLsa, tmnxOspfAreaMaxAgeLsa, tmnxOspfLsdbOverflow, tmnxOspfLsdbApproachingOverflow, tmnxOspfNssaTranslatorStatusChg, tmnxOspfRestartStatusChange, tmnxOspfVirtNbrRestartHlprStsChg, tmnxOspfSpfRunsStopped, tmnxOspfSpfRunsRestarted, tmnxOspfOverloadEntered, tmnxOspfOverloadExited, tmnxOspfAsOriginateLsa, tmnxOspfAsMaxAgeLsa, tmnxOspfShamIfStateChange, tmnxOspfShamNbrStateChange, tmnxOspfShamIfConfigError, tmnxOspfShamIfAuthFailure, tmnxOspfShamIfRxBadPacket, tmnxOspfShamNbrRestartHlprStsChg, tmnxOspfFailureDisabled, tmnxOspfExportLimitReached, tmnxOspfExportLimitWarning, tmnxOspfRoutesExpLmtDropped, tmnxOspfNgNbrStateChange, tmnxOspfNgIfConfigError, tmnxOspfNgIfAuthFailure, tmnxOspfNgIfRxBadPacket, tmnxOspfNgIfStateChange, tmnxOspfNgNbrRestartHlprStsChg, tmnxOspfNgLinkOriginateLsa, tmnxOspfNgLinkMaxAgeLsa, tmnxOspfNgLdpSyncTimerStarted, tmnxOspfNgLdpSyncExit, tmnxOspfSrSidError, tmnxOspfSrSidNotInLabelRange, tmnxOspfOverloadWarning, tmnxOspfRejectedAdjacencySid, tmnxOspfAdjBfdSessionSetupFail, tmnxOspfSrgbBadLabelRange, tmnxOspfRejectedAdjacencySet, tmnxOspfSidStatsIndexAlloc, tmnxOspfDynHostnameDuplicate, tmnxOspfDynHostnameInconsistent, tmnxOspfFaOperParticipationDown, tmnxOspfNgNbrStrictBfdBlocked
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger

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Context	**configure** log event-trigger ospf event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger ospf event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger ospf event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger ospf event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger ospf event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger ospf event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger ospf event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger ospf event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** log event-trigger ospf event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger ospf event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger ospf event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

pcap event *keyword*

Synopsis	Enter the **pcap** list instance
Context	**configure** log event-trigger pcap event *keyword*
Tree	pcap
Introduced	16.0.R1
Platforms	All

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event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger pcap event *keyword*
Tree	pcap
Options	tmnxPcapFileError, tmnxPcapBufferFull, tmnxPcapBufferReadWriteFailure, tmnxPcapSoftwareFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger pcap event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger pcap event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger pcap event *keyword* entry *number*
Tree	entry

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Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger pcap event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger pcap event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger pcap event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger pcap event *keyword* entry *number* debounce time *number*

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Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger pcap event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger pcap event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger pcap event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

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handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger pcap event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

pcep event *keyword*

Synopsis	Enter the **pcep** list instance
Context	**configure** log event-trigger pcep event *keyword*
Tree	pcep
Introduced	22.2.R1
Platforms	All

event *keyword*

Synopsis	PCEP module events
Context	**configure** log event-trigger pcep event *keyword*
Tree	pcep
Options	tmnxPcepPccPeerStateChange
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger pcep event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	22.2.R1

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Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger pcep event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	22.2.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger pcep event *keyword* entry *number*
Tree	entry
Introduced	22.2.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger pcep event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger pcep event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable

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Default	enable
Introduced	22.2.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger pcep event *keyword* entry *number* debounce
Tree	debounce
Introduced	22.2.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger pcep event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	22.2.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger pcep event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	22.2.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger pcep event *keyword* entry *number* description *string*

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Tree	description
String Length	1 to 80
Introduced	22.2.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger pcep event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	22.2.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger pcep event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	22.2.R1
Platforms	All

pfcp event *keyword*

Synopsis	Enter the **pfcp** list instance
Context	**configure** log event-trigger pfcp event *keyword*
Tree	pfcp
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	PFCP events
Context	**configure** log event-trigger pfcp event *keyword*

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Tree	pfcp
Options	tmnxPfcpInvalidIe
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger pfcp event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** log event-trigger pfcp event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger pfcp event *keyword* entry *number*
Tree	entry
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger pfcp event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger pfcp event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger pfcp event *keyword* entry *number* debounce
Tree	debounce
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger pfcp event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	23.7.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger pfcp event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** log event-trigger pfcp event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger pfcp event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger pfcp event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*

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Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pim event *keyword*

Synopsis	Enter the **pim** list instance
Context	**configure** log event-trigger pim event *keyword*
Tree	pim
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger pim event *keyword*
Tree	pim
Options	vRtrPimNgIfNeighborLoss, vRtrPimNgIfNeighborUp, vRtrPimNgInvalidJoinPrune, vRtrPimNgInvalidRegister, vRtrPimNgGrpInSSMRange, vRtrPimNgBSRStateChange, vRtrPimNgHelloDropped, vRtrPimNgSGLimitExceeded, vRtrPimNgReplicationLmtExceeded, vRtrPimNgMDTLimitExceeded, vRtrPimNgMaxGrpsLimitExceeded, vRtrPimNgDataMtReused, vRtrPimNgMcacPlcyDropped, vRtrPimNgInvalidIPmsiTunnel, vRtrPimNgMaxGraftRetry, vRtrPimNgBierInbInvSD, vRtrPimNgBierInbInvBfrId, vRtrPimNgUmhBMonFastFailPriToStb, vRtrPimNgUmhBMonFastFailStbToPri, vRtrPimNgInstMaxNbrReached, vRtrPimNgIfMaxNbrReached
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger pim event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1

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Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger pim event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger pim event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger pim event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger pim event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable

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Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger pim event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger pim event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger pim event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger pim event *keyword* entry *number* description *string*

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Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger pim event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger pim event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

pim-snooping event *keyword*

Synopsis	Enter the **pim-snooping** list instance
Context	**configure** log event-trigger pim-snooping event *keyword*
Tree	pim-snooping
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger pim-snooping event *keyword*

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Tree	pim-snooping
Options	tmnxPimSnpgIfNeighborLoss, tmnxPimSnpgIfNeighborUp, tmnxPimSnpgSGLimitExceeded, tmnxPimSnpgSnoopModeChanged, tmnxPimSnpgIfMaxNbrReached, tmnxPimSnpgMaxNbrReached
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger pim-snooping event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger pim-snooping event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger pim-snooping event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

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[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger pim-snooping event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger pim-snooping event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger pim-snooping event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger pim-snooping event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800

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Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger pim-snooping event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger pim-snooping event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger pim-snooping event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry

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Context	**configure** log event-trigger pim-snooping event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

port event *keyword*

Synopsis	Enter the **port** list instance
Context	**configure** log event-trigger port event *keyword*
Tree	port
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger port event *keyword*
Tree	port
Options	sonetSDHAlarmSet, sonetSDHAlarmClear, sonetSDHChannelAlarmSet, sonetSDHChannelAlarmClear, SFPInserted, SFPRemoved, SFPStatusFailure, portError, ds3AlarmSet, ds3AlarmClear, ds1AlarmSet, ds1AlarmClear, etherAlarmSet, etherAlarmClear, ds1LoopbackStart, ds1LoopbackStop, ds3LoopbackStart, ds3LoopbackStop, sdhLoopbackStart, sdhLoopbackStop, etherLoopDetected, etherLoopCleared, etherSpeedNotCompatible, etherDuplexNotCompatible, etherIngressRateCfgNotCompatible, digitalDiagnosticMonitorFailed, SFPStatusDDMCorrupt, SFPStatusReadError, SFPStatusUnsupported, dsxClockSyncStateChange, tmnxPortUnsupportedFunction, otuAlarms, tPortAccEgrQGrpHostMatchFailure, tPortEgrVPortHostMatchFailure, digitalDiagnosticMonitorCleared, tmnxEqSonetClockSrcNotCompatible, tmnxEqSonetSfThreshNotCompatible, tmnxEqSonetFramingNotCompatible, tmnxResvCbsPoolThreshGreen, tmnxResvCbsPoolThreshAmber, tmnxResvCbsPoolThreshRed, tmnxEqPortEtherCrcAlarm, tmnxEqPortEtherCrcAlarmClear, tmnxEqPortEtherInternalAlarm, tmnxEqPortEtherInternalAlarmClr, tmnxEqCohOptPortAlarm, tmnxEqPortEtherSymMonAlarm, tmnxEqPortEtherSymMonAlarmClear, SFPStatusCulprit, SFPStatusBlocked, SFPStatusOperational, tmnxRS232ControlLeadSignalChg, tmnxRS232SquelchStatusChange, tmnxRS232SquelchResetIssued, tmnxCellularBearerCreated, tmnxCellularBearerDeleted, tmnxCellularBearerModified, tmnxEqPortEtherEgressRateChange, tmnxCellularNoServiceReset,

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	tmnxCellularActiveSimCardChange, tmnxPortEtherLoopbackStart, tmnxPortEtherLoopbackStop, tmnxPortGnssStatusChange, tmnxWlanNetworkConnected, tmnxWlanNetworkDisconnected, tmnxPortAUIReset, tmnxCellPortCbsdRegistered, tmnxCellPortCbsdUnregistered, tmnxCellPortCbsdGranted, tmnxCellPortCbsdAuthorized, tmnxCellPortCbsdTransDown, tmnxHwAggShpSchedOperColorGreen, tmnxHwAggShpSchedOperColorAmber, tmnxHwAggShpSchedOperColorRed, tmnxCellularRssiAlarm, tmnxCellularRssiAlarmClear, SFPStatusInvalidFormFactor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger port event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger port event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger port event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1

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Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger port event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger port event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger port event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger port event *keyword* entry *number* debounce time *number*
Tree	time

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Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger port event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger port event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger port event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry

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Context	**configure** log event-trigger port event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

pppoe event *keyword*

Synopsis	Enter the **pppoe** list instance
Context	**configure** log event-trigger pppoe event *keyword*
Tree	pppoe
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger pppoe event *keyword*
Tree	pppoe
Options	tmnxPppoeSessionFailure, tmnxPppoeNcpFailure, tmnxMlpppBundleIndicatorsChange, tmnxPppoeLacSteeringActive, tmnxPppoeLacSteeringStopped, tmnxPppoeLacSteeringFailed, tmnxPppoeMaxSessionsOvrExceeded
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger pppoe event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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description *string*

Synopsis	Text description
Context	**configure** log event-trigger pppoe event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger pppoe event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger pppoe event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger pppoe event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger pppoe event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger pppoe event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger pppoe event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** log event-trigger pppoe event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger pppoe event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger pppoe event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe-clnt event *keyword*

Synopsis	Enter the **pppoe-clnt** list instance
Context	**configure** log event-trigger pppoe-clnt event *keyword*
Tree	pppoe-clnt
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger pppoe-clnt event *keyword*
Tree	pppoe-clnt

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Options	tmnxPppoeClientSetupFailure, tmnxPppoeClientEchoTimeout, tmnxPppoeClientNcpFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger pppoe-clnt event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** log event-trigger pppoe-clnt event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger pppoe-clnt event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger pppoe-clnt event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger pppoe-clnt event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger pppoe-clnt event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger pppoe-clnt event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800

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Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger pppoe-clnt event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** log event-trigger pppoe-clnt event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger pppoe-clnt event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

handler *reference*

Synopsis	Event handler for EHS event trigger entry

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Context	**configure** log event-trigger pppoe-clnt event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ptp event *keyword*

Synopsis	Enter the **ptp** list instance
Context	**configure** log event-trigger ptp event *keyword*
Tree	ptp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger ptp event *keyword*
Tree	ptp
Options	tmnxPtpCardNotSupported, tmnxPtpCardNotSupportedClear, tmnxPtpMasterClockChangedEvent, tmnxPtpClockRecoveryStateChange, tmnxPtpOutOfResources, tmnxPtpOutOfResourcesClear, tmnxPtpDynamicChange, tmnxPtpPortNoTimestamping, tmnxPtpPortPtsfUnusable, tmnxPtpRequiresSystemReboot, tmnxPtpRequiresSystemRebootClear, tmnxPtpTimeRecoveryStateChange, tmnxPtpPeerNoTxTimestamping, tmnxPtpPeerNoTxTimestampingClear, tmnxPtpPeerNoRxTimestamping, tmnxPtpPeerNoRxTimestampingClear
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger ptp event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable

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Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** log event-trigger ptp event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger ptp event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger ptp event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger ptp event *keyword* entry *number* admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger ptp event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger ptp event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger ptp event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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description *string*

Synopsis	Text description
Context	**configure** log event-trigger ptp event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger ptp event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger ptp event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

python event *keyword*

Synopsis	Enter the **python** list instance
Context	**configure** log event-trigger python event *keyword*
Tree	python
Introduced	23.3.R2
Platforms	All

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event *keyword*

Synopsis	Python module events
Context	**configure** log event-trigger python event *keyword*
Tree	python
Options	tmnxPythonInterpreterRestarted
Notes	This element is part of a list key.
Introduced	23.3.R2
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger python event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	23.3.R2
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger python event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	23.3.R2
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger python event *keyword* entry *number*
Tree	entry
Introduced	23.3.R2
Platforms	All

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[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger python event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	23.3.R2
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger python event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	23.3.R2
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger python event *keyword* entry *number* debounce
Tree	debounce
Introduced	23.3.R2
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger python event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds

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Introduced	23.3.R2
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger python event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	23.3.R2
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger python event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	23.3.R2
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger python event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	23.3.R2
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger python event *keyword* entry *number* handler *reference*

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Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	23.3.R2
Platforms	All

radius event *keyword*

Synopsis	Enter the **radius** list instance
Context	**configure** log event-trigger radius event *keyword*
Tree	radius
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger radius event *keyword*
Tree	radius
Options	tmnxRadSrvPlcySrvOperStateCh, tmnxRadRouteDownloadFailed, tmnxRadAcctOnOngoing
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger radius event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** log event-trigger radius event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger radius event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger radius event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger radius event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

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debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger radius event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger radius event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger radius event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger radius event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger radius event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger radius event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

rip event *keyword*

Synopsis	Enter the **rip** list instance
Context	**configure** log event-trigger rip event *keyword*
Tree	rip
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger rip event *keyword*
Tree	rip
Options	ripPacketDiscarded, vRtrRipAuthTypeMismatch, vRtrRipAuthTypeFailure, vRtrRipInstanceShuttingDown, vRtrRipInstanceRestarted, vRtrRipInstanceExpLmtReached, vRtrRipInstanceExpLmtWarning, vRtrRipInstanceRtsExpLmtDropped, vRtrRipPeerBfdDown
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger rip event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger rip event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger rip event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger rip event *keyword* entry *number*
Tree	entry

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Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger rip event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger rip event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger rip event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

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value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger rip event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger rip event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger rip event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger rip event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

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ripng event *keyword*

Synopsis	Enter the **ripng** list instance
Context	**configure** log event-trigger ripng event *keyword*
Tree	ripng
Introduced	16.0.R3
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger ripng event *keyword*
Tree	ripng
Options	tmnxRipNgPacketDiscarded, tmnxRipNgAuthTypeMismatch, tmnxRipNgAuthFailure, tmnxRipNgInstShuttingDown, tmnxRipNgInstRestarted, tmnxRipNgInstExpLmtReached, tmnxRipNgInstExpLmtWarning, tmnxRipNgInstRtsExpLmtDropped, tmnxRipNgIfUcastAddrNotUsed, tmnxRipNgPeerBfdDown
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger ripng event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R3
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger ripng event *keyword* description *string*
Tree	description

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String Length	1 to 80
Introduced	16.0.R3
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger ripng event *keyword* entry *number*
Tree	entry
Introduced	16.0.R3
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger ripng event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger ripng event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R3
Platforms	All

debounce

Synopsis	Enter the **debounce** context

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Context	**configure** log event-trigger ripng event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R3
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger ripng event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R3
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger ripng event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R3
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger ripng event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R3
Platforms	All

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filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger ripng event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R3
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger ripng event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R3
Platforms	All

route-policy event *keyword*

Synopsis	Enter the **route-policy** list instance
Context	**configure** log event-trigger route-policy event *keyword*
Tree	route-policy
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger route-policy event *keyword*
Tree	route-policy
Options	trigPolicyPrevEval
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger route-policy event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger route-policy event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger route-policy event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger route-policy event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger route-policy event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger route-policy event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger route-policy event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response

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Context	**configure** log event-trigger route-policy event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger route-policy event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger route-policy event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger route-policy event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

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rpki event *keyword*

Synopsis	Enter the **rpki** list instance
Context	**configure** log event-trigger rpki event *keyword*
Tree	rpki
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger rpki event *keyword*
Tree	rpki
Options	tmnxRpkiNotifySession, tmnxRpkiStaleTimerExpiry
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger rpki event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger rpki event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger rpki event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger rpki event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger rpki event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger rpki event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

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time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger rpki event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger rpki event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger rpki event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger rpki event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1

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Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger rpki event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

rsvp event *keyword*

Synopsis	Enter the **rsvp** list instance
Context	**configure** log event-trigger rsvp event *keyword*
Tree	rsvp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger rsvp event *keyword*
Tree	rsvp
Options	vRtrRsvpStateChange, vRtrRsvpIfStateChange, vRtrRsvpIfNbrStateUp, vRtrRsvpIfNbrStateDown, vRtrRsvpPEFailOverPriToStdBy, vRtrRsvpPEFailOverStdByToPri
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger rsvp event *keyword* admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger rsvp event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger rsvp event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger rsvp event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry

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Context	**configure** log event-trigger rsvp event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger rsvp event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger rsvp event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger rsvp event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** log event-trigger rsvp event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger rsvp event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger rsvp event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

satellite event *keyword*

Synopsis	Enter the **satellite** list instance
Context	**configure** log event-trigger satellite event *keyword*
Tree	satellite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger satellite event *keyword*
Tree	satellite
Options	tmnxSatelliteOperStateChange, tmnxSatSyncIfTimRefSwitch, tmnxSatSyncIfTimSystemQuality, tmnxSatSyncIfTimRef1Quality, tmnxSatSyncIfTimRef2Quality, tmnxSatSyncIfTimHoldover, tmnxSatSyncIfTimHoldoverClear, tmnxSatSyncIfTimRef1Alarm, tmnxSatSyncIfTimRef1AlarmClear, tmnxSatSyncIfTimRef2Alarm, tmnxSatSyncIfTimRef2AlarmClear, tmnxSatLocalForwardStateChg, tmnxSatLocalForwardSapStateChg
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger satellite event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** log event-trigger satellite event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

entry [id] *number*

Synopsis	Enter the **entry** list instance

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Context	**configure** log event-trigger satellite event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger satellite event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger satellite event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger satellite event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger satellite event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger satellite event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** log event-trigger satellite event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger satellite event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger satellite event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

security event *keyword*

Synopsis	Enter the **security** list instance
Context	**configure** log event-trigger security event *keyword*
Tree	security
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger security event *keyword*
Tree	security
Options	cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, ssh_user_login, ssh_user_logout, ssh_user_login_failed, ssh_user_login_max_attempts, radiusOperStatusChange, user_disconnect, radiusSystemIpAddrNotSet, tacplusOperStatusChange, mafEntryMatch, ftp_transfer_successful, ftp_transfer_failed, enable_admin, host_snmp_attempts, SSH_server_preserve_key_fail, tacplusInetSrvrOperStatusChange, radiusInetServerOperStatusChange, tmnxKeyChainAuthFailure, tmnxCpmProtViolPort, tmnxCpmProtViolPortAgg, tmnxCpmProtViolIf, tmnxCpmProtViolSap, tmnxCpmProtViolMac, tmnxCpmProtViolVdoSvcClient, tmnxCpmProtViolVdoVrtrClient, tmnxMD5AuthFailure, tmnxCpmProtDefPolModified, tmnxCpmProtViolSdpBind, tmnxCpmProtExcdSdpBind, tmnxCpmProtExcdSapEcm, tmnxCpmProtExcdSdpBindEcm, tmnxPkiFileReadFailed, tmnxPkiCertVerificationFailed, tmnxCAProfileStateChange, tmnxCpmProtExcdSapIp, tmnxDcpFpDynPoolUsageHiAlmRaise, tmnxDcpFpDynPoolUsageHiAlmClear, tmnxDcpCardFpEventOvrflwClr, tmnxDcpCardSapEventOvrflwClr,

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tmnxDcpCardVrtrIfEventOvrflwClr, sapDcpStaticExcd, sapDcpDynamicExcd, sapDcpStaticHoldDownStart, sapDcpDynamicHoldDownStart, sapDcpStaticHoldDownEnd, sapDcpDynamicHoldDownEnd, sapDcpStaticConform, sapDcpDynamicConform, sapDcpLocMonExcd, sapDcpLocMonExcdDynResource, sapDcpLocMonExcdAllDynAlloc, sapDcpLocMonExcdAllDynFreed, sapDcpDynamicEnforceAlloc, sapDcpDynamicEnforceFreed, vRtrIfDcpStaticExcd, vRtrIfDcpDynamicExcd, vRtrIfDcpStaticHoldDownStart, vRtrIfDcpDynamicHoldDownStart, vRtrIfDcpStaticHoldDownEnd, vRtrIfDcpDynamicHoldDownEnd, vRtrIfDcpStaticConform, vRtrIfDcpDynamicConform, vRtrIfDcpLocMonExcd, vRtrIfDcpLocMonExcdDynResource, vRtrIfDcpLocMonExcdAllDynAlloc, vRtrIfDcpLocMonExcdAllDynFreed, vRtrIfDcpDynamicEnforceAlloc, vRtrIfDcpDynamicEnforceFreed, tmnxDcpCardFpEventOvrflw, tmnxDcpCardSapEventOvrflw, tmnxDcpCardVrtrIfEventOvrflw, tmnxPkiCAProfActnStatusChg, tmnxCpmProtViolSapOutProf, tmnxCpmProtViolIfOutProf, sysDNSSecFailedAuthentication, tmnxCpmProtExcdSdpBindIp, tmnxSecComputeCertChainFailure, tmnxCpmProtViolSdpBindOutProf, tmnxSecNotifKeyChainExpired, tmnxSysLicenseInvalid, tmnxSysLicenseExpiresSoon, tmnxPkiCAProfRevokeChkWarning, tmnxCAProfUpDueToRevokeChkCrlOpt, tmnxPkiCertBeforeExpWarning, tmnxPkiCertAfterExpWarning, tmnxPkiCertExpWarningCleared, tmnxPkiCRLBeforeExpWarning, tmnxPkiCRLAfterExpWarning, tmnxPkiCRLExpWarningCleared, tmnxSecNotifFileReloaded, tmnxSysLicenseValid, tmnxSecPwdHistoryFileLoadFailed, tmnxSecPwdHistoryFileWriteFailed, tmnxPkiCAProfCrlUpdateStart, tmnxPkiCAProfCrlUpdateSuccess, tmnxPkiCAProfCrlUpdateUrlFail, tmnxPkiCAProfCrlUpdAllUrlsFail, tmnxPkiFileWriteFailed, tmnxPkiCAProfCrlUpdNoNxtUpdTime, tmnxUsrProfSessionLimitExceeded, tmnxCliGroupSessionLimitExceeded, tmnxPkiCAProfCrlUpdLargPreUpdTm, tmnxPkiCertNotYetValid, tmnxPkiCRLNotYetValid, tmnxAppPkiCertVerificationFailed, grpc_user_login, grpc_user_logout, grpc_user_login_failed, grpc_user_login_max_attempts, netconf_user_login, netconf_user_logout, netconf_user_login_failed, netconf_user_login_max_attempts, tmnxSysLicenseActivated, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, radiusUserProfileInvalid, tmnxSysStandbyLicensingError, tmnxSysStandbyLicensingReady, md_cli_io, md_cli_unauth_io, tmnxSysAppLicenseInsufficient, tmnxSysLicenseUpdateRequired, netconf_auth, netconf_unauth, grpc_auth, grpc_unauth, tmnxCertKeyPairGen, tmnxCertImport, tmnxCertExport, tmnxFileDeleted, tmnxFileMoved, tmnxFileCopied, tmnxFileUnzip, tmnxPasswordHashingChanged, tmnxUserPasswordChangedByAdmin, tmnxSSHSessionFailed, tmnxSecSignedSwCpmBootEvent, tSecSgndSwUefiVarsUpdtReqd, tmnxPkiCertUpdUpdateStarted, tmnxPkiCertUpdUpdateFinished, tmnxPkiCertUpdUpdateFailed, tmnxSystemPasswordChangedByAdmin, tmnxSysLicenseCleared, tmnxSysLicensingStateOk

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger security event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger security event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger security event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger security event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger security event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger security event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger security event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger security event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15

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Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger security event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger security event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger security event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

sflow event *keyword*

Synopsis	Enter the **sflow** list instance
Context	**configure** log event-trigger sflow event *keyword*
Tree	sflow

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Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger sflow event *keyword*
Tree	sflow
Options	none, tmnxSflowCpEntrySampling, tmnxSflowPacketTxFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger sflow event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** log event-trigger sflow event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

entry [id] *number*

Synopsis	Enter the **entry** list instance

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Context	**configure** log event-trigger sflow event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger sflow event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger sflow event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger sflow event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

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time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger sflow event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger sflow event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** log event-trigger sflow event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger sflow event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

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handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger sflow event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

snmp event *keyword*

Synopsis	Enter the **snmp** list instance
Context	**configure** log event-trigger snmp event *keyword*
Tree	snmp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger snmp event *keyword*
Tree	snmp
Options	coldStart, warmStart, authenticationFailure, linkDown, linkUp, risingAlarm, fallingAlarm, snmpdError
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger snmp event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable

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Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger snmp event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger snmp event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger snmp event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger snmp event *keyword* entry *number* admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger snmp event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger snmp event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger snmp event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description

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Context	**configure** log event-trigger snmp event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger snmp event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger snmp event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

sr-mpls event *keyword*

Synopsis	Enter the **sr-mpls** list instance
Context	**configure** log event-trigger sr-mpls event *keyword*
Tree	sr-mpls
Introduced	21.10.R1
Platforms	All

event *keyword*

Synopsis	SR MPLS event

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Context	**configure** log event-trigger sr-mpls event *keyword*
Tree	sr-mpls
Options	tmnxSrMplsPfxSidFailure
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger sr-mpls event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger sr-mpls event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger sr-mpls event *keyword* entry *number*
Tree	entry
Introduced	21.10.R1
Platforms	All

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[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger sr-mpls event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger sr-mpls event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	21.10.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger sr-mpls event *keyword* entry *number* debounce
Tree	debounce
Introduced	21.10.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger sr-mpls event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	21.10.R1

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Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger sr-mpls event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	21.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger sr-mpls event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger sr-mpls event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	21.10.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger sr-mpls event *keyword* entry *number* handler *reference*
Tree	handler

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Reference	**configure** log event-handling handler *string*
Introduced	21.10.R1
Platforms	All

srv6 event *keyword*

Synopsis	Enter the **srv6** list instance
Context	**configure** log event-trigger srv6 event *keyword*
Tree	srv6
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger srv6 event *keyword*
Tree	srv6
Options	vRtrSrv6FunctionExhaustion, vRtrSrv6SvcSidIndex, vRtrSrv6LocatorResExhaustion
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger srv6 event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

description *string*

Synopsis	Text description

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Context	**configure** log event-trigger srv6 event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger srv6 event *keyword* entry *number*
Tree	entry
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger srv6 event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger srv6 event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger srv6 event *keyword* entry *number* debounce
Tree	debounce
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger srv6 event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger srv6 event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

description *string*

Synopsis	Text description
Context	**configure** log event-trigger srv6 event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger srv6 event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger srv6 event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

stp event *keyword*

Synopsis	Enter the **stp** list instance
Context	**configure** log event-trigger stp event *keyword*
Tree	stp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger stp event *keyword*
Tree	stp
Options	topologyChangeSapMajorState, newRootSap, topologyChangeVcpState, newRootVcpState, topologyChangeSapState, receivedTCN, newRootBridge, unacknowledgedTCN, higherPriorityBridge, sapEncapPVST, sapEncapDot1d, tmnxSvcTopoChgSdpBindMajorState, tmnxSvcNewRootSdpBind, tmnxSvcTopoChgSdpBindState, tmnxSvcSdpBindRcvdTCN, tmnxSvcSdpBindRcvdHigherBriPrio, tmnxSvcSdpBindEncapPVST,

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	tmnxSvcSdpBindEncapDot1d, tmnxNewCistRegionalRootBridge, tmnxNewMstiRegionalRootBridge, tmnxStpRootGuardViolation, tmnxStpMeshNotInMstRegion, tmnxSapStpExcepCondStateChng, tmnxSdpBndStpExcepCondStateChng, sapActiveProtocolChange, tmnxSvcSdpActiveProtocolChange, vcpActiveProtocolChange, topologyChangePipMajorState, topologyChangePipState, tmnxPipStpExcepCondStateChng, pipActiveProtocolChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger stp event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger stp event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger stp event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

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[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger stp event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger stp event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger stp event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger stp event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds

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Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger stp event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger stp event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger stp event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger stp event *keyword* entry *number* handler *reference*
Tree	handler

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Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

svcmgr event *keyword*

Synopsis	Enter the **svcmgr** list instance
Context	**configure** log event-trigger svcmgr event *keyword*
Tree	svcmgr
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger svcmgr event *keyword*
Tree	svcmgr
Options	svcTlsMacPinningViolation, tmnxSubSlaacOverride, svcEvpnMplsMacMoveExceedNonBlock, svcTlsVxInstReplicatorChgd, svcArpHostOverride, svcEvpnMHEsEviDFStateChgd, svcEvpnMHEsIsidDFStateChgd, svcEvpnRcvdProtSrcMac, svcBgpEvpnBHDupMacAddrsDetected, svcEvpnEtreeBumLabelSysHiUsgSet, svcEvpnEtreeBumLabelSysHiUsgClr, svcVxlanEvpnMplsDestSysHiUsgSet, svcVxlanEvpnMplsDestSysHiUsgClr, svcStatusChanged, svcTlsFdbTableFullAlarmRaised, svcTlsFdbTableFullAlarmCleared, svcSysEvpnESDfPrefOperValChange, tmnxSvcSysFdbTableHighUsgSet, iesIfStatusChanged, tmnxEndPointTxActiveChanged, tmnxSvcSysFdbTableHighUsgClr, svcEvpnMHStandbyStatusChg, svcEvpnVxVTepLclBiasAddFailSet, svcEvpnESVxVTepLclBiasAddFailSet, svcEvpnVxVTepLclBiasAddFailClr, svcEvpnESVxVTepLclBiasAddFailClr, svcEvpnRcvdPbbProtSrcMac, svcTlsMrpAttrRegistrationFailed, svcTlsMrpAttrTblFullAlarmRaised, svcTlsMrpAttrTblFullAlarmCleared, svcEvpnMplsTEPEgrLblStateChgd, svcEpipePbbOperStatusChanged, svcTlsVxInstVTEPEgrVniStateChgd, svcEvpnVxInstESDstTEPStateChgd, svcSrv6InstTEPSidOperStateChgd, svcSrv6InstESDstTEPOperStateChgd, svcEvpnMplsESDestTEPStateChgd, svcBgpEvpnTepStateChgd, svcSrv6FunctionOutOfResources, sapStatusChanged, sapTlsMacAddrLimitAlarmRaised, sapTlsMacAddrLimitAlarmCleared, hostConnectivityLost, hostConnectivityRestored, sapReceivedProtSrcMac, sapTlsMacMoveExceeded, sapPortStateChangeProcessed, sapCemPacketDefectAlarm, sapCemPacketDefectAlarmClear, msapStateChanged, msapCreationFailure, sapTlsMacMoveExceedNonBlock, sapEthLoopbackStarted, sapEthLoopbackStopped, sapTunnelEncapIpMtuTooSmall, tmnxIpTunnelOperStateChange, sapIfIgnorePortStateStart, sapIfIgnorePortStateStop, sapReceivedPbbProtSrcMac, sdpStatusChanged, sdpBindStatusChanged,

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sdpKeepAliveStarted, sdpKeepAliveStopped, sdpKeepAliveProbeFailure, sdpKeepAliveLateReply, sdpTlsMacAddrLimitAlarmRaised, sdpTlsMacAddrLimitAlarmCleared, sdpBindPwPeerStatusBitsChanged, sdpBindTlsMacMoveExceeded, sdpBindPwPeerFaultAddrChanged, sdpBindSdpStateChangeProcessed, sdpBandwidthOverbooked, sdpBindInsufficientBandwidth, dynamicSdpConfigChanged, dynamicSdpBindConfigChanged, dynamicSdpCreationFailed, dynamicSdpBindCreationFailed, sdpEgrIfsNetDomInconsCntChanged, sdpBindIpipeCeIpAddressChange, sdpBindReceivedProtSrcMac, sdpBindPwLocalStatusBitsChanged, sdpBindTlsMacMoveExceedNonBlock, sdpBindEthLoopbackStarted, sdpBindEthLoopbackStopped, sdpPbbActvPwWithNonActvCtrlPwChg, svcBgpEvpnDupMacAddrsDetected, svcBgpEvpnDupMacAddrsCleared, svcTlsVTEPHiUsageAlarmRaised, svcTlsVTEPHiUsageAlarmCleared, svcTlsVTEPEgrVniSysHiUsgAlarmSet, svcTlsVTEPEgrVniSysHiUsgAlarmClr, svcTlsVTEPEgrVniSvcHiUsgAlarmSet, svcTlsVTEPEgrVniSvcHiUsgAlarmClr, svcBindSysHiUsageAlarmRaised, svcBindSysHiUsageAlarmCleared, sdpControlPwActiveStateChg, svcTlsProxyArpDupDetect, svcTlsProxyArpDupClear, svcTlsProxyNdDupDetect, svcTlsProxyNdDupClear, svcTlsEvpnTunnNHopHiUsgAlarmSet, svcTlsEvpnTunnNHopHiUsgAlarmClr, svcEvpnMplsTEPHiUsageRaised, svcEvpnMplsTEPHiUsageCleared, svcEvpnMplsTEPEgrBndSysHiUsgSet, svcEvpnMplsTEPEgrBndSysHiUsgClr, svcEvpnMplsTEPEgrBndSvcHiUsgSet, svcEvpnMplsTEPEgrBndSvcHiUsgClr, svcTlsProxyArpSysHiUsgSet, svcTlsProxyArpSysHiUsgClr, svcTlsProxyArpSvcHiUsgSet, svcTlsProxyArpSvcHiUsgClr, svcTlsProxyNdSysHiUsgSet, svcTlsProxyNdSysHiUsgClr, svcTlsProxyNdSvcHiUsgSet, svcTlsProxyNdSvcHiUsgClr, svcSiteMinDnTimerStateChg, sdpBindReceivedPbbProtSrcMac, svcTlsMfibTableFullAlarmRaised, svcTlsMfibTableFullAlarmCleared, tmnxSubscriberCreated, tmnxSubscriberDeleted, tmnxSubscriberRenamed, tmnxSubAcctPlcyFailure, tmnxSubMcsRelatedProblem, tmnxSubAuthPlcyRadSerOperStatChg, tmnxSubAcctPlcyRadSerOperStatChg, svcEndPointMacLimitAlarmRaised, svcEndPointMacLimitAlarmCleared, tmnxSubRadSapDisconnectError, tmnxSubRadSdpBndDisconnectError, tmnxSubRadSapCoAError, tmnxSubRadSdpBndCoAError, tmnxSubRadSapSubAuthError, tmnxSubRadSdpBndSubAuthError, svcFdbMimDestTblFullAlrm, svcFdbMimDestTblFullAlrmCleared, svcPersistencyProblem, svcArpHostPopulateErr, svcEPMCEPConfigMismatch, svcEPMCEPConfigMismatchResolved, svcEPMCEPPassiveModeActive, svcEPMCEPPassiveModePassive, sapHostBGPPeeringSetupFailed, tmnxSubUserCategoryOutOfCredit, svcRestoreHostProblem, tmnxSubUserCategoryRefreshCredit, tmnxSubUserCategoryError, svcTlsSiteDesigFwdrChg, sapTlsDataSapInstStatusChgd, svcTlsGroupOperStatusChanged, sapTunnelStateChange, tmnxSubHostInconsistentAtmTdOvr, svcMSPwRtMisconfig, svcOperGrpOperStatusChanged, sapIpipeCeIpAddrChange, svcMSPwRetryExpiredNotif, svcVllSiteDesigFwdrChg, tmnxSubSlaacSetupFailure, tmnxIpTunnelOperRemIpChg, tmnxSubHostLcktLimitReached, tmnxSubHostLcktSapLimitReached, tmnxSubSysChassMemoryUsageHi, tmnxSubVSubnetHostsDeleted, sapHostRipListenerSetupFailed, tmnxSubIpoeInvalidSessionKey, tmnxSubIpoeInvalidCidRidChange, tmnxSubIpoeSessionLimitReached, tmnxSubIpoePersistenceRecovery, tmnxSubIpoeMigrHostDeleted, tmnxSubMngdHostCreationFail,

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tmnxSubMngdHostOverride, tmnxSubHostInfoConflict, tmnxSubPlBndFailed, tmnxSubBrgCreated, tmnxSubBrgDeleted, tmnxSubBrgCvInitFailed, tmnxSubBrgRadiusUpdateIpoeSeFail, tmnxSubBrgRadiusCoaError, tmnxSubBrgRadiusAuthError, tmnxSubBrgSessionLimitReached, tmnxSubStatsResourceLimitReached, tmnxSubDhcpOverloadDetected, aluIpTransportStateChanged, tmnxSubBrgRadiusProxyAuthError, tmnxSubIpoeSessionBrgNotAuth, tmnxSubRadiusCoaNatFwdFailed, tmnxSubSVlanStatsReachedMaximum, svcTlsVxInstMacAdrLimitAlrmRsd, svcTlsVxInstMacAdrLimitAlrmClrd, tmnxSubCupsUpSapCreationFailed, tmnxSubCupsUpIfCreationFailed, tmnxPfcpAssocPathMgmtStateChgd, tmnxSubInfoEgrAggRateLimitLowReq, tmnxSubIpoeWppRegistrationFailed, svcEvpnMplsTEPIpSysHiUsgSet, svcEvpnMplsTEPIpSysHiUsgClr, svcEvpnMHAutoEsiCreated, svcEvpnMHAutoEsiConflict, svcSrv6TEPEgrBndSysHiUsgSet, svcSrv6TEPEgrBndSysHiUsgClr, svcIfSubForwardingStatsDisNotify, svcIfSubForwardingStatsEnNotify, svcRoutedVplsEvpnGWDrStateChgd, svcSrv6TEPEgrBndSvcHiUsgSet, svcSrv6TEPEgrBndSvcHiUsgClr, tmnxSapMRtCpeChkStatusChange

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger svcmgr event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger svcmgr event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger svcmgr event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger svcmgr event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger svcmgr event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger svcmgr event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

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time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger svcmgr event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger svcmgr event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger svcmgr event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger svcmgr event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*

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Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger svcmgr event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

system event *keyword*

Synopsis	Enter the **system** list instance
Context	**configure** log event-trigger system event *keyword*
Tree	system
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger system event *keyword*
Tree	system
Options	stiDateAndTimeChanged, ssiSaveConfigSucceeded, ssiSaveConfigFailed, sbiBootConfig, sbiBootSnmpd, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, tmnxModuleMallocFailed, tmnxTrapDropped, ssiSyncConfigOK, ssiSyncConfigFailed, ssiSyncBootEnvOK, ssiSyncBootEnvFailed, socket_bind_failed, socket_conn_accept_failed, sntpTimeDiffExceedsThreshold, tmnxSssiMismatch, tmnxSnmpdStateChange, tmnxRedStandbySyncing, tmnxRedStandbyReady, tmnxRedStandbySyncLost, tmnxRedSwitchover, tmnxRedCpmActive, tmnxRedSingleCpm, persistencyClosedAlarmRaised, persistencyClosedAlarmCleared, tmnxSntpOperChange, tmnxFtpClientFailure, persistencyEventReport, sbiBootConfigFailFileError, sbiBootConfigOKFileError, persistenceRestoreProblem, tmnxSysRollbackStarted, tmnxSysRollbackStatusChange, tmnxSysRollbackSaveStatusChange, tmnxSysRollbackFileDeleteStatus, ssiSyncRollbackOK, ssiSyncRollbackFailed, ssiSyncCertOK, ssiSyncCertFailed, persistencyFileSysThresRaised, persistencyFileSysThresCleared, tmnxSysExecStarted, tmnxSysExecFinished, tmnxSysRollbackSaveStarted,

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tmnxSysRollbackDeleteStarted, tmnxSysNvsysFileError, tmnxConfigConflict, tmnxSysBaseMacAddressNotSet, tmnxSmLaunchStartFailed, tmnxEhsHandlerInvoked, tmnxEhsDroppedByMinDelay, tmnxSysAppStats24HrsAvailable, tmnxSysAppStatsWeekAvailable, tmnxSysMgmtIfModeChangeStart, tmnxSysMgmtIfModeChangeComplete, tmnxSysMgmtIfModeChangeFailure, tmnxSysMgmtIfLiIncorrectFormat, tmnxSysMgmtIfLiCfgNotEncrypted, stiDateAndTimeChanging, tmnxSysSwFabFailRecStarted, tmnxSysSwFabFailRecCompleted, tmnxSysSwFabFailRecAborted, tmnxSysSwFabFailRecDetected, tMirrorLiXIfLicenseInvalid, mdSaveCommitHistoryFailed, sbiBootMdReadCommitHistoryFailed, tmnxSysDyingGasp, tmnxSysHttpRdrOutOfSeqLimitExc, schedActionFailure, smScriptAbort, smScriptResult, smScriptException, ssiSaveIncrementConfigSucceeded, ssiSaveIncrementConfigFailed, ssiSaveBackgroundConfigSucceeded, ssiSaveBackgroundConfigFailed, mdCommitInProgress

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger system event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger system event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger system event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger system event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger system event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger system event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

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time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger system event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger system event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger system event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger system event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*

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Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger system event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

tls event *keyword*

Synopsis	Enter the **tls** list instance
Context	**configure** log event-trigger tls event *keyword*
Tree	tls
Introduced	20.5.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger tls event *keyword*
Tree	tls
Options	tmnxTlsInitiateSession, tmnxTlsTermination, tmnxTlsFailure
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger tls event *keyword* admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	disable
Introduced	20.5.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger tls event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	20.5.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger tls event *keyword* entry *number*
Tree	entry
Introduced	20.5.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger tls event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry

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Context	**configure** log event-trigger tls event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	20.5.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger tls event *keyword* entry *number* debounce
Tree	debounce
Introduced	20.5.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger tls event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	20.5.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger tls event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	20.5.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** log event-trigger tls event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	20.5.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger tls event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	20.5.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger tls event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	20.5.R1
Platforms	All

tree-sid event *keyword*

Synopsis	Enter the **tree-sid** list instance
Context	**configure** log event-trigger tree-sid event *keyword*
Tree	tree-sid
Introduced	20.10.R1
Platforms	All

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event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger tree-sid event *keyword*
Tree	tree-sid
Options	vRtrTreeSidCdtPathChanged, vRtrTreeSidCdtPathActInsChanged, vRtrTreeSidInSidRegFailure, vRtrTreeSidTreeIdAllocFailure, vRtrTreeSidRepSegResExhaustion, vRtrTreeSidRepSegResExhstCleared, vRtrTreeSidLabelRangeExhaustion, vRtrTreeSidLblRangeExhstCleared, vRtrTreeSidFailOverPriToStdBy, vRtrTreeSidFailOverStdByToPri
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger tree-sid event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger tree-sid event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger tree-sid event *keyword* entry *number*

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Tree	entry
Introduced	20.10.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger tree-sid event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger tree-sid event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	20.10.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger tree-sid event *keyword* entry *number* debounce
Tree	debounce
Introduced	20.10.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response

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Context	**configure** log event-trigger tree-sid event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	20.10.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger tree-sid event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	20.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger tree-sid event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger tree-sid event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	20.10.R1
Platforms	All

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handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger tree-sid event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	20.10.R1
Platforms	All

user event *keyword*

Synopsis	Enter the **user** list instance
Context	**configure** log event-trigger user event *keyword*
Tree	user
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger user event *keyword*
Tree	user
Options	cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, cli_user_io, snmp_user_set, cli_config_io, cli_unauth_user_io, cli_unauth_config_io, grpc_user_login, grpc_user_logout, grpc_user_login_failed, grpc_user_login_max_attempts, netconf_user_login, netconf_user_logout, netconf_user_login_failed, netconf_user_login_max_attempts
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger user event *keyword* admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger user event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger user event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger user event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry

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Context	**configure** log event-trigger user event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger user event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger user event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger user event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** log event-trigger user event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger user event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger user event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

video event *keyword*

Synopsis	Enter the **video** list instance
Context	**configure** log event-trigger video event *keyword*
Tree	video
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger video event *keyword*
Tree	video
Options	tmnxVdoDuplicateSsrcId, tmnxVdoMdaSessionsLimitExceeded, tmnxVdoMdaSGLimitExceeded, tmnxVdoMdaSessionsLimitCleared, tmnxVdoMdaSGLimitCleared, tmnxVdoAdSpliceAbort, tmnxVdoClientSessionsLmtExceeded, tmnxVdoClientSessionsLmtCleared, tmnxVdoGrpSrcAnlyzrErrState, tmnxVdoGrpSrcAnlyzrStClear, tmnxVdoMdaFccBwLimitExceeded, tmnxVdoMdaFccBwLimitCleared, tmnxVdoMdaRetBwLimitExceeded, tmnxVdoMdaRetBwLimitCleared, tmnxVdoMdaFccRetTotBwLmtExceeded, tmnxVdoMdaFccRetTotBwLmtCleared, tmnxVdoMdaFccSesLimitExceeded, tmnxVdoMdaFccSesLimitCleared, tmnxVdoMdaRetSesLimitExceeded, tmnxVdoMdaRetSesLimitCleared, tmnxVdoMdaFccRetTotSeLmtExceeded, tmnxVdoMdaFccRetTotSeLmtCleared, tmnxVdoVappSessionsLimitExceeded, tmnxVdoVappSGLimitExceeded, tmnxVdoVappSessionsLimitCleared, tmnxVdoVappSGLimitCleared, tmnxVdoVappFccBwLimitExceeded, tmnxVdoVappFccBwLimitCleared, tmnxVdoVappRetBwLimitExceeded, tmnxVdoVappRetBwLimitCleared, tmnxVdoVappFccRetTotBwLmtExceded, tmnxVdoVappFccRetTotBwLmtCleared, tmnxVdoVappFccSesLimitExceeded, tmnxVdoVappFccSesLimitCleared, tmnxVdoVappRetSesLimitExceeded, tmnxVdoVappRetSesLimitCleared, tmnxVdoVappFccRetTotSeLmtExceded, tmnxVdoVappFccRetTotSeLmtCleared
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger video event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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description *string*

Synopsis	Text description
Context	**configure** log event-trigger video event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger video event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger video event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger video event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger video event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger video event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger video event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description

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Context	**configure** log event-trigger video event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger video event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger video event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

vrrp event *keyword*

Synopsis	Enter the **vrrp** list instance
Context	**configure** log event-trigger vrrp event *keyword*
Tree	vrrp
Introduced	16.0.R1
Platforms	All

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event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger vrrp event *keyword*
Tree	vrrp
Options	vrrpTrapNewMaster, vrrpTrapAuthFailure, tmnxVrrpIPListMismatch, tmnxVrrpIPListMismatchClear, tmnxVrrpMultipleOwners, tmnxVrrpBecameBackup, vrrpPacketDiscarded, tmnxVrrpBfdIntfSessStateChgd, vrrpTrapProtoError, tVrrpBecameBackup, tVrrpTrapNewMaster, tVrrpIPListMismatch, tVrrpIPListMismatchClear, tVrrpMultipleOwners, tVrrpPacketDiscarded, tVrrpRouterAdvNotActivated, tVrrpRouterAdvNotActivatedClear, tVrrpOperDownInvalidMac, tVrrpOperDownInvalidMacClear, tmnxVrrpOperDownInvalidMac, tmnxVrrpOperDownInvalidMacClear
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger vrrp event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger vrrp event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger vrrp event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger vrrp event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger vrrp event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger vrrp event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

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time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger vrrp event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger vrrp event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger vrrp event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger vrrp event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1

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Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger vrrp event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

vrtr event *keyword*

Synopsis	Enter the **vrtr** list instance
Context	**configure** log event-trigger vrtr event *keyword*
Tree	vrtr
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger vrtr event *keyword*
Tree	vrtr
Options	tmnxVRtrMidRouteTCA, tmnxVRtrHighRouteTCA, tmnxVRtrHighRouteCleared, tmnxVRtrMcastMidRouteTCA, tmnxVRtrMcastMaxRoutesTCA, tmnxVRtrMcastMaxRoutesCleared, tmnxVRtrMaxArpEntriesTCA, tmnxVRtrMaxArpEntriesCleared, tmnxVRtrMaxRoutes, tmnxVRtrBfdMaxSessionOnSlot, tmnxVRtrBfdPortTypeNotSupported, tmnxVRtrIPv6MidRouteTCA, tmnxVRtrIPv6HighRouteTCA, tmnxVRtrIPv6HighRouteCleared, tmnxVRtrStaticRouteCPEStatus, tmnxVRtrManagedRouteAddFailed, tmnxVRtrFibOccupancyThreshold, tmnxVRtrInetAddressAttachFailed, tmnxVRtrSingleSfmOverloadStateCh, tmnxVRtrGrtExportLimitReached, tmnxVRtrGrtRoutesExpLimitDropped, tmnxVRtrIfLdpSyncTimerStart, tmnxVRtrIfLdpSyncTimerStop, tmnxVRtrGrtV6ExportLimitReached, tmnxVRtrGrtV6RoutesExpLimDropped, tmnxVRtrStaticRouteStatusChanged, tmnxVRtrBfdSessExtDown, tmnxVRtrBfdSessExtUp, tmnxVRtrBfdSessExtDeleted, tmnxVRtrBfdSessExtProtChange, tmnxVRtrBfdExtNoCpmNpResources, tmnxVRtrDnsFault, tmnxVRtrMacAcctLimitReached, tmnxVRtrMacAcctLimitCleared, tmnxVRtrNgBfdSessDown, tmnxVRtrNgBfdSessUp, tmnxVRtrNgBfdSessDeleted,

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	tmnxVRtrNgBfdSessProtChange, tmnxVRtrNgBfdNoCpmNpResources, tmnxVRtrNHRvplsARPHighUsage, tmnxVRtrNHRvplsARPExhaust, tmnxVRtrNHRvplsARPHighUsageClr, tmnxVRtrArpLmt, tmnxVRtrArpThresholdExceeded, tmnxVRtrIpv6NbrLmt, tmnxVRtrIpv6NbrThresholdExceeded, tmnxVRtrIfIgnorePortState, tmnxVRtrPdnAddrMismatch, tmnxVRtrPdnAddrMismatchCleared, tmnxVRtrLeakExportLimitReached, tmnxVRtrLeakExportLimitDropped, tmnxVRtrDhcpClientStatusChanged, tmnxVRtrDhcp6ClientStatusChanged, tmnxVRtrNeDiscovered, tmnxVRtrNeRemoved, tmnxVRtrNeModified, vRtrIfDhcpClRtStatusChanged, vRtrIfDhcpClStateDnsChanged, vRtrAutoCfgRaRtStatusChanged, vRtrIfDhcp6ClStateDnsChanged, tipNbrAllocFailed, vRtrIfEthLoopbackStarted, vRtrIfEthLoopbackStopped, tmnxVRtrBfdExtNoFreeTxIntrvlSlot, tmnxVRtrFibVPNOccupancyThreshold, tmnxVRtrBfdMultiHopFpMismatch, vRtrBgpInstanceError
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger vrtr event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger vrtr event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger vrtr event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger vrtr event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger vrtr event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger vrtr event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

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time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger vrtr event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger vrtr event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger vrtr event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger vrtr event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1

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Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger vrtr event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

wlan-gw event *keyword*

Synopsis	Enter the **wlan-gw** list instance
Context	**configure** log event-trigger wlan-gw event *keyword*
Tree	wlan-gw
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger wlan-gw event *keyword*
Tree	wlan-gw
Options	tmnxWlanGwResrcProblemDetected, tmnxWlanGwResrcProblemCause, tmnxWlanGwTuQosProblem, tmnxWlanGwGrpOperStateChanged, tmnxWlanGwIomActive, tmnxWlanGwMgwConnected, tmnxWlanGwMgwRestarted, tmnxWlanGwNumMgwHi, tmnxWlanGwMgwStateChanged, tmnxWlanGwQosRadiusGtpMismatch, tmnxWlanGwSubIfRedActiveChanged, tmnxWlanGwDsmGtpTunnelSetupFail, tmnxWlanGwSubIfPmStartD6cFailed, tmnxWlanGwSubIfPmNewPlReqFailed, tmnxWlanGwSubIfPmAddNewPlFailed, tmnxWlanGwSubIfPmCrIntObjFailed, tmnxWlanGwSubIfPmPoolTimeout, tmnxWlanGwSubIfPmPoolUsageLow, tmnxWlanGwSubIfPmLsQryRtryFailed, tmnxWlanGwGtpMessageDropped, tmnxWlanGwSubIfPmPoolPartialUse, tmnxWlanGwBdCreated, tmnxWlanGwBdDeleted, tmnxWlanGwUeCreationFail, tmnxWlanGwUeReplacement, tmnxWlanGwGrpMemberUsageHigh
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger wlan-gw event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger wlan-gw event *keyword* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger wlan-gw event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger wlan-gw event *keyword* entry *number*
Tree	entry
Range	1 to 1500

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger wlan-gw event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger wlan-gw event *keyword* entry *number* debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger wlan-gw event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

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value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger wlan-gw event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger wlan-gw event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	**configure** log event-trigger wlan-gw event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger wlan-gw event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

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wpp event *keyword*

Synopsis	Enter the **wpp** list instance
Context	**configure** log event-trigger wpp event *keyword*
Tree	wpp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log event-trigger wpp event *keyword*
Tree	wpp
Options	tmnxWppPortalStatChanged, tmnxWppHostAuthenticationFailed, tmnxWppPortalUnreachable, tmnxWppPortalGroupStatChanged, tmnxWppPGHostAuthFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	**configure** log event-trigger wpp event *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger wpp event *keyword* description *string*
Tree	description
String Length	1 to 80

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Introduced	16.0.R1
Platforms	All

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** log event-trigger wpp event *keyword* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	ID of the EHS event trigger entry
Context	**configure** log event-trigger wpp event *keyword* entry *number*
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	**configure** log event-trigger wpp event *keyword* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the **debounce** context
Context	**configure** log event-trigger wpp event *keyword* entry *number* debounce

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Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	**configure** log event-trigger wpp event *keyword* entry *number* debounce time *number*
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	**configure** log event-trigger wpp event *keyword* entry *number* debounce value *number*
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log event-trigger wpp event *keyword* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry

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Context	**configure** log event-trigger wpp event *keyword* entry *number* filter *reference*
Tree	filter
Reference	**configure** log filter *string*
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	**configure** log event-trigger wpp event *keyword* entry *number* handler *reference*
Tree	handler
Reference	**configure** log event-handling handler *string*
Introduced	16.0.R1
Platforms	All

file [file-policy-name] *string*

Synopsis	Enter the **file** list instance
Context	**configure** log file *string*
Tree	file
Max. Instances	99
Introduced	16.0.R1
Platforms	All

[**file-policy-name**] *string*

Synopsis	File ID for a log or accounting file
Context	**configure** log file *string*
Tree	file
Description	This command specifies the identification name or number for a log or accounting file. If the name begins with a numerical digit (from 1 to 9), the name must be a number from 1 to 99.
String Length	1 to 64
Notes	This element is part of a list key.

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Introduced	22.2.R1
Platforms	All

compact-flash-location

Synopsis	Enter the **compact-flash-location** context
Context	**configure** log file *string* compact-flash-location
Tree	compact-flash-location
Introduced	16.0.R1
Platforms	All

backup *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Log file location
Context	**configure** log file *string* compact-flash-location backup *keyword*
Tree	backup
Options	cf-unspecified, cf1, cf2, cf3, cf4
Default	cf-unspecified
Introduced	16.0.R1
Platforms	All

primary *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Log file location
Context	**configure** log file *string* compact-flash-location primary *keyword*
Tree	primary
Options	cf-unspecified, cf1, cf2, cf3, cf4
Default	cf-unspecified
Introduced	16.0.R1

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Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log file *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

retention *number*

Synopsis	Minimum time that a file is retained on the media
Context	**configure** log file *string* retention *number*
Tree	retention
Range	1 to 500
Units	hours
Default	12
Introduced	16.0.R1
Platforms	All

rollover *number*

Synopsis	Frequency at which a new log or accounting file is created
Context	**configure** log file *string* rollover *number*
Tree	rollover
Range	5 to 10080
Units	minutes
Default	1440
Introduced	16.0.R1
Platforms	All

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file-storage-control

Synopsis	Enter the **file-storage-control** context
Context	**configure** log file-storage-control
Tree	file-storage-control
Introduced	23.3.R1
Platforms	All

accounting-files-total-size *number*

Synopsis	Per CF total accounting file storage limit
Context	**configure** log file-storage-control accounting-files-total-size *number*
Tree	accounting-files-total-size
Description	This command configures the limit for the total space that all accounting files can occupy on each storage device on the active CPM. When this threshold is reached, new accounting files are no longer created in the \act-collect directory of the storage device until SR OS removes older accounting files from the \act directory and the occupancy is below the limit. Currently open, in-progress accounting files in the \act-collect directory are not affected by this limit and are completed. When unconfigured, there is no specific limit for the total size of all accounting files. Only accounting files in the \act directory with system generated names (including no file extension) are applicable toward the total size limit. If a user manually adds or deletes accounting files from the \act directory, the size of the files is not taken into account for up to 1 hour. The configured total size limit is not validated against the actual size of the installed storage devices. If the configured limit is larger than the installed compact flash (CF) device, the limit is never reached.
Range	50 to 4194304
Units	megabytes
Introduced	23.3.R1
Platforms	All

log-files-total-size *number*

Synopsis	Per CF total log file storage limit
Context	**configure** log file-storage-control log-files-total-size *number*
Tree	log-files-total-size

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Description	This command configures the limit for the total space that all log files can occupy on each storage device on the active CPM. When this threshold is reached, log events are no longer written to the files in the \log directory until SR OS removes older log files and the occupancy is below the limit. When unconfigured, there is no specific limit for the total size of all log files. Only log files in the \log directory with system generated names (including no file extension) are applicable toward the total size limit. If a user manually adds or deletes log files from the \log directory, the size of the files is not taken into account for up to 1 hour. The configured total size limit is not validated against the actual size of the installed storage devices. If the configured limit is larger than the installed CF device, the limit is never reached.
Range	50 to 4194304
Units	megabytes
Introduced	23.3.R1
Platforms	All

filter [filter-name] *string*

Synopsis	Enter the **filter** list instance
Context	**configure** log filter *string*
Tree	filter
Max. Instances	1500
Introduced	16.0.R1
Platforms	All

[**filter-name**] *string*

Synopsis	Filter name
Context	**configure** log filter *string*
Tree	filter
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

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default-action *keyword*

Synopsis	Default action for the event filter
Context	**configure** log filter *string* default-action *keyword*
Tree	default-action
Options	drop, forward
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log filter *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

named-entry [entry-name] *string*

Synopsis	Enter the **named-entry** list instance
Context	**configure** log filter *string* named-entry *string*
Tree	named-entry
Description	Commands in this context create or edit an event filter entry.
Max. Instances	999
Notes	This element is ordered by the user.
Introduced	21.2.R1
Platforms	All

[**entry-name**] *string*

Synopsis	Entry name
Context	**configure** log filter *string* named-entry *string*
Tree	named-entry

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String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

action *keyword*

Synopsis	Action for this event filter entry
Context	**configure** log filter *string* named-entry *string* action *keyword*
Tree	action
Options	drop, forward
Introduced	21.2.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log filter *string* named-entry *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.2.R1
Platforms	All

match

Synopsis	Enter the **match** context
Context	**configure** log filter *string* named-entry *string* match
Tree	match
Introduced	21.2.R1
Platforms	All

application

Synopsis	Enter the **application** context
Context	**configure** log filter *string* named-entry *string* match application

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Tree	application
Introduced	21.2.R1
Platforms	All

eq *keyword*

Synopsis	Application to match
Context	**configure** log filter *string* named-entry *string* match application eq *keyword*
Tree	eq
Options	application-assurance, aps, bgp, cflowd, chassis, debug, dhcp, dhcps, diameter, dot1x, efm-oam, elmi, ering, eth-cfm, etun, filter, gsmp, igmp, igmp-snooping, ip, ipsec, isis, l2tp, lag, ldp, li, lldp, logger, mcpath, mc-redundancy, mirror, mld, mld-snooping, mpls, msdp, nat, ntp, oam, ospf, pim, pim-snooping, port, pppoe, ptp, rip, route-policy, rsvp, security, snmp, stp, svcmgr, system, user, video, vrrp, vrtr, radius, wpp, wlan-gw, dynsvc, mpls-tp, bfd, python, ripng, openflow, sflow, rpki, pcep, calltrace, satellite, ldap, pppoe-clnt, tls, adp, mgmt-core, macsec, pcap, auto-prov, bier, pfcp, tree-sid, srv6, sr-mpls, anysec
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.2.R1
Platforms	All

neq *keyword*

Synopsis	Application to be filtered out
Context	**configure** log filter *string* named-entry *string* match application neq *keyword*
Tree	neq
Options	application-assurance, aps, bgp, cflowd, chassis, debug, dhcp, dhcps, diameter, dot1x, efm-oam, elmi, ering, eth-cfm, etun, filter, gsmp, igmp, igmp-snooping, ip, ipsec, isis, l2tp, lag, ldp, li, lldp, logger, mcpath, mc-redundancy, mirror, mld, mld-snooping, mpls, msdp, nat, ntp, oam, ospf, pim, pim-snooping, port, pppoe, ptp, rip, route-policy, rsvp, security, snmp, stp, svcmgr, system, user, video, vrrp, vrtr, radius, wpp, wlan-gw, dynsvc, mpls-tp, bfd, python, ripng, openflow, sflow, rpki, pcep, calltrace, satellite, ldap, pppoe-clnt, tls, adp, mgmt-core, macsec, pcap, auto-prov, bier, pfcp, tree-sid, srv6, sr-mpls, anysec
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.2.R1
Platforms	All

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event

Synopsis	Enter the **event** context
Context	**configure** log filter *string* named-entry *string* match event
Tree	event
Introduced	21.2.R1
Platforms	All

eq *number*

Synopsis	Log event message to match
Context	**configure** log filter *string* named-entry *string* match event eq *number*
Tree	eq
Range	1 to 4294967295
Notes	The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.
Introduced	21.2.R1
Platforms	All

gt *number*

Synopsis	Number of the log event to match
Context	**configure** log filter *string* named-entry *string* match event gt *number*
Tree	gt
Range	1 to 4294967295
Notes	The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.
Introduced	21.2.R1
Platforms	All

gte *number*

Synopsis	Number of the log event to match
Context	**configure** log filter *string* named-entry *string* match event gte *number*
Tree	gte
Range	1 to 4294967295
Notes	The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.

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Introduced	21.2.R1
Platforms	All

lt *number*

Synopsis	Number of the log event to match
Context	**configure** log filter *string* named-entry *string* match event lt *number*
Tree	lt
Range	1 to 4294967295
Notes	The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.
Introduced	21.2.R1
Platforms	All

lte *number*

Synopsis	Number of the log event to match
Context	**configure** log filter *string* named-entry *string* match event lte *number*
Tree	lte
Range	1 to 4294967295
Notes	The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.
Introduced	21.2.R1
Platforms	All

neq *number*

Synopsis	Log event message to filter out
Context	**configure** log filter *string* named-entry *string* match event neq *number*
Tree	neq
Range	1 to 4294967295
Notes	The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.
Introduced	21.2.R1
Platforms	All

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message

Synopsis	Enter the **message** context
Context	**configure** log filter *string* named-entry *string* match message
Tree	message
Introduced	21.2.R1
Platforms	All

eq *string*

Synopsis	Log event message to match
Context	**configure** log filter *string* named-entry *string* match message eq *string*
Tree	eq
String Length	1 to 400
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.2.R1
Platforms	All

neq *string*

Synopsis	Log event message to be filtered out
Context	**configure** log filter *string* named-entry *string* match message neq *string*
Tree	neq
String Length	1 to 400
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.2.R1
Platforms	All

regexp *boolean*

Synopsis	String comparison to determine if the log event matches the value of pattern
Context	**configure** log filter *string* named-entry *string* match message regexp *boolean*
Tree	regexp
Default	false
Introduced	21.2.R1

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Platforms	All

severity

Synopsis	Enter the **severity** context
Context	**configure** log filter *string* named-entry *string* match severity
Tree	severity
Introduced	21.2.R1
Platforms	All

eq *keyword*

Synopsis	Log event severity level to match
Context	**configure** log filter *string* named-entry *string* match severity eq *keyword*
Tree	eq
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.
Introduced	21.2.R1
Platforms	All

gt *keyword*

Synopsis	Log event severity level
Context	**configure** log filter *string* named-entry *string* match severity gt *keyword*
Tree	gt
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.
Introduced	21.2.R1
Platforms	All

gte *keyword*

Synopsis	Log event severity level
Context	**configure** log filter *string* named-entry *string* match severity gte *keyword*
Tree	gte

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Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.
Introduced	21.2.R1
Platforms	All

lt *keyword*

Synopsis	Log event severity level
Context	**configure** log filter *string* named-entry *string* match severity lt *keyword*
Tree	lt
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.
Introduced	21.2.R1
Platforms	All

lte *keyword*

Synopsis	Log event severity level
Context	**configure** log filter *string* named-entry *string* match severity lte *keyword*
Tree	lte
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.
Introduced	21.2.R1
Platforms	All

neq *keyword*

Synopsis	Log event severity level to filter out
Context	**configure** log filter *string* named-entry *string* match severity neq *keyword*
Tree	neq
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.
Introduced	21.2.R1
Platforms	All

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subject

Synopsis	Enter the **subject** context
Context	**configure** log filter *string* named-entry *string* match subject
Tree	subject
Introduced	21.2.R1
Platforms	All

eq *string*

Synopsis	Log event subject string to match
Context	**configure** log filter *string* named-entry *string* match subject eq *string*
Tree	eq
String Length	1 to 32
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.2.R1
Platforms	All

neq *string*

Synopsis	Log event subject string to filter out
Context	**configure** log filter *string* named-entry *string* match subject neq *string*
Tree	neq
String Length	1 to 32
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.2.R1
Platforms	All

regexp *boolean*

Synopsis	String comparison to determine if the log event matches the value of subject
Context	**configure** log filter *string* named-entry *string* match subject regexp *boolean*
Tree	regexp
Default	false
Introduced	21.2.R1

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Platforms	All

vrtr-name

Synopsis	Enter the **vrtr-name** context
Context	**configure** log filter *string* named-entry *string* match vrtr-name
Tree	vrtr-name
Description	Commands in this context configure the criteria for the name of a router instance. The vrtr-name is a name for a router instance, in a special format, used in the logging system. Examples of names include Base and vprn101, where 101 is the service ID of the VPRN service. The name represents the router instance that generated the log event.
Introduced	21.2.R1
Platforms	All

eq *string*

Synopsis	Log event router instance to match
Context	**configure** log filter *string* named-entry *string* match vrtr-name eq *string*
Tree	eq
String Length	1 to 32
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.2.R1
Platforms	All

neq *string*

Synopsis	Log event router instance to filter out
Context	**configure** log filter *string* named-entry *string* match vrtr-name neq *string*
Tree	neq
String Length	1 to 32
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.2.R1
Platforms	All

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regexp *boolean*

Synopsis	Match the router instance string
Context	**configure** log filter *string* named-entry *string* match vrtr-name regexp *boolean*
Tree	regexp
Default	false
Introduced	21.2.R1
Platforms	All

log-events

Synopsis	Enter the **log-events** context
Context	**configure** log log-events
Tree	log-events
Introduced	16.0.R1
Platforms	All

adp event *keyword*

Synopsis	Enter the **adp** list instance
Context	**configure** log log-events adp event *keyword*
Tree	adp
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events adp event *keyword*
Tree	adp
Options	tmnxDiscoveryEndNotify, tmnxDiscoveryCellularReq
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

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generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events adp event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events adp event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events adp event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events adp event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

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specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events adp event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events adp event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events adp event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

anysec event *keyword*

Synopsis	Enter the **anysec** list instance
Context	**configure** log log-events anysec event *keyword*
Tree	anysec
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

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event *keyword*

Synopsis	ANYSec module event
Context	**configure** log log-events anysec event *keyword*
Tree	anysec
Options	tmnxAnySecMkaPskRollover, tmnxAnySecMkaOperStateChanged, tmnxAnySecMkaSessionInitiation, tmnxAnySecMkaSessionTermination, tmnxAnySecSessionEnabled, tmnxAnySecSessionDisabled
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events anysec event *keyword* generate *boolean*
Tree	generate
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events anysec event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events anysec event *keyword* severity *keyword*
Tree	severity

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Options	cleared, indeterminate, critical, major, minor, warning
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events anysec event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events anysec event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events anysec event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

throttle *boolean*

Synopsis	Throttle log events of this type

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Context	**configure** log log-events anysec event *keyword* throttle *boolean*
Tree	throttle
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

application-assurance event *keyword*

Synopsis	Enter the **application-assurance** list instance
Context	**configure** log log-events application-assurance event *keyword*
Tree	application-assurance
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events application-assurance event *keyword*
Tree	application-assurance
Options	tmnxBsxIsaAaGrpFailureV2, tmnxBsxIsaAaGrpFailureClearV2, tmnxBsxIsaAaGrpNonRedundantV2, tmnxBsxIsaAaGrpSwitchover, tmnxBsxIsaAaGrpFlowFull, tmnxBsxIsaAaGrpFlowFullClear, tmnxBsxIsaAaSubLoadBalance, tmnxBsxIsaAaGrpCapCostThres, tmnxBsxIsaAaGrpCapCostThresClear, tmnxBsxAaSubscribersUnassigned, tmnxBsxAaSubscriberAcctDataLoss, tmnxBsxAaSubPolResExceeded, tmnxBsxAaSubPolResExceededClear, tmnxBsxIsaAaGrpFlowSetup, tmnxBsxIsaAaGrpFlowSetupClear, tmnxBsxIsaAaGrpPacketRate, tmnxBsxIsaAaGrpPacketRateClear, tmnxBsxIsaAaGrpBitRate, tmnxBsxIsaAaGrpBitRateClear, tmnxBsxTransIpPolAaSubCreated, tmnxBsxTransIpPolAaSubDeleted, tmnxBsxTransIpPolRadCoAAudit, tmnxBsxTransIpPolRadCoAError, tmnxBsxTransIpPolRadDiscError, tmnxBsxTransIpPolDhcpAddWarning, tmnxBsxTransIpPolDhcpDelWarning, tmnxBsxIsaAaGrpFmSbWaSBufOvld, tmnxBsxIsaAaGrpFmSbWaSBufOvldClr, tmnxBsxIsaAaGrpToSbWaSBufOvld, tmnxBsxIsaAaGrpToSbWaSBufOvldClr, tmnxBsxIsaAaGrpOvrldCutthru, tmnxBsxIsaAaGrpOvrldCutthruClr, tmnxBsxTransitIpPersistenceWarn, tmnxBsxAarpInstOperStateChanged, tmnxBsxAarpInstStateChanged, tmnxBsxRadApFailure, tmnxBsxRadApServOperStateChange, tmnxBsxMobileSubModifyFailure, tmnxBsxRadApIntrmUpdateSkipped, tmnxBsxHttpUrlParamLimitExceeded, tmnxBsxUrlFilterOperStateChange, tmnxBsxSubModifyFailure, tmnxBsxDnsIpCacheFull, tmnxBsxDnsIpCacheFullClear, tmnxBsxUrlListUpdate, tmnxBsxUrlListFailure, tmnxBsxIsaAaTimFileProcFailure, tmnxBsxStatTcaThreshCrossed, tmnxBsxStatTcaThreshCrossedClear,

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	tmnxBsxStatPolcrTcaThreshCrossed, tmnxBsxStatPolcrTcaThreshCrClear, tmnxBsxStatFtrTcaThreshCrossed, tmnxBsxStatFtrTcaThreshCrClear, tmnxBsxStatFtrEnTcaThreshCrossed, tmnxBsxStatFtrEnTcaThreshCrClear, tmnxBsxTransIpPolDiamGxError, tmnxBsxDatapathCpuUsage, tmnxBsxDatapathCpuUsageClear, tmnxBsxTcpValTcaCrossed, tmnxBsxTcpValTcaCrossedClear, tmnxBsxCertProfileOperStateChngd, tmnxBsxSubQuarantined, tmnxBsxSubQuarantinedClear, tmnxBsxUrlFltrWebServOprStateChg
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events application-assurance event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events application-assurance event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events application-assurance event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events application-assurance event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events application-assurance event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events application-assurance event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events application-assurance event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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aps event *keyword*

Synopsis	Enter the **aps** list instance
Context	**configure** log log-events aps event *keyword*
Tree	aps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events aps event *keyword*
Tree	aps
Options	apsEventSwitchover, apsEventModeMismatch, apsEventChannelMismatch, apsEventPSBF, apsEventFEPLF, tApsModeMismatchClear, tApsChannelMismatchClear, tApsPSBFClear, tApsFEPLFClear, tApsLocalSwitchCommandSet, tApsLocalSwitchCommandClear, tApsRemoteSwitchCommandSet, tApsRemoteSwitchCommandClear, tApsMcApsCtlLinkStateChange, tApsChanTxLaisStateChange, tApsPrimaryChannelChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events aps event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events aps event *keyword* repeat *boolean*
Tree	repeat

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Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events aps event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events aps event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events aps event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events aps event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit

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Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events aps event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

auto-prov event *keyword*

Synopsis	Enter the **auto-prov** list instance
Context	**configure** log log-events auto-prov event *keyword*
Tree	auto-prov
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events auto-prov event *keyword*
Tree	auto-prov
Options	autoNodeProv
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events auto-prov event *keyword* generate *boolean*
Tree	generate

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Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events auto-prov event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events auto-prov event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events auto-prov event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events auto-prov event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200

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Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events auto-prov event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events auto-prov event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

bfd event *keyword*

Synopsis	Enter the **bfd** list instance
Context	**configure** log log-events bfd event *keyword*
Tree	bfd
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events bfd event *keyword*
Tree	bfd
Options	tmnxBfdOnLspSessDown, tmnxBfdOnLspSessUp, tmnxBfdOnLspSessDeleted, tmnxBfdOnLspSessProtChange, tmnxBfdOnLspSessNoCpmNpResources, tmnxBfdOnLspSessNoTailResources, tmnxBfdOnLspExtSessDown,

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	tmnxBfdOnLspExtSessUp, tmnxBfdOnLspExtSessDeleted, tmnxBfdOnLspExtSessProtChange, tmnxBfdOnLspExtSessNoCpmNpResrcs
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events bfd event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events bfd event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events bfd event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events bfd event *keyword* specific-throttle *boolean*

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Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events bfd event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events bfd event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events bfd event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

bgp event *keyword*

Synopsis	Enter the **bgp** list instance
Context	**configure** log log-events bgp event *keyword*
Tree	bgp

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Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events bgp event *keyword*
Tree	bgp
Options	sendNotification, receiveNotification, bgpInterfaceDown, bgpConnNoKA, bgpConnNoOpenRcvd, bgpRejectConnBadLocAddr, bgpRemoteEndClosedConn, bgpPeerNotFound, bgpConnMgrTerminated, bgpTerminated, bgpNoMemoryPeer, bgpVariableRangeViolation, bgpCfgViol, tBgpPeerGRStatusChange, tBgpNgEstablished, tBgpNgBackwardTransition, tBgpPeerNgHoldTimeInconsistent, tBgpFlowspecUnsupportdComAction, tBgp4RouteInvalid, tBgp4PathAttrInvalid, tBgp4WithdrawnRtFromUpdateError, tBgp4UpdateInvalid, tBgpGeneral, tBgpFibResourceFailPeer, tBgpReceivedInvalidNlri, tBgpMaxNgPfxLmt, tBgpMaxNgPfxLmtThresholdReached, tBgpInstanceDynamicPeerLmtReachd, tBgpPGDynamicPeerLmtReached, bgpEstablishedNotification, bgpBackwardTransNotification, tBgp4PathAttrDiscarded, tmnxBmpSessionStatusChange, tBgpInstConvStateTransition, tBgpPeerNgGRStatusChange, tBgpPGDynNbrIfMaxSessLmtReachd
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events of this type and increment the event counter
Context	**configure** log log-events bgp event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events bgp event *keyword* repeat *boolean*
Tree	repeat
Default	false

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Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events bgp event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	**configure** log log-events bgp event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events bgp event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Times that this event can be logged within the specific throttle interval
Context	**configure** log log-events bgp event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000

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Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events bgp event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

bier event *keyword*

Synopsis	Enter the **bier** list instance
Context	**configure** log log-events bier event *keyword*
Tree	bier
Introduced	19.5.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events bier event *keyword*
Tree	bier
Options	vRtrBierBfrIdCollision, vRtrBierMtMismatch, vRtrBierSubDomainMismatch, vRtrBierUnsupportedNhop
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events bier event *keyword* generate *boolean*
Tree	generate

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Introduced	19.5.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events bier event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	19.5.R1
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events bier event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	19.5.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events bier event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	19.5.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events bier event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200

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Introduced	19.5.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events bier event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	19.5.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events bier event *keyword* throttle *boolean*
Tree	throttle
Introduced	19.5.R1
Platforms	All

calltrace event *keyword*

Synopsis	Enter the **calltrace** list instance
Context	**configure** log log-events calltrace event *keyword*
Tree	calltrace
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events calltrace event *keyword*
Tree	calltrace
Options	tmnxCallTraceMaxFilesNumReached, tmnxCallTraceLocSizeLimitReached, calltraceDebugEvent

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events calltrace event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events calltrace event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events calltrace event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events calltrace event *keyword* specific-throttle *boolean*
Tree	specific-throttle

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events calltrace event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events calltrace event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events calltrace event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cflowd event *keyword*

Synopsis	Enter the **cflowd** list instance
Context	**configure** log log-events cflowd event *keyword*
Tree	cflowd
Introduced	16.0.R1

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Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events cflowd event *keyword*
Tree	cflowd
Options	tmnxCflowdCreateFailure, tmnxCflowdStateChange, tmnxCflowdFlowCreateFailure, tmnxCflowdPacketTxFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events cflowd event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events cflowd event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events cflowd event *keyword* severity *keyword*
Tree	severity

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Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events cflowd event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events cflowd event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events cflowd event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events cflowd event *keyword* throttle *boolean*
Tree	throttle

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Introduced	16.0.R1
Platforms	All

chassis event *keyword*

Synopsis	Enter the **chassis** list instance
Context	**configure** log log-events chassis event *keyword*
Tree	chassis
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events chassis event *keyword*
Tree	chassis
Options	tmnxEqCardFailure, tmnxEqCardInserted, tmnxEqCardRemoved, tmnxEqWrongCard, tmnxEnvTempTooHigh, tmnxEqPowerSupplyInserted, tmnxEqPowerSupplyRemoved, tmnxRedPrimaryCPMFail, tmnxChassisNotificationClear, tmnxEqSyncIfTimingHoldover, tmnxEqSyncIfTimingHoldoverClear, tmnxEqSyncIfTimingRef1Alarm, tmnxEqSyncIfTimingRef1AlarmClear, tmnxEqSyncIfTimingRef2Alarm, tmnxEqSyncIfTimingRef2AlarmClear, tmnxEqFlashDataLoss, tmnxEqFlashDiskFull, tmnxPeSoftwareVersionMismatch, tmnxPeSoftwareLoadFailed, tmnxPeBootloaderVersionMismatch, tmnxPeBootromVersionMismatch, tmnxPeFPGAVersionMismatch, tmnxEqSyncIfTimingBITSAlarm, tmnxEqSyncIfTimingBITSAlarmClear, tmnxEqCardFirmwareUpgraded, tmnxChassisUpgradeInProgress, tmnxChassisUpgradeComplete, tmnxChassisHiBwMcastAlarm, tmnxEqOperStateChange, tmnxEqMdaCfgNotCompatible, tmnxCpmCardSyncFileNotPresent, tmnxEqMdaXplError, tmnxEqCardPChipError, tmnxEqCardSoftResetAlarm, tmnxEqMdaSyncENotCompatible, tmnxIPsecIsaGrpActiveIsaChgd, tmnxEqCardPChipMemoryEvent, tmnxIPsecIsaGrpUnableToSwitch, tmnxIPsecIsaGrpTnlLowWMark, tmnxIPsecIsaGrpTnlHighWMark, tmnxIPsecIsaGrpTnlMax, tmnxEqSyncIfTimingRef1Quality, tmnxEqSyncIfTimingRef2Quality, tmnxEqSyncIfTimingBITSQuality, tmnxEqSyncIfTimingBITS2Quality, tmnxEqSyncIfTimingRefSwitch, tmnxEqSyncIfTimingBITS2Alarm, tmnxEqSyncIfTimingBITS2AlarmClr, tmnxEqSyncIfTimingBITSOutRefChg, tmnxEqCardPChipCamEvent, tmnxEqSyncIfTimingSystemQuality, tmnxEqHwEnhancedCapability, tmnxEqSyncIfTimingPTPQuality, tmnxEqSyncIfTimingPTPAlarm, tmnxEqSyncIfTimingPTPAlarmClr, tmnxPeFirmwareVersionWarning, tmnxMDAIsaTunnelGroupChange, tmnxEqPowerCapacityExceeded, tmnxEqPowerCapacityExceededClear, tmnxEqPowerLostCapacity, tmnxEqPowerLostCapacityClear, tmnxEqPowerOverloadState,

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tmnxEqPowerOverloadStateClear, tmnxEqCardQChipBufMemoryEvent, tmnxEqCardQChipStatsMemoryEvent, tmnxEqCardQChipIntMemoryEvent, tmnxEqCardChipIfDownEvent, tmnxEqCardChipIfCellEvent, tmnxEqLowSwitchFabricCap, tmnxEqLowSwitchFabricCapClear, tmnxEqPowerSafetyAlertThreshold, tmnxEqPowerSafetyAlertClear, tmnxEqPowerSafetyLevelThreshold, tmnxEqPowerSafetyLevelClear, tmnxEqCardTChipParityEvent, tmnxEqProvPowerCapacityAlm, tmnxEqProvPowerCapacityAlmClr, tmnxPlcyAcctStatsPoolExcResource, tmnxPlcyAcctStatsPoolLowResource, tmnxPlcyAcctStatsEventOvrflwClr, tmnxPlcyAcctStatsEventOvrflw, tmnxIomResHighLimitReached, tmnxIomResExhausted, tmnxIomResStateClr, tmnxIomEventOverflow, tmnxIomEventOverflowClr, tmnxEqDataPathFailureProtImpact, tmnxExtStandbyCpmReboot, tmnxExtStandbyCpmRebootFail, tmnxEqMdaIngrXplError, tmnxSyncIfTimBITS2048khzUnsup, tmnxSyncIfTimBITS2048khzUnsupClr, tmnxEqMgmtEthRedStandbyRaise, tmnxEqMgmtEthRedStandbyClear, tmnxEqPhysChassPowerSupOvrTmp, tmnxEqPhysChassPowerSupOvrTmpClr, tmnxEqPhysChassPowerSupAcFail, tmnxEqPhysChassPowerSupAcFailClr, tmnxEqPhysChassPowerSupDcFail, tmnxEqPhysChassPowerSupDcFailClr, tmnxEqPhysChassPowerSupInFail, tmnxEqPhysChassPowerSupInFailClr, tmnxEqPhysChassPowerSupOutFail, tmnxEqPhysChassPowerSupOutFailCl, tmnxEqPhysChassisFanFailure, tmnxEqPhysChassisFanFailureClear, tIPsecIsaMemLowWatermark, tIPsecIsaMemHighWatermark, tIPsecIsaMemMax, tmnxCpmMemSizeMismatch, tmnxCpmMemSizeMismatchClear, tmnxPhysChassPwrSupWrgFanDir, tmnxPhysChassPwrSupWrgFanDirClr, tmnxPhysChassPwrSupPemACRect, tmnxPhysChassPwrSupPemACRectClr, tmnxPhysChassPwrSupInputFeed, tmnxPhysChassPwrSupInputFeedClr, tmnxEqBpEpromFail, tmnxEqBpEpromFailClear, tmnxEqBpEpromWarning, tmnxEqBpEpromWarningClear, tmnxPhysChassisPCMInputFeed, tmnxPhysChassisPCMInputFeedClr, tmnxIPMacQosIngOverload, tmnxIPMacQosIngOverloadClear, tmnxIPQosEgrOverload, tmnxIPQosEgrOverloadClear, tmnxIPv6QosIngOverload, tmnxIPv6QosIngOverloadClear, tmnxIPv6QosEgrOverload, tmnxIPv6QosEgrOverloadClear, tmnxIPMacFilterIngOverload, tmnxIPMacFilterIngOverloadClear, tmnxIPMacFilterEgrOverload, tmnxIPMacFilterEgrOverloadClear, tmnxIPv6FilterIngOverload, tmnxIPv6FilterIngOverloadClear, tmnxIPv6FilterEgrOverload, tmnxIPv6FilterEgrOverloadClear, tmnxIPMacCpmFilterOverload, tmnxIPMacCpmFilterOverloadClear, tmnxIPv6CpmFilterOverload, tmnxIPv6CpmFilterOverloadClear, tmnxBluetoothModuleConnectionChg, tmnxGnssAcquiringFix, tmnxGnssAcquiredFix, tmnxPhysChassisPMOutFail, tmnxPhysChassisPMOutFailClr, tmnxPhysChassisPMInputFeed, tmnxPhysChassisPMInputFeedClr, tmnxPhysChassisFilterDoorOpen, tmnxPhysChassisFilterDoorClosed, tmnxPhysChassisPMOverTemp, tmnxPhysChassisPMOverTempClr, tmnxEqFpgaSoftError, tmnxEqSyncIfTimingSyncEQuality, tmnxEqSyncIfTimingSyncE2Quality, tmnxEqSyncIfTimingSyncEAlarm, tmnxEqSyncIfTimingSyncEAlarmClr, tmnxEqSyncIfTimingSyncE2Alarm, tmnxEqSyncIfTimingSyncE2AlarmClr, tmnxEqHwEventDetected, tmnxTunnelGrpEsaVmActivity, tmnxEsaDiscovered, tmnxEsaConnected, tmnxEsaDisconnected, tmnxEsaFailure, tmnxEsaCleared, tmnxEsaVmCreated, tmnxEsaVmBooted, tmnxEsaVmRemoved, tmnxEsaVmCleared, tmnxEsaVmFailure, tIPsecEsaVmMemLowWatermark,

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tIPsecEsaVmMemHighWatermark, tmnxPeKernelVersionMismatch, tmnxFPResourcePolicyModified, tmnxFPResourcePolicyModifiedClr, tmnxEqSyncIfTimingGnssQuality, tmnxEqSyncIfTimingGnss2Quality, tmnxEqSyncIfTimingGnssAlarm, tmnxEqSyncIfTimingGnss2Alarm, tmnxEqSyncIfTimingGnssAlarmClr, tmnxEqSyncIfTimingGnss2AlarmClr, tmnxEsaFirmwareUpgradeStarted, tmnxPlcyAcctPlcrPoolExcResource, tmnxPlcyAcctPlcrPoolLowResource, tChassisAirflowDirMismatch, tChassisAirflowDirMismatchClr, tChassisPowerSupplyMismatch, tChassisPowerSupplyMismatchClr, tChassisPowerSupplyUnsup, tmnxHwAggShpSchedEventOvrflwClr, tmnxHwAggShpSchedEventOvrflw, tmnxFPResOversubscribed, tmnxFPResOversubscribedCleared, tmnxIPMacFilterIngNearFull, tmnxIPMacFilterIngNearFullClear, tmnxIPMacFilterEgrNearFull, tmnxIPMacFilterEgrNearFullClear, tmnxIPv6FilterIngNearFull, tmnxIPv6FilterIngNearFullClear, tmnxIPv6FilterEgrNearFull, tmnxIPv6FilterEgrNearFullClear, tmnxEsaHwStatusDegraded, tmnxEsaHwStatusDegradedClr, tmnxEsaHwStatusCritical, tmnxEsaHwStatusCriticalClr, tmnxEsaHwPwrSup1Degraded, tmnxEsaHwPwrSup1DegradedClr, tmnxEsaHwPwrSup1Failed, tmnxEsaHwPwrSup1FailedClr, tmnxEsaHwPwrSup2Degraded, tmnxEsaHwPwrSup2DegradedClr, tmnxEsaHwPwrSup2Failed, tmnxEsaHwPwrSup2FailedClr, tmnxEsaHwFanBankNonRedun, tmnxEsaHwFanBankNonRedunClr, tmnxEsaHwFanBankFailRedun, tmnxEsaHwFanBankFailRedunClr, tmnxEsaHwFanStatusDegraded, tmnxEsaHwFanStatusDegradedClr, tmnxEsaHwFanStatusFailed, tmnxEsaHwFanStatusFailedClr, tmnxEsaHwPwrSupMismatch, tmnxEsaHwPwrSupMismatchClr, tmnxEsaHwPwrSupBankNonRedun, tmnxEsaHwPwrSupBankNonRedunClr, tmnxEsaHwPwrSupBankFailRedun, tmnxEsaHwPwrSupBankFailRedunClr, tmnxEsaHwTemperatureDegraded, tmnxEsaHwTemperatureDegradedClr, tmnxEsaHwTemperatureFailed, tmnxEsaHwTemperatureFailedClr, tmnxPowerSupplyFanFailed, tmnxPowerSupplyFanFailedClear, tmnxIxrResourceHighUsage, tmnxIxrResourceExhausted, tmnxIxrResourceRecovered, tmnxIxrResourceHighUsageByOwner, tmnxIxrResourceExhaustedByOwner, tmnxIxrResourceRecoveredByOwner, tmnxSasAlarminput1StateChanged, tmnxSasAlarminput2StateChanged, tmnxSasAlarminput3StateChanged, tmnxSasAlarminput4StateChanged, tmnxAlarmInputVoltageFailure, tmnxIomRsrcUsageHighLimitReached, tmnxIomRsrcUsageExhausted, tmnxIomRsrcUsageRecovered, tmnxIomRsrcEventOverflow, tmnxIomRsrcEventOverflowClr, tmnxIomRsrcOwnerOversubscribed, tmnxIomRsrcOwnerOversubscrbdClr, tmnxInterChassisCommsDown, tmnxInterChassisCommsUp, tmnxCpmIcPortDown, tmnxCpmIcPortUp, tmnxCpmIcPortSFFInserted, tmnxCpmIcPortSFFRemoved, tmnxCpmANoLocalIcPort, tmnxCpmBNoLocalIcPort, tmnxCpmALocalIcPortAvail, tmnxCpmBLocalIcPortAvail, CpmIcPortSFFStatusFailure, CpmIcPortSFFStatusDDMCorrupt, CpmIcPortSFFStatusReadError, CpmIcPortSFFStatusUnsupported, tmnxCpmIcPortDDMFailure, tmnxCpmIcPortDDMClear, tmnxSfmIcPortDown, tmnxSfmIcPortUp, tmnxSfmIcPortSFFInserted, tmnxSfmIcPortSFFRemoved, SfmIcPortSFFStatusFailure, SfmIcPortSFFStatusDDMCorrupt, SfmIcPortSFFStatusReadError, SfmIcPortSFFStatusUnsupported, tmnxSfmIcPortDDMFailure, tmnxSfmIcPortDDMClear, tmnxSfmIcPortDegraded, tmnxSfmIcPortDegradedClear, tmnxCardResMacFdbHighUsgSet, tmnxCardResMacFdbHighUsgClr, tmnxPowerShelfInputPwrModeSwitch,

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	tmnxPowerShelfCommsDown, tmnxPowerShelfCommsUp, tmnxPowerShelfOutputStatusSwitch, tmnxPowerShelfOutputStatusDown, tmnxPowerShelfOutputStatusUp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events chassis event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events chassis event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events chassis event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event

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Context	**configure** log log-events chassis event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events chassis event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events chassis event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events chassis event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

debug event *keyword*

Synopsis	Enter the **debug** list instance
Context	**configure** log log-events debug event *keyword*

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Tree	debug
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events debug event *keyword*
Tree	debug
Options	traceEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events debug event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events debug event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events debug event *keyword* severity *keyword*

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Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events debug event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events debug event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events debug event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events debug event *keyword* throttle *boolean*

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Tree	throttle
Introduced	16.0.R1
Platforms	All

dhcp event *keyword*

Synopsis	Enter the **dhcp** list instance
Context	**configure** log log-events dhcp event *keyword*
Tree	dhcp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events dhcp event *keyword*
Tree	dhcp
Options	svcDHCPLseStateRestoreProblem, sapDHCPLeaseEntriesExceeded, sapDHCPLseStateOverride, sapDHCPSuspiciousPcktRcvd, sapDHCPLseStatePopulateErr, sdpBindDHCPLeaseEntriesExceeded, sdpBindDHCPLseStateOverride, sdpBindDHCPSuspiciousPcktRcvd, sdpBindDHCPLseStatePopulateErr, tmnxVRtrDHCPSuspiciousPcktRcvd, sapStaticHostDynMacConflict, sapDHCPProxyServerError, tmnxVRtrDHCPIfLseStatesExceeded, sdpBindDHCPProxyServerError, tmnxVRtrDHCP6RelayLseStExceeded, tmnxVRtrDHCP6ServerLseStExceeded, tmnxVRtrDHCP6LseStateOverride, tmnxVRtrDHCP6RelayReplyStripUni, tmnxVRtrDHCP6IllegalClientAddr, tmnxVRtrDHCP6AssignedIllegSubnet, tmnxVRtrDHCP6ClientMacUnresolved, sapDHCPLseStateMobilityError, sdpBindDHCPLseStateMobilityErr, svcDHCPMiscellaneousProblem, sapStatHost6DynMacConflict
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events dhcp event *keyword* generate *boolean*
Tree	generate

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Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events dhcp event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events dhcp event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events dhcp event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events dhcp event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200

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Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events dhcp event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events dhcp event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

dhcps event *keyword*

Synopsis	Enter the **dhcps** list instance
Context	**configure** log log-events dhcps event *keyword*
Tree	dhcps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events dhcps event *keyword*
Tree	dhcps
Options	tmnxDhcpSvrSubnetMinFreeExc, tmnxDhcpSvrHostConflict, tmnxDhcpSvrPoolUnknown, tmnxDhcpSvrLeaseNotOwner, tmnxDhcpSvrDeclineStaticAddr, tmnxDhcpSvrMsgTooLong, tmnxDhcpsFoStateChange,

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	tmnxDhcpsFoLeaseUpdateFailed, tmnxDhcpSvrUserDbUnknown, tmnxDhcpSvrMaxLeasesReached, tmnxDhcpSvrNoSubnetFixAddr, tmnxDhcpSvrLeaseDefaultTimers, tmnxDhcpSvrPoolMinFreeExc, tmnxDhcpSvrSubnetDepleted, tmnxDhcpSvrPoolDepleted, tmnxDhcpSvrIntLseConflict, tmnxDhcpSvrLeaseModify, tmnxDhcpSvrLeaseCreate, tmnxDhcpSvrLeaseDelete, tmnxLudbDhcpGroupIfTooLong, tmnxLudbPppoeGroupIfTooLong, tmnxDhcpSvrNoContFreeBlocks, tmnxDhcpsPoolFoStateChange, tmnxDhcpsPoolFoLeaseUpdateFailed, tmnxDhcpSvrPlThTooLowV6, tmnxDhcpSvrPlThDepletedV6, tmnxDhcpSvrPfxThTooLowV6, tmnxDhcpSvrPfxThDepletedV6, tmnxDhcpsLeaseOfferedExpired, tmnxDhcpsAddrAllocationFailure, tmnxDhcpsPacketDropped
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events dhcps event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events dhcps event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events dhcps event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events dhcps event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events dhcps event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events dhcps event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events dhcps event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

diameter event *keyword*

Synopsis	Enter the **diameter** list instance
Context	**configure** log log-events diameter event *keyword*
Tree	diameter
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events diameter event *keyword*
Tree	diameter
Options	tmnxDiamPolicyPeerStateChange, tmnxDiamAppSessionFailure, tmnxDiamSessionEvent, tmnxDiamPpPrxMcLocStateChanged, tmnxDiamMessageDropped, tmnxDiamNdPeerStatActiveChanged
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events diameter event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events diameter event *keyword* repeat *boolean*
Tree	repeat
Default	false

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Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events diameter event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events diameter event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events diameter event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events diameter event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000

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Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events diameter event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

dot1x event *keyword*

Synopsis	Enter the **dot1x** list instance
Context	**configure** log log-events dot1x event *keyword*
Tree	dot1x
Introduced	21.2.R1
Platforms	All

event *keyword*

Synopsis	Events for dynsvc module.
Context	**configure** log log-events dot1x event *keyword*
Tree	dot1x
Options	alxDot1xHostAuthEvent
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events dot1x event *keyword* generate *boolean*
Tree	generate
Introduced	21.2.R1

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Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events dot1x event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	21.2.R1
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events dot1x event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	21.2.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events dot1x event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	21.2.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events dot1x event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	21.2.R1

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Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events dot1x event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	21.2.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events dot1x event *keyword* throttle *boolean*
Tree	throttle
Introduced	21.2.R1
Platforms	All

dynsvc event *keyword*

Synopsis	Enter the **dynsvc** list instance
Context	**configure** log log-events dynsvc event *keyword*
Tree	dynsvc
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events dynsvc event *keyword*
Tree	dynsvc
Options	tmnxDynSvcSapFailed
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events dynsvc event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events dynsvc event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events dynsvc event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events dynsvc event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

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specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events dynsvc event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events dynsvc event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events dynsvc event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

efm-oam event *keyword*

Synopsis	Enter the **efm-oam** list instance
Context	**configure** log log-events efm-oam event *keyword*
Tree	efm-oam
Introduced	16.0.R1
Platforms	All

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event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events efm-oam event *keyword*
Tree	efm-oam
Options	tmnxDot3OamPeerChanged, tmnxDot3OamLoopDetected, tmnxDot3OamLoopCleared, dot3OamThresholdEvent, dot3OamNonThresholdEvent, tmnxDot3OamSdThresholdEvent, tmnxDot3OamThresholdEventClr, tmnxDot3OamNonThresholdEventClr
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events efm-oam event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events efm-oam event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events efm-oam event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1

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Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events efm-oam event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events efm-oam event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events efm-oam event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events efm-oam event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

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elmi event *keyword*

Synopsis	Enter the **elmi** list instance
Context	**configure** log log-events elmi event *keyword*
Tree	elmi
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events elmi event *keyword*
Tree	elmi
Options	tmnxElmiIfStatusChangeEvent, tmnxElmiEVCStatusChangeEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events elmi event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events elmi event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

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severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events elmi event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events elmi event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events elmi event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events elmi event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

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throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events elmi event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

ering event *keyword*

Synopsis	Enter the **ering** list instance
Context	**configure** log log-events ering event *keyword*
Tree	ering
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events ering event *keyword*
Tree	ering
Options	tmnxEthRingPathFwdStateChange, tmnxEthRingApsPrvsnRaiseAlarm, tmnxEthRingApsPrvsnClearAlarm
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events ering event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

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repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events ering event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events ering event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events ering event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events ering event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

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specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events ering event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events ering event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

eth-cfm event *keyword*

Synopsis	Enter the **eth-cfm** list instance
Context	**configure** log log-events eth-cfm event *keyword*
Tree	eth-cfm
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events eth-cfm event *keyword*
Tree	eth-cfm
Options	dot1agCfmFaultAlarm, tmnxDot1agCfmMepLbmTestComplete, tmnxDot1agCfmMepLtmTestComplete, tmnxDot1agCfmMepEthTestComplete, tmnxDot1agCfmMepDMTestComplete, tmnxDot1agCfmMepAisStateChanged, tmnxDot1agCfmMipEvaluation, tmnxDot1agCfmMepSLMTestComplete, tmnxDot1agCfmMepCsfStateChanged, tmnxDot1agCfmMepFcltyFaultRaise, tmnxDot1agCfmMepFcltyFaultClear
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events eth-cfm event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events eth-cfm event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events eth-cfm event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events eth-cfm event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1

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Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events eth-cfm event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events eth-cfm event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events eth-cfm event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

etun event *keyword*

Synopsis	Enter the **etun** list instance
Context	**configure** log log-events etun event *keyword*
Tree	etun
Introduced	16.0.R1
Platforms	All

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event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events etun event *keyword*
Tree	etun
Options	tmnxEthTunnelApsCfgRaiseAlarm, tmnxEthTunnelApsCfgClearAlarm, tmnxEthTunnelApsPrvsnRaiseAlarm, tmnxEthTunnelApsPrvsnClearAlarm, tmnxEthTunnelApsNoRspRaiseAlarm, tmnxEthTunnelApsNoRspClearAlarm, tmnxEthTunnelApsSwitchoverAlarm
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events etun event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events etun event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events etun event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning

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Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events etun event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events etun event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events etun event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events etun event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1

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Platforms	All

filter event *keyword*

Synopsis	Enter the **filter** list instance
Context	**configure** log log-events filter event *keyword*
Tree	filter
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events filter event *keyword*
Tree	filter
Options	tIPFilterPBRPacketsDrop, tFilterSubInsSpaceAlarmRaised, tFilterSubInsSpaceAlarmCleared, tFilterSubInsFltrEntryDropped, tFilterBgpFlowSpecProblem, tFilterApplyPathProblem, tFilterRadSharedFltrAlarmRaised, tFilterRadSharedFltrAlarmClear, tFilterEmbeddingOperStateChange, tFilterEmbedOpenflowOperStateChg, tFilterOpenflowRequestRejected, tFilterEmbedFlowspecOperStateChg, tFilterRPActiveDestChangeEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events filter event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared

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Context	**configure** log log-events filter event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events filter event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events filter event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events filter event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged

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Context	**configure** log log-events filter event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events filter event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

gsmp event *keyword*

Synopsis	Enter the **gsmp** list instance
Context	**configure** log log-events gsmp event *keyword*
Tree	gsmp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events gsmp event *keyword*
Tree	gsmp
Options	tmnxAncpIngRateMonitorEvent, tmnxAncpIngRateMonitorEventL, tmnxAncpEgrRateMonitorEvent, tmnxAncpEgrRateMonitorEventL, tmnxAncpShcvDisabledEvent, tmnxAncpShcvDisabledEventL, tmnxAncpSesRejected, tmnxAncpStringRejected
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events gsmp event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events gsmp event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events gsmp event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events gsmp event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

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specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events gsmp event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events gsmp event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events gsmp event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

igmp event *keyword*

Synopsis	Enter the **igmp** list instance
Context	**configure** log log-events igmp event *keyword*
Tree	igmp
Introduced	16.0.R1
Platforms	All

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event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events igmp event *keyword*
Tree	igmp
Options	vRtrIgmpIfRxQueryVerMismatch, vRtrIgmpIfCModeRxQueryMismatch, vRtrIgmpMaxGrpsLimitExceeded, vRtrIgmpMcacPlcyDropped, vRtrIgmpHostInstantiationFail, vRtrIgmpHostMaxGrpsLimitExceeded, vRtrIgmpHostMcacPlcyDropped, vRtrIgmpHostCModeRxQueryMismatch, vRtrIgmpHostRxQueryVerMismatch, vRtrIgmpHostMaxSrcsLimitExceeded, vRtrIgmpMaxSrcsLimitExceeded, vRtrIgmpGrpIfSapMaxGrpsLimExceed, vRtrIgmpGrpIfSapMaxSrcsLimExceed, vRtrIgmpGrpIfSapMcacPlcyDropped, vRtrIgmpGrpIfSapCModeRxQueryMism, vRtrIgmpGrpIfSapRxQueryVerMism, vRtrIgmpHostMaxGrpSrcsLimitExcd, vRtrIgmpMaxGrpSrcsLimitExceeded, vRtrIgmpGrpIfSapMaxGrpSrcLimExcd, vRtrIgmpHostQryIntervalConflict, vRtrIgmpNotifyNumOfIPsecIfLowWm, vRtrIgmpNotifyNumOfIPsecIfHighWm, vRtrIgmpNotifyNumOfIPsecIfMaxRch, vRtrIgmpSlaProfInstMcacPlcyDrop
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events igmp event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events igmp event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

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severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events igmp event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events igmp event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events igmp event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events igmp event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

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throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events igmp event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

igmp-snooping event *keyword*

Synopsis	Enter the **igmp-snooping** list instance
Context	**configure** log log-events igmp-snooping event *keyword*
Tree	igmp-snooping
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events igmp-snooping event *keyword*
Tree	igmp-snooping
Options	sapIgmpSnpgGrpLimitExceeded, sapIgmpSnpgMcacPlcyDropped, sdpBndIgmpSnpgGrpLimitExceeded, sdpBndIgmpSnpgMcacPlcyDropped, sapIgmpSnpgMcsFailure, sapIgmpSnpgSrcLimitExceeded, sdpBndIgmpSnpgSrcLimitExceeded, sdpBndIgmpSnpgGrpSrcLimitExceed, sapIgmpSnpgGrpSrcLimitExceeded, eMplsIgmpSnpgMfibFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events igmp-snooping event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

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repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events igmp-snooping event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events igmp-snooping event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events igmp-snooping event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events igmp-snooping event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

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specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events igmp-snooping event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events igmp-snooping event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

ip event *keyword*

Synopsis	Enter the **ip** list instance
Context	**configure** log log-events ip event *keyword*
Tree	ip
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events ip event *keyword*
Tree	ip
Options	clearRTMError, ipEtherBroadcast, ipDuplicateAddress, ipArpInfoOverwritten, fibAddFailed, qosNetworkPolicyMallocFailed, ipArpBadInterface, ipArpDuplicateIpAddress, ipArpDuplicateMacAddress, ipAnyDuplicateAddress, labelIndexAllocFailed
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events ip event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events ip event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events ip event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events ip event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

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specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events ip event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events ip event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events ip event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

ipsec event *keyword*

Synopsis	Enter the **ipsec** list instance
Context	**configure** log log-events ipsec event *keyword*
Tree	ipsec
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events ipsec event *keyword*
Tree	ipsec
Options	tIPsecRUTnlFailToCreate, tIPsecRUSAFailToAddRoute, tIPsecBfdIntfSessStateChgd, tIPsecRadAcctPlcyFailure, tIPSecTrustAnchorPrfOprChg, tIPsecTunnelEncapIpMtuTooSmall, tIPsecRuTnlEncapIpMtuTooSmall, tmnxSecNotifCmptedCertHashChngd, tmnxSecNotifCmptedCertChnChngd, tmnxSecNotifSendChnNotInCmptChn, tmnxIPsecTunnelOperStateChange, tmnxIPsecGWOperStateChange, tIPsecRUTnlRemoved, tIPsecTunnelProtocolFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events ipsec event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events ipsec event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events ipsec event *keyword* severity *keyword*
Tree	severity

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Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events ipsec event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events ipsec event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events ipsec event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events ipsec event *keyword* throttle *boolean*
Tree	throttle

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isis event *keyword*

Synopsis	Enter the **isis** list instance
Context	**configure** log log-events isis event *keyword*
Tree	isis
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events isis event *keyword*
Tree	isis
Options	vRtrIsisSpbNbrMultAdjExists, vRtrIsisSpbNbrMultAdjExistsClear, vRtrSpbEctFidCfgChg, tmnxIsisDatabaseOverload, tmnxIsisManualAddressDrops, tmnxIsisCorruptedLSPDetected, tmnxIsisMaxSeqExceedAttempt, tmnxIsisIDLenMismatch, tmnxIsisMaxAreaAddrsMismatch, tmnxIsisOwnLSPPurge, tmnxIsisSequenceNumberSkip, tmnxIsisAutTypeFail, tmnxIsisAuthFail, tmnxIsisVersionSkew, tmnxIsisAreaMismatch, tmnxIsisRejectedAdjacency, tmnxIsisLSPTooLargeToPropagate, tmnxIsisOrigLSPBufSizeMismatch, tmnxIsisProtoSuppMismatch, tmnxIsisAdjacencyChange, tmnxIsisCircIdExhausted, tmnxIsisAdjRestartStatusChange, tmnxIsisLdpSyncTimerStarted, tmnxIsisLdpSyncExit, tmnxIsisExportLimitReached, tmnxIsisExportLimitWarning, tmnxIsisRoutesExpLmtDropped, tmnxIsisFailureDisabled, tmnxIsisSidError, tmnxIsisSidNotInLabelRange, tmnxIsisRejectedAdjacencySid, tmnxIsisLSPPurge, tmnxIsisPfxLimitOverloadWarning, tmnxIsisAdjBfdSessionSetupFail, tmnxIsisSrgbBadLabelRange, tmnxIsisCircMtuTooLow, tmnxIsisRejectedAdjacencySet, tmnxIsisCorruptRemainingLifetime, tmnxIsisSidStatsIndexAlloc, tmnxIsisFaOperParticipationDown, tmnxIsisRejectedEndXSid, tmnxIsisRejectedPgId, tmnxIsisSrv6LocError
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs

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Context	**configure** log log-events isis event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events isis event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events isis event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events isis event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events isis event *keyword* specific-throttle-interval *number*

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Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events isis event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events isis event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

l2tp event *keyword*

Synopsis	Enter the **l2tp** list instance
Context	**configure** log log-events l2tp event *keyword*
Tree	l2tp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events l2tp event *keyword*
Tree	l2tp

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Options	tmnxL2tpPeerUnreachable, tmnxL2tpIsaMdaVRtrStateChange, tmnxL2tpLnsSePppSessionFailure, tmnxL2tpVappVRtrStateChange, tmnxL2tpTunnelBlacklisted, tmnxL2tpTunnelSelBlacklistFull, tmnxL2tpLnsPppNcpFailure, tmnxL2tpApFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events l2tp event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events l2tp event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events l2tp event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events l2tp event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events l2tp event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events l2tp event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events l2tp event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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lag event *keyword*

Synopsis	Enter the **lag** list instance
Context	**configure** log log-events lag event *keyword*
Tree	lag
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events lag event *keyword*
Tree	lag
Options	DynamicCostOn, DynamicCostOff, LagPortAddFailed, LagSubGroupSelected, LagPortAddFailureCleared, LagStateEvent, tLagMemberStateEvent, tmnxLagBfdMemStateChanged, tLagAdaptiveLoadbalancingChanged
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events lag event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events lag event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

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severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events lag event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events lag event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events lag event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events lag event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

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throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events lag event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

ldap event *keyword*

Synopsis	Enter the **ldap** list instance
Context	**configure** log log-events ldap event *keyword*
Tree	ldap
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events ldap event *keyword*
Tree	ldap
Options	tmnxLdapOperStateChange, tmnxLdapServerOperStateChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events ldap event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

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repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events ldap event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events ldap event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events ldap event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events ldap event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

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specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events ldap event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events ldap event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

ldp event *keyword*

Synopsis	Enter the **ldp** list instance
Context	**configure** log log-events ldp event *keyword*
Tree	ldp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events ldp event *keyword*
Tree	ldp
Options	vRtrLdpStateChange, vRtrLdpGroupIdMismatch, vRtrLdpNgIpv4InstStateChange, vRtrLdpNgIpv6InstStateChange, vRtrLdpNgIfStateChange, vRtrLdpNgInetIfStateChange, vRtrLdpNgTargPeerStateChange, vRtrLdpNgSessionStateChange, vRtrLdpNgSessMaxFecThresChanged, vRtrLdpNgSessMaxFecLimitReached, vRtrLdpNgResourceExhaustion, vRtrLdpNgAddrFecCommMismatch
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events ldp event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events ldp event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events ldp event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events ldp event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1

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Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events ldp event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events ldp event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events ldp event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

li event *keyword*

Synopsis	Enter the **li** list instance
Context	**configure** log log-events li event *keyword*
Tree	li
Introduced	16.0.R1
Platforms	All

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event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events li event *keyword*
Tree	li
Options	sbiBootLiConfig, sourceEnabled, sourceDisabled, destinationEnabled, destinationDisabled, sourceSapChange, sourceSubscriberChange, tMirrorSourceIPFltrChangeReject, tMirrorSourceMacFltrChangeReject, tMirrorSourceFilterAssignReject, tMirrorDestinationChangeReject, tMirrorSourceFilterOverruled, tMirrorSourceFilterAssignWarn, tMirrorFilterAssignToSapWarn, tMirrorFilterAssignToSdpWarn, tMirrorFilterAssignToItfWarn, tMirrorSourceLiFilterChanged, tMirrorSourceLiSubProblem, tMirrorSourceIPv6FltrChangeRej, tMirrorLiNatLsnSubOperStateCh, tMirrorLiNatL2awSubOperStateCh, tMirrorLiNat64SubOperStateCh, tMirrorLiX2Alarm, tFltrLiRsvdBlockRangeChangeEvent, tMirrorLiSrcPortLicInvalid, tMirrorLiXIfLicenseInvalid, cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, ssh_user_login, ssh_user_logout, ssh_user_login_failed, ssh_user_login_max_attempts, cli_user_io, snmp_user_set, cli_config_io, cli_unauth_user_io, cli_unauth_config_io, grpc_user_login, grpc_user_logout, grpc_user_login_failed, grpc_user_login_max_attempts, host_snmp_attempts, radiusFailed, netconf_user_login, netconf_user_logout, netconf_user_login_failed, netconf_user_login_max_attempts, mdSaveCommitHistoryFailed, sbiBootMdReadCommitHistoryFailed, ssiSaveConfigSucceeded, ssiSaveConfigFailed, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, mdLiConfigChange, ssiSyncConfigOK, ssiSyncConfigFailed, md_cli_io, md_cli_unauth_io, tmnxClear, netconf_auth, netconf_unauth, grpc_auth, grpc_unauth
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events li event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

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repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events li event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events li event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events li event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events li event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

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specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events li event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events li event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

lldp event *keyword*

Synopsis	Enter the **lldp** list instance
Context	**configure** log log-events lldp event *keyword*
Tree	lldp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events lldp event *keyword*
Tree	lldp
Options	lldpRemTablesChange, tmnxLldpRemEntryPeerAdded, tmnxLldpRemEntryPeerUpdated, tmnxLldpRemEntryPeerRemoved, tmnxLldpRemManAddrEntryAdded, tmnxLldpRemManAddrEntryRemoved
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events lldp event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events lldp event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events lldp event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events lldp event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

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specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events lldp event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events lldp event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events lldp event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

logger event *keyword*

Synopsis	Enter the **logger** list instance
Context	**configure** log log-events logger event *keyword*
Tree	logger
Introduced	16.0.R1
Platforms	All

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event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events logger event *keyword*
Tree	logger
Options	STARTED, tmnxLogTraceError, tmnxLogSpaceContention, tmnxLogAdminLocFailed, tmnxLogBackupLocFailed, tmnxLogFileRollover, tmnxLogFileDeleted, tmnxClear, tmnxTestEvent, tmnxLogEventThrottled, tmnxSysLogTargetProblem, tmnxLogAccountingDataLoss, tmnxStdEventsReplayed, tmnxLogOnlyEventThrottled, tmnxLogEventOverrun, tmnxLogOnlyEventOverrun
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events logger event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events logger event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events logger event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning

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Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events logger event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events logger event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events logger event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events logger event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1

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Platforms	All

macsec event *keyword*

Synopsis	Enter the **macsec** list instance
Context	**configure** log log-events macsec event *keyword*
Tree	macsec
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events macsec event *keyword*
Tree	macsec
Options	tmnxMacsecConfiguredPortCA, tmnxMacsecUnconfiguredPortCA, tmnxMacsecEnabledPort, tmnxMacsecDisabledPort, tmnxMacsecMaxPeerLimitExceeded, tmnxMkaSessionEstablished, tmnxMkaPskRollover, tmnxMkaSessionEnded, tmnxMkaOperStateChanged, tmnxMacsecMaxPeerLimitCleared, tmnxMacsecCaCreate, tmnxMacsecSakCreate, tmnxMacsecSakInstalledRx, tmnxMacsecSakInstalledTx, tmnxMacsecMkaReplayAttemptDisc, tmnxMacsecDpReplayAttempt, tmnxMacsecSakDelete
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events macsec event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

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repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events macsec event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events macsec event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events macsec event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events macsec event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

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specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events macsec event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events macsec event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

mc-redundancy event *keyword*

Synopsis	Enter the **mc-redundancy** list instance
Context	**configure** log log-events mc-redundancy event *keyword*
Tree	mc-redundancy
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events mc-redundancy event *keyword*
Tree	mc-redundancy
Options	tmnxMcRedundancyPeerStateChanged, tmnxMcRedundancyMismatchDetected, tmnxMcRedundancyMismatchResolved, tmnxMcPeerSyncStatusChanged, tmnxMcSyncClientAlarmRaised, tmnxMcSyncClientAlarmCleared, tmnxSrrpSubnetMismatch, tmnxSrrpSubnetMismatchCleared, tmnxSrrpInstanceIdMismatch, tmnxSrrpSapMismatch, tmnxSrrpSapTagMismatch, tmnxSrrpRedIfMismatch, tmnxSrrpDualMaster, tmnxMcLagInfoLagChanged, tmnxSrrpSystemIpNotSet, tmnxMcRingOperStateChanged, tmnxMcRingInbCtrlOperStateChgd, tmnxMcRingNodeLocOperStateChgd, tmnxMcSyncClockSkewRaised, tmnxMcSyncClockSkewCleared,

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	tmnxSrrpDuplicateSubIfAddress, tmnxMcPeerRingsOperStateChanged, tmnxSrrpTrapNewMaster, tmnxSrrpBecameBackup, srrpPacketDiscarded, tmnxSrrpBfdIntfSessStateChgd, tmnxMcPeerEPBfdSessionOpen, tmnxMcPeerEPBfdSessionClose, tmnxMcPeerEPBfdSessionUp, tmnxMcPeerEPBfdSessionDown, tmnxMcPeerEPOperDown, tmnxMcPeerEPOperUp, tmnxMCEPSessionPsvModeEnabled, tmnxMCEPSessionPsvModeDisabled, tMcPeerIPsecTnlGrpMasterStateChg, tMcPeerIPsecTnlGrpProtStatusChg, tmnxMcOmcrStatFailedChanged, tmnxMcOmcrClientNumEntriesHigh, tmnxSrrpOperDownInvalidMac, tmnxSrrpOperDownInvalidMacClear, tmnxSrrpPrivRetailMismatch, tMcIPsecDomainActivityStateChg, tMcIpsecDomainProtStatusChg
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events mc-redundancy event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events mc-redundancy event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events mc-redundancy event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning

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Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events mc-redundancy event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events mc-redundancy event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events mc-redundancy event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events mc-redundancy event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1

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Platforms	All

mcpath event *keyword*

Synopsis	Enter the **mcpath** list instance
Context	**configure** log log-events mcpath event *keyword*
Tree	mcpath
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events mcpath event *keyword*
Tree	mcpath
Options	tmnxMcPathSrcGrpBlackHole, tmnxMcPathSrcGrpBlackHoleCleared, tmnxMcPathAvailBwLimitExceeded, tmnxMcPathAvailBwLimitCleared
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events mcpath event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events mcpath event *keyword* repeat *boolean*
Tree	repeat
Default	false

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Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events mcpath event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events mcpath event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events mcpath event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events mcpath event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000

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Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events mcpath event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

mgmt-core event *keyword*

Synopsis	Enter the **mgmt-core** list instance
Context	**configure** log log-events mgmt-core event *keyword*
Tree	mgmt-core
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events mgmt-core event *keyword*
Tree	mgmt-core
Options	none, mdConfigChange, mdOcConfigChange, mdBofConfigChange, mdDebugConfigChange, asyncOperationStatusChange, syncOperationStatusChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events mgmt-core event *keyword* generate *boolean*
Tree	generate

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Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events mgmt-core event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events mgmt-core event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events mgmt-core event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events mgmt-core event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200

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Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events mgmt-core event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events mgmt-core event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

mirror event *keyword*

Synopsis	Enter the **mirror** list instance
Context	**configure** log log-events mirror event *keyword*
Tree	mirror
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events mirror event *keyword*
Tree	mirror
Options	sourceEnabled, sourceDisabled, destinationEnabled, destinationDisabled, sourceIpFilterChange, sourceMacFilterChange, sourceSapChange, sourceSubscriberChange, tMirrorSourceIpv6FilterChange

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events mirror event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events mirror event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events mirror event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events mirror event *keyword* specific-throttle *boolean*
Tree	specific-throttle

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Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events mirror event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events mirror event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events mirror event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

mld event *keyword*

Synopsis	Enter the **mld** list instance
Context	**configure** log log-events mld event *keyword*
Tree	mld
Introduced	16.0.R1

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Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events mld event *keyword*
Tree	mld
Options	vRtrMldIfRxQueryVerMismatch, vRtrMldIfCModeRxQueryMismatch, vRtrMldMaxGrpsLimitExceeded, vRtrMldMcacPlcyDropped, vRtrMldHostInstantiationFail, vRtrMldHostMaxGrpsLimitExceeded, vRtrMldHostMcacPlcyDropped, vRtrMldHostCModeRxQueryMismatch, vRtrMldHostRxQueryVerMismatch, vRtrMldHostMaxSrcsLimitExceeded, vRtrMldMaxSrcsLimitExceeded, vRtrMldGrpIfSapMaxGrpsLimExceed, vRtrMldGrpIfSapMaxSrcsLimExceed, vRtrMldGrpIfSapMcacPlcyDropped, vRtrMldGrpIfSapCModeRxQueryMism, vRtrMldGrpIfSapRxQueryVerMism, vRtrMldHostMaxGrpSrcsLimitExcd, vRtrMldMaxGrpSrcsLimitExceeded, vRtrMldGrpIfSapMaxGrpSrcLimExcd, vRtrMldHostQryIntervalConflict, vRtrMldSlaProfInstMcacPlcyDrop
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events mld event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events mld event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

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severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events mld event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events mld event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events mld event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events mld event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

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throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events mld event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

mld-snooping event *keyword*

Synopsis	Enter the **mld-snooping** list instance
Context	**configure** log log-events mld-snooping event *keyword*
Tree	mld-snooping
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events mld-snooping event *keyword*
Tree	mld-snooping
Options	sapMldSnpgGrpLimitExceeded, sdpBndMldSnpgGrpLimitExceeded, sapMldSnpgMcsFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events mld-snooping event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

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repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events mld-snooping event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events mld-snooping event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events mld-snooping event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events mld-snooping event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

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specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events mld-snooping event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events mld-snooping event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

mpls event *keyword*

Synopsis	Enter the **mpls** list instance
Context	**configure** log log-events mpls event *keyword*
Tree	mpls
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events mpls event *keyword*
Tree	mpls
Options	mplsXCUp, mplsXCDown, mplsTunnelUp, mplsTunnelDown, mplsTunnelRerouted, mplsTunnelReoptimized, vRtrMplsStateChange, vRtrMplsIfStateChange, vRtrMplsLspUp, vRtrMplsLspDown, vRtrMplsLspPathUp, vRtrMplsLspPathDown, vRtrMplsLspPathRerouted, vRtrMplsLspPathResignaled, vRtrMplsP2mpInstanceUp, vRtrMplsP2mpInstanceDown, vRtrMplsS2lSubLspUp, vRtrMplsS2lSubLspDown, vRtrMplsS2lSubLspRerouted, vRtrMplsS2lSubLspResignaled, vRtrMplsLspPathSoftPreempted, vRtrMplsLspPathLstFillReoptElig, vRtrMplsP2mpInstanceResignaled, vRtrMplsResignalTimerExpired, vRtrMplsLspPathMbbStatusEvent, vRtrMplsLspSwitchStbyFailure,

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	vRtrMplsLspActivePathChanged, vRtrMplsXCBundleChange, vRtrMplsNodeInIgpOverload, vRtrMplsIPv6StateChange, vRtrMplsIfIPv6StateChange, vRtrMplsLspResourceExhaustion, vRtrMplsLspManualSwitchFailure, vRtrMplsLspPathManualDegStateChg, vRtrMplsS2lSubLspPreempted, vRtrMplsNodeInIgpOverloadIpv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events mpls event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events mpls event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events mpls event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

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specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events mpls event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events mpls event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events mpls event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events mpls event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

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mpls-tp event *keyword*

Synopsis	Enter the **mpls-tp** list instance
Context	**configure** log log-events mpls-tp event *keyword*
Tree	mpls-tp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events mpls-tp event *keyword*
Tree	mpls-tp
Options	vRtrMplsTpLspRevertMismatchAlarm, vRtrMplsTpLspRevertMismatchClear, vRtrMplsTpLspPtTypeMismatchAlarm, vRtrMplsTpLspPtTypeMismatchClear, vRtrMplsTpLspActivePathUp, vRtrMplsTpLspActivePathChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events mpls-tp event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events mpls-tp event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

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severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events mpls-tp event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events mpls-tp event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events mpls-tp event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events mpls-tp event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

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throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events mpls-tp event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

msdp event *keyword*

Synopsis	Enter the **msdp** list instance
Context	**configure** log log-events msdp event *keyword*
Tree	msdp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events msdp event *keyword*
Tree	msdp
Options	msdpEstablished, msdpBackwardTransition, tmnxMsdpNgActSrcLimExcd, tmnxMsdpNgPeerActSrcLimExcd, tmnxMsdpNgRPFFailure, tmnxMsdpNgSourceSrcActMsgsExcd, tmnxMsdpNgGroupSrcActMsgsExcd
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events msdp event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

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repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events msdp event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events msdp event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events msdp event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events msdp event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

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specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events msdp event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events msdp event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

nat event *keyword*

Synopsis	Enter the **nat** list instance
Context	**configure** log log-events nat event *keyword*
Tree	nat
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events nat event *keyword*
Tree	nat
Options	tmnxNatPlL2AwBlockUsageHigh, tmnxNatIsaMemberSessionUsageHigh, tmnxNatPlLsnMemberBlockUsageHigh, tmnxNatL2AwSubIcmpPortUsageHigh, tmnxNatL2AwSubUdpPortUsageHigh, tmnxNatL2AwSubTcpPortUsageHigh, tmnxNatL2AwSubSessionUsageHigh, tmnxNatPlBlockAllocationLsn, tmnxNatPlBlockAllocationL2Aw, tmnxNatResourceProblemDetected, tmnxNatResourceProblemCause, tmnxNatPlAddrFree, tmnxNatPlLsnRedActiveChanged, tmnxNatPcpSrvStateChanged,

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	tmnxNatMdaActive, tmnxNatLsnSubBlksFree, tmnxNatDetPlcyChanged, tmnxNatMdaDetectsLoadSharingErr, tmnxNatIsaGrpOperStateChanged, tmnxNatIsaGrpIsDegraded, tmnxNatLsnSubIcmpPortUsgHigh, tmnxNatLsnSubUdpPortUsgHigh, tmnxNatLsnSubTcpPortUsgHigh, tmnxNatLsnSubSessionUsgHigh, tmnxNatInAddrPrefixBlksFree, tmnxNatFwd2EntryAdded, tmnxNatFwd2OperStateChanged, tmnxNatVrtrOutDnatOnlyRoutesHigh, tmnxNatMapRuleChange, tmnxNatMaxNbrSubsOrHostsExceeded, tmnxNatNbrSubsOrHostsBelowThrsh, tmnxNatVappActive, tmnxNatVappDetectsLoadSharingErr, tmnxNatDetPfxMapOperStateChanged, tmnxNatDetMap2OperStateChanged, tmnxNatDynamicConfigMismatch, tmnxNatPIL2AwMembrBlockUsageHigh, tmnxNatPlMemberExtBlockUsageHigh
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events nat event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events nat event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events nat event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events nat event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events nat event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events nat event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events nat event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ntp event *keyword*

Synopsis	Enter the **ntp** list instance
Context	**configure** log log-events ntp event *keyword*
Tree	ntp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events ntp event *keyword*
Tree	ntp
Options	tmnxNtpAuthMismatch, tmnxNtpNoServersAvail, tmnxNtpServersAvail, tmnxNtpOperChange, tmnxNtpServerChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events ntp event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events ntp event *keyword* repeat *boolean*
Tree	repeat
Default	false

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Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events ntp event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events ntp event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events ntp event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events ntp event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000

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Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events ntp event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

oam event *keyword*

Synopsis	Enter the **oam** list instance
Context	**configure** log log-events oam event *keyword*
Tree	oam
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events oam event *keyword*
Tree	oam
Options	tmnxOamPingProbeFailedV3, tmnxOamPingTestFailedV3, tmnxOamPingTestCompletedV3, tmnxAncpLoopbackTestCompleted, tmnxAncpLoopbackTestCompletedL, tmnxOamTrPathChange, tmnxOamTrTestFailed, tmnxOamTrTestCompleted, svcIdInvalid, svcIdWrongType, tmnxOamLdpTtraceAutoDiscState, tmnxOamLdpTtraceFecProbeState, tmnxOamLdpTtraceFecDisStatus, tmnxOamLdpTtraceFecPFailUpdate, tmnxOamSaaThreshold, tmnxOamDiagTestCompleted, tmnxTwampSrvInactivityTimeout, tmnxTwampSrvMaxConnsExceeded, tmnxTwampSrvPfxMaxConnsExceeded, tmnxTwampSrvMaxSessExceeded, tmnxTwampSrvPfxMaxSessExceeded, tmnxTwampRflInactivityTimeout, tmnxOamPmThrRaise, tmnxOamPmThrClear, tmnxOamSathSvcTestCompleted, tmnxOamSathSvcStrmCompleted
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events oam event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events oam event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events oam event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events oam event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

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specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events oam event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events oam event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events oam event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

openflow event *keyword*

Synopsis	Enter the **openflow** list instance
Context	**configure** log log-events openflow event *keyword*
Tree	openflow
Introduced	16.0.R2
Platforms	All

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event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events openflow event *keyword*
Tree	openflow
Options	tmnxOFFlowEntryInsertFailed
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events openflow event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R2
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events openflow event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events openflow event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R2
Platforms	All

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specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events openflow event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R2
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events openflow event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R2
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events openflow event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R2
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events openflow event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R2
Platforms	All

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ospf event *keyword*

Synopsis	Enter the **ospf** list instance
Context	**configure** log log-events ospf event *keyword*
Tree	ospf
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events ospf event *keyword*
Tree	ospf
Options	tmnxOspfVirtIfStateChange, tmnxOspfVirtNbrStateChange, tmnxOspfVirtIfConfigError, tmnxOspfVirtIfAuthFailure, tmnxOspfVirtIfRxBadPacket, tmnxOspfAreaOriginateLsa, tmnxOspfAreaMaxAgeLsa, tmnxOspfLsdbOverflow, tmnxOspfLsdbApproachingOverflow, tmnxOspfNssaTranslatorStatusChg, tmnxOspfRestartStatusChange, tmnxOspfVirtNbrRestartHlprStsChg, tmnxOspfSpfRunsStopped, tmnxOspfSpfRunsRestarted, tmnxOspfOverloadEntered, tmnxOspfOverloadExited, tmnxOspfAsOriginateLsa, tmnxOspfAsMaxAgeLsa, tmnxOspfShamIfStateChange, tmnxOspfShamNbrStateChange, tmnxOspfShamIfConfigError, tmnxOspfShamIfAuthFailure, tmnxOspfShamIfRxBadPacket, tmnxOspfShamNbrRestartHlprStsChg, tmnxOspfFailureDisabled, tmnxOspfExportLimitReached, tmnxOspfExportLimitWarning, tmnxOspfRoutesExpLmtDropped, tmnxOspfNgNbrStateChange, tmnxOspfNgIfConfigError, tmnxOspfNgIfAuthFailure, tmnxOspfNgIfRxBadPacket, tmnxOspfNgIfStateChange, tmnxOspfNgNbrRestartHlprStsChg, tmnxOspfNgLinkOriginateLsa, tmnxOspfNgLinkMaxAgeLsa, tmnxOspfNgLdpSyncTimerStarted, tmnxOspfNgLdpSyncExit, tmnxOspfSrSidError, tmnxOspfSrSidNotInLabelRange, tmnxOspfOverloadWarning, tmnxOspfRejectedAdjacencySid, tmnxOspfAdjBfdSessionSetupFail, tmnxOspfSrgbBadLabelRange, tmnxOspfRejectedAdjacencySet, tmnxOspfSidStatsIndexAlloc, tmnxOspfDynHostnameDuplicate, tmnxOspfDynHostnameInconsistent, tmnxOspfFaOperParticipationDown, tmnxOspfNgNbrStrictBfdBlocked
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs

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Context	**configure** log log-events ospf event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events ospf event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events ospf event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events ospf event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events ospf event *keyword* specific-throttle-interval *number*

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Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events ospf event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events ospf event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

pcap event *keyword*

Synopsis	Enter the **pcap** list instance
Context	**configure** log log-events pcap event *keyword*
Tree	pcap
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events pcap event *keyword*
Tree	pcap

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Options	tmnxPcapFileError, tmnxPcapBufferFull, tmnxPcapBufferReadWriteFailure, tmnxPcapSoftwareFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events pcap event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events pcap event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events pcap event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event

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Context	**configure** log log-events pcap event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events pcap event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events pcap event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events pcap event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

pcep event *keyword*

Synopsis	Enter the **pcep** list instance
Context	**configure** log log-events pcep event *keyword*

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Tree	pcep
Introduced	22.2.R1
Platforms	All

event *keyword*

Synopsis	PCEP module events
Context	**configure** log log-events pcep event *keyword*
Tree	pcep
Options	tmnxPcepPccPeerStateChange
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events pcep event *keyword* generate *boolean*
Tree	generate
Introduced	22.2.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events pcep event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	22.2.R1
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events pcep event *keyword* severity *keyword*

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Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	22.2.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events pcep event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	22.2.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events pcep event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	22.2.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events pcep event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	22.2.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events pcep event *keyword* throttle *boolean*

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Tree	throttle
Introduced	22.2.R1
Platforms	All

pfcp event *keyword*

Synopsis	Enter the **pfcp** list instance
Context	**configure** log log-events pfcp event *keyword*
Tree	pfcp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	PFCP events
Context	**configure** log log-events pfcp event *keyword*
Tree	pfcp
Options	tmnxPfcpInvalidIe
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events pfcp event *keyword* generate *boolean*
Tree	generate
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events pfcp event *keyword* repeat *boolean*
Tree	repeat

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Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events pfcp event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events pfcp event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events pfcp event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events pfcp event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit

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Range	1 to 20000
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events pfcp event *keyword* throttle *boolean*
Tree	throttle
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pim event *keyword*

Synopsis	Enter the **pim** list instance
Context	**configure** log log-events pim event *keyword*
Tree	pim
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events pim event *keyword*
Tree	pim
Options	vRtrPimNgIfNeighborLoss, vRtrPimNgIfNeighborUp, vRtrPimNgInvalidJoinPrune, vRtrPimNgInvalidRegister, vRtrPimNgGrpInSSMRange, vRtrPimNgBSRStateChange, vRtrPimNgHelloDropped, vRtrPimNgSGLimitExceeded, vRtrPimNgReplicationLmtExceeded, vRtrPimNgMDTLimitExceeded, vRtrPimNgMaxGrpsLimitExceeded, vRtrPimNgDataMtReused, vRtrPimNgMcacPlcyDropped, vRtrPimNgInvalidIPmsiTunnel, vRtrPimNgMaxGraftRetry, vRtrPimNgBierInbInvSD, vRtrPimNgBierInbInvBfrId, vRtrPimNgUmhBMonFastFailPriToStb, vRtrPimNgUmhBMonFastFailStbToPri, vRtrPimNgInstMaxNbrReached, vRtrPimNgIfMaxNbrReached
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events pim event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events pim event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events pim event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events pim event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

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specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events pim event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events pim event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events pim event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

pim-snooping event *keyword*

Synopsis	Enter the **pim-snooping** list instance
Context	**configure** log log-events pim-snooping event *keyword*
Tree	pim-snooping
Introduced	16.0.R1
Platforms	All

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event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events pim-snooping event *keyword*
Tree	pim-snooping
Options	tmnxPimSnpgIfNeighborLoss, tmnxPimSnpgIfNeighborUp, tmnxPimSnpgSGLimitExceeded, tmnxPimSnpgSnoopModeChanged, tmnxPimSnpgIfMaxNbrReached, tmnxPimSnpgMaxNbrReached
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events pim-snooping event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events pim-snooping event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events pim-snooping event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1

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Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events pim-snooping event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events pim-snooping event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events pim-snooping event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events pim-snooping event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

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port event *keyword*

Synopsis	Enter the **port** list instance
Context	**configure** log log-events port event *keyword*
Tree	port
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events port event *keyword*
Tree	port
Options	sonetSDHAlarmSet, sonetSDHAlarmClear, sonetSDHChannelAlarmSet, sonetSDHChannelAlarmClear, SFPInserted, SFPRemoved, SFPStatusFailure, portError, ds3AlarmSet, ds3AlarmClear, ds1AlarmSet, ds1AlarmClear, etherAlarmSet, etherAlarmClear, ds1LoopbackStart, ds1LoopbackStop, ds3LoopbackStart, ds3LoopbackStop, sdhLoopbackStart, sdhLoopbackStop, etherLoopDetected, etherLoopCleared, etherSpeedNotCompatible, etherDuplexNotCompatible, etherIngressRateCfgNotCompatible, digitalDiagnosticMonitorFailed, SFPStatusDDMCorrupt, SFPStatusReadError, SFPStatusUnsupported, dsxClockSyncStateChange, tmnxPortUnsupportedFunction, otuAlarms, tPortAccEgrQGrpHostMatchFailure, tPortEgrVPortHostMatchFailure, digitalDiagnosticMonitorCleared, tmnxEqSonetClockSrcNotCompatible, tmnxEqSonetSfThreshNotCompatible, tmnxEqSonetFramingNotCompatible, tmnxResvCbsPoolThreshGreen, tmnxResvCbsPoolThreshAmber, tmnxResvCbsPoolThreshRed, tmnxEqPortEtherCrcAlarm, tmnxEqPortEtherCrcAlarmClear, tmnxEqPortEtherInternalAlarm, tmnxEqPortEtherInternalAlarmClr, tmnxEqCohOptPortAlarm, tmnxEqPortEtherSymMonAlarm, tmnxEqPortEtherSymMonAlarmClear, SFPStatusCulprit, SFPStatusBlocked, SFPStatusOperational, tmnxRS232ControlLeadSignalChg, tmnxRS232SquelchStatusChange, tmnxRS232SquelchResetIssued, tmnxCellularBearerCreated, tmnxCellularBearerDeleted, tmnxCellularBearerModified, tmnxEqPortEtherEgressRateChange, tmnxCellularNoServiceReset, tmnxCellularActiveSimCardChange, tmnxPortEtherLoopbackStart, tmnxPortEtherLoopbackStop, tmnxPortGnssStatusChange, tmnxWlanNetworkConnected, tmnxWlanNetworkDisconnected, tmnxPortAUIReset, tmnxCellPortCbsdRegistered, tmnxCellPortCbsdUnregistered, tmnxCellPortCbsdGranted, tmnxCellPortCbsdAuthorized, tmnxCellPortCbsdTransDown, tmnxHwAggShpSchedOperColorGreen, tmnxHwAggShpSchedOperColorAmber, tmnxHwAggShpSchedOperColorRed, tmnxCellularRssiAlarm, tmnxCellularRssiAlarmClear, SFPStatusInvalidFormFactor
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events of this type and increment the event counter
Context	**configure** log log-events port event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events port event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events port event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	**configure** log log-events port event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1

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Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events port event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Times that this event can be logged within the specific throttle interval
Context	**configure** log log-events port event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events port event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

pppoe event *keyword*

Synopsis	Enter the **pppoe** list instance
Context	**configure** log log-events pppoe event *keyword*
Tree	pppoe
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events pppoe event *keyword*
Tree	pppoe
Options	tmnxPppoeSessionFailure, tmnxPppoeNcpFailure, tmnxMlpppBundleIndicatorsChange, tmnxPppoeLacSteeringActive, tmnxPppoeLacSteeringStopped, tmnxPppoeLacSteeringFailed, tmnxPppoeMaxSessionsOvrExceeded
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events pppoe event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events pppoe event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events pppoe event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events pppoe event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events pppoe event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events pppoe event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events pppoe event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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pppoe-clnt event *keyword*

Synopsis	Enter the **pppoe-clnt** list instance
Context	**configure** log log-events pppoe-clnt event *keyword*
Tree	pppoe-clnt
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events pppoe-clnt event *keyword*
Tree	pppoe-clnt
Options	tmnxPppoeClientSetupFailure, tmnxPppoeClientEchoTimeout, tmnxPppoeClientNcpFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events pppoe-clnt event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events pppoe-clnt event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events pppoe-clnt event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events pppoe-clnt event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events pppoe-clnt event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events pppoe-clnt event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events pppoe-clnt event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ptp event *keyword*

Synopsis	Enter the **ptp** list instance
Context	**configure** log log-events ptp event *keyword*
Tree	ptp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events ptp event *keyword*
Tree	ptp
Options	tmnxPtpCardNotSupported, tmnxPtpCardNotSupportedClear, tmnxPtpMasterClockChangedEvent, tmnxPtpClockRecoveryStateChange, tmnxPtpOutOfResources, tmnxPtpOutOfResourcesClear, tmnxPtpDynamicChange, tmnxPtpPortNoTimestamping, tmnxPtpPortPtsfUnusable, tmnxPtpRequiresSystemReboot, tmnxPtpRequiresSystemRebootClear, tmnxPtpTimeRecoveryStateChange, tmnxPtpPeerNoTxTimestamping, tmnxPtpPeerNoTxTimestampingClear, tmnxPtpPeerNoRxTimestamping, tmnxPtpPeerNoRxTimestampingClear
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events ptp event *keyword* generate *boolean*

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Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events ptp event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events ptp event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events ptp event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events ptp event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval

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Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events ptp event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events ptp event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

python event *keyword*

Synopsis	Enter the **python** list instance
Context	**configure** log log-events python event *keyword*
Tree	python
Introduced	21.2.R1
Platforms	All

event *keyword*

Synopsis	Python module events
Context	**configure** log log-events python event *keyword*
Tree	python
Options	tmnxPythonInterpreterRestarted

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Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events python event *keyword* generate *boolean*
Tree	generate
Introduced	21.2.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events python event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	21.2.R1
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events python event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	21.2.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events python event *keyword* specific-throttle *boolean*
Tree	specific-throttle

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Introduced	21.2.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events python event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	21.2.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events python event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	21.2.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events python event *keyword* throttle *boolean*
Tree	throttle
Introduced	21.2.R1
Platforms	All

radius event *keyword*

Synopsis	Enter the **radius** list instance
Context	**configure** log log-events radius event *keyword*
Tree	radius
Introduced	16.0.R1

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Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events radius event *keyword*
Tree	radius
Options	tmnxRadSrvPlcySrvOperStateCh, tmnxRadRouteDownloadFailed, tmnxRadAcctOnOngoing
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events radius event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events radius event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events radius event *keyword* severity *keyword*
Tree	severity

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Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events radius event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events radius event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events radius event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events radius event *keyword* throttle *boolean*
Tree	throttle

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Introduced	16.0.R1
Platforms	All

rip event *keyword*

Synopsis	Enter the **rip** list instance
Context	**configure** log log-events rip event *keyword*
Tree	rip
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events rip event *keyword*
Tree	rip
Options	ripPacketDiscarded, vRtrRipAuthTypeMismatch, vRtrRipAuthTypeFailure, vRtrRipInstanceShuttingDown, vRtrRipInstanceRestarted, vRtrRipInstanceExpLmtReached, vRtrRipInstanceExpLmtWarning, vRtrRipInstanceRtsExpLmtDropped, vRtrRipPeerBfdDown
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events rip event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events rip event *keyword* repeat *boolean*

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Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events rip event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events rip event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events rip event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events rip event *keyword* specific-throttle-limit *number*

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Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events rip event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

ripng event *keyword*

Synopsis	Enter the **ripng** list instance
Context	**configure** log log-events ripng event *keyword*
Tree	ripng
Introduced	16.0.R3
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events ripng event *keyword*
Tree	ripng
Options	tmnxRipNgPacketDiscarded, tmnxRipNgAuthTypeMismatch, tmnxRipNgAuthFailure, tmnxRipNgInstShuttingDown, tmnxRipNgInstRestarted, tmnxRipNgInstExpLmtReached, tmnxRipNgInstExpLmtWarning, tmnxRipNgInstRtsExpLmtDropped, tmnxRipNgIfUcastAddrNotUsed, tmnxRipNgPeerBfdDown
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

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generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events ripng event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R3
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events ripng event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events ripng event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R3
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events ripng event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R3
Platforms	All

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specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events ripng event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R3
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events ripng event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R3
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events ripng event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R3
Platforms	All

route-policy event *keyword*

Synopsis	Enter the **route-policy** list instance
Context	**configure** log log-events route-policy event *keyword*
Tree	route-policy
Introduced	16.0.R1
Platforms	All

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event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events route-policy event *keyword*
Tree	route-policy
Options	trigPolicyPrevEval
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events route-policy event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events route-policy event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events route-policy event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

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specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events route-policy event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events route-policy event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events route-policy event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events route-policy event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

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rpki event *keyword*

Synopsis	Enter the **rpki** list instance
Context	**configure** log log-events rpki event *keyword*
Tree	rpki
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events rpki event *keyword*
Tree	rpki
Options	tmnxRpkiNotifySession, tmnxRpkiStaleTimerExpiry
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events rpki event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events rpki event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

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severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events rpki event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events rpki event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events rpki event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events rpki event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

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throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events rpki event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

rsvp event *keyword*

Synopsis	Enter the **rsvp** list instance
Context	**configure** log log-events rsvp event *keyword*
Tree	rsvp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events rsvp event *keyword*
Tree	rsvp
Options	vRtrRsvpStateChange, vRtrRsvpIfStateChange, vRtrRsvpIfNbrStateUp, vRtrRsvpIfNbrStateDown, vRtrRsvpPEFailOverPriToStdBy, vRtrRsvpPEFailOverStdByToPri
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events rsvp event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

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repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events rsvp event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events rsvp event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events rsvp event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events rsvp event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

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specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events rsvp event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events rsvp event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

satellite event *keyword*

Synopsis	Enter the **satellite** list instance
Context	**configure** log log-events satellite event *keyword*
Tree	satellite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events satellite event *keyword*
Tree	satellite
Options	tmnxSatelliteOperStateChange, tmnxSatSyncIfTimRefSwitch, tmnxSatSyncIfTimSystemQuality, tmnxSatSyncIfTimRef1Quality, tmnxSatSyncIfTimRef2Quality, tmnxSatSyncIfTimHoldover, tmnxSatSyncIfTimHoldoverClear, tmnxSatSyncIfTimRef1Alarm, tmnxSatSyncIfTimRef1AlarmClear, tmnxSatSyncIfTimRef2Alarm, tmnxSatSyncIfTimRef2AlarmClear, tmnxSatLocalForwardStateChg, tmnxSatLocalForwardSapStateChg
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events satellite event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events satellite event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events satellite event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events satellite event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events satellite event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events satellite event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events satellite event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

security event *keyword*

Synopsis	Enter the **security** list instance
Context	**configure** log log-events security event *keyword*
Tree	security
Introduced	16.0.R1
Platforms	All

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event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** log log-events security event *keyword*

Tree security

Options cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, ssh_user_login, ssh_user_logout, ssh_user_login_failed, ssh_user_login_max_attempts, radiusOperStatusChange, user_disconnect, radiusSystemIpAddrNotSet, tacplusOperStatusChange, mafEntryMatch, ftp_transfer_successful, ftp_transfer_failed, enable_admin, host_snmp_attempts, SSH_server_preserve_key_fail, tacplusInetSrvrOperStatusChange, radiusInetServerOperStatusChange, tmnxKeyChainAuthFailure, tmnxCpmProtViolPort, tmnxCpmProtViolPortAgg, tmnxCpmProtViolIf, tmnxCpmProtViolSap, tmnxCpmProtViolMac, tmnxCpmProtViolVdoSvcClient, tmnxCpmProtViolVdoVrtrClient, tmnxMD5AuthFailure, tmnxCpmProtDefPolModified, tmnxCpmProtViolSdpBind, tmnxCpmProtExcdSdpBind, tmnxCpmProtExcdSapEcm, tmnxCpmProtExcdSdpBindEcm, tmnxPkiFileReadFailed, tmnxPkiCertVerificationFailed, tmnxCAProfileStateChange, tmnxCpmProtExcdSapIp, tmnxDcpFpDynPoolUsageHiAlmRaise, tmnxDcpFpDynPoolUsageHiAlmClear, tmnxDcpCardFpEventOvrflwClr, tmnxDcpCardSapEventOvrflwClr, tmnxDcpCardVrtrIfEventOvrflwClr, sapDcpStaticExcd, sapDcpDynamicExcd, sapDcpStaticHoldDownStart, sapDcpDynamicHoldDownStart, sapDcpStaticHoldDownEnd, sapDcpDynamicHoldDownEnd, sapDcpStaticConform, sapDcpDynamicConform, sapDcpLocMonExcd, sapDcpLocMonExcdDynResource, sapDcpLocMonExcdAllDynAlloc, sapDcpLocMonExcdAllDynFreed, sapDcpDynamicEnforceAlloc, sapDcpDynamicEnforceFreed, vRtrIfDcpStaticExcd, vRtrIfDcpDynamicExcd, vRtrIfDcpStaticHoldDownStart, vRtrIfDcpDynamicHoldDownStart, vRtrIfDcpStaticHoldDownEnd, vRtrIfDcpDynamicHoldDownEnd, vRtrIfDcpStaticConform, vRtrIfDcpDynamicConform, vRtrIfDcpLocMonExcd, vRtrIfDcpLocMonExcdDynResource, vRtrIfDcpLocMonExcdAllDynAlloc, vRtrIfDcpLocMonExcdAllDynFreed, vRtrIfDcpDynamicEnforceAlloc, vRtrIfDcpDynamicEnforceFreed, tmnxDcpCardFpEventOvrflw, tmnxDcpCardSapEventOvrflw, tmnxDcpCardVrtrIfEventOvrflw, tmnxPkiCAProfActnStatusChg, tmnxCpmProtViolSapOutProf, tmnxCpmProtViolIfOutProf, sysDNSSecFailedAuthentication, tmnxCpmProtExcdSdpBindIp, tmnxSecComputeCertChainFailure, tmnxCpmProtViolSdpBindOutProf, tmnxSecNotifKeyChainExpired, tmnxSysLicenseInvalid, tmnxSysLicenseExpiresSoon, tmnxPkiCAProfRevokeChkWarning, tmnxCAProfUpDueToRevokeChkCrlOpt, tmnxPkiCertBeforeExpWarning, tmnxPkiCertAfterExpWarning, tmnxPkiCertExpWarningCleared, tmnxPkiCRLBeforeExpWarning, tmnxPkiCRLAfterExpWarning, tmnxPkiCRLExpWarningCleared, tmnxSecNotifFileReloaded, tmnxSysLicenseValid, tmnxSecPwdHistoryFileLoadFailed, tmnxSecPwdHistoryFileWriteFailed, tmnxPkiCAProfCrlUpdateStart, tmnxPkiCAProfCrlUpdateSuccess, tmnxPkiCAProfCrlUpdateUrlFail, tmnxPkiCAProfCrlUpdAllUrlsFail, tmnxPkiFileWriteFailed, tmnxPkiCAProfCrlUpdNoNxtUpdTime, tmnxUsrProfSessionLimitExceeded, tmnxCliGroupSessionLimitExceeded,

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tmnxPkiCAProfCrlUpdLargPreUpdTm, tmnxPkiCertNotYetValid, tmnxPkiCRLNotYetValid, tmnxAppPkiCertVerificationFailed, grpc_user_login, grpc_user_logout, grpc_user_login_failed, grpc_user_login_max_attempts, netconf_user_login, netconf_user_logout, netconf_user_login_failed, netconf_user_login_max_attempts, tmnxSysLicenseActivated, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, radiusUserProfileInvalid, tmnxSysStandbyLicensingError, tmnxSysStandbyLicensingReady, md_cli_io, md_cli_unauth_io, tmnxSysAppLicenseInsufficient, tmnxSysLicenseUpdateRequired, netconf_auth, netconf_unauth, grpc_auth, grpc_unauth, tmnxCertKeyPairGen, tmnxCertImport, tmnxCertExport, tmnxFileDeleted, tmnxFileMoved, tmnxFileCopied, tmnxFileUnzip, tmnxPasswordHashingChanged, tmnxUserPasswordChangedByAdmin, tmnxSSHSessionFailed, tmnxSecSignedSwCpmBootEvent, tSecSgndSwUefiVarsUpdtReqd, tmnxPkiCertUpdUpdateStarted, tmnxPkiCertUpdUpdateFinished, tmnxPkiCertUpdUpdateFailed, tmnxSystemPasswordChangedByAdmin, tmnxSysLicenseCleared, tmnxSysLicensingStateOk

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** log log-events security event *keyword* generate *boolean*

Tree generate

Introduced 16.0.R1

Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** log log-events security event *keyword* repeat *boolean*

Tree repeat

Default false

Introduced 16.0.R4

Platforms All

severity *keyword*

Synopsis Severity level associated with event type

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Context	**configure** log log-events security event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events security event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events security event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events security event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type

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Context	**configure** log log-events security event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

sflow event *keyword*

Synopsis	Enter the **sflow** list instance
Context	**configure** log log-events sflow event *keyword*
Tree	sflow
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events sflow event *keyword*
Tree	sflow
Options	none, tmnxSflowCpEntrySampling, tmnxSflowPacketTxFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events sflow event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events sflow event *keyword* repeat *boolean*

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Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-s, 7950 XRS

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events sflow event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events sflow event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events sflow event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events sflow event *keyword* specific-throttle-limit *number*

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Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events sflow event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

snmp event *keyword*

Synopsis	Enter the **snmp** list instance
Context	**configure** log log-events snmp event *keyword*
Tree	snmp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events snmp event *keyword*
Tree	snmp
Options	coldStart, warmStart, authenticationFailure, linkDown, linkUp, risingAlarm, fallingAlarm, snmpdError
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs

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Context	**configure** log log-events snmp event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events snmp event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events snmp event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events snmp event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events snmp event *keyword* specific-throttle-interval *number*

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Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events snmp event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events snmp event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

sr-mpls event *keyword*

Synopsis	Enter the **sr-mpls** list instance
Context	**configure** log log-events sr-mpls event *keyword*
Tree	sr-mpls
Introduced	21.10.R1
Platforms	All

event *keyword*

Synopsis	SR MPLS event
Context	**configure** log log-events sr-mpls event *keyword*
Tree	sr-mpls

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Options	tmnxSrMplsPfxSidFailure
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events sr-mpls event *keyword* generate *boolean*
Tree	generate
Introduced	21.10.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events sr-mpls event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	21.10.R1
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events sr-mpls event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	21.10.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events sr-mpls event *keyword* specific-throttle *boolean*

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Tree	specific-throttle
Introduced	21.10.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events sr-mpls event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	21.10.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events sr-mpls event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	21.10.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events sr-mpls event *keyword* throttle *boolean*
Tree	throttle
Introduced	21.10.R1
Platforms	All

srv6 event *keyword*

Synopsis	Enter the **srv6** list instance
Context	**configure** log log-events srv6 event *keyword*
Tree	srv6

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Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events srv6 event *keyword*
Tree	srv6
Options	vRtrSrv6FunctionExhaustion, vRtrSrv6SvcSidIndex, vRtrSrv6LocatorResExhaustion
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events srv6 event *keyword* generate *boolean*
Tree	generate
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events srv6 event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events srv6 event *keyword* severity *keyword*
Tree	severity

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Options	cleared, indeterminate, critical, major, minor, warning
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events srv6 event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events srv6 event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events srv6 event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events srv6 event *keyword* throttle *boolean*
Tree	throttle

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Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

stp event *keyword*

Synopsis	Enter the **stp** list instance
Context	**configure** log log-events stp event *keyword*
Tree	stp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events stp event *keyword*
Tree	stp
Options	topologyChangeSapMajorState, newRootSap, topologyChangeVcpState, newRootVcpState, topologyChangeSapState, receivedTCN, newRootBridge, unacknowledgedTCN, higherPriorityBridge, sapEncapPVST, sapEncapDot1d, tmnxSvcTopoChgSdpBindMajorState, tmnxSvcNewRootSdpBind, tmnxSvcTopoChgSdpBindState, tmnxSvcSdpBindRcvdTCN, tmnxSvcSdpBindRcvdHigherBriPrio, tmnxSvcSdpBindEncapPVST, tmnxSvcSdpBindEncapDot1d, tmnxNewCistRegionalRootBridge, tmnxNewMstiRegionalRootBridge, tmnxStpRootGuardViolation, tmnxStpMeshNotInMstRegion, tmnxSapStpExcepCondStateChng, tmnxSdpBndStpExcepCondStateChng, sapActiveProtocolChange, tmnxSvcSdpActiveProtocolChange, vcpActiveProtocolChange, topologyChangePipMajorState, topologyChangePipState, tmnxPipStpExcepCondStateChng, pipActiveProtocolChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events stp event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1

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Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events stp event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events stp event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events stp event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events stp event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1

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Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events stp event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events stp event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

svcmgr event *keyword*

Synopsis	Enter the **svcmgr** list instance
Context	**configure** log log-events svcmgr event *keyword*
Tree	svcmgr
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events svcmgr event *keyword*
Tree	svcmgr
Options	svcTlsMacPinningViolation, tmnxSubSlaacOverride, svcEvpnMplsMacMoveExceedNonBlock, svcTlsVxInstReplicatorChgd, svcArpHostOverride, svcEvpnMHEsEviDFStateChgd, svcEvpnMHEsIsidDFStateChgd, svcEvpnRcvdProtSrcMac, svcBgpEvpnBHDupMacAddrsDetected, svcEvpnEtreeBumLabelSysHiUsgSet, svcEvpnEtreeBumLabelSysHiUsgClr,

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svcVxlanEvpnMplsDestSysHiUsgSet, svcVxlanEvpnMplsDestSysHiUsgClr, svcStatusChanged, svcTlsFdbTableFullAlarmRaised, svcTlsFdbTableFullAlarmCleared, svcSysEvpnESDfPrefOperValChange, tmnxSvcSysFdbTableHighUsgSet, iesIfStatusChanged, tmnxEndPointTxActiveChanged, tmnxSvcSysFdbTableHighUsgClr, svcEvpnMHStandbyStatusChg, svcEvpnVxVTepLclBiasAddFailSet, svcEvpnESVxVTepLclBiasAddFailSet, svcEvpnVxVTepLclBiasAddFailClr, svcEvpnESVxVTepLclBiasAddFailClr, svcEvpnRcvdPbbProtSrcMac, svcTlsMrpAttrRegistrationFailed, svcTlsMrpAttrTblFullAlarmRaised, svcTlsMrpAttrTblFullAlarmCleared, svcEvpnMplsTEPEgrLblStateChgd, svcEpipePbbOperStatusChanged, svcTlsVxInstVTEPEgrVniStateChgd, svcEvpnVxInstESDstTEPStateChgd, svcSrv6InstTEPSidOperStateChgd, svcSrv6InstESDstTEPOperStateChgd, svcEvpnMplsESDestTEPStateChgd, svcBgpEvpnTepStateChgd, svcSrv6FunctionOutOfResources, sapStatusChanged, sapTlsMacAddrLimitAlarmRaised, sapTlsMacAddrLimitAlarmCleared, hostConnectivityLost, hostConnectivityRestored, sapReceivedProtSrcMac, sapTlsMacMoveExceeded, sapPortStateChangeProcessed, sapCemPacketDefectAlarm, sapCemPacketDefectAlarmClear, msapStateChanged, msapCreationFailure, sapTlsMacMoveExceedNonBlock, sapEthLoopbackStarted, sapEthLoopbackStopped, sapTunnelEncapIpMtuTooSmall, tmnxIpTunnelOperStateChange, sapIfIgnorePortStateStart, sapIfIgnorePortStateStop, sapReceivedPbbProtSrcMac, sdpStatusChanged, sdpBindStatusChanged, sdpKeepAliveStarted, sdpKeepAliveStopped, sdpKeepAliveProbeFailure, sdpKeepAliveLateReply, sdpTlsMacAddrLimitAlarmRaised, sdpTlsMacAddrLimitAlarmCleared, sdpBindPwPeerStatusBitsChanged, sdpBindTlsMacMoveExceeded, sdpBindPwPeerFaultAddrChanged, sdpBindSdpStateChangeProcessed, sdpBandwidthOverbooked, sdpBindInsufficientBandwidth, dynamicSdpConfigChanged, dynamicSdpBindConfigChanged, dynamicSdpCreationFailed, dynamicSdpBindCreationFailed, sdpEgrIfsNetDomInconsCntChanged, sdpBindIpipeCeIpAddressChange, sdpBindReceivedProtSrcMac, sdpBindPwLocalStatusBitsChanged, sdpBindTlsMacMoveExceedNonBlock, sdpBindEthLoopbackStarted, sdpBindEthLoopbackStopped, sdpPbbActvPwWithNonActvCtrlPwChg, svcBgpEvpnDupMacAddrsDetected, svcBgpEvpnDupMacAddrsCleared, svcTlsVTEPHiUsageAlarmRaised, svcTlsVTEPHiUsageAlarmCleared, svcTlsVTEPEgrVniSysHiUsgAlarmSet, svcTlsVTEPEgrVniSysHiUsgAlarmClr, svcTlsVTEPEgrVniSvcHiUsgAlarmSet, svcTlsVTEPEgrVniSvcHiUsgAlarmClr, svcBindSysHiUsageAlarmRaised, svcBindSysHiUsageAlarmCleared, sdpControlPwActiveStateChg, svcTlsProxyArpDupDetect, svcTlsProxyArpDupClear, svcTlsProxyNdDupDetect, svcTlsProxyNdDupClear, svcTlsEvpnTunnNHopHiUsgAlarmSet, svcTlsEvpnTunnNHopHiUsgAlarmClr, svcEvpnMplsTEPHiUsageRaised, svcEvpnMplsTEPHiUsageCleared, svcEvpnMplsTEPEgrBndSysHiUsgSet, svcEvpnMplsTEPEgrBndSysHiUsgClr, svcEvpnMplsTEPEgrBndSvcHiUsgSet, svcEvpnMplsTEPEgrBndSvcHiUsgClr, svcTlsProxyArpSysHiUsgSet, svcTlsProxyArpSysHiUsgClr, svcTlsProxyArpSvcHiUsgSet, svcTlsProxyArpSvcHiUsgClr, svcTlsProxyNdSysHiUsgSet, svcTlsProxyNdSysHiUsgClr, svcTlsProxyNdSvcHiUsgSet, svcTlsProxyNdSvcHiUsgClr, svcSiteMinDnTimerStateChg, sdpBindReceivedPbbProtSrcMac, svcTlsMfibTableFullAlarmRaised, svcTlsMfibTableFullAlarmCleared, tmnxSubscriberCreated, tmnxSubscriberDeleted, tmnxSubscriberRenamed, tmnxSubAcctPlcyFailure, tmnxSubMcsRelatedProblem, tmnxSubAuthPlcyRadSerOperStatChg,

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tmnxSubAcctPlcyRadSerOperStatChg, svcEndPointMacLimitAlarmRaised, svcEndPointMacLimitAlarmCleared, tmnxSubRadSapDisconnectError, tmnxSubRadSdpBndDisconnectError, tmnxSubRadSapCoAError, tmnxSubRadSdpBndCoAError, tmnxSubRadSapSubAuthError, tmnxSubRadSdpBndSubAuthError, svcFdbMimDestTblFullAlrm, svcFdbMimDestTblFullAlrmCleared, svcPersistencyProblem, svcArpHostPopulateErr, svcEPMCEPConfigMismatch, svcEPMCEPConfigMismatchResolved, svcEPMCEPPassiveModeActive, svcEPMCEPPassiveModePassive, sapHostBGPPeeringSetupFailed, tmnxSubUserCategoryOutOfCredit, svcRestoreHostProblem, tmnxSubUserCategoryRefreshCredit, tmnxSubUserCategoryError, svcTlsSiteDesigFwdrChg, sapTlsDataSapInstStatusChgd, svcTlsGroupOperStatusChanged, sapTunnelStateChange, tmnxSubHostInconsistentAtmTdOvr, svcMSPwRtMisconfig, svcOperGrpOperStatusChanged, sapIpipeCeIpAddrChange, svcMSPwRetryExpiredNotif, svcVllSiteDesigFwdrChg, tmnxSubSlaacSetupFailure, tmnxIpTunnelOperRemIpChg, tmnxSubHostLcktLimitReached, tmnxSubHostLcktSapLimitReached, tmnxSubSysChassMemoryUsageHi, tmnxSubVSubnetHostsDeleted, sapHostRipListenerSetupFailed, tmnxSubIpoeInvalidSessionKey, tmnxSubIpoeInvalidCidRidChange, tmnxSubIpoeSessionLimitReached, tmnxSubIpoePersistenceRecovery, tmnxSubIpoeMigrHostDeleted, tmnxSubMngdHostCreationFail, tmnxSubMngdHostOverride, tmnxSubHostInfoConflict, tmnxSubPlBndFailed, tmnxSubBrgCreated, tmnxSubBrgDeleted, tmnxSubBrgCvInitFailed, tmnxSubBrgRadiusUpdateIpoeSeFail, tmnxSubBrgRadiusCoaError, tmnxSubBrgRadiusAuthError, tmnxSubBrgSessionLimitReached, tmnxSubStatsResourceLimitReached, tmnxSubDhcpOverloadDetected, aluIpTransportStateChanged, tmnxSubBrgRadiusProxyAuthError, tmnxSubIpoeSessionBrgNotAuth, tmnxSubRadiusCoaNatFwdFailed, tmnxSubSVlanStatsReachedMaximum, svcTlsVxInstMacAdrLimitAlrmRsd, svcTlsVxInstMacAdrLimitAlrmClrd, tmnxSubCupsUpSapCreationFailed, tmnxSubCupsUpIfCreationFailed, tmnxPfcpAssocPathMgmtStateChgd, tmnxSubInfoEgrAggRateLimitLowReq, tmnxSubIpoeWppRegistrationFailed, svcEvpnMplsTEPIpSysHiUsgSet, svcEvpnMplsTEPIpSysHiUsgClr, svcEvpnMHAutoEsiCreated, svcEvpnMHAutoEsiConflict, svcSrv6TEPEgrBndSysHiUsgSet, svcSrv6TEPEgrBndSysHiUsgClr, svcIfSubForwardingStatsDisNotify, svcIfSubForwardingStatsEnNotify, svcRoutedVplsEvpnGWDrStateChgd, svcSrv6TEPEgrBndSvcHiUsgSet, svcSrv6TEPEgrBndSvcHiUsgClr, tmnxSapMRtCpeChkStatusChange

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** log log-events svcmgr event *keyword* generate *boolean*

Tree generate

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Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events svcmgr event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events svcmgr event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events svcmgr event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events svcmgr event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200

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Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events svcmgr event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events svcmgr event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

system event *keyword*

Synopsis	Enter the **system** list instance
Context	**configure** log log-events system event *keyword*
Tree	system
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events system event *keyword*
Tree	system
Options	stiDateAndTimeChanged, ssiSaveConfigSucceeded, ssiSaveConfigFailed, sbiBootConfig, sbiBootSnmpd, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, tmnxModuleMallocFailed, tmnxTrapDropped,

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ssiSyncConfigOK, ssiSyncConfigFailed, ssiSyncBootEnvOK, ssiSyncBootEnvFailed, socket_bind_failed, socket_conn_accept_failed, sntpTimeDiffExceedsThreshold, tmnxSssiMismatch, tmnxSnmpdStateChange, tmnxRedStandbySyncing, tmnxRedStandbyReady, tmnxRedStandbySyncLost, tmnxRedSwitchover, tmnxRedCpmActive, tmnxRedSingleCpm, persistencyClosedAlarmRaised, persistencyClosedAlarmCleared, tmnxSntpOperChange, tmnxFtpClientFailure, persistencyEventReport, sbiBootConfigFailFileError, sbiBootConfigOKFileError, persistenceRestoreProblem, tmnxSysRollbackStarted, tmnxSysRollbackStatusChange, tmnxSysRollbackSaveStatusChange, tmnxSysRollbackFileDeleteStatus, ssiSyncRollbackOK, ssiSyncRollbackFailed, ssiSyncCertOK, ssiSyncCertFailed, persistencyFileSysThresRaised, persistencyFileSysThresCleared, tmnxSysExecStarted, tmnxSysExecFinished, tmnxSysRollbackSaveStarted, tmnxSysRollbackDeleteStarted, tmnxSysNvsysFileError, tmnxConfigConflict, tmnxSysBaseMacAddressNotSet, tmnxSmLaunchStartFailed, tmnxEhsHandlerInvoked, tmnxEhsDroppedByMinDelay, tmnxSysAppStats24HrsAvailable, tmnxSysAppStatsWeekAvailable, tmnxSysMgmtIfModeChangeStart, tmnxSysMgmtIfModeChangeComplete, tmnxSysMgmtIfModeChangeFailure, tmnxSysMgmtIfLiIncorrectFormat, tmnxSysMgmtIfLiCfgNotEncrypted, stiDateAndTimeChanging, tmnxSysSwFabFailRecStarted, tmnxSysSwFabFailRecCompleted, tmnxSysSwFabFailRecAborted, tmnxSysSwFabFailRecDetected, tMirrorLiXIfLicenseInvalid, mdSaveCommitHistoryFailed, sbiBootMdReadCommitHistoryFailed, tmnxSysDyingGasp, tmnxSysHttpRdrOutOfSeqLimitExc, schedActionFailure, smScriptAbort, smScriptResult, smScriptException, ssiSaveIncrementConfigSucceeded, ssiSaveIncrementConfigFailed, ssiSaveBackgroundConfigSucceeded, ssiSaveBackgroundConfigFailed, mdCommitInProgress

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events system event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events system event *keyword* repeat *boolean*
Tree	repeat

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Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events system event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events system event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events system event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events system event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit

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Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events system event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

tls event *keyword*

Synopsis	Enter the **tls** list instance
Context	**configure** log log-events tls event *keyword*
Tree	tls
Introduced	20.5.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events tls event *keyword*
Tree	tls
Options	tmnxTlsInitiateSession, tmnxTlsTermination, tmnxTlsFailure
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events tls event *keyword* generate *boolean*
Tree	generate

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Introduced	20.5.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events tls event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	20.5.R1
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events tls event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	20.5.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events tls event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	20.5.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events tls event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200

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Introduced	20.5.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events tls event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	20.5.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events tls event *keyword* throttle *boolean*
Tree	throttle
Introduced	20.5.R1
Platforms	All

tree-sid event *keyword*

Synopsis	Enter the **tree-sid** list instance
Context	**configure** log log-events tree-sid event *keyword*
Tree	tree-sid
Introduced	20.10.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events tree-sid event *keyword*
Tree	tree-sid
Options	vRtrTreeSidCdtPathChanged, vRtrTreeSidCdtPathActInsChanged, vRtrTreeSidInSidRegFailure, vRtrTreeSidTreeIdAllocFailure, vRtrTreeSidRepSegResExhaustion, vRtrTreeSidRepSegResExhstCleared,

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	vRtrTreeSidLabelRangeExhaustion, vRtrTreeSidLblRangeExhstCleared, vRtrTreeSidFailOverPriToStdBy, vRtrTreeSidFailOverStdByToPri
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events tree-sid event *keyword* generate *boolean*
Tree	generate
Introduced	20.10.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events tree-sid event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	20.10.R1
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events tree-sid event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	20.10.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events tree-sid event *keyword* specific-throttle *boolean*

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Tree	specific-throttle
Introduced	20.10.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events tree-sid event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	20.10.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events tree-sid event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	20.10.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events tree-sid event *keyword* throttle *boolean*
Tree	throttle
Introduced	20.10.R1
Platforms	All

user event *keyword*

Synopsis	Enter the **user** list instance
Context	**configure** log log-events user event *keyword*
Tree	user

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Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events user event *keyword*
Tree	user
Options	cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, cli_user_io, snmp_user_set, cli_config_io, cli_unauth_user_io, cli_unauth_config_io, grpc_user_login, grpc_user_logout, grpc_user_login_failed, grpc_user_login_max_attempts, netconf_user_login, netconf_user_logout, netconf_user_login_failed, netconf_user_login_max_attempts
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events user event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events user event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

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severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events user event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events user event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events user event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events user event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

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throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events user event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

video event *keyword*

Synopsis	Enter the **video** list instance
Context	**configure** log log-events video event *keyword*
Tree	video
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events video event *keyword*
Tree	video
Options	tmnxVdoDuplicateSsrcId, tmnxVdoMdaSessionsLimitExceeded, tmnxVdoMdaSGLimitExceeded, tmnxVdoMdaSessionsLimitCleared, tmnxVdoMdaSGLimitCleared, tmnxVdoAdSpliceAbort, tmnxVdoClientSessionsLmtExceeded, tmnxVdoClientSessionsLmtCleared, tmnxVdoGrpSrcAnlyzrErrState, tmnxVdoGrpSrcAnlyzrStClear, tmnxVdoMdaFccBwLimitExceeded, tmnxVdoMdaFccBwLimitCleared, tmnxVdoMdaRetBwLimitExceeded, tmnxVdoMdaRetBwLimitCleared, tmnxVdoMdaFccRetTotBwLmtExceeded, tmnxVdoMdaFccRetTotBwLmtCleared, tmnxVdoMdaFccSesLimitExceeded, tmnxVdoMdaFccSesLimitCleared, tmnxVdoMdaRetSesLimitExceeded, tmnxVdoMdaRetSesLimitCleared, tmnxVdoMdaFccRetTotSeLmtExceeded, tmnxVdoMdaFccRetTotSeLmtCleared, tmnxVdoVappSessionsLimitExceeded, tmnxVdoVappSGLimitExceeded, tmnxVdoVappSessionsLimitCleared, tmnxVdoVappSGLimitCleared, tmnxVdoVappFccBwLimitExceeded, tmnxVdoVappFccBwLimitCleared, tmnxVdoVappRetBwLimitExceeded, tmnxVdoVappRetBwLimitCleared, tmnxVdoVappFccRetTotBwLmtExceded, tmnxVdoVappFccRetTotBwLmtCleared, tmnxVdoVappFccSesLimitExceeded, tmnxVdoVappFccSesLimitCleared, tmnxVdoVappRetSesLimitExceeded, tmnxVdoVappRetSesLimitCleared, tmnxVdoVappFccRetTotSeLmtExceded, tmnxVdoVappFccRetTotSeLmtCleared
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events video event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events video event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events video event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events video event *keyword* specific-throttle *boolean*

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Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events video event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events video event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events video event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

vrrp event *keyword*

Synopsis	Enter the **vrrp** list instance

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Context	**configure** log log-events vrrp event *keyword*
Tree	vrrp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events vrrp event *keyword*
Tree	vrrp
Options	vrrpTrapNewMaster, vrrpTrapAuthFailure, tmnxVrrpIPListMismatch, tmnxVrrpIPListMismatchClear, tmnxVrrpMultipleOwners, tmnxVrrpBecameBackup, vrrpPacketDiscarded, tmnxVrrpBfdIntfSessStateChgd, vrrpTrapProtoError, tVrrpBecameBackup, tVrrpTrapNewMaster, tVrrpIPListMismatch, tVrrpIPListMismatchClear, tVrrpMultipleOwners, tVrrpPacketDiscarded, tVrrpRouterAdvNotActivated, tVrrpRouterAdvNotActivatedClear, tVrrpOperDownInvalidMac, tVrrpOperDownInvalidMacClear, tmnxVrrpOperDownInvalidMac, tmnxVrrpOperDownInvalidMacClear
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events vrrp event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events vrrp event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4

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Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events vrrp event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events vrrp event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events vrrp event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events vrrp event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1

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Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events vrrp event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

vrtr event *keyword*

Synopsis	Enter the **vrtr** list instance
Context	**configure** log log-events vrtr event *keyword*
Tree	vrtr
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events vrtr event *keyword*
Tree	vrtr
Options	tmnxVRtrMidRouteTCA, tmnxVRtrHighRouteTCA, tmnxVRtrHighRouteCleared, tmnxVRtrMcastMidRouteTCA, tmnxVRtrMcastMaxRoutesTCA, tmnxVRtrMcastMaxRoutesCleared, tmnxVRtrMaxArpEntriesTCA, tmnxVRtrMaxArpEntriesCleared, tmnxVRtrMaxRoutes, tmnxVRtrBfdMaxSessionOnSlot, tmnxVRtrBfdPortTypeNotSupported, tmnxVRtrIPv6MidRouteTCA, tmnxVRtrIPv6HighRouteTCA, tmnxVRtrIPv6HighRouteCleared, tmnxVRtrStaticRouteCPEStatus, tmnxVRtrManagedRouteAddFailed, tmnxVRtrFibOccupancyThreshold, tmnxVRtrInetAddressAttachFailed, tmnxVRtrSingleSfmOverloadStateCh, tmnxVRtrGrtExportLimitReached, tmnxVRtrGrtRoutesExpLimitDropped, tmnxVRtrIfLdpSyncTimerStart, tmnxVRtrIfLdpSyncTimerStop, tmnxVRtrGrtV6ExportLimitReached, tmnxVRtrGrtV6RoutesExpLimDropped, tmnxVRtrStaticRouteStatusChanged, tmnxVRtrBfdSessExtDown, tmnxVRtrBfdSessExtUp, tmnxVRtrBfdSessExtDeleted, tmnxVRtrBfdSessExtProtChange, tmnxVRtrBfdExtNoCpmNpResources, tmnxVRtrDnsFault, tmnxVRtrMacAcctLimitReached, tmnxVRtrMacAcctLimitCleared, tmnxVRtrNgBfdSessDown, tmnxVRtrNgBfdSessUp, tmnxVRtrNgBfdSessDeleted, tmnxVRtrNgBfdSessProtChange, tmnxVRtrNgBfdNoCpmNpResources, tmnxVRtrNHRvplsARPHighUsage, tmnxVRtrNHRvplsARPExhaust,

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	tmnxVRtrNHRvplsARPHighUsageClr, tmnxVRtrArpLmt, tmnxVRtrArpThresholdExceeded, tmnxVRtrIpv6NbrLmt, tmnxVRtrIpv6NbrThresholdExceeded, tmnxVRtrIfIgnorePortState, tmnxVRtrPdnAddrMismatch, tmnxVRtrPdnAddrMismatchCleared, tmnxVRtrLeakExportLimitReached, tmnxVRtrLeakExportLimitDropped, tmnxVRtrDhcpClientStatusChanged, tmnxVRtrDhcp6ClientStatusChanged, tmnxVRtrNeDiscovered, tmnxVRtrNeRemoved, tmnxVRtrNeModified, vRtrIfDhcpClRtStatusChanged, vRtrIfDhcpClStateDnsChanged, vRtrAutoCfgRaRtStatusChanged, vRtrIfDhcp6ClStateDnsChanged, tipNbrAllocFailed, vRtrIfEthLoopbackStarted, vRtrIfEthLoopbackStopped, tmnxVRtrBfdExtNoFreeTxIntrvlSlot, tmnxVRtrFibVPNOccupancyThreshold, tmnxVRtrBfdMultiHopFpMismatch, vRtrBgpInstanceError
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events vrtr event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events vrtr event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events vrtr event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning

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Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events vrtr event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events vrtr event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events vrtr event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events vrtr event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1

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Platforms	All

wlan-gw event *keyword*

Synopsis	Enter the **wlan-gw** list instance
Context	**configure** log log-events wlan-gw event *keyword*
Tree	wlan-gw
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events wlan-gw event *keyword*
Tree	wlan-gw
Options	tmnxWlanGwResrcProblemDetected, tmnxWlanGwResrcProblemCause, tmnxWlanGwTuQosProblem, tmnxWlanGwGrpOperStateChanged, tmnxWlanGwIomActive, tmnxWlanGwMgwConnected, tmnxWlanGwMgwRestarted, tmnxWlanGwNumMgwHi, tmnxWlanGwMgwStateChanged, tmnxWlanGwQosRadiusGtpMismatch, tmnxWlanGwSubIfRedActiveChanged, tmnxWlanGwDsmGtpTunnelSetupFail, tmnxWlanGwSubIfPmStartD6cFailed, tmnxWlanGwSubIfPmNewPlReqFailed, tmnxWlanGwSubIfPmAddNewPlFailed, tmnxWlanGwSubIfPmCrIntObjFailed, tmnxWlanGwSubIfPmPoolTimeout, tmnxWlanGwSubIfPmPoolUsageLow, tmnxWlanGwSubIfPmLsQryRtryFailed, tmnxWlanGwGtpMessageDropped, tmnxWlanGwSubIfPmPoolPartialUse, tmnxWlanGwBdCreated, tmnxWlanGwBdDeleted, tmnxWlanGwUeCreationFail, tmnxWlanGwUeReplacement, tmnxWlanGwGrpMemberUsageHigh
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events wlan-gw event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

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repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events wlan-gw event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events wlan-gw event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events wlan-gw event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events wlan-gw event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

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specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events wlan-gw event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events wlan-gw event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

wpp event *keyword*

Synopsis	Enter the **wpp** list instance
Context	**configure** log log-events wpp event *keyword*
Tree	wpp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	**configure** log log-events wpp event *keyword*
Tree	wpp
Options	tmnxWppPortalStatChanged, tmnxWppHostAuthenticationFailed, tmnxWppPortalUnreachable, tmnxWppPortalGroupStatChanged, tmnxWppPGHostAuthFailed
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	**configure** log log-events wpp event *keyword* generate *boolean*
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	**configure** log log-events wpp event *keyword* repeat *boolean*
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	**configure** log log-events wpp event *keyword* severity *keyword*
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	**configure** log log-events wpp event *keyword* specific-throttle *boolean*
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

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specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	**configure** log log-events wpp event *keyword* specific-throttle-interval *number*
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	**configure** log log-events wpp event *keyword* specific-throttle-limit *number*
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	**configure** log log-events wpp event *keyword* throttle *boolean*
Tree	throttle
Introduced	16.0.R1
Platforms	All

log-id [name] *string*

Synopsis	Enter the **log-id** list instance
Context	**configure** log log-id *string*
Tree	log-id
Max. Instances	30
Introduced	16.0.R1
Platforms	All

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[**name**] *string*

Synopsis	Log ID
Context	**configure** log log-id *string*
Tree	log-id
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the log
Context	**configure** log log-id *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log log-id *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

destination

Synopsis	Enter the **destination** context
Context	**configure** log log-id *string* destination
Tree	destination
Introduced	16.0.R1

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Platforms	All

cli

Synopsis	Enable the **cli** context
Context	**configure** log log-id *string* destination cli
Tree	cli
Notes	The following elements are part of a choice: **cli**, **console**, **file**, **memory**, **netconf**, **snmp**, or **syslog**.
Introduced	16.0.R1
Platforms	All

max-entries *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this CLI log
Context	**configure** log log-id *string* destination cli max-entries *number*
Tree	max-entries
Range	50 to 3000
Default	100
Introduced	16.0.R1
Platforms	All

console

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Log events to send to the system console port
Context	**configure** log log-id *string* destination console
Tree	console
Notes	The following elements are part of a choice: **cli**, **console**, **file**, **memory**, **netconf**, **snmp**, or **syslog**.

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Introduced	16.0.R1
Platforms	All

file *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Log events to send to the specified file ID
Context	**configure** log log-id *string* destination file *reference*
Tree	file
Reference	**configure** log file *string*
Notes	The following elements are part of a choice: **cli**, **console**, **file**, **memory**, **netconf**, **snmp**, or **syslog**.
Introduced	16.0.R1
Platforms	All

memory

Synopsis	Enable the **memory** context
Context	**configure** log log-id *string* destination memory
Tree	memory
Notes	The following elements are part of a choice: **cli**, **console**, **file**, **memory**, **netconf**, **snmp**, or **syslog**.
Introduced	16.0.R1
Platforms	All

max-entries *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this memory log
Context	**configure** log log-id *string* destination memory max-entries *number*
Tree	max-entries

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Range	50 to 3000
Default	100
Introduced	16.0.R1
Platforms	All

netconf

Synopsis	Enable the **netconf** context
Context	**configure** log log-id *string* destination netconf
Tree	netconf
Notes	The following elements are part of a choice: **cli**, **console**, **file**, **memory**, **netconf**, **snmp**, or **syslog**.
Introduced	16.0.R1
Platforms	All

max-entries *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this NETCONF log
Context	**configure** log log-id *string* destination netconf max-entries *number*
Tree	max-entries
Range	50 to 3000
Introduced	16.0.R1
Platforms	All

snmp

Synopsis	Enable the **snmp** context
Context	**configure** log log-id *string* destination snmp
Tree	snmp
Notes	The following elements are part of a choice: **cli**, **console**, **file**, **memory**, **netconf**, **snmp**, or **syslog**.
Introduced	16.0.R1

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Platforms	All

max-entries *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this SNMP log
Context	**configure** log log-id *string* destination snmp max-entries *number*
Tree	max-entries
Range	50 to 3000
Default	100
Introduced	16.0.R1
Platforms	All

syslog *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Log events to send to the specified syslog ID
Context	**configure** log log-id *string* destination syslog *reference*
Tree	syslog
Reference	**configure** log syslog *string*
Notes	The following elements are part of a choice: **cli**, **console**, **file**, **memory**, **netconf**, **snmp**, or **syslog**.
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Event filter policy with the log destination
Context	**configure** log log-id *string* filter *reference*
Tree	filter
Reference	**configure** log filter *string*

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Introduced	16.0.R1
Platforms	All

netconf-stream *string*

Synopsis	Destination NETCONF stream name
Context	**configure** log log-id *string* netconf-stream *string*
Tree	netconf-stream
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

python-policy *reference*

Synopsis	Python policy name
Context	**configure** log log-id *string* python-policy *reference*
Tree	python-policy
Reference	**configure** python python-policy *string*
Introduced	16.0.R1
Platforms	All

source

Synopsis	Enter the **source** context
Context	**configure** log log-id *string* source
Tree	source
Introduced	16.0.R1
Platforms	All

change *boolean*

Synopsis	Collect log events from change event stream
Context	**configure** log log-id *string* source change *boolean*
Tree	change
Introduced	16.0.R1

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Platforms	All

debug *boolean*

Synopsis	Collect log events from the debug event stream
Context	**configure** log log-id *string* source debug *boolean*
Tree	debug
Default	false
Introduced	16.0.R1
Platforms	All

main *boolean*

Synopsis	Collect log events from the main event stream
Context	**configure** log log-id *string* source main *boolean*
Tree	main
Introduced	16.0.R1
Platforms	All

security *boolean*

Synopsis	Collect log events from the security event stream
Context	**configure** log log-id *string* source security *boolean*
Tree	security
Introduced	16.0.R1
Platforms	All

time-format *keyword*

Synopsis	Time zone output for file log contents and syslog
Context	**configure** log log-id *string* time-format *keyword*
Tree	time-format
Options	utc, local
Default	utc
Introduced	16.0.R1

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Platforms	All

route-preference

Synopsis	Enter the **route-preference** context
Context	**configure** log route-preference
Tree	route-preference
Introduced	16.0.R1
Platforms	All

primary *keyword*

Synopsis	Primary routing preference for traffic that is generated for SNMP notifications and syslog messages
Context	**configure** log route-preference primary *keyword*
Tree	primary
Options	inband, outband
Default	outband
Introduced	16.0.R1
Platforms	All

secondary *keyword*

Synopsis	Secondary route preference for SNMP and syslog traffic
Context	**configure** log route-preference secondary *keyword*
Tree	secondary
Options	inband, outband, none
Default	inband
Introduced	16.0.R1
Platforms	All

services-all-events

Synopsis	Enter the **services-all-events** context
Context	**configure** log services-all-events
Tree	services-all-events

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Introduced	19.10.R1
Platforms	All

service [service-name] *reference*

Synopsis	Add a list entry for **service**
Context	**configure** log services-all-events service *reference*
Tree	service
Introduced	19.10.R1
Platforms	All

[**service-name**] *reference*

Synopsis	Administrative service name
Context	**configure** log services-all-events service *reference*
Tree	service
Reference	**configure** service vprn *string*
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

snmp-trap-group [log-name] *string*

Synopsis	Enter the **snmp-trap-group** list instance
Context	**configure** log snmp-trap-group *string*
Tree	snmp-trap-group
Max. Instances	15
Introduced	16.0.R1
Platforms	All

[**log-name**] *string*

Synopsis	Log ID
Context	**configure** log snmp-trap-group *string*

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Tree	snmp-trap-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log snmp-trap-group *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

trap-target [name] *string*

Synopsis	Enter the **trap-target** list instance
Context	**configure** log snmp-trap-group *string* trap-target *string*
Tree	trap-target
Max. Instances	25
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	Trap target name
Context	**configure** log snmp-trap-group *string* trap-target *string*
Tree	trap-target
String Length	1 to 28
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the trap receiver
Context	**configure** log snmp-trap-group *string* trap-target *string* address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log snmp-trap-group *string* trap-target *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

notify-community *string*

Synopsis	SNMPv1 or SNMPv2c community name string, or SNMPv3 security name, for sending a notification
Context	**configure** log snmp-trap-group *string* trap-target *string* notify-community *string*
Tree	notify-community
String Length	1 to 31
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

port *number*

Synopsis	UDP port number to send messages to this remote SNMP notification collector
Context	**configure** log snmp-trap-group *string* trap-target *string* port *number*
Tree	port

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Range	0 | 1 to 65535
Default	162
Introduced	16.0.R1
Platforms	All

replay *boolean*

Synopsis	Retransmit missed notifications
Context	**configure** log snmp-trap-group *string* trap-target *string* replay *boolean*
Tree	replay
Default	false
Introduced	16.0.R1
Platforms	All

security-level *keyword*

Synopsis	Security level at which SNMP notification messages are sent to SNMP notification collector
Context	**configure** log snmp-trap-group *string* trap-target *string* security-level *keyword*
Tree	security-level
Options	no-auth-no-privacy, auth-no-privacy, privacy
Default	no-auth-no-privacy
Introduced	16.0.R1
Platforms	All

version *keyword*

Synopsis	SNMP version to format notification messages sent to this SNMP notification collector
Context	**configure** log snmp-trap-group *string* trap-target *string* version *keyword*
Tree	version
Options	snmpv1, snmpv2c, snmpv3
Default	snmpv3
Introduced	16.0.R1
Platforms	All

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syslog [syslog-name] *string*

Synopsis	Enter the **syslog** list instance
Context	**configure** log syslog *string*
Tree	syslog
Max. Instances	10
Introduced	16.0.R1
Platforms	All

[**syslog-name**] *string*

Synopsis	Syslog name
Context	**configure** log syslog *string*
Tree	syslog
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the Syslog target host
Context	**configure** log syslog *string* address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	address
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** log syslog *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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facility *keyword*

Synopsis	Facility code for messages
Context	**configure** log syslog *string* facility *keyword*
Tree	facility
Options	kernel, user, mail, systemd, auth, syslogd, printer, netnews, uucp, cron, authpriv, ftp, ntp, logaudit, logalert, cron2, local0, local1, local2, local3, local4, local5, local6, local7
Default	local7
Introduced	16.0.R1
Platforms	All

hostname

Synopsis	Enter the **hostname** context
Context	**configure** log syslog *string* hostname
Tree	hostname
Description	Commands in this context control how the HOSTNAME field of syslog messages is populated.
Introduced	23.7.R1
Platforms	All

use-system-name

Synopsis	Enable the **use-system-name** context
Context	**configure** log syslog *string* hostname use-system-name
Tree	use-system-name
Description	This command configures the system to use the system name configured with the **configure system name** command as the HOSTNAME field of syslog messages. Do not use any spaces in the system name if it is being used for the syslog HOSTNAME.
Notes	The following elements are part of a choice: **use-system-name** or **value**.
Introduced	23.7.R1
Platforms	All

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value *string*

Synopsis	Syslog HOSTNAME field value
Context	**configure** log syslog *string* hostname value *string*
Tree	value
Description	This command configures the system to use a specified string as the HOSTNAME field of syslog messages. Do not use any spaces in the string used for the syslog HOSTNAME.
String Length	1 to 255
Notes	The following elements are part of a choice: **use-system-name** or **value**.
Introduced	23.7.R1
Platforms	All

log-prefix *(keyword | string)*

Synopsis	String that is prepended to every log message sent to this target syslog host
Context	**configure** log syslog *string* log-prefix *(keyword | string)*
Tree	log-prefix
String Length	1 to 32
Options	no-prefix
Default	TMNX
Introduced	16.0.R1
Platforms	All

port *number*

Synopsis	Destination port when sending syslog over UDP
Context	**configure** log syslog *string* port *number*
Tree	port
Range	0 | 1 to 65535
Default	514
Introduced	16.0.R1
Platforms	All

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severity *keyword*

Synopsis	Severity level threshold for the syslog message
Context	**configure** log syslog *string* severity *keyword*
Tree	severity
Options	emergency, alert, critical, error, warning, notice, info, debug
Default	info
Introduced	16.0.R1
Platforms	All

tls-client-profile *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	TLS client profile used to encrypt syslog communication
Context	**configure** log syslog *string* tls-client-profile *reference*
Tree	tls-client-profile
Description	This command specifies the Transport Layer Security (TLS) client profile used to encrypt syslog communications. When configured, syslog messages are sent using TLS. Any change to this command results in a brief interruption of the event log, which may cause the loss of a few syslog messages. When this command is unconfigured, the syslog messages are sent over UDP.
Reference	**configure** system security tls client-tls-profile *string*
Introduced	21.10.R1
Platforms	All

throttle-rate

Synopsis	Enter the **throttle-rate** context
Context	**configure** log throttle-rate
Tree	throttle-rate
Introduced	16.0.R1
Platforms	All

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interval *number*

Synopsis	Duration of an event throttling interval
Context	**configure** log throttle-rate interval *number*
Tree	interval
Range	1 to 1200
Default	1
Introduced	16.0.R1
Platforms	All

limit *number*

Synopsis	Number of log events within the throttle interval
Context	**configure** log throttle-rate limit *number*
Tree	limit
Range	1 to 20000
Default	2000
Introduced	16.0.R1
Platforms	All

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3.25 macsec commands

```
configure
   - macsec
      - apply-groups reference
      - apply-groups-exclude reference
      - connectivity-association string
         - admin-state keyword
         - anysec boolean
         - apply-groups reference
         - apply-groups-exclude reference
         - cipher-suite keyword
         - clear-tag-mode keyword
         - delay-protection boolean
         - description string
         - encryption-offset number
         - macsec-encrypt boolean
         - replay-protection boolean
         - replay-window-size number
         - static-cak
            - active-psk number
            - apply-groups reference
            - apply-groups-exclude reference
            - mka-hello-interval keyword
            - mka-key-server-priority number
            - pre-shared-key number
               - apply-groups reference
               - apply-groups-exclude reference
               - cak string
               - cak-name string
               - encryption-type keyword
      - mac-policy number
         - apply-groups reference
         - apply-groups-exclude reference
         - destination-mac-address string
```


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3.25.1 macsec command descriptions

macsec

Synopsis	Enter the **macsec** context
Context	**configure** macsec
Tree	macsec
Introduced	16.0.R1
Platforms	All

connectivity-association [ca-name] *string*

Synopsis	Enter the **connectivity-association** list instance
Context	**configure** macsec connectivity-association *string*
Tree	connectivity-association
Introduced	16.0.R1
Platforms	All

[**ca-name**] *string*

Synopsis	Connectivity association name
Context	**configure** macsec connectivity-association *string*
Tree	connectivity-association
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the connectivity association
Context	**configure** macsec connectivity-association *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable

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Introduced	16.0.R1
Platforms	All

anysec *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Mark the CA for use by ANYSec only
Context	**configure** macsec connectivity-association *string* anysec *boolean*
Tree	anysec
Default	false
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

cipher-suite *keyword*

Synopsis	Data path encryption algorithm
Context	**configure** macsec connectivity-association *string* cipher-suite *keyword*
Tree	cipher-suite
Options	gcm-aes-128, gcm-aes-256, gcm-aes-xpn-128, gcm-aes-xpn-256
Default	gcm-aes-128
Introduced	16.0.R1
Platforms	All

clear-tag-mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear tag mode for clear text before the SecTAG
Context	**configure** macsec connectivity-association *string* clear-tag-mode *keyword*
Tree	clear-tag-mode
Options	none, single-tag, dual-tag

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Default	none
Introduced	16.0.R1
Platforms	All

delay-protection *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable delay protection
Context	**configure** macsec connectivity-association *string* delay-protection *boolean*
Tree	delay-protection
Default	false
Introduced	20.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** macsec connectivity-association *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

encryption-offset *number*

Synopsis	Confidentiality (encryption) offset
Context	**configure** macsec connectivity-association *string* encryption-offset *number*
Tree	encryption-offset
Range	0 | 30 | 50
Default	0
Introduced	16.0.R1
Platforms	All

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macsec-encrypt *boolean*

Synopsis	Encrypt and authenticate all PDUs
Context	**configure** macsec connectivity-association *string* macsec-encrypt *boolean*
Tree	macsec-encrypt
Description	When configured to **true**, all PDUs are encrypted and authenticated. When configured to **false**, all PDUs are transmitted in clear text, however, they are still authenticated and have the trailing ICV.
Default	true
Introduced	16.0.R1
Platforms	All

replay-protection *boolean*

Synopsis	Discard packet when not within the replay window size
Context	**configure** macsec connectivity-association *string* replay-protection *boolean*
Tree	replay-protection
Description	When configured to **true**, replay protection is enabled and packets are discarded when they are not within the replay window size. With replay protection, the sequence of the ID number of received packets is checked. If a packet arrives out of sequence and the difference between the packet IDs exceeds the replay protection window size, the packet is counted by the receiving port and discarded. For example if the replay protection window size is configured to five and a packet with an ID of 1006 arrives on the receiving link immediately following the packet assigned an ID of 1000, the packet with ID 1006 is counted and discarded because it is outside the parameter of the window size. Replay protection is particularly useful for addressing man-in-the-middle attacks. A packet that is replayed by a man-in-the-middle attacker on the Ethernet link that arrives on the receiving link out of sequence will be detected and dropped instead of forwarded through the network. Replay protection should not be enabled in cases where packets are expected to arrive out of order. When configured to **false**, replay protection is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

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replay-window-size *number*

Synopsis	Replay protection window size
Context	**configure** macsec connectivity-association *string* replay-window-size *number*
Tree	replay-window-size
Range	0 to 4294967294
Default	0
Introduced	16.0.R1
Platforms	All

static-cak

Synopsis	Enter the **static-cak** context
Context	**configure** macsec connectivity-association *string* static-cak
Tree	static-cak
Description	Commands in this context configure the Connectivity Association Key (CAK) to manage the MACsec Key Agreement (MKA).
Introduced	16.0.R1
Platforms	All

active-psk *number*

Synopsis	Active pre-shared-key (PSK)
Context	**configure** macsec connectivity-association *string* static-cak active-psk *number*
Tree	active-psk
Description	This command specifies the active transmitting PSK. If two PSKs are configured, the arriving MACsec MKA can be decrypted via CAKs using either PSK; however, only the active PSK is used for TX encryption of MKA PDUs.
Range	1 to 2
Default	1
Introduced	16.0.R1
Platforms	All

mka-hello-interval *keyword*

Synopsis	MKA hello interval
Context	**configure** macsec connectivity-association *string* static-cak mka-hello-interval *keyword*

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Tree	mka-hello-interval
Description	This command configures the interval at which MKA hello packets are sent or received for the connectivity association.
Options	1, 2, 3, 4, 5, 6, 500ms
Default	2
Introduced	19.5.R1
Platforms	All

mka-key-server-priority *number*

Synopsis	Key server priority used by the MKA protocol
Context	**configure** macsec connectivity-association *string* static-cak mka-key-server-priority *number*
Tree	mka-key-server-priority
Description	This command specifies the key server priority used by the MACsec Key Agreement (MKA) protocol to select the key server when MACsec is enabled using static connectivity association key (CAK) security mode.
Range	0 to 255
Default	16
Introduced	16.0.R1
Platforms	All

pre-shared-key [psk-id] *number*

Synopsis	Enter the **pre-shared-key** list instance
Context	**configure** macsec connectivity-association *string* static-cak pre-shared-key *number*
Tree	pre-shared-key
Description	Commands in this context configure pre-shared key attributes to enable MACsec using static connectivity association key (CAK) security mode. A pre-shared key includes a connectivity association key name (CKN) and a connectivity association key (CAK). The pre-shared key, the CKN and the CAK, must match on both ends of a link. A pre-shared key is configured on both devices at each end of a point-to-point link to enable MACsec via static CAK security mode. The MACsec Key Agreement (MKA) protocol is enabled after the successful MKA liveliness negotiation. The encryption type is used to encrypt the SAK and authenticate the MKA packet. The symmetric encryption key SAK (Security Association Key) must be encrypted (wrapped) via the MKA protocols. The AES key is derived from the pre-shared-key.

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Max. Instances	2
Introduced	16.0.R1
Platforms	All

[**psk-id**] *number*

Synopsis	Pre-shared-key (PSK) ID
Context	**configure** macsec connectivity-association *string* static-cak pre-shared-key *number*
Tree	pre-shared-key
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

cak *string*

Synopsis	Connectivity association key (CAK) for the PSK
Context	**configure** macsec connectivity-association *string* static-cak pre-shared-key *number* cak *string*
Tree	cak
Description	This command specifies the connectivity association key (CAK) for the pre-shared key. Two values are derived from the CAK: • Key Encryption Key (KEK), used to encrypt the MKA and SAK (symmetric key used for data path PDUs) distributed between all members • Integrity Check Value (ICV), used to authenticate the MKA and SAK PDUs distributed between all members
String Length	1 to 71
Introduced	16.0.R1
Platforms	All

cak-name *string*

Synopsis	Connectivity association key name (CKN) for the PSK
Context	**configure** macsec connectivity-association *string* static-cak pre-shared-key *number* cak-name *string*
Tree	cak-name

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Description	This command specifies the connectivity association key name (CKN) for the pre-shared key. The CKN is appended to the MKA for identification of the appropriate CAK by the peer.
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

encryption-type *keyword*

Synopsis	Encryption for authentication of the MKA packet
Context	**configure** macsec connectivity-association *string* static-cak pre-shared-key *number* encryption-type *keyword*
Tree	encryption-type
Options	aes-128-cmac, aes-256-cmac
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mac-policy [mac-policy-id] *number*

Synopsis	Enter the **mac-policy** list instance
Context	**configure** macsec mac-policy *number*
Tree	mac-policy
Introduced	16.0.R5
Platforms	All

[**mac-policy-id**] *number*

Synopsis	MAC address policy ID
Context	**configure** macsec mac-policy *number*
Tree	mac-policy
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

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destination-mac-address [dest-mac-addr] *string*

Synopsis	Add a list entry for **destination-mac-address**
Context	**configure** macsec mac-policy *number* destination-mac-address *string*
Tree	destination-mac-address
Max. Instances	5
Introduced	16.0.R5
Platforms	All

[**dest-mac-addr**] *string*

Synopsis	Destination MAC address added to the MAC policy
Context	**configure** macsec mac-policy *number* destination-mac-address *string*
Tree	destination-mac-address
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

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3.26 mcac commands

```
configure
   - mcac
      - apply-groups reference
      - apply-groups-exclude reference
      - interface-policy string
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - bandwidth
            - mandatory (number | keyword)
            - total (number | keyword)
         - description string
      - policy string
         - apply-groups reference
         - apply-groups-exclude reference
         - bundle string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - bandwidth number
            - channel start (ipv4-address-no-zone | ipv6-address-no-zone) end (ipv4-address-
no-zone | ipv6-address-no-zone) source (ipv4-prefix | ipv6-prefix)
               - apply-groups reference
               - apply-groups-exclude reference
               - bandwidth number
               - priority-class keyword
               - type keyword
            - description string
            - mc-constraints
               - lag-port-down string number-down number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - level number
               - level number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - bandwidth number
               - use-lag-port-weight boolean
         - default-action keyword
         - description string
```


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3.26.1 mcac command descriptions

mcac

Synopsis	Enter the **mcac** context
Context	**configure** mcac
Tree	mcac
Introduced	16.0.R1
Platforms	All

interface-policy [policy-name] *string*

Synopsis	Enter the **interface-policy** list instance
Context	**configure** mcac interface-policy *string*
Tree	interface-policy
Introduced	16.0.R1
Platforms	All

[**policy-name**] *string*

Synopsis	MCAC interface policy name
Context	**configure** mcac interface-policy *string*
Tree	interface-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the MCAC interface policy
Context	**configure** mcac interface-policy *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable

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Introduced	16.0.R1
Platforms	All

bandwidth

Synopsis	Enter the **bandwidth** context
Context	**configure** mcac interface-policy *string* bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	All

mandatory *(number | keyword)*

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	**configure** mcac interface-policy *string* bandwidth mandatory *(number | keyword)*
Tree	mandatory
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

total *(number | keyword)*

Synopsis	Maximum allowed bandwidth
Context	**configure** mcac interface-policy *string* bandwidth total *(number | keyword)*
Tree	total
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** mcac interface-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

policy [policy-name] *string*

Synopsis	Enter the **policy** list instance
Context	**configure** mcac policy *string*
Tree	policy
Introduced	16.0.R1
Platforms	All

[**policy-name**] *string*

Synopsis	Name of the global MCAC channel definition policy
Context	**configure** mcac policy *string*
Tree	policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bundle [bundle-name] *string*

Synopsis	Enter the **bundle** list instance
Context	**configure** mcac policy *string* bundle *string*
Tree	bundle
Max. Instances	64
Introduced	16.0.R1
Platforms	All

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[**bundle-name**] *string*

Synopsis	Multicast policy bundle name
Context	**configure** mcac policy *string* bundle *string*
Tree	bundle
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the policy bundle
Context	**configure** mcac policy *string* bundle *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Maximum bandwidth for the MCAC policy bundle
Context	**configure** mcac policy *string* bundle *string* bandwidth *number*
Tree	bandwidth
Range	1 to 4294967295
Units	kilobps
Default	100
Introduced	16.0.R1
Platforms	All

channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **channel** list instance

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Context	**configure** mcac policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source *(ipv4-prefix | ipv6-prefix)*
Tree	channel
Introduced	16.0.R1
Platforms	All

start *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Starting multicast IP address for a multicast stream
Context	**configure** mcac policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source *(ipv4-prefix | ipv6-prefix)*
Tree	channel
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Ending multicast IP address for a multicast stream
Context	**configure** mcac policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source *(ipv4-prefix | ipv6-prefix)*
Tree	channel
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source *(ipv4-prefix | ipv6-prefix)*

Synopsis	Source prefix for the multicast IP stream
Context	**configure** mcac policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source *(ipv4-prefix | ipv6-prefix)*
Tree	channel
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Bandwidth required by the channel
Context	**configure** mcac policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source *(ipv4-prefix | ipv6-prefix)* bandwidth *number*
Tree	bandwidth
Range	10 to 10000000
Units	kilobps
Default	10
Introduced	16.0.R1
Platforms	All

priority-class *keyword*

Synopsis	Channel classification for when LAG ports change state
Context	**configure** mcac policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source *(ipv4-prefix | ipv6-prefix)* priority-class *keyword*
Tree	priority-class
Options	low, high
Default	low
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Channel type
Context	**configure** mcac policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source *(ipv4-prefix | ipv6-prefix)* type *keyword*
Tree	type
Options	optional, mandatory
Default	optional

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Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** mcac policy *string* bundle *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

mc-constraints

Synopsis	Enter the **mc-constraints** context
Context	**configure** mcac policy *string* bundle *string* mc-constraints
Tree	mc-constraints
Introduced	16.0.R1
Platforms	All

lag-port-down [lag-name] *string* number-down *number*

Synopsis	Enter the **lag-port-down** list instance
Context	**configure** mcac policy *string* bundle *string* mc-constraints lag-port-down *string* number-down *number*
Tree	lag-port-down
Introduced	16.0.R1
Platforms	All

[**lag-name**] *string*

Synopsis	LAG name
Context	**configure** mcac policy *string* bundle *string* mc-constraints lag-port-down *string* number-down *number*
Tree	lag-port-down
String Length	1 to 27

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Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

number-down *number*

Synopsis	Number of LAG ports that are down
Context	**configure** mcac policy *string* bundle *string* mc-constraints lag-port-down *string* number-down *number*
Tree	lag-port-down
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level ID to associate with number of down LAG ports
Context	**configure** mcac policy *string* bundle *string* mc-constraints lag-port-down *string* number-down *number* level *number*
Tree	level
Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

level [level-id] *number*

Synopsis	Enter the **level** list instance
Context	**configure** mcac policy *string* bundle *string* mc-constraints level *number*
Tree	level
Introduced	16.0.R1
Platforms	All

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[**level-id**] *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	**configure** mcac policy *string* bundle *string* mc-constraints level *number*
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Bandwidth available for this level
Context	**configure** mcac policy *string* bundle *string* mc-constraints level *number* bandwidth *number*
Tree	bandwidth
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

use-lag-port-weight *boolean*

Synopsis	Use LAG port weight in calculating MCAC constraints
Context	**configure** mcac policy *string* bundle *string* mc-constraints use-lag-port-weight *boolean*
Tree	use-lag-port-weight
Description	When configured to **true**, port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.
Default	false
Introduced	16.0.R1
Platforms	All

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default-action *keyword*

Synopsis	Default action for the MCAC policy
Context	**configure** mcac policy *string* default-action *keyword*
Tree	default-action
Options	accept, discard
Default	discard
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** mcac policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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3.27 mirror commands

```
configure
   - mirror
      - apply-groups reference
      - apply-groups-exclude reference
      - global-sampling-rate number
      - mirror-dest string
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - encap
            - layer-3-encap
               - apply-groups reference
               - apply-groups-exclude reference
               - direction-bit boolean
               - gateway
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - ip-address
                     - destination string
                     - source string
                  - udp-port
                     - destination number
                     - source number
               - header-type keyword
               - router-instance string
         - endpoint string
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - revert-time (number | keyword)
         - fc keyword
         - pcap string
            - apply-groups reference
            - apply-groups-exclude reference
            - file-url string
         - remote-source
            - far-end string
               - apply-groups reference
               - apply-groups-exclude reference
               - icb boolean
               - ing-vc-label number
               - label-signaling keyword
               - vc-id number
            - spoke-sdp string
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - control-word boolean
               - egress
                  - vc-label number
               - endpoint
                  - icb boolean
                  - name reference
               - ingress
                  - l2tpv3
                     - cookie
                        - cookie1 string
                        - cookie2 string
```


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configure mirror mirror-dest remote-source spoke-sdp ingress vc-label

```
                - vc-label number
        - sampling-rate number
        - sap string
            - apply-groups reference
            - apply-groups-exclude reference
            - egress
                - ip-mirror
                    - mac
                        - destination string
                        - source string
                - qos
                    - sap-egress
                        - policy-name reference
                        - port-redirect-group
                            - group-name reference
                            - instance number
            - endpoint reference
        - service-id number
        - slice-size number
        - spoke-sdp string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - control-word boolean
            - egress
                - l2tpv3
                    - cookie string
                - vc-label number
            - endpoint
                - icb boolean
                - name reference
                - precedence (number | keyword)
            - ingress
                - vc-label number
        - type keyword
        - use-global-sampling-rate boolean
    - mirror-source string
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - ip-filter reference
            - apply-groups reference
            - apply-groups-exclude reference
            - entry number
        - ipv6-filter reference
            - apply-groups reference
            - apply-groups-exclude reference
            - entry number
        - mac-filter reference
            - apply-groups reference
            - apply-groups-exclude reference
            - entry number
        - port string
            - apply-groups reference
            - apply-groups-exclude reference
            - egress boolean
            - ingress boolean
        - sap string
            - apply-groups reference
            - apply-groups-exclude reference
            - egress boolean
            - ingress boolean
        - subscriber string
            - apply-groups reference
```


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```
            - apply-groups-exclude reference
            - egress boolean
            - fc keyword
            - host-type keyword
            - ingress boolean
            - ip-address string
            - ip-family keyword
            - mac-address string
            - sap-id string
            - sla-profile string
```


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3.27.1 mirror command descriptions

mirror

Synopsis	Enter the **mirror** context
Context	**configure** mirror
Tree	mirror
Introduced	16.0.R1
Platforms	All

global-sampling-rate *number*

Synopsis	System wide global sampling rate
Context	**configure** mirror global-sampling-rate *number*
Tree	global-sampling-rate
Description	This command configures the global sampling rate. The global sampling rate provides a higher sampling rate than the sampling rate specified on the mirror destination. When set, this command applies to all mirror destination services that have the **use-global-sampling-rate** command configured. The global sampling rate takes precedence over the rate specified on the mirror destination. This means that when this command and the **configure mirror mirror-dest sampling-rate** are configured under the same mirror destination, the system automatically samples using the higher rate configured with this command and ignores the lower rate configured with the **sampling-rate** command. When unconfigured, no mirror destinations are associated to a global sampling rate and all mirror destinations mirror at the full rate, which means every packet is mirrored unless a mirror destination rate is specified.
Range	0 | 2 to 255
Default	0
Introduced	22.10.R1
Platforms	All

mirror-dest [service-name] *string*

Synopsis	Enter the **mirror-dest** list instance
Context	**configure** mirror mirror-dest *string*
Tree	mirror-dest

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Max. Instances	255
Introduced	16.0.R1
Platforms	All

[**service-name**] *string*

Synopsis	Administrative service name
Context	**configure** mirror mirror-dest *string*
Tree	mirror-dest
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the service
Context	**configure** mirror mirror-dest *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** mirror mirror-dest *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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encap

Synopsis	Enter the **encap** context
Context	**configure** mirror mirror-dest *string* encap
Tree	encap
Introduced	16.0.R1
Platforms	All

layer-3-encap

Synopsis	Enable the **layer-3-encap** context
Context	**configure** mirror mirror-dest *string* encap layer-3-encap
Tree	layer-3-encap
Introduced	16.0.R1
Platforms	All

direction-bit *boolean*

Synopsis	Use the highest bit to specify traffic flow direction
Context	**configure** mirror mirror-dest *string* encap layer-3-encap direction-bit *boolean*
Tree	direction-bit
Default	false
Introduced	16.0.R1
Platforms	All

gateway

Synopsis	Enable the **gateway** context
Context	**configure** mirror mirror-dest *string* encap layer-3-encap gateway
Tree	gateway
Introduced	16.0.R1
Platforms	All

ip-address

Synopsis	Enter the **ip-address** context

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Context	**configure** mirror mirror-dest *string* encap layer-3-encap gateway ip-address
Tree	ip-address
Introduced	16.0.R1
Platforms	All

destination *string*

Synopsis	IPv4 destination address for the gateway
Context	**configure** mirror mirror-dest *string* encap layer-3-encap gateway ip-address destination *string*
Tree	destination
Introduced	16.0.R1
Platforms	All

source *string*

Synopsis	IPv4 source address for the gateway
Context	**configure** mirror mirror-dest *string* encap layer-3-encap gateway ip-address source *string*
Tree	source
Introduced	16.0.R1
Platforms	All

udp-port

Synopsis	Enter the **udp-port** context
Context	**configure** mirror mirror-dest *string* encap layer-3-encap gateway udp-port
Tree	udp-port
Introduced	16.0.R1
Platforms	All

destination *number*

Synopsis	UDP destination port to use with the gateway
Context	**configure** mirror mirror-dest *string* encap layer-3-encap gateway udp-port destination *number*

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Tree	destination
Range	0 | 1 to 65535
Default	0
Introduced	16.0.R1
Platforms	All

source *number*

Synopsis	UDP source port to use with the gateway
Context	**configure** mirror mirror-dest *string* encap layer-3-encap gateway udp-port source *number*
Tree	source
Range	0 | 1 to 65535
Default	0
Introduced	16.0.R1
Platforms	All

header-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Header type for Layer 3 encapsulation
Context	**configure** mirror mirror-dest *string* encap layer-3-encap header-type *keyword*
Tree	header-type
Options	ip-udp-shim, ip-gre, ip-udp-shim-sampled
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

router-instance *string*

Synopsis	Router instance to use with routed encapsulation
Context	**configure** mirror mirror-dest *string* encap layer-3-encap router-instance *string*
Tree	router-instance

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Default	Base
Introduced	16.0.R1
Platforms	All

endpoint [name] *string*

Synopsis	Enter the **endpoint** list instance
Context	**configure** mirror mirror-dest *string* endpoint *string*
Tree	endpoint
Max. Instances	2
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	Service endpoint name
Context	**configure** mirror mirror-dest *string* endpoint *string*
Tree	endpoint
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** mirror mirror-dest *string* endpoint *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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revert-time *(number | keyword)*

Synopsis	Time to wait before reverting back to primary spoke SDP
Context	**configure** mirror mirror-dest *string* endpoint *string* revert-time *(number | keyword)*
Tree	revert-time
Range	1 to 600
Units	seconds
Options	never, immediate
Default	immediate
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class for destination traffic
Context	**configure** mirror mirror-dest *string* fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	16.0.R1
Platforms	All

pcap [session-name] *string*

Synopsis	Enter the **pcap** list instance
Context	**configure** mirror mirror-dest *string* pcap *string*
Tree	pcap
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[**session-name**] *string*

Synopsis	PCAP session name
Context	**configure** mirror mirror-dest *string* pcap *string*

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Tree	pcap
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

file-url *string*

Synopsis	URL and file name for packet capture transfer
Context	**configure** mirror mirror-dest *string* pcap *string* file-url *string*
Tree	file-url
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

remote-source

Synopsis	Enable the **remote-source** context
Context	**configure** mirror mirror-dest *string* remote-source
Tree	remote-source
Introduced	16.0.R1
Platforms	All

far-end [far-end-addr] *string*

Synopsis	Enter the **far-end** list instance
Context	**configure** mirror mirror-dest *string* remote-source far-end *string*
Tree	far-end
Introduced	16.0.R1
Platforms	All

[**far-end-addr**] *string*

Synopsis	Far end IP address
Context	**configure** mirror mirror-dest *string* remote-source far-end *string*

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Tree	far-end
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

icb *boolean*

Synopsis	Remote source as an inter-chassis backup
Context	**configure** mirror mirror-dest *string* remote-source far-end *string* icb *boolean*
Tree	icb
Default	false
Introduced	16.0.R1
Platforms	All

ing-vc-label *number*

Synopsis	Ingress virtual circuit label
Context	**configure** mirror mirror-dest *string* remote-source far-end *string* ing-vc-label *number*
Tree	ing-vc-label
Range	32 to 18431
Notes	The following elements are part of a choice: **ing-vc-label** or **label-signaling**.
Introduced	16.0.R1
Platforms	All

label-signaling *keyword*

Synopsis	Protocol to obtain the ingress labels
Context	**configure** mirror mirror-dest *string* remote-source far-end *string* label-signaling *keyword*
Tree	label-signaling
Options	tldp
Default	tldp
Notes	The following elements are part of a choice: **ing-vc-label** or **label-signaling**.
Introduced	16.0.R1
Platforms	All

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vc-id *number*

Synopsis	Virtual circuit ID associated with the remote source
Context	**configure** mirror mirror-dest *string* remote-source far-end *string* vc-id *number*
Tree	vc-id
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

spoke-sdp [sdp-bind-id] *string*

Synopsis	Enter the **spoke-sdp** list instance
Context	**configure** mirror mirror-dest *string* remote-source spoke-sdp *string*
Tree	spoke-sdp
Introduced	16.0.R1
Platforms	All

[**sdp-bind-id**] *string*

Synopsis	SDP ID number
Context	**configure** mirror mirror-dest *string* remote-source spoke-sdp *string*
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the service SDP binding
Context	**configure** mirror mirror-dest *string* remote-source spoke-sdp *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable

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Introduced	16.0.R1
Platforms	All

control-word *boolean*

Synopsis	Enable the PW control word on spoke SDPs
Context	**configure** mirror mirror-dest *string* remote-source spoke-sdp *string* control-word *boolean*
Tree	control-word
Description	When configured to **true**, this command enables the PW control word on spoke SDPs that are part of a mirror destination. The control word must be enabled to allow MPLS-TP OAM on spoke SDP and is only valid for spoke SDPs that are part of a mirror service of type **ether**. When configured to **false**, this command disables the PW control word.
Default	false
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** mirror mirror-dest *string* remote-source spoke-sdp *string* egress
Tree	egress
Introduced	16.0.R1
Platforms	All

vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MPLS VC label that sends packets to the far end device
Context	**configure** mirror mirror-dest *string* remote-source spoke-sdp *string* egress vc-label *number*
Tree	vc-label
Range	16 to 1048575

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Introduced	16.0.R1
Platforms	All

endpoint

Synopsis	Enter the **endpoint** context
Context	**configure** mirror mirror-dest *string* remote-source spoke-sdp *string* endpoint
Tree	endpoint
Introduced	16.0.R1
Platforms	All

icb *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Bind the SDP as the Inter-Chassis Backup (ICB) type
Context	**configure** mirror mirror-dest *string* remote-source spoke-sdp *string* endpoint icb *boolean*
Tree	icb
Default	false
Introduced	16.0.R1
Platforms	All

name *reference*

Synopsis	SAP-associated endpoint name
Context	**configure** mirror mirror-dest *string* remote-source spoke-sdp *string* endpoint name *reference*
Tree	name
Reference	**configure** mirror mirror-dest *string* endpoint *string*
Introduced	16.0.R1
Platforms	All

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ingress

Synopsis	Enter the **ingress** context
Context	**configure** mirror mirror-dest *string* remote-source spoke-sdp *string* ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

l2tpv3

Synopsis	Enter the **l2tpv3** context
Context	**configure** mirror mirror-dest *string* remote-source spoke-sdp *string* ingress l2tpv3
Tree	l2tpv3
Introduced	16.0.R1
Platforms	All

cookie

Synopsis	Enter the **cookie** context
Context	**configure** mirror mirror-dest *string* remote-source spoke-sdp *string* ingress l2tpv3 cookie
Tree	cookie
Introduced	16.0.R1
Platforms	All

cookie1 *string*

Synopsis	Value of the first cookie for the tunnel
Context	**configure** mirror mirror-dest *string* remote-source spoke-sdp *string* ingress l2tpv3 cookie cookie1 *string*
Tree	cookie1
String Length	18 to 23
Introduced	16.0.R1
Platforms	All

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cookie2 *string*

Synopsis	Value of the second cookie for the tunnel
Context	**configure** mirror mirror-dest *string* remote-source spoke-sdp *string* ingress l2tpv3 cookie cookie2 *string*
Tree	cookie2
String Length	18 to 23
Introduced	16.0.R1
Platforms	All

vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MPLS VC label that sends packets to the far end device
Context	**configure** mirror mirror-dest *string* remote-source spoke-sdp *string* ingress vc-label *number*
Tree	vc-label
Range	32 to 18431
Introduced	16.0.R1
Platforms	All

sampling-rate *number*

Synopsis	Sampling rate
Context	**configure** mirror mirror-dest *string* sampling-rate *number*
Tree	sampling-rate
Description	This command configures the packet sampling rate value for mirrored traffic and is supported with mirror source configurations. The sampling rate is common to all endpoints on a given line card FP per mirror destination service.
Range	256 to 10000
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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sap [sap-id] *string*

Synopsis	Enter the **sap** list instance
Context	**configure** mirror mirror-dest *string* sap *string*
Tree	sap
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[**sap-id**] *string*

Synopsis	SAP ID
Context	**configure** mirror mirror-dest *string* sap *string*
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** mirror mirror-dest *string* sap *string* egress
Tree	egress
Introduced	16.0.R1
Platforms	All

ip-mirror

Synopsis	Enter the **ip-mirror** context
Context	**configure** mirror mirror-dest *string* sap *string* egress ip-mirror
Tree	ip-mirror
Introduced	16.0.R1
Platforms	All

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mac

Synopsis	Enter the **mac** context
Context	**configure** mirror mirror-dest *string* sap *string* egress ip-mirror mac
Tree	mac
Introduced	16.0.R1
Platforms	All

destination *string*

Synopsis	Destination MAC address
Context	**configure** mirror mirror-dest *string* sap *string* egress ip-mirror mac destination *string*
Tree	destination
Introduced	16.0.R1
Platforms	All

source *string*

Synopsis	Source MAC address
Context	**configure** mirror mirror-dest *string* sap *string* egress ip-mirror mac source *string*
Tree	source
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** mirror mirror-dest *string* sap *string* egress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

sap-egress

Synopsis	Enter the **sap-egress** context

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Context	**configure** mirror mirror-dest *string* sap *string* egress qos sap-egress
Tree	sap-egress
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	**configure** mirror mirror-dest *string* sap *string* egress qos sap-egress policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-egress *string*
Introduced	16.0.R1
Platforms	All

port-redirect-group

Synopsis	Enter the **port-redirect-group** context
Context	**configure** mirror mirror-dest *string* sap *string* egress qos sap-egress port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Name of the queue group redirect list policy
Context	**configure** mirror mirror-dest *string* sap *string* egress qos sap-egress port-redirect-group group-name *reference*
Tree	group-name
Reference	**configure** qos queue-group-templates egress queue-group *string*
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Port queue group instance

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Context	**configure** mirror mirror-dest *string* sap *string* egress qos sap-egress port-redirect-group instance *number*
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

endpoint *reference*

Synopsis	Service endpoint name
Context	**configure** mirror mirror-dest *string* sap *string* endpoint *reference*
Tree	endpoint
Reference	**configure** mirror mirror-dest *string* endpoint *string*
Introduced	16.0.R1
Platforms	All

service-id *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	**configure** mirror mirror-dest *string* service-id *number*
Tree	service-id
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

slice-size *number*

Synopsis	Maximum size of the transmitted mirrored frame
Context	**configure** mirror mirror-dest *string* slice-size *number*
Tree	slice-size
Range	0 | 128 to 9216
Default	0

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Introduced	16.0.R1
Platforms	All

spoke-sdp [sdp-bind-id] *string*

Synopsis	Enter the **spoke-sdp** list instance
Context	**configure** mirror mirror-dest *string* spoke-sdp *string*
Tree	spoke-sdp
Introduced	16.0.R1
Platforms	All

[**sdp-bind-id**] *string*

Synopsis	SDP ID number
Context	**configure** mirror mirror-dest *string* spoke-sdp *string*
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the service SDP binding
Context	**configure** mirror mirror-dest *string* spoke-sdp *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

control-word *boolean*

Synopsis	Enable the PW control word on spoke SDPs
Context	**configure** mirror mirror-dest *string* spoke-sdp *string* control-word *boolean*

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Tree	control-word
Description	When configured to **true**, this command enables the PW control word on spoke SDPs that are part of a mirror destination. The control word must be enabled to allow MPLS-TP OAM on spoke SDP and is only valid for spoke SDPs that are part of a mirror service of type **ether**. When configured to **false**, this command disables the PW control word.
Default	false
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** mirror mirror-dest *string* spoke-sdp *string* egress
Tree	egress
Introduced	16.0.R1
Platforms	All

l2tpv3

Synopsis	Enter the **l2tpv3** context
Context	**configure** mirror mirror-dest *string* spoke-sdp *string* egress l2tpv3
Tree	l2tpv3
Introduced	16.0.R1
Platforms	All

cookie *string*

Synopsis	RX or TX cookie for L2TPv3 spoke SDPs
Context	**configure** mirror mirror-dest *string* spoke-sdp *string* egress l2tpv3 cookie *string*
Tree	cookie
String Length	18 to 23
Introduced	16.0.R1
Platforms	All

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vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MPLS VC label that sends packets to the far end device
Context	**configure** mirror mirror-dest *string* spoke-sdp *string* egress vc-label *number*
Tree	vc-label
Range	16 to 1048575
Introduced	16.0.R1
Platforms	All

endpoint

Synopsis	Enter the **endpoint** context
Context	**configure** mirror mirror-dest *string* spoke-sdp *string* endpoint
Tree	endpoint
Introduced	16.0.R1
Platforms	All

icb *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Bind the SDP as the Inter-Chassis Backup (ICB) type
Context	**configure** mirror mirror-dest *string* spoke-sdp *string* endpoint icb *boolean*
Tree	icb
Default	false
Introduced	16.0.R1
Platforms	All

name *reference*

Synopsis	Endpoint name associated with the SAP
Context	**configure** mirror mirror-dest *string* spoke-sdp *string* endpoint name *reference*

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Tree	name
Reference	**configure** mirror mirror-dest *string* endpoint *string*
Introduced	16.0.R1
Platforms	All

precedence *(number | keyword)*

Synopsis	Precedence when multiple SDP binds are on one endpoint
Context	**configure** mirror mirror-dest *string* spoke-sdp *string* endpoint precedence *(number | keyword)*
Tree	precedence
Range	1 to 4
Options	primary
Default	4
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the **ingress** context
Context	**configure** mirror mirror-dest *string* spoke-sdp *string* ingress
Tree	ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MPLS VC label that sends packets to the far end device
Context	**configure** mirror mirror-dest *string* spoke-sdp *string* ingress vc-label *number*
Tree	vc-label
Range	32 to 18431
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Mirror type information
Context	**configure** mirror mirror-dest *string* type *keyword*
Tree	type
Options	ether, ip-only
Default	ether
Introduced	16.0.R1
Platforms	All

use-global-sampling-rate *boolean*

Synopsis	Enables global sampling rate by mirror destination
Context	**configure** mirror mirror-dest *string* use-global-sampling-rate *boolean*
Tree	use-global-sampling-rate
Description	When configured to **true**, this command configures each mirror destination service to use the global sampling rate, which allows a single high sampling rate for the entire system. When configured to **false**, the mirror destination mirrors at the full rate (all packets) or mirrors based on the sampling rate for the mirror destination if the **sampling-rate** command is configured.
Default	false
Introduced	22.10.R1
Platforms	All

mirror-source [service-name] *string*

Synopsis	Enter the **mirror-source** list instance
Context	**configure** mirror mirror-source *string*
Tree	mirror-source
Introduced	19.10.R1

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Platforms	All

[**service-name**] *string*

Synopsis	Administrative service name
Context	**configure** mirror mirror-source *string*
Tree	mirror-source
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the mirror service
Context	**configure** mirror mirror-source *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	19.10.R1
Platforms	All

ip-filter [filter-name] *reference*

Synopsis	Enter the **ip-filter** list instance
Context	**configure** mirror mirror-source *string* ip-filter *reference*
Tree	ip-filter
Introduced	19.10.R1
Platforms	All

[**filter-name**] *reference*

Synopsis	IP filter name
Context	**configure** mirror mirror-source *string* ip-filter *reference*
Tree	ip-filter

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Reference	**configure** filter ip-filter *string*
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

entry [entry-id] *number*

Synopsis	Add a list entry for **entry**
Context	**configure** mirror mirror-source *string* ip-filter *reference* entry *number*
Tree	entry
Min. Instances	1
Introduced	19.10.R1
Platforms	All

[**entry-id**] *number*

Synopsis	IP filter entry ID
Context	**configure** mirror mirror-source *string* ip-filter *reference* entry *number*
Tree	entry
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

ipv6-filter [filter-name] *reference*

Synopsis	Enter the **ipv6-filter** list instance
Context	**configure** mirror mirror-source *string* ipv6-filter *reference*
Tree	ipv6-filter
Introduced	19.10.R1
Platforms	All

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[**filter-name**] *reference*

Synopsis	IPv6 filter name
Context	**configure** mirror mirror-source *string* ipv6-filter *reference*
Tree	ipv6-filter
Reference	**configure** filter ipv6-filter *string*
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

entry [entry-id] *number*

Synopsis	Add a list entry for **entry**
Context	**configure** mirror mirror-source *string* ipv6-filter *reference* entry *number*
Tree	entry
Min. Instances	1
Introduced	19.10.R1
Platforms	All

[**entry-id**] *number*

Synopsis	IPv6 filter entry ID
Context	**configure** mirror mirror-source *string* ipv6-filter *reference* entry *number*
Tree	entry
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

mac-filter [filter-name] *reference*

Synopsis	Enter the **mac-filter** list instance
Context	**configure** mirror mirror-source *string* mac-filter *reference*
Tree	mac-filter
Introduced	19.10.R1

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Platforms	All

[**filter-name**] *reference*

Synopsis	MAC filter name
Context	**configure** mirror mirror-source *string* mac-filter *reference*
Tree	mac-filter
Reference	**configure** filter mac-filter *string*
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

entry [entry-id] *number*

Synopsis	Add a list entry for **entry**
Context	**configure** mirror mirror-source *string* mac-filter *reference* entry *number*
Tree	entry
Min. Instances	1
Introduced	19.10.R1
Platforms	All

[**entry-id**] *number*

Synopsis	MAC filter entry ID
Context	**configure** mirror mirror-source *string* mac-filter *reference* entry *number*
Tree	entry
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

port [port-id] *string*

Synopsis	Enter the **port** list instance

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Context	**configure** mirror mirror-source *string* port *string*
Tree	port
Introduced	19.10.R1
Platforms	All

[**port-id**] *string*

Synopsis	Port ID
Context	**configure** mirror mirror-source *string* port *string*
Tree	port
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

egress *boolean*

Synopsis	Mirror egress packets
Context	**configure** mirror mirror-source *string* port *string* egress *boolean*
Tree	egress
Description	When configured to **true**, egressing packets are mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

ingress *boolean*

Synopsis	Mirror ingress packets
Context	**configure** mirror mirror-source *string* port *string* ingress *boolean*
Tree	ingress
Description	When configured to **true**, ingressing packets are mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

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sap [sap-id] *string*

Synopsis	Enter the **sap** list instance
Context	**configure** mirror mirror-source *string* sap *string*
Tree	sap
Introduced	19.10.R1
Platforms	All

[**sap-id**] *string*

Synopsis	SAP ID
Context	**configure** mirror mirror-source *string* sap *string*
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

egress *boolean*

Synopsis	Mirror egress packets
Context	**configure** mirror mirror-source *string* sap *string* egress *boolean*
Tree	egress
Description	When configured to **true**, egressing packets are mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

ingress *boolean*

Synopsis	Mirror ingress packets
Context	**configure** mirror mirror-source *string* sap *string* ingress *boolean*
Tree	ingress

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Description	When configured to **true**, ingressing packets are mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

subscriber [subscriber-id] *string*

Synopsis	Enter the **subscriber** list instance
Context	**configure** mirror mirror-source *string* subscriber *string*
Tree	subscriber
Introduced	19.10.R1
Platforms	All

[**subscriber-id**] *string*

Synopsis	Subscriber ID
Context	**configure** mirror mirror-source *string* subscriber *string*
Tree	subscriber
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

egress *boolean*

Synopsis	Mirror egress packets
Context	**configure** mirror mirror-source *string* subscriber *string* egress *boolean*
Tree	egress
Description	When configured to **true**, egressing packets are mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

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fc *keyword*

Synopsis	The forwarding classes traffic which should be mirrored
Context	**configure** mirror mirror-source *string* subscriber *string* fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	19.10.R1
Platforms	All

host-type *keyword*

Synopsis	Host type for mirroring
Context	**configure** mirror mirror-source *string* subscriber *string* host-type *keyword*
Tree	host-type
Options	ipoe, ppp
Introduced	19.10.R1
Platforms	All

ingress *boolean*

Synopsis	Mirror ingress packets
Context	**configure** mirror mirror-source *string* subscriber *string* ingress *boolean*
Tree	ingress
Description	When configured to **true**, ingressing packets are mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

ip-address *string*

Synopsis	Service IP address of remote device sending LI traffic
Context	**configure** mirror mirror-source *string* subscriber *string* ip-address *string*
Tree	ip-address

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Notes	The following elements are part of a choice: (**ip-address**, **mac-address**, and **sap-id**) or **sla-profile**.
Introduced	19.10.R1
Platforms	All

ip-family *keyword*

Synopsis	IP family for mirroring
Context	**configure** mirror mirror-source *string* subscriber *string* ip-family *keyword*
Tree	ip-family
Options	ipv4, ipv6
Introduced	19.10.R1
Platforms	All

mac-address *string*

Synopsis	MAC address for the subscriber
Context	**configure** mirror mirror-source *string* subscriber *string* mac-address *string*
Tree	mac-address
Notes	The following elements are part of a choice: (**ip-address**, **mac-address**, and **sap-id**) or **sla-profile**.
Introduced	19.10.R1
Platforms	All

sap-id *string*

Synopsis	Subscriber SAP ID
Context	**configure** mirror mirror-source *string* subscriber *string* sap-id *string*
Tree	sap-id
String Length	1 to 45
Notes	The following elements are part of a choice: (**ip-address**, **mac-address**, and **sap-id**) or **sla-profile**.
Introduced	19.10.R1
Platforms	All

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sla-profile *string*

Synopsis	SLA profile name
Context	**configure** mirror mirror-source *string* subscriber *string* sla-profile *string*
Tree	sla-profile
String Length	1 to 32
Notes	The following elements are part of a choice: (**ip-address**, **mac-address**, and **sap-id**) or **sla-profile**.
Introduced	19.10.R1
Platforms	All

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3.28 multicast-management commands

```
configure
   –  multicast-management
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  bandwidth-policy string
         –  admin-bw-threshold number
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  description string
         –  falling-percent-reset number
         –  impm-paths
            –  primary-path
               –  apply-groups reference
               –  apply-groups-exclude reference
               –  queue-parameters
                  –  cbs decimal-number
                  –  drop-tail
                     –  low
                        –  percent-reduction-from-mbs number
                  –  mbs decimal-number
            –  secondary-path
               –  apply-groups reference
               –  apply-groups-exclude reference
               –  number-paths
                  –  number-of-paths number
                  –  redundant-sfm number
               –  queue-parameters
                  –  cbs decimal-number
                  –  drop-tail
                     –  low
                        –  percent-reduction-from-mbs number
                  –  mbs decimal-number
         –  mcast-pool
            –  percent-of-total number
            –  resv-cbs number
            –  slope-policy reference
      –  chassis-level
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  mmrp-impm-override boolean
         –  per-mcast-plane-capacity
            –  mcast-capacity
               –  primary-percentage decimal-number
               –  secondary-percentage decimal-number
            –  redundant-mcast-capacity
               –  primary-percentage decimal-number
               –  secondary-percentage decimal-number
            –  total-capacity keyword
         –  round-robin-inactive-records boolean
      –  multicast-info-policy string
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  bundle string
            –  admin-bw number
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  bw-activity
               –  black-hole-rate number
               –  bw-activity-type keyword
```


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configure multicast-management multicast-info-policy bundle bw-activity falling-delay

```
                - falling-delay number
            - channel start (ipv4-address-no-zone | ipv6-address-no-zone) end (ipv4-address-
no-zone | ipv6-address-no-zone)
                - admin-bw number
                - apply-groups reference
                - apply-groups-exclude reference
                - bw-activity
                  - black-hole-rate number
                  - bw-activity-type keyword
                  - falling-delay number
                - explicit-sf-path keyword
                - keepalive-override number
                - preference number
                - primary-tunnel-interface
                  - ldp-p2mp number
                  - rsvp-p2mp string
                  - sender string
                - source-override (ipv4-address-no-zone | ipv6-address-no-zone)
                  - admin-bw number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - bw-activity
                    - black-hole-rate number
                    - bw-activity-type keyword
                    - falling-delay number
                  - explicit-sf-path keyword
                  - keepalive-override number
                  - preference number
                  - primary-tunnel-interface
                    - ldp-p2mp number
                    - rsvp-p2mp string
                    - sender string
                  - video
                    - analyzer
                      - alarms
                        - cc-error boolean
                        - non-vid-pid-absent number
                        - pat-repetition
                          - poa number
                          - qos number
                          - tnc number
                        - pat-syntax boolean
                        - pcr-repetition
                          - poa number
                          - qos number
                          - tnc number
                        - pid-pmt-unref boolean
                        - pmt-repetition
                          - poa number
                          - qos number
                          - tnc number
                        - pmt-syntax boolean
                        - report-alarm
                          - severity keyword
                        - tei-set boolean
                        - ts-sync-loss boolean
                        - vid-pid-absent number
                      - description string
                    - fcc-channel-type keyword
                    - fcc-min-duration number
                    - fcc-server keyword
                    - local-rt-server keyword
                    - reorder-audio number
                    - rt-buffer-size number
```


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configure multicast-management multicast-info-policy bundle channel source-override video rt-server

```
                  - rt-server
                     - ip-address string
                     - port number
                     - rt-state keyword
                  - stream-selection
                     - intf1 string
                     - intf2 string
                     - source1 string
                     - source2 string
                  - video-group (number | keyword)
            - video
               - analyzer
                  - alarms
                     - cc-error boolean
                     - non-vid-pid-absent number
                     - pat-repetition
                        - poa number
                        - qos number
                        - tnc number
                     - pat-syntax boolean
                     - pcr-repetition
                        - poa number
                        - qos number
                        - tnc number
                     - pid-pmt-unref boolean
                     - pmt-repetition
                        - poa number
                        - qos number
                        - tnc number
                     - pmt-syntax boolean
                     - report-alarm
                        - severity keyword
                     - tei-set boolean
                     - ts-sync-loss boolean
                     - vid-pid-absent number
                  - description string
               - fcc-channel-type keyword
               - fcc-min-duration number
               - fcc-server keyword
               - local-rt-server keyword
               - reorder-audio number
               - rt-buffer-size number
               - rt-server
                  - ip-address string
                  - port number
                  - rt-state keyword
               - stream-selection
                  - intf1 string
                  - intf2 string
                  - source1 string
                  - source2 string
               - video-group (number | keyword)
         - cong-priority-threshold number
         - description string
         - ecmp-opt-threshold number
         - explicit-sf-path keyword
         - keepalive-override number
         - preference number
         - primary-tunnel-interface
            - ldp-p2mp number
            - rsvp-p2mp string
            - sender string
         - video
            - analyzer
```


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configure multicast-management multicast-info-policy bundle video analyzer alarms

```
                  - alarms
                     - cc-error boolean
                     - non-vid-pid-absent number
                     - pat-repetition
                        - poa number
                        - qos number
                        - tnc number
                     - pat-syntax boolean
                     - pcr-repetition
                        - poa number
                        - qos number
                        - tnc number
                     - pid-pmt-unref boolean
                     - pmt-repetition
                        - poa number
                        - qos number
                        - tnc number
                     - pmt-syntax boolean
                     - report-alarm
                        - severity keyword
                     - tei-set boolean
                     - ts-sync-loss boolean
                     - vid-pid-absent number
                  - description string
               - fcc-channel-type keyword
               - fcc-min-duration number
               - fcc-server boolean
               - local-fcc-port number
               - local-rt-port number
               - local-rt-server boolean
               - reorder-audio number
               - rt-buffer-size number
               - rt-server
                  - ip-address string
                  - port number
               - stream-selection
                  - intf1 string
                  - intf2 string
                  - source1 string
                  - source2 string
               - video-group number
         - description string
         - video-policy
            - video-interface string
               - apply-groups reference
               - apply-groups-exclude reference
               - extended-unicast boolean
               - fcc-session-timeout number
               - hd
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - dent-threshold number
                  - fcc-burst number
                  - fcc-server
                     - mode keyword
                  - local-rt-server boolean
                  - mc-handover number
                  - rt-rate number
               - max-igmp-latency number
               - max-sessions number
               - pip
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - dent-threshold number
```


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configure multicast-management multicast-info-policy video-policy video-interface pip fcc-burst

```
                  -  fcc-burst number
                  -  fcc-server
                     -  mode keyword
                  -  local-rt-server boolean
                  -  mc-handover number
                  -  rt-rate number
               -  ret-session-timeout number
               -  rt-payload-type number
               -  rt-rate number
               -  sd
                  -  apply-groups reference
                  -  apply-groups-exclude reference
                  -  dent-threshold number
                  -  fcc-burst number
                  -  fcc-server
                     -  mode keyword
                  -  local-rt-server boolean
                  -  mc-handover number
                  -  rt-rate number
               -  subscriber-bw-limit number
   -  multicast-reporting-destination string
      -  address string
      -  admin-state keyword
      -  apply-groups reference
      -  apply-groups-exclude reference
      -  description string
      -  maximum-transmission-delay number
      -  udp-port number
```


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3.28.1 multicast-management command descriptions

multicast-management

Synopsis	Enter the **multicast-management** context
Context	**configure** multicast-management
Tree	multicast-management
Introduced	16.0.R1
Platforms	All

bandwidth-policy [policy-name] *string*

Synopsis	Enter the **bandwidth-policy** list instance
Context	**configure** multicast-management bandwidth-policy *string*
Tree	bandwidth-policy
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

[**policy-name**] *string*

Synopsis	Bandwidth policy name
Context	**configure** multicast-management bandwidth-policy *string*
Tree	bandwidth-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

admin-bw-threshold *number*

Synopsis	Administrative bandwidth threshold
Context	**configure** multicast-management bandwidth-policy *string* admin-bw-threshold *number*

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Tree	admin-bw-threshold
Range	1 to 40000000
Units	kilobps
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

description *string*

Synopsis	Text description
Context	**configure** multicast-management bandwidth-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

falling-percent-reset *number*

Synopsis	Percent of bandwidth that decreases before resetting
Context	**configure** multicast-management bandwidth-policy *string* falling-percent-reset *number*
Tree	falling-percent-reset
Range	1 to 100
Units	percent
Default	50
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

impm-paths

Synopsis	Enter the **impm-paths** context
Context	**configure** multicast-management bandwidth-policy *string* impm-paths
Tree	impm-paths
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

primary-path

Synopsis	Enter the **primary-path** context
Context	**configure** multicast-management bandwidth-policy *string* impm-paths primary-path
Tree	primary-path
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

queue-parameters

Synopsis	Enter the **queue-parameters** context
Context	**configure** multicast-management bandwidth-policy *string* impm-paths primary-path queue-parameters
Tree	queue-parameters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

cbs *decimal-number*

Synopsis	Override for default CBS for single queue for each path
Context	**configure** multicast-management bandwidth-policy *string* impm-paths primary-path queue-parameters cbs *decimal-number*
Tree	cbs
Range	0.00 to 100.00
Units	percent
Default	5.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

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drop-tail

Synopsis	Enter the **drop-tail** context
Context	**configure** multicast-management bandwidth-policy *string* impm-paths primary-path queue-parameters drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

low

Synopsis	Enter the **low** context
Context	**configure** multicast-management bandwidth-policy *string* impm-paths primary-path queue-parameters drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

percent-reduction-from-mbs *number*

Synopsis	Low drop-tail percent from MBS that is reduced
Context	**configure** multicast-management bandwidth-policy *string* impm-paths primary-path queue-parameters drop-tail low percent-reduction-from-mbs *number*
Tree	percent-reduction-from-mbs
Range	0 to 100
Units	percent
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

mbs *decimal-number*

Synopsis	Override for default MBS for single queue for each path
Context	**configure** multicast-management bandwidth-policy *string* impm-paths primary-path queue-parameters mbs *decimal-number*

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Tree	mbs
Range	0.00 to 100.00
Units	percent
Default	7.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

secondary-path

Synopsis	Enter the **secondary-path** context
Context	**configure** multicast-management bandwidth-policy *string* impm-paths secondary-path
Tree	secondary-path
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

number-paths

Synopsis	Enter the **number-paths** context
Context	**configure** multicast-management bandwidth-policy *string* impm-paths secondary-path number-paths
Tree	number-paths
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

number-of-paths *number*

Synopsis	Number of secondary paths
Context	**configure** multicast-management bandwidth-policy *string* impm-paths secondary-path number-paths number-of-paths *number*
Tree	number-of-paths
Range	1 to 15
Default	1
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

redundant-sfm *number*

Synopsis	Number of secondary paths in redundant SFM mode
Context	**configure** multicast-management bandwidth-policy *string* impm-paths secondary-path number-paths redundant-sfm *number*
Tree	redundant-sfm
Range	1 to 15
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR

queue-parameters

Synopsis	Enter the **queue-parameters** context
Context	**configure** multicast-management bandwidth-policy *string* impm-paths secondary-path queue-parameters
Tree	queue-parameters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

cbs *decimal-number*

Synopsis	Override for default CBS for single queue for each path
Context	**configure** multicast-management bandwidth-policy *string* impm-paths secondary-path queue-parameters cbs *decimal-number*
Tree	cbs
Range	0.00 to 100.00
Units	percent
Default	30.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

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drop-tail

Synopsis	Enter the **drop-tail** context
Context	**configure** multicast-management bandwidth-policy *string* impm-paths secondary-path queue-parameters drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

low

Synopsis	Enter the **low** context
Context	**configure** multicast-management bandwidth-policy *string* impm-paths secondary-path queue-parameters drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

percent-reduction-from-mbs *number*

Synopsis	Low drop-tail percent from MBS that is reduced
Context	**configure** multicast-management bandwidth-policy *string* impm-paths secondary-path queue-parameters drop-tail low percent-reduction-from-mbs *number*
Tree	percent-reduction-from-mbs
Range	0 to 100
Units	percent
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

mbs *decimal-number*

Synopsis	Override for default MBS for single queue for each path

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Context	**configure** multicast-management bandwidth-policy *string* impm-paths secondary-path queue-parameters mbs *decimal-number*
Tree	mbs
Range	0.00 to 100.00
Units	percent
Default	40.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

mcast-pool

Synopsis	Enter the **mcast-pool** context
Context	**configure** multicast-management bandwidth-policy *string* mcast-pool
Tree	mcast-pool
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

percent-of-total *number*

Synopsis	Percent of ingress buffers assigned to multicast pool
Context	**configure** multicast-management bandwidth-policy *string* mcast-pool percent-of-total *number*
Tree	percent-of-total
Range	1 to 50
Units	percent
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

resv-cbs *number*

Synopsis	Percentage of pool reserved for multicast path queues
Context	**configure** multicast-management bandwidth-policy *string* mcast-pool resv-cbs *number*
Tree	resv-cbs

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Range	1 to 100
Units	percent
Default	50
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

slope-policy *reference*

Synopsis	Slope policy name
Context	**configure** multicast-management bandwidth-policy *string* mcast-pool slope-policy *reference*
Tree	slope-policy
Reference	**configure** qos slope-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

chassis-level

Synopsis	Enter the **chassis-level** context
Context	**configure** multicast-management chassis-level
Tree	chassis-level
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

mmrp-impm-override *boolean*

Synopsis	Manage MMRP traffic by IMPM
Context	**configure** multicast-management chassis-level mmrp-impm-override *boolean*
Tree	mmrp-impm-override
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

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per-mcast-plane-capacity

Synopsis	Enter the **per-mcast-plane-capacity** context
Context	**configure** multicast-management chassis-level per-mcast-plane-capacity
Tree	per-mcast-plane-capacity
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

mcast-capacity

Synopsis	Enter the **mcast-capacity** context
Context	**configure** multicast-management chassis-level per-mcast-plane-capacity mcast-capacity
Tree	mcast-capacity
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

primary-percentage *decimal-number*

Synopsis	Percent of plane capacity for primary multicast planes
Context	**configure** multicast-management chassis-level per-mcast-plane-capacity mcast-capacity primary-percentage *decimal-number*
Tree	primary-percentage
Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

secondary-percentage *decimal-number*

Synopsis	Percent of plane capacity for secondary multicast plane
Context	**configure** multicast-management chassis-level per-mcast-plane-capacity mcast-capacity secondary-percentage *decimal-number*
Tree	secondary-percentage

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Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

redundant-mcast-capacity

Synopsis	Enter the **redundant-mcast-capacity** context
Context	**configure** multicast-management chassis-level per-mcast-plane-capacity redundant-mcast-capacity
Tree	redundant-mcast-capacity
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

primary-percentage *decimal-number*

Synopsis	Percent of plane capacity for primary multicast planes
Context	**configure** multicast-management chassis-level per-mcast-plane-capacity redundant-mcast-capacity primary-percentage *decimal-number*
Tree	primary-percentage
Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

secondary-percentage *decimal-number*

Synopsis	Percent of plane capacity for secondary multicast plane
Context	**configure** multicast-management chassis-level per-mcast-plane-capacity redundant-mcast-capacity secondary-percentage *decimal-number*
Tree	secondary-percentage
Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

total-capacity *keyword*

Synopsis	Total multicast plane bandwidth
Context	**configure** multicast-management chassis-level per-mcast-plane-capacity total-capacity *keyword*
Tree	total-capacity
Units	megabps
Options	dynamic, 2000, 4000, 5250, 8250, 15000, 17000, 19000, 27000, 42000, 90000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

round-robin-inactive-records *boolean*

Synopsis	Redistribute newly populated inactive records
Context	**configure** multicast-management chassis-level round-robin-inactive-records *boolean*
Tree	round-robin-inactive-records
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

multicast-info-policy [policy-name] *string*

Synopsis	Enter the **multicast-info-policy** list instance
Context	**configure** multicast-management multicast-info-policy *string*
Tree	multicast-info-policy
Max. Instances	32
Introduced	16.0.R1
Platforms	All

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[**policy-name**] *string*

Synopsis	Multicast information policy name
Context	**configure** multicast-management multicast-info-policy *string*
Tree	multicast-info-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bundle [bundle-name] *string*

Synopsis	Enter the **bundle** list instance
Context	**configure** multicast-management multicast-info-policy *string* bundle *string*
Tree	bundle
Max. Instances	32
Introduced	16.0.R1
Platforms	All

[**bundle-name**] *string*

Synopsis	Bundle name
Context	**configure** multicast-management multicast-info-policy *string* bundle *string*
Tree	bundle
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-bw *number*

Synopsis	Administrative bandwidth
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* admin-bw *number*
Tree	admin-bw

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Range	1 to 40000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

bw-activity

Synopsis	Enter the **bw-activity** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* bw-activity
Tree	bw-activity
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

black-hole-rate *number*

Synopsis	Rate that a channel is placed in the blackhole state
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* bw-activity black-hole-rate *number*
Tree	black-hole-rate
Range	1 to 40000000
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

bw-activity-type *keyword*

Synopsis	Bandwidth required by a multicast channel
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* bw-activity bw-activity-type *keyword*
Tree	bw-activity-type
Options	use-admin-bw, dynamic
Default	dynamic
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

falling-delay *number*

Synopsis	Falling delay threshold value until delay time expires
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* bw-activity falling-delay *number*
Tree	falling-delay
Range	10 to 3600
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **channel** list instance
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	channel
Introduced	16.0.R1
Platforms	All

start *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Starting IP address for the channel range
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	channel
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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end *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Ending IP address for the channel range
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	channel
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-bw *number*

Synopsis	Administrative bandwidth
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* admin-bw *number*
Tree	admin-bw
Range	1 to 40000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

bw-activity

Synopsis	Enter the **bw-activity** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* bw-activity
Tree	bw-activity
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

black-hole-rate *number*

Synopsis	Rate that a channel is placed in the blackhole state

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Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* bw-activity black-hole-rate *number*
Tree	black-hole-rate
Range	0 to 40000000
Units	kilobps
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

bw-activity-type *keyword*

Synopsis	Bandwidth required by a multicast channel
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* bw-activity bw-activity-type *keyword*
Tree	bw-activity-type
Options	use-admin-bw, dynamic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

falling-delay *number*

Synopsis	Falling delay threshold value until delay time expires
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* bw-activity falling-delay *number*
Tree	falling-delay
Range	10 to 3600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

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explicit-sf-path *keyword*

Synopsis	Explicit switch fabric path shared to multicast channel
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* explicit-sf-path *keyword*
Tree	explicit-sf-path
Options	primary, secondary
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

keepalive-override *number*

Synopsis	Keepalive timer override
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* keepalive-override *number*
Tree	keepalive-override
Range	10 to 86000
Units	seconds
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Relative preference level for multicast channels
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* preference *number*
Tree	preference
Range	1 to 7
Introduced	16.0.R1
Platforms	All

primary-tunnel-interface

Synopsis	Enter the **primary-tunnel-interface** context

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Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* primary-tunnel-interface
Tree	primary-tunnel-interface
Introduced	16.0.R1
Platforms	All

ldp-p2mp *number*

Synopsis	ID for signaling MLDP P2MP LSP
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* primary-tunnel-interface ldp-p2mp *number*
Tree	ldp-p2mp
Range	1 to 4294967295
Notes	The following elements are part of a choice: **ldp-p2mp** or **rsvp-p2mp**.
Introduced	16.0.R1
Platforms	All

rsvp-p2mp *string*

Synopsis	P2MP name for the LDP P2MP
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* primary-tunnel-interface rsvp-p2mp *string*
Tree	rsvp-p2mp
String Length	1 to 32
Notes	The following elements are part of a choice: **ldp-p2mp** or **rsvp-p2mp**.
Introduced	16.0.R1
Platforms	All

sender *string*

Synopsis	Bundle set to receive from the primary tunnel interface
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* primary-tunnel-interface sender *string*

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Tree	sender
Introduced	16.0.R1
Platforms	All

source-override [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **source-override** list instance
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-override
Introduced	16.0.R1
Platforms	All

[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address for the source override
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-override
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-bw *number*

Synopsis	Administrative bandwidth
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* admin-bw *number*
Tree	admin-bw
Range	1 to 40000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

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bw-activity

Synopsis	Enter the **bw-activity** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* bw-activity
Tree	bw-activity
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

black-hole-rate *number*

Synopsis	Rate that a channel is placed in the blackhole state
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* bw-activity black-hole-rate *number*
Tree	black-hole-rate
Range	0 to 40000000
Units	kilobps
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

bw-activity-type *keyword*

Synopsis	Bandwidth required by a multicast channel
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* bw-activity bw-activity-type *keyword*
Tree	bw-activity-type
Options	use-admin-bw, dynamic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

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falling-delay *number*

Synopsis	Falling delay threshold value until delay time expires
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* bw-activity falling-delay *number*
Tree	falling-delay
Range	10 to 3600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

explicit-sf-path *keyword*

Synopsis	Explicit switch fabric path shared to multicast channel
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* explicit-sf-path *keyword*
Tree	explicit-sf-path
Options	primary, secondary
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

keepalive-override *number*

Synopsis	Keepalive timer override
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* keepalive-override *number*
Tree	keepalive-override
Range	10 to 86000
Units	seconds
Introduced	16.0.R1

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Platforms	All

preference *number*

Synopsis	Relative preference level for multicast channels
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* preference *number*
Tree	preference
Range	1 to 7
Introduced	16.0.R1
Platforms	All

primary-tunnel-interface

Synopsis	Enter the **primary-tunnel-interface** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* primary-tunnel-interface
Tree	primary-tunnel-interface
Introduced	16.0.R1
Platforms	All

ldp-p2mp *number*

Synopsis	ID for signaling MLDP P2MP LSP
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* primary-tunnel-interface ldp-p2mp *number*
Tree	ldp-p2mp
Range	1 to 4294967295
Notes	The following elements are part of a choice: **ldp-p2mp** or **rsvp-p2mp**.
Introduced	16.0.R1
Platforms	All

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rsvp-p2mp *string*

Synopsis	P2MP name for the LDP P2MP
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* primary-tunnel-interface rsvp-p2mp *string*
Tree	rsvp-p2mp
String Length	1 to 32
Notes	The following elements are part of a choice: **ldp-p2mp** or **rsvp-p2mp**.
Introduced	16.0.R1
Platforms	All

sender *string*

Synopsis	Bundle set to receive from the primary tunnel interface
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* primary-tunnel-interface sender *string*
Tree	sender
Introduced	16.0.R1
Platforms	All

video

Synopsis	Enter the **video** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video
Tree	video
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

analyzer

Synopsis	Enable the **analyzer** context

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Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer
Tree	analyzer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

alarms

Synopsis	Enter the **alarms** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms
Tree	alarms
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

cc-error *boolean*

Synopsis	Check the continuity counter
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms cc-error *boolean*
Tree	cc-error
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

non-vid-pid-absent *number*

Synopsis	PID checked within the specified interval
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-*

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	address-no-zone) source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms non-vid-pid-absent *number*
Tree	non-vid-pid-absent
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pat-repetition

Synopsis	Enable the **pat-repetition** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pat-repetition
Tree	pat-repetition
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa *number*

Synopsis	Time between two PATs for which a POA alarm is raised
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pat-repetition poa *number*
Tree	poa
Range	300 to 1000
Units	milliseconds
Default	500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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qos *number*

Synopsis	Time between two PATs for which a QoS alarm is raised
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pat-repetition qos *number*
Tree	qos
Range	200 to 900
Units	milliseconds
Default	200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tnc *number*

Synopsis	Time between two PATs for which a TNC alarm is raised
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pat-repetition tnc *number*
Tree	tnc
Range	100 to 800
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pat-syntax *boolean*

Synopsis	Check for PAT syntax errors
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pat-syntax *boolean*
Tree	pat-syntax
Default	false

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pcr-repetition

Synopsis	Enable the **pcr-repetition** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pcr-repetition
Tree	pcr-repetition
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa *number*

Synopsis	Time between two PCRs for which a POA alarm is raised
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pcr-repetition poa *number*
Tree	poa
Range	300 to 1000
Units	milliseconds
Default	500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos *number*

Synopsis	Time between two PCRs for which a QoS alarm is raised
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pcr-repetition qos *number*
Tree	qos

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Range	200 to 900
Units	milliseconds
Default	200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tnc *number*

Synopsis	Time between two PCRs for which a TNC alarm is raised
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pcr-repetition tnc *number*
Tree	tnc
Range	100 to 800
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pid-pmt-unref *boolean*

Synopsis	Check for unreferenced PIDs in the PMT
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pid-pmt-unref *boolean*
Tree	pid-pmt-unref
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pmt-repetition

Synopsis	Enable the **pmt-repetition** context

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Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pmt-repetition
Tree	pmt-repetition
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa *number*

Synopsis	Time between two PMTs for which a POA alarm is raised
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pmt-repetition poa *number*
Tree	poa
Range	300 to 5000
Units	milliseconds
Default	2000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos *number*

Synopsis	Time between two PMTs for which a QoS alarm is raised
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pmt-repetition qos *number*
Tree	qos
Range	200 to 4900
Units	milliseconds
Default	800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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tnc *number*

Synopsis	Time between two PMTs for which a TNC alarm is raised
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pmt-repetition tnc *number*
Tree	tnc
Range	100 to 4800
Units	milliseconds
Default	400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pmt-syntax *boolean*

Synopsis	Check for PMT syntax errors
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pmt-syntax *boolean*
Tree	pmt-syntax
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

report-alarm

Synopsis	Enter the **report-alarm** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms report-alarm
Tree	report-alarm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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severity *keyword*

Synopsis	Keyword for the type of alarm
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms report-alarm severity *keyword*
Tree	severity
Options	tnc, qos, poa
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tei-set *boolean*

Synopsis	Check for TEI set errors
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms tei-set *boolean*
Tree	tei-set
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ts-sync-loss *boolean*

Synopsis	Check for synchronization loss errors
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms ts-sync-loss *boolean*
Tree	ts-sync-loss
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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vid-pid-absent *number*

Synopsis	VID PID checked within the specified time interval
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms vid-pid-absent *number*
Tree	vid-pid-absent
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-channel-type *keyword*

Synopsis	Channel type for the bundle or channel
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video fcc-channel-type *keyword*
Tree	fcc-channel-type
Options	hd, sd, pip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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fcc-min-duration *number*

Synopsis	Minimum duration of the FCC burst
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video fcc-min-duration *number*
Tree	fcc-min-duration
Range	300 to 8000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-server *keyword*

Synopsis	Value to override the parent value of the FCC server
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video fcc-server *keyword*
Tree	fcc-server
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-rt-server *keyword*

Synopsis	Value to override the parent value of local RT server
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video local-rt-server *keyword*
Tree	local-rt-server
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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reorder-audio *number*

Synopsis	Time the audio packets are reordered in the ad stream
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video reorder-audio *number*
Tree	reorder-audio
Range	100 to 1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-buffer-size *number*

Synopsis	Buffer size to store channel packets
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video rt-buffer-size *number*
Tree	rt-buffer-size
Range	300 to 8000
Units	milliseconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-server

Synopsis	Enter the **rt-server** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video rt-server
Tree	rt-server
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ip-address *string*

Synopsis	IP address of the upstream retransmission server
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video rt-server ip-address *string*
Tree	ip-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

port *number*

Synopsis	UDP port to send RET requests to the upstream RET sever
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video rt-server port *number*
Tree	port
Range	1024 to 5999 | 6251 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-state *keyword*

Synopsis	Retransmission server state
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video rt-server rt-state *keyword*
Tree	rt-state
Options	false, true
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

stream-selection

Synopsis	Enter the **stream-selection** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video stream-selection
Tree	stream-selection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

intf1 *string*

Synopsis	Primary interface
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video stream-selection intf1 *string*
Tree	intf1
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

intf2 *string*

Synopsis	Secondary interface
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video stream-selection intf2 *string*
Tree	intf2
String Length	1 to 32
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

source1 *string*

Synopsis	Primary source IP address
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video stream-selection source1 *string*
Tree	source1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

source2 *string*

Synopsis	Secondary source IP address
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video stream-selection source2 *string*
Tree	source2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

video-group *(number | keyword)*

Synopsis	Video group ID
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* source-override *(ipv4-address-no-zone | ipv6-address-no-zone)* video video-group *(number | keyword)*
Tree	video-group
Range	1 to 4
Options	none
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

video

Synopsis	Enter the **video** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video
Tree	video
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

analyzer

Synopsis	Enable the **analyzer** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer
Tree	analyzer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

alarms

Synopsis	Enter the **alarms** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms
Tree	alarms
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

cc-error *boolean*

Synopsis	Check the continuity counter

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Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms cc-error *boolean*
Tree	cc-error
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

non-vid-pid-absent *number*

Synopsis	PID checked within the specified interval
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms non-vid-pid-absent *number*
Tree	non-vid-pid-absent
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pat-repetition

Synopsis	Enable the **pat-repetition** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pat-repetition
Tree	pat-repetition
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa *number*

Synopsis	Time between two PATs for which a POA alarm is raised
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pat-repetition poa *number*

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Tree	poa
Range	300 to 1000
Units	milliseconds
Default	500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos *number*

Synopsis	Time between two PATs for which a QoS alarm is raised
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pat-repetition qos *number*
Tree	qos
Range	200 to 900
Units	milliseconds
Default	200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tnc *number*

Synopsis	Time between two PATs for which a TNC alarm is raised
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pat-repetition tnc *number*
Tree	tnc
Range	100 to 800
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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pat-syntax *boolean*

Synopsis	Check for PAT syntax errors
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pat-syntax *boolean*
Tree	pat-syntax
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pcr-repetition

Synopsis	Enable the **pcr-repetition** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pcr-repetition
Tree	pcr-repetition
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa *number*

Synopsis	Time between two PCRs for which a POA alarm is raised
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pcr-repetition poa *number*
Tree	poa
Range	300 to 1000
Units	milliseconds
Default	500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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qos *number*

Synopsis	Time between two PCRs for which a QoS alarm is raised
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pcr-repetition qos *number*
Tree	qos
Range	200 to 900
Units	milliseconds
Default	200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tnc *number*

Synopsis	Time between two PCRs for which a TNC alarm is raised
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pcr-repetition tnc *number*
Tree	tnc
Range	100 to 800
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pid-pmt-unref *boolean*

Synopsis	Check for unreferenced PIDs in the PMT
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pid-pmt-unref *boolean*
Tree	pid-pmt-unref
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pmt-repetition

Synopsis	Enable the **pmt-repetition** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pmt-repetition
Tree	pmt-repetition
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa *number*

Synopsis	Time between two PMTs for which a POA alarm is raised
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pmt-repetition poa *number*
Tree	poa
Range	300 to 5000
Units	milliseconds
Default	2000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos *number*

Synopsis	Time between two PMTs for which a QoS alarm is raised
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pmt-repetition qos *number*
Tree	qos
Range	200 to 4900
Units	milliseconds
Default	800

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tnc *number*

Synopsis	Time between two PMTs for which a TNC alarm is raised
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pmt-repetition tnc *number*
Tree	tnc
Range	100 to 4800
Units	milliseconds
Default	400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pmt-syntax *boolean*

Synopsis	Check for PMT syntax errors
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms pmt-syntax *boolean*
Tree	pmt-syntax
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

report-alarm

Synopsis	Enter the **report-alarm** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms report-alarm
Tree	report-alarm
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

severity *keyword*

Synopsis	Keyword for the type of alarm
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms report-alarm severity *keyword*
Tree	severity
Options	tnc, qos, poa
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tei-set *boolean*

Synopsis	Check for TEI set errors
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms tei-set *boolean*
Tree	tei-set
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ts-sync-loss *boolean*

Synopsis	Check for synchronization loss errors
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms ts-sync-loss *boolean*
Tree	ts-sync-loss
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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vid-pid-absent *number*

Synopsis	VID PID checked within the specified time interval
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer alarms vid-pid-absent *number*
Tree	vid-pid-absent
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video analyzer description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-channel-type *keyword*

Synopsis	Channel type for the bundle or channel
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video fcc-channel-type *keyword*
Tree	fcc-channel-type
Options	hd, sd, pip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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fcc-min-duration *number*

Synopsis	Minimum duration of the FCC burst
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video fcc-min-duration *number*
Tree	fcc-min-duration
Range	300 to 8000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-server *keyword*

Synopsis	Value to override the parent value of the FCC server
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video fcc-server *keyword*
Tree	fcc-server
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-rt-server *keyword*

Synopsis	Value to override the parent value of local RT server
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video local-rt-server *keyword*
Tree	local-rt-server
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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reorder-audio *number*

Synopsis	Time the audio packets are reordered in the ad stream
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video reorder-audio *number*
Tree	reorder-audio
Range	100 to 1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-buffer-size *number*

Synopsis	Buffer size to store channel packets
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video rt-buffer-size *number*
Tree	rt-buffer-size
Range	300 to 8000
Units	milliseconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-server

Synopsis	Enter the **rt-server** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video rt-server
Tree	rt-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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ip-address *string*

Synopsis	IP address of the upstream retransmission server
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video rt-server ip-address *string*
Tree	ip-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

port *number*

Synopsis	UDP port to send RET requests to the upstream RET sever
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video rt-server port *number*
Tree	port
Range	1024 to 5999 | 6251 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-state *keyword*

Synopsis	Retransmission server state
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video rt-server rt-state *keyword*
Tree	rt-state
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

stream-selection

Synopsis	Enter the **stream-selection** context

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Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video stream-selection
Tree	stream-selection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

intf1 *string*

Synopsis	Primary interface
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video stream-selection intf1 *string*
Tree	intf1
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

intf2 *string*

Synopsis	Secondary interface
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video stream-selection intf2 *string*
Tree	intf2
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

source1 *string*

Synopsis	Primary source IP address
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video stream-selection source1 *string*
Tree	source1

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

source2 *string*

Synopsis	Secondary source IP address
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video stream-selection source2 *string*
Tree	source2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

video-group *(number | keyword)*

Synopsis	Video group ID
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* channel start *(ipv4-address-no-zone | ipv6-address-no-zone)* end *(ipv4-address-no-zone | ipv6-address-no-zone)* video video-group *(number | keyword)*
Tree	video-group
Range	1 to 4
Options	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

cong-priority-threshold *number*

Synopsis	Preference level threshold from low to high priority
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* cong-priority-threshold *number*
Tree	cong-priority-threshold
Range	0 to 7
Default	4
Introduced	16.0.R1

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Platforms	All

description *string*

Synopsis	Text description
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

ecmp-opt-threshold *number*

Synopsis	ECMP threshold
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* ecmp-opt-threshold *number*
Tree	ecmp-opt-threshold
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	All

explicit-sf-path *keyword*

Synopsis	Explicit ingress switch fabric multicast path
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* explicit-sf-path *keyword*
Tree	explicit-sf-path
Options	primary, secondary
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

keepalive-override *number*

Synopsis	Keepalive timer override

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Context	**configure** multicast-management multicast-info-policy *string* bundle *string* keepalive-override *number*
Tree	keepalive-override
Range	10 to 86000
Units	seconds
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Relative preference level for multicast channels
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* preference *number*
Tree	preference
Range	1 to 7
Introduced	16.0.R1
Platforms	All

primary-tunnel-interface

Synopsis	Enter the **primary-tunnel-interface** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* primary-tunnel-interface
Tree	primary-tunnel-interface
Introduced	16.0.R1
Platforms	All

ldp-p2mp *number*

Synopsis	ID for signaling MLDP P2MP LSP
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* primary-tunnel-interface ldp-p2mp *number*
Tree	ldp-p2mp
Range	1 to 4294967295
Notes	The following elements are part of a choice: **ldp-p2mp** or **rsvp-p2mp**.
Introduced	16.0.R1

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Platforms	All

rsvp-p2mp *string*

Synopsis	P2MP name for the LDP P2MP
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* primary-tunnel-interface rsvp-p2mp *string*
Tree	rsvp-p2mp
String Length	1 to 32
Notes	The following elements are part of a choice: **ldp-p2mp** or **rsvp-p2mp**.
Introduced	16.0.R1
Platforms	All

sender *string*

Synopsis	Bundle set to receive from the primary tunnel interface
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* primary-tunnel-interface sender *string*
Tree	sender
Introduced	16.0.R1
Platforms	All

video

Synopsis	Enter the **video** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video
Tree	video
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

analyzer

Synopsis	Enable the **analyzer** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video analyzer

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Tree	analyzer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

alarms

Synopsis	Enter the **alarms** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video analyzer alarms
Tree	alarms
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

cc-error *boolean*

Synopsis	Check the continuity counter
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video analyzer alarms cc-error *boolean*
Tree	cc-error
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

non-vid-pid-absent *number*

Synopsis	PID checked within the specified interval
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video analyzer alarms non-vid-pid-absent *number*
Tree	non-vid-pid-absent
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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pat-repetition

Synopsis	Enable the **pat-repetition** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video analyzer alarms pat-repetition
Tree	pat-repetition
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa *number*

Synopsis	Time between two PATs for which a POA alarm is raised
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video analyzer alarms pat-repetition poa *number*
Tree	poa
Range	300 to 1000
Units	milliseconds
Default	500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos *number*

Synopsis	Time between two PATs for which a QoS alarm is raised
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video analyzer alarms pat-repetition qos *number*
Tree	qos
Range	200 to 900
Units	milliseconds
Default	200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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tnc *number*

Synopsis	Time between two PATs for which a TNC alarm is raised
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video analyzer alarms pat-repetition tnc *number*
Tree	tnc
Range	100 to 800
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pat-syntax *boolean*

Synopsis	Check for PAT syntax errors
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video analyzer alarms pat-syntax *boolean*
Tree	pat-syntax
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pcr-repetition

Synopsis	Enable the **pcr-repetition** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video analyzer alarms pcr-repetition
Tree	pcr-repetition
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa *number*

Synopsis	Time between two PCRs for which a POA alarm is raised

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Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video analyzer alarms pcr-repetition poa *number*
Tree	poa
Range	300 to 1000
Units	milliseconds
Default	500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos *number*

Synopsis	Time between two PCRs for which a QoS alarm is raised
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video analyzer alarms pcr-repetition qos *number*
Tree	qos
Range	200 to 900
Units	milliseconds
Default	200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tnc *number*

Synopsis	Time between two PCRs for which a TNC alarm is raised
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video analyzer alarms pcr-repetition tnc *number*
Tree	tnc
Range	100 to 800
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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pid-pmt-unref *boolean*

Synopsis	Check for unreferenced PIDs in the PMT
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video analyzer alarms pid-pmt-unref *boolean*
Tree	pid-pmt-unref
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pmt-repetition

Synopsis	Enable the **pmt-repetition** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video analyzer alarms pmt-repetition
Tree	pmt-repetition
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa *number*

Synopsis	Time between two PMTs for which a POA alarm is raised
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video analyzer alarms pmt-repetition poa *number*
Tree	poa
Range	300 to 5000
Units	milliseconds
Default	2000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos *number*

Synopsis	Time between two PMTs for which a QoS alarm is raised

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Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video analyzer alarms pmt-repetition qos *number*
Tree	qos
Range	200 to 4900
Units	milliseconds
Default	800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tnc *number*

Synopsis	Time between two PMTs for which a TNC alarm is raised
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video analyzer alarms pmt-repetition tnc *number*
Tree	tnc
Range	100 to 4800
Units	milliseconds
Default	400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pmt-syntax *boolean*

Synopsis	Check for PMT syntax errors
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video analyzer alarms pmt-syntax *boolean*
Tree	pmt-syntax
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

report-alarm

Synopsis	Enter the **report-alarm** context

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Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video analyzer alarms report-alarm
Tree	report-alarm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

severity *keyword*

Synopsis	Keyword for the type of alarm
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video analyzer alarms report-alarm severity *keyword*
Tree	severity
Options	tnc, qos, poa
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tei-set *boolean*

Synopsis	Check for TEI set errors
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video analyzer alarms tei-set *boolean*
Tree	tei-set
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ts-sync-loss *boolean*

Synopsis	Check for synchronization loss errors
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video analyzer alarms ts-sync-loss *boolean*
Tree	ts-sync-loss
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

vid-pid-absent *number*

Synopsis	VID PID checked within the specified time interval
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video analyzer alarms vid-pid-absent *number*
Tree	vid-pid-absent
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video analyzer description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-channel-type *keyword*

Synopsis	Channel type for the bundle or channel
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video fcc-channel-type *keyword*
Tree	fcc-channel-type
Options	hd, sd, pip
Default	hd
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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fcc-min-duration *number*

Synopsis	Minimum duration of the FCC burst
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video fcc-min-duration *number*
Tree	fcc-min-duration
Range	300 to 8000
Units	milliseconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-server *boolean*

Synopsis	Enable the FCC server for a multicast bundle
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video fcc-server *boolean*
Tree	fcc-server
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-fcc-port *number*

Synopsis	Local port for FCC requests
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video local-fcc-port *number*
Tree	local-fcc-port
Range	1024 to 5999 | 6251 to 65535
Default	4098
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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local-rt-port *number*

Synopsis	Local port for RET requests
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video local-rt-port *number*
Tree	local-rt-port
Range	1024 to 5999 | 6251 to 65535
Default	4096
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-rt-server *boolean*

Synopsis	Enable local retransmission server capability
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video local-rt-server *boolean*
Tree	local-rt-server
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

reorder-audio *number*

Synopsis	Time the audio packets are reordered in the ad stream
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video reorder-audio *number*
Tree	reorder-audio
Range	100 to 1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-buffer-size *number*

Synopsis	Buffer size to store channel packets

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Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video rt-buffer-size *number*
Tree	rt-buffer-size
Range	300 to 8000
Units	milliseconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-server

Synopsis	Enable the **rt-server** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video rt-server
Tree	rt-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ip-address *string*

Synopsis	IP address of the upstream retransmission server
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video rt-server ip-address *string*
Tree	ip-address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

port *number*

Synopsis	RET server port number
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video rt-server port *number*
Tree	port

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Range	1024 to 5999 | 6251 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

stream-selection

Synopsis	Enter the **stream-selection** context
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video stream-selection
Tree	stream-selection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

intf1 *string*

Synopsis	Primary interface
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video stream-selection intf1 *string*
Tree	intf1
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

intf2 *string*

Synopsis	Secondary interface
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video stream-selection intf2 *string*
Tree	intf2
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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source1 *string*

Synopsis	Primary source IP address
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video stream-selection source1 *string*
Tree	source1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

source2 *string*

Synopsis	Secondary source IP address
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video stream-selection source2 *string*
Tree	source2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

video-group *number*

Synopsis	Video group for the bundle
Context	**configure** multicast-management multicast-info-policy *string* bundle *string* video video-group *number*
Tree	video-group
Range	1 to 4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	**configure** multicast-management multicast-info-policy *string* description *string*
Tree	description
String Length	1 to 80

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Introduced	16.0.R1
Platforms	All

video-policy

Synopsis	Enter the **video-policy** context
Context	**configure** multicast-management multicast-info-policy *string* video-policy
Tree	video-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

video-interface [ip-address] *string*

Synopsis	Enter the **video-interface** list instance
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string*
Tree	video-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[ip-address] *string*

Synopsis	IP address of the video interface
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string*
Tree	video-interface
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

extended-unicast *boolean*

Synopsis	Extend video unicast session

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Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* extended-unicast *boolean*
Tree	extended-unicast
Description	When configured to **true**, video unicast is delayed from switching over to multicast for 5 minutes. The unicast session can be extended further by sending an RTCP extension request, which resets the 5-minute timer. This is ideal for services that require unicast video and end devices that require extended time to switch over from unicast to multicast. When configured to **false**, the unicast session switches over to multicast 1.5 seconds after the IGMP request is sent. Most Fast Channel Change deployments do not require a time extension.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-session-timeout *number*

Synopsis	FCC session timeout
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* fcc-session-timeout *number*
Tree	fcc-session-timeout
Range	5 to 300
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

hd

Synopsis	Enter the **hd** context
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* hd
Tree	hd
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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dent-threshold *number*

Synopsis	Threshold below which the FCC server dents unicast data
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* hd dent-threshold *number*
Tree	dent-threshold
Range	1 to 31
Default	16
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-burst *number*

Synopsis	Burst rate FCC server sends unicast data to FCC client
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* hd fcc-burst *number*
Tree	fcc-burst
Range	0 to 600
Units	percent
Default	25
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-server

Synopsis	Enter the **fcc-server** context
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* hd fcc-server
Tree	fcc-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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mode *keyword*

Synopsis	Mode the FCC server sends information to the client
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* hd fcc-server mode *keyword*
Tree	mode
Options	burst, dent, hybrid
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-rt-server *boolean*

Synopsis	Enable local retransmission server capability
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* hd local-rt-server *boolean*
Tree	local-rt-server
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

mc-handover *number*

Synopsis	Rate the FCC server sends data during the handover
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* hd mc-handover *number*
Tree	mc-handover
Range	0 to 100
Units	percent
Default	25
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-rate *number*

Synopsis	Rate the RET packets are sent to client

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Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* hd rt-rate *number*
Tree	rt-rate
Range	1 to 100
Units	percent
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

max-igmp-latency *number*

Synopsis	Maximum IGMP latency per client
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* max-igmp-latency *number*
Tree	max-igmp-latency
Range	10 to 1000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

max-sessions *number*

Synopsis	Maximum number of sessions per client
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* max-sessions *number*
Tree	max-sessions
Range	1 to 65536
Default	256
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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pip

Synopsis	Enter the **pip** context
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* pip
Tree	pip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

dent-threshold *number*

Synopsis	Threshold below which the FCC server dents unicast data
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* pip dent-threshold *number*
Tree	dent-threshold
Range	1 to 31
Default	16
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-burst *number*

Synopsis	Burst rate FCC server sends unicast data to FCC client
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* pip fcc-burst *number*
Tree	fcc-burst
Range	0 to 600
Units	percent
Default	25
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-server

Synopsis	Enter the **fcc-server** context

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Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* pip fcc-server
Tree	fcc-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

mode *keyword*

Synopsis	Mode the FCC server sends information to the client
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* pip fcc-server mode *keyword*
Tree	mode
Options	burst, dent, hybrid
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-rt-server *boolean*

Synopsis	Enable local retransmission server capability
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* pip local-rt-server *boolean*
Tree	local-rt-server
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

mc-handover *number*

Synopsis	Rate the FCC server sends data during the handover
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* pip mc-handover *number*
Tree	mc-handover
Range	0 to 600
Units	percent

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Default	25
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-rate *number*

Synopsis	Rate the RET packets are sent to client
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* pip rt-rate *number*
Tree	rt-rate
Range	1 to 100
Units	percent
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ret-session-timeout *number*

Synopsis	RET session timeout
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* ret-session-timeout *number*
Tree	ret-session-timeout
Range	5 to 300
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-payload-type *number*

Synopsis	Format for the received retransmission packets
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* rt-payload-type *number*
Tree	rt-payload-type

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Range	33 | 96 to 127
Default	99
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-rate *number*

Synopsis	Rate the RET packets are sent to client
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* rt-rate *number*
Tree	rt-rate
Range	1 to 100
Units	percent
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

sd

Synopsis	Enter the **sd** context
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* sd
Tree	sd
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

dent-threshold *number*

Synopsis	Threshold below which the FCC server dents unicast data
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* sd dent-threshold *number*
Tree	dent-threshold
Range	1 to 31
Default	16

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-burst *number*

Synopsis	Burst rate FCC server sends unicast data to FCC client
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* sd fcc-burst *number*
Tree	fcc-burst
Range	0 to 600
Units	percent
Default	25
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-server

Synopsis	Enter the **fcc-server** context
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* sd fcc-server
Tree	fcc-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

mode *keyword*

Synopsis	Mode the FCC server sends information to the client
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* sd fcc-server mode *keyword*
Tree	mode
Options	burst, dent, hybrid
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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local-rt-server *boolean*

Synopsis	Enable local retransmission server capability
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* sd local-rt-server *boolean*
Tree	local-rt-server
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

mc-handover *number*

Synopsis	Rate the FCC server sends data during the handover
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* sd mc-handover *number*
Tree	mc-handover
Range	0 to 600
Units	percent
Default	25
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-rate *number*

Synopsis	Rate the RET packets are sent to client
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* sd rt-rate *number*
Tree	rt-rate
Range	1 to 100
Units	percent
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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subscriber-bw-limit *number*

Synopsis	Egress bandwidth limit per subscriber
Context	**configure** multicast-management multicast-info-policy *string* video-policy video-interface *string* subscriber-bw-limit *number*
Tree	subscriber-bw-limit
Range	1 to 4294967295
Units	kilobps
Default	4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

multicast-reporting-destination [name] *string*

Synopsis	Enter the **multicast-reporting-destination** list instance
Context	**configure** multicast-management multicast-reporting-destination *string*
Tree	multicast-reporting-destination
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	Multicast reporting destination name
Context	**configure** multicast-management multicast-reporting-destination *string*
Tree	multicast-reporting-destination
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	IP address of the multicast reporting destination
Context	**configure** multicast-management multicast-reporting-destination *string* address *string*
Tree	address

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Default	0.0.0.0
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of multicast reporting destination
Context	**configure** multicast-management multicast-reporting-destination *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** multicast-management multicast-reporting-destination *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

maximum-transmission-delay *number*

Synopsis	Time delay before packet transmits to the destination
Context	**configure** multicast-management multicast-reporting-destination *string* maximum-transmission-delay *number*
Tree	maximum-transmission-delay
Range	0 to 100
Units	deciseconds
Default	1
Introduced	16.0.R1
Platforms	All

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udp-port *number*

Synopsis	UDP port where multicast reports are sent
Context	**configure** multicast-management multicast-reporting-destination *string* udp-port *number*
Tree	udp-port
Range	1 to 65535
Default	1037
Introduced	16.0.R1
Platforms	All

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3.29 oam-pm commands

```
configure
  - oam-pm
    - apply-groups reference
    - apply-groups-exclude reference
    - bin-group number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - bin-type keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - bin number
          - apply-groups reference
          - apply-groups-exclude reference
          - lower-bound number
        - delay-event keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - clear-threshold number
          - exclude-lowest-bin number
          - lowest-bin number
          - raise-threshold number
        - exclude-from-avg keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - bins string
      - description string
    - session string
      - apply-groups reference
      - apply-groups-exclude reference
      - bin-group reference
      - description string
      - ethernet
        - dest-mac string
        - dmm
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - data-tlv-size number
          - delay-template string
          - interval number
          - test-duration number
          - test-id number
        - lmm
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - availability
            - admin-state keyword
            - flr-threshold number
            - hli-force-count boolean
            - timing
              - chli-threshold number
              - consec-delta-t number
              - frames-per-delta-t number
          - fc-collection boolean
          - interval number
          - loss-events
            - avg-flr-event keyword
```


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configure oam-pm session ethernet lmm loss-events avg-flr-event apply-groups

```
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - clear-threshold decimal-number
                    - raise-threshold decimal-number
                 - chli-event keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - clear-threshold number
                    - raise-threshold number
                 - hli-event keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - clear-threshold number
                    - raise-threshold number
                 - unavailability-event keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - clear-threshold number
                    - raise-threshold number
                 - undet-availability-event keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - clear-threshold number
                    - raise-threshold number
                 - undet-unavailability-event keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - clear-threshold number
                    - raise-threshold number
              - test-duration number
              - test-id number
           - priority number
           - remote-mep number
           - slm
              - admin-state keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - data-tlv-size number
              - flr-threshold number
              - hli-force-count boolean
              - interval number
              - loss-events
                 - avg-flr-event keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - clear-threshold decimal-number
                    - raise-threshold decimal-number
                 - chli-event keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - clear-threshold number
                    - raise-threshold number
                 - hli-event keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - clear-threshold number
                    - raise-threshold number
                 - unavailability-event keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - clear-threshold number
                    - raise-threshold number
                 - undet-availability-event keyword
                    - apply-groups reference
```


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configure oam-pm session ethernet slm loss-events undet-availability-event apply-groups-exclude

```
                    - apply-groups-exclude reference
                    - clear-threshold number
                    - raise-threshold number
                 - undet-unavailability-event keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - clear-threshold number
                    - raise-threshold number
              - test-duration number
              - test-id number
              - timing
                 - chli-threshold number
                 - consec-delta-t number
                 - frames-per-delta-t number
           - source
              - ma-admin-name string
              - md-admin-name string
              - mep number
        - ip
           - allow-egress-remark-dscp boolean
           - destination (ipv4-address-no-zone | ipv6-address-no-zone)
           - destination-udp-port number
           - do-not-fragment boolean
           - dscp (keyword | keyword)
           - fc keyword
           - forwarding
              - bypass-routing
              - interface string
              - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
           - pattern (keyword | number)
           - profile keyword
           - router-instance string
           - source (ipv4-address-no-zone | ipv6-address-no-zone)
           - source-udp-port number
           - ttl number
           - tunnel
              - mpls
                 - rsvp-te
                    - lsp string
                 - rsvp-te-auto
                    - from string
                    - lsp-template string
                    - to string
                 - sr-isis
                    - igp-instance number
                    - prefix (ipv4-prefix | ipv6-prefix)
                 - sr-ospf
                    - igp-instance number
                    - prefix string
                 - sr-ospf3
                    - igp-instance number
                    - prefix (ipv4-prefix | ipv6-prefix)
                 - sr-te
                    - lsp string
           - twamp-light
              - admin-state keyword
              - allow-ipv6-udp-checksum-zero boolean
              - apply-groups reference
              - apply-groups-exclude reference
              - delay-template string
              - interval number
              - loss
                 - flr-threshold number
                 - hli-force-count boolean
```


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```
                  - timing
                     - chli-threshold number
                     - consec-delta-t number
                     - frames-per-delta-t number
               - loss-events
                  - avg-flr-event keyword
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - clear-threshold decimal-number
                     - raise-threshold decimal-number
                  - chli-event keyword
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - clear-threshold number
                     - raise-threshold number
                  - hli-event keyword
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - clear-threshold number
                     - raise-threshold number
                  - unavailability-event keyword
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - clear-threshold number
                     - raise-threshold number
                  - undet-availability-event keyword
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - clear-threshold number
                     - raise-threshold number
                  - undet-unavailability-event keyword
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - clear-threshold number
                     - raise-threshold number
               - pad-size number
               - pad-tlv-size number
               - record-stats keyword
               - session-sender-type keyword
               - test-duration number
               - test-id number
               - timestamp-format keyword
         - measurement-interval keyword
            - accounting-policy reference
            - apply-groups reference
            - apply-groups-exclude reference
            - boundary-type keyword
            - clock-offset number
            - intervals-stored number
            - threshold-cross-alerts
               - admin-state keyword
               - delay-events boolean
               - loss-events boolean
         - mpls
            - dm
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - delay-template string
               - interval number
               - pad-tlv-size number
               - reflect-pad boolean
               - test-duration number
               - test-id number
```


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configure oam-pm session mpls dscp

```
            - dscp keyword
            - fc keyword
            - lsp
               - mpls-tp-static
                  - lsp string
               - rsvp
                  - lsp string
                  - udp-return-object (ipv4-address-no-zone | ipv6-address-no-zone)
               - rsvp-auto
                  - from string
                  - lsp-template string
                  - to string
                  - udp-return-object (ipv4-address-no-zone | ipv6-address-no-zone)
            - pattern (keyword | number)
            - profile keyword
            - ttl number
         - session-type keyword
      - streaming
         - delay-template string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - fd-avg keyword
            - ifdv-avg keyword
            - sample-window number
            - window-integrity number
```


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3.29.1 oam-pm command descriptions

oam-pm

Synopsis	Enter the **oam-pm** context
Context	**configure** oam-pm
Tree	oam-pm
Introduced	16.0.R1
Platforms	All

bin-group [bin-group-id] *number*

Synopsis	Enter the **bin-group** list instance
Context	**configure** oam-pm bin-group *number*
Tree	bin-group
Introduced	16.0.R5
Platforms	All

[**bin-group-id**] *number*

Synopsis	Bin group ID
Context	**configure** oam-pm bin-group *number*
Tree	bin-group
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the bin group
Context	**configure** oam-pm bin-group *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R5

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Platforms	All

bin-type [bin-metric] *keyword*

Synopsis	Enter the **bin-type** list instance
Context	**configure** oam-pm bin-group *number* bin-type *keyword*
Tree	bin-type
Introduced	16.0.R5
Platforms	All

[**bin-metric**] *keyword*

Synopsis	Delay metric bin structure
Context	**configure** oam-pm bin-group *number* bin-type *keyword*
Tree	bin-type
Options	fd, fdr, ifdv
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

bin [bin-number] *number*

Synopsis	Enter the **bin** list instance
Context	**configure** oam-pm bin-group *number* bin-type *keyword* bin *number*
Tree	bin
Introduced	16.0.R5
Platforms	All

[**bin-number**] *number*

Synopsis	Bin number
Context	**configure** oam-pm bin-group *number* bin-type *keyword* bin *number*
Tree	bin
Range	0 to 9
Notes	This element is part of a list key.

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Introduced	16.0.R5
Platforms	All

lower-bound *number*

Synopsis	Lower bound for the bin
Context	**configure** oam-pm bin-group *number* bin-type *keyword* bin *number* lower-bound *number*
Tree	lower-bound
Range	0 | 1 to 4294967295
Units	microseconds
Introduced	16.0.R5
Platforms	All

delay-event [direction] *keyword*

Synopsis	Enter the **delay-event** list instance
Context	**configure** oam-pm bin-group *number* bin-type *keyword* delay-event *keyword*
Tree	delay-event
Introduced	16.0.R5
Platforms	All

[**direction**] *keyword*

Synopsis	Traffic flow direction of the OAM-PM test or metric
Context	**configure** oam-pm bin-group *number* bin-type *keyword* delay-event *keyword*
Tree	delay-event
Options	forward, backward, round-trip
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *number*

Synopsis	OAM-PM clear threshold for an excessive delay

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Context	**configure** oam-pm bin-group *number* bin-type *keyword* delay-event *keyword* clear-threshold *number*
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

exclude-lowest-bin *number*

Synopsis	Lowest bin excluded from the TCA count
Context	**configure** oam-pm bin-group *number* bin-type *keyword* delay-event *keyword* exclude-lowest-bin *number*
Tree	exclude-lowest-bin
Range	1 to 9
Introduced	16.0.R5
Platforms	All

lowest-bin *number*

Synopsis	Lowest delay bin used when applying a delay threshold
Context	**configure** oam-pm bin-group *number* bin-type *keyword* delay-event *keyword* lowest-bin *number*
Tree	lowest-bin
Range	0 to 9
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

raise-threshold *number*

Synopsis	Raise threshold for excessive delay
Context	**configure** oam-pm bin-group *number* bin-type *keyword* delay-event *keyword* raise-threshold *number*
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.

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Introduced	16.0.R5
Platforms	All

exclude-from-avg [direction] *keyword*

Synopsis	Enter the **exclude-from-avg** list instance
Context	**configure** oam-pm bin-group *number* bin-type *keyword* exclude-from-avg *keyword*
Tree	exclude-from-avg
Introduced	16.0.R5
Platforms	All

[**direction**] *keyword*

Synopsis	Traffic flow direction of the OAM-PM test or metric
Context	**configure** oam-pm bin-group *number* bin-type *keyword* exclude-from-avg *keyword*
Tree	exclude-from-avg
Options	forward, backward, round-trip
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

bins *string*

Synopsis	Bin numbers excluded from the average calculation
Context	**configure** oam-pm bin-group *number* bin-type *keyword* exclude-from-avg *keyword* bins *string*
Tree	bins
String Length	1 to 39
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

description *string*

Synopsis	Text description

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Context	**configure** oam-pm bin-group *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R5
Platforms	All

session [session-name] *string*

Synopsis	Enter the **session** list instance
Context	**configure** oam-pm session *string*
Tree	session
Introduced	16.0.R5
Platforms	All

[**session-name**] *string*

Synopsis	OAM-PM session name
Context	**configure** oam-pm session *string*
Tree	session
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

bin-group *reference*

Synopsis	Bin group for the session
Context	**configure** oam-pm session *string* bin-group *reference*
Tree	bin-group
Reference	**configure** oam-pm bin-group *number*
Introduced	16.0.R5
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** oam-pm session *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R5
Platforms	All

ethernet

Synopsis	Enable the **ethernet** context
Context	**configure** oam-pm session *string* ethernet
Tree	ethernet
Notes	The following elements are part of a mandatory choice: **ethernet**, **ip**, or **mpls**.
Introduced	16.0.R5
Platforms	All

dest-mac *string*

Synopsis	Destination MAC address for the session
Context	**configure** oam-pm session *string* ethernet dest-mac *string*
Tree	dest-mac
Introduced	16.0.R5
Platforms	All

dmm

Synopsis	Enable the **dmm** context
Context	**configure** oam-pm session *string* ethernet dmm
Tree	dmm
Introduced	16.0.R5
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the test
Context	**configure** oam-pm session *string* ethernet dmm admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R5
Platforms	All

data-tlv-size *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Size of the pad TLV in the frames sent for the test
Context	**configure** oam-pm session *string* ethernet dmm data-tlv-size *number*
Tree	data-tlv-size
Range	0 | 3 to 2000
Units	octets
Default	0
Introduced	16.0.R5
Platforms	All

delay-template *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reference to a streaming delay template for the test
Context	**configure** oam-pm session *string* ethernet dmm delay-template *string*
Tree	delay-template
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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interval *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between transmission PDUs for the session's test
Context	**configure** oam-pm session *string* ethernet dmm interval *number*
Tree	interval
Range	50 | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 10000
Units	milliseconds
Introduced	16.0.R5
Platforms	All

test-duration *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Duration of an on-demand test
Context	**configure** oam-pm session *string* ethernet dmm test-duration *number*
Tree	test-duration
Range	1 to 86400
Units	seconds
Introduced	16.0.R5
Platforms	All

test-id *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Test ID
Context	**configure** oam-pm session *string* ethernet dmm test-id *number*
Tree	test-id

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Range	0 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

lmm

Synopsis	Enable the **lmm** context
Context	**configure** oam-pm session *string* ethernet lmm
Tree	lmm
Introduced	16.0.R5
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the test
Context	**configure** oam-pm session *string* ethernet lmm admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R5
Platforms	All

availability

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **availability** context
Context	**configure** oam-pm session *string* ethernet lmm availability
Tree	availability
Introduced	16.0.R5
Platforms	All

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admin-state *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of availability statistics
Context	**configure** oam-pm session *string* ethernet lmm availability admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R5
Platforms	All

flr-threshold *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FLR threshold for the test
Context	**configure** oam-pm session *string* ethernet lmm availability flr-threshold *number*
Tree	flr-threshold
Range	0 to 100
Units	percent
Default	50
Introduced	16.0.R5
Platforms	All

hli-force-count *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Increment HLI/CHLI counters regardless of availability
Context	**configure** oam-pm session *string* ethernet lmm availability hli-force-count *boolean*
Tree	hli-force-count

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Default	false
Introduced	16.0.R5
Platforms	All

timing

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **timing** context
Context	**configure** oam-pm session *string* ethernet lmm availability timing
Tree	timing
Introduced	16.0.R5
Platforms	All

chli-threshold *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	CHLI threshold
Context	**configure** oam-pm session *string* ethernet lmm availability timing chli-threshold *number*
Tree	chli-threshold
Range	1 to 9
Default	5
Introduced	16.0.R5
Platforms	All

consec-delta-t *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of consecutive delta-t intervals
Context	**configure** oam-pm session *string* ethernet lmm availability timing consec-delta-t *number*

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Tree	consec-delta-t
Range	2 to 10
Default	10
Introduced	16.0.R5
Platforms	All

frames-per-delta-t *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of frames sent in one delta-t
Context	**configure** oam-pm session *string* ethernet lmm availability timing frames-per-delta-t *number*
Tree	frames-per-delta-t
Range	1 to 50
Introduced	16.0.R5
Platforms	All

fc-collection *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable collection of per-forwarding class counters
Context	**configure** oam-pm session *string* ethernet lmm fc-collection *boolean*
Tree	fc-collection
Default	false
Introduced	16.0.R5
Platforms	All

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interval *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between transmission PDUs for the session's test
Context	**configure** oam-pm session *string* ethernet lmm interval *number*
Tree	interval
Range	100 | 1000 | 10000
Units	milliseconds
Introduced	16.0.R5
Platforms	All

loss-events

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **loss-events** context
Context	**configure** oam-pm session *string* ethernet lmm loss-events
Tree	loss-events
Introduced	16.0.R5
Platforms	All

avg-flr-event [direction] *keyword*

Synopsis	Enter the **avg-flr-event** list instance
Context	**configure** oam-pm session *string* ethernet lmm loss-events avg-flr-event *keyword*
Tree	avg-flr-event
Introduced	16.0.R5
Platforms	All

[**direction**] *keyword*

Synopsis	Traffic flow direction
Context	**configure** oam-pm session *string* ethernet lmm loss-events avg-flr-event *keyword*

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Tree	avg-flr-event
Options	forward, backward
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *decimal-number*

Synopsis	Clear threshold for the average FLR
Context	**configure** oam-pm session *string* ethernet lmm loss-events avg-flr-event *keyword* clear-threshold *decimal-number*
Tree	clear-threshold
Range	0.000 to 99.999
Units	percent
Introduced	16.0.R5
Platforms	All

raise-threshold *decimal-number*

Synopsis	Raise threshold for the average FLR
Context	**configure** oam-pm session *string* ethernet lmm loss-events avg-flr-event *keyword* raise-threshold *decimal-number*
Tree	raise-threshold
Range	0.000 to 100.000
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

chli-event [direction] *keyword*

Synopsis	Enter the **chli-event** list instance
Context	**configure** oam-pm session *string* ethernet lmm loss-events chli-event *keyword*
Tree	chli-event
Introduced	16.0.R5

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Platforms	All

[**direction**] *keyword*

Synopsis	Traffic flow direction
Context	**configure** oam-pm session *string* ethernet lmm loss-events chli-event *keyword*
Tree	chli-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *number*

Synopsis	Clear threshold
Context	**configure** oam-pm session *string* ethernet lmm loss-events chli-event *keyword* clear-threshold *number*
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	**configure** oam-pm session *string* ethernet lmm loss-events chli-event *keyword* raise-threshold *number*
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

hli-event [direction] *keyword*

Synopsis	Enter the **hli-event** list instance

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Context	**configure** oam-pm session *string* ethernet lmm loss-events hli-event *keyword*
Tree	hli-event
Introduced	16.0.R5
Platforms	All

[**direction**] *keyword*

Synopsis	Traffic flow direction
Context	**configure** oam-pm session *string* ethernet lmm loss-events hli-event *keyword*
Tree	hli-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *number*

Synopsis	Clear threshold
Context	**configure** oam-pm session *string* ethernet lmm loss-events hli-event *keyword* clear-threshold *number*
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	**configure** oam-pm session *string* ethernet lmm loss-events hli-event *keyword* raise-threshold *number*
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

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unavailability-event [direction] *keyword*

Synopsis	Enter the **unavailability-event** list instance
Context	**configure** oam-pm session *string* ethernet lmm loss-events unavailability-event *keyword*
Tree	unavailability-event
Introduced	16.0.R5
Platforms	All

[**direction**] *keyword*

Synopsis	Traffic flow direction
Context	**configure** oam-pm session *string* ethernet lmm loss-events unavailability-event *keyword*
Tree	unavailability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *number*

Synopsis	Clear threshold
Context	**configure** oam-pm session *string* ethernet lmm loss-events unavailability-event *keyword* clear-threshold *number*
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	**configure** oam-pm session *string* ethernet lmm loss-events unavailability-event *keyword* raise-threshold *number*
Tree	raise-threshold
Range	1 to 864000

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Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

undet-availability-event [direction] *keyword*

Synopsis	Enter the **undet-availability-event** list instance
Context	**configure** oam-pm session *string* ethernet lmm loss-events undet-availability-event *keyword*
Tree	undet-availability-event
Introduced	16.0.R5
Platforms	All

[**direction**] *keyword*

Synopsis	Traffic flow direction
Context	**configure** oam-pm session *string* ethernet lmm loss-events undet-availability-event *keyword*
Tree	undet-availability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *number*

Synopsis	Clear threshold
Context	**configure** oam-pm session *string* ethernet lmm loss-events undet-availability-event *keyword* clear-threshold *number*
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

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raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	**configure** oam-pm session *string* ethernet lmm loss-events undet-availability-event *keyword* raise-threshold *number*
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

undet-unavailability-event [direction] *keyword*

Synopsis	Enter the **undet-unavailability-event** list instance
Context	**configure** oam-pm session *string* ethernet lmm loss-events undet-unavailability-event *keyword*
Tree	undet-unavailability-event
Introduced	16.0.R5
Platforms	All

[**direction**] *keyword*

Synopsis	Traffic flow direction
Context	**configure** oam-pm session *string* ethernet lmm loss-events undet-unavailability-event *keyword*
Tree	undet-unavailability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *number*

Synopsis	Clear threshold
Context	**configure** oam-pm session *string* ethernet lmm loss-events undet-unavailability-event *keyword* clear-threshold *number*
Tree	clear-threshold

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Range	0 to 863999
Introduced	16.0.R5
Platforms	All

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	**configure** oam-pm session *string* ethernet lmm loss-events undet-unavailability-event *keyword* raise-threshold *number*
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

test-duration *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Duration of an on-demand test
Context	**configure** oam-pm session *string* ethernet lmm test-duration *number*
Tree	test-duration
Range	1 to 86400
Units	seconds
Introduced	16.0.R5
Platforms	All

test-id *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Test ID
Context	**configure** oam-pm session *string* ethernet lmm test-id *number*

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Tree	test-id
Range	0 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

priority *number*

Synopsis	Priority and forwarding class for the session
Context	**configure** oam-pm session *string* ethernet priority *number*
Tree	priority
Range	0 to 7
Default	0
Introduced	16.0.R5
Platforms	All

remote-mep *number*

Synopsis	Remote MEP for the session
Context	**configure** oam-pm session *string* ethernet remote-mep *number*
Tree	remote-mep
Range	1 to 8191
Introduced	16.0.R5
Platforms	All

slm

Synopsis	Enable the **slm** context
Context	**configure** oam-pm session *string* ethernet slm
Tree	slm
Introduced	16.0.R5
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the test
Context	**configure** oam-pm session *string* ethernet slm admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R5
Platforms	All

data-tlv-size *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Size of the pad TLV in the frames sent for the test
Context	**configure** oam-pm session *string* ethernet slm data-tlv-size *number*
Tree	data-tlv-size
Range	0 | 3 to 2000
Units	octets
Default	0
Introduced	16.0.R5
Platforms	All

flr-threshold *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FLR threshold for the test
Context	**configure** oam-pm session *string* ethernet slm flr-threshold *number*
Tree	flr-threshold
Range	0 to 100
Units	percent
Default	50

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Introduced	16.0.R5
Platforms	All

hli-force-count *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Increment HLI/CHLI counters regardless of availability
Context	**configure** oam-pm session *string* ethernet slm hli-force-count *boolean*
Tree	hli-force-count
Default	false
Introduced	16.0.R5
Platforms	All

interval *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between transmission PDUs for the session's test
Context	**configure** oam-pm session *string* ethernet slm interval *number*
Tree	interval
Range	50 | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000
Units	milliseconds
Introduced	16.0.R5
Platforms	All

loss-events

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **loss-events** context
Context	**configure** oam-pm session *string* ethernet slm loss-events

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Tree	loss-events
Introduced	16.0.R5
Platforms	All

avg-flr-event [direction] *keyword*

Synopsis	Enter the **avg-flr-event** list instance
Context	**configure** oam-pm session *string* ethernet slm loss-events avg-flr-event *keyword*
Tree	avg-flr-event
Introduced	16.0.R5
Platforms	All

[**direction**] *keyword*

Synopsis	Traffic flow direction
Context	**configure** oam-pm session *string* ethernet slm loss-events avg-flr-event *keyword*
Tree	avg-flr-event
Options	forward, backward
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *decimal-number*

Synopsis	Clear threshold for the average FLR
Context	**configure** oam-pm session *string* ethernet slm loss-events avg-flr-event *keyword* clear-threshold *decimal-number*
Tree	clear-threshold
Range	0.000 to 99.999
Units	percent
Introduced	16.0.R5
Platforms	All

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raise-threshold *decimal-number*

Synopsis	Raise threshold for the average FLR
Context	**configure** oam-pm session *string* ethernet slm loss-events avg-flr-event *keyword* raise-threshold *decimal-number*
Tree	raise-threshold
Range	0.000 to 100.000
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

chli-event [direction] *keyword*

Synopsis	Enter the **chli-event** list instance
Context	**configure** oam-pm session *string* ethernet slm loss-events chli-event *keyword*
Tree	chli-event
Introduced	16.0.R5
Platforms	All

[**direction**] *keyword*

Synopsis	Traffic flow direction
Context	**configure** oam-pm session *string* ethernet slm loss-events chli-event *keyword*
Tree	chli-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *number*

Synopsis	Clear threshold
Context	**configure** oam-pm session *string* ethernet slm loss-events chli-event *keyword* clear-threshold *number*
Tree	clear-threshold

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Range	0 to 863999
Introduced	16.0.R5
Platforms	All

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	**configure** oam-pm session *string* ethernet slm loss-events chli-event *keyword* raise-threshold *number*
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

hli-event [direction] *keyword*

Synopsis	Enter the **hli-event** list instance
Context	**configure** oam-pm session *string* ethernet slm loss-events hli-event *keyword*
Tree	hli-event
Introduced	16.0.R5
Platforms	All

[**direction**] *keyword*

Synopsis	Traffic flow direction
Context	**configure** oam-pm session *string* ethernet slm loss-events hli-event *keyword*
Tree	hli-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

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clear-threshold *number*

Synopsis	Clear threshold
Context	**configure** oam-pm session *string* ethernet slm loss-events hli-event *keyword* clear-threshold *number*
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	**configure** oam-pm session *string* ethernet slm loss-events hli-event *keyword* raise-threshold *number*
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

unavailability-event [direction] *keyword*

Synopsis	Enter the **unavailability-event** list instance
Context	**configure** oam-pm session *string* ethernet slm loss-events unavailability-event *keyword*
Tree	unavailability-event
Introduced	16.0.R5
Platforms	All

[**direction**] *keyword*

Synopsis	Traffic flow direction
Context	**configure** oam-pm session *string* ethernet slm loss-events unavailability-event *keyword*
Tree	unavailability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.

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Introduced	16.0.R5
Platforms	All

clear-threshold *number*

Synopsis	Clear threshold
Context	**configure** oam-pm session *string* ethernet slm loss-events unavailability-event *keyword* clear-threshold *number*
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	**configure** oam-pm session *string* ethernet slm loss-events unavailability-event *keyword* raise-threshold *number*
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

undet-availability-event [direction] *keyword*

Synopsis	Enter the **undet-availability-event** list instance
Context	**configure** oam-pm session *string* ethernet slm loss-events undet-availability-event *keyword*
Tree	undet-availability-event
Introduced	16.0.R5
Platforms	All

[**direction**] *keyword*

Synopsis	Traffic flow direction

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Context	**configure** oam-pm session *string* ethernet slm loss-events undet-availability-event *keyword*
Tree	undet-availability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *number*

Synopsis	Clear threshold
Context	**configure** oam-pm session *string* ethernet slm loss-events undet-availability-event *keyword* clear-threshold *number*
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	**configure** oam-pm session *string* ethernet slm loss-events undet-availability-event *keyword* raise-threshold *number*
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

undet-unavailability-event [direction] *keyword*

Synopsis	Enter the **undet-unavailability-event** list instance
Context	**configure** oam-pm session *string* ethernet slm loss-events undet-unavailability-event *keyword*
Tree	undet-unavailability-event
Introduced	16.0.R5

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Platforms	All

[**direction**] *keyword*

Synopsis	Traffic flow direction
Context	**configure** oam-pm session *string* ethernet slm loss-events undet-unavailability-event *keyword*
Tree	undet-unavailability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *number*

Synopsis	Clear threshold
Context	**configure** oam-pm session *string* ethernet slm loss-events undet-unavailability-event *keyword* clear-threshold *number*
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	**configure** oam-pm session *string* ethernet slm loss-events undet-unavailability-event *keyword* raise-threshold *number*
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

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test-duration *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Duration of an on-demand test
Context	**configure** oam-pm session *string* ethernet slm test-duration *number*
Tree	test-duration
Range	1 to 86400
Units	seconds
Introduced	16.0.R5
Platforms	All

test-id *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Test ID
Context	**configure** oam-pm session *string* ethernet slm test-id *number*
Tree	test-id
Range	0 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

timing

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **timing** context
Context	**configure** oam-pm session *string* ethernet slm timing
Tree	timing
Introduced	16.0.R5

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Platforms	All

chli-threshold *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	CHLI threshold
Context	**configure** oam-pm session *string* ethernet slm timing chli-threshold *number*
Tree	chli-threshold
Range	1 to 9
Default	5
Introduced	16.0.R5
Platforms	All

consec-delta-t *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of consecutive delta-t intervals
Context	**configure** oam-pm session *string* ethernet slm timing consec-delta-t *number*
Tree	consec-delta-t
Range	2 to 10
Default	10
Introduced	16.0.R5
Platforms	All

frames-per-delta-t *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of frames sent in one delta-t
Context	**configure** oam-pm session *string* ethernet slm timing frames-per-delta-t *number*

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Tree	frames-per-delta-t
Range	1 to 50
Introduced	16.0.R5
Platforms	All

source

Synopsis	Enable the **source** context
Context	**configure** oam-pm session *string* ethernet source
Tree	source
Introduced	16.0.R5
Platforms	All

ma-admin-name *string*

Synopsis	Source Ethernet MA name
Context	**configure** oam-pm session *string* ethernet source ma-admin-name *string*
Tree	ma-admin-name
String Length	1 to 64
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

md-admin-name *string*

Synopsis	Source Ethernet MD name
Context	**configure** oam-pm session *string* ethernet source md-admin-name *string*
Tree	md-admin-name
String Length	1 to 64
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

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mep *number*

Synopsis	Source Ethernet MEP ID
Context	**configure** oam-pm session *string* ethernet source mep *number*
Tree	mep
Range	1 to 8191
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

ip

Synopsis	Enable the **ip** context
Context	**configure** oam-pm session *string* ip
Tree	ip
Notes	The following elements are part of a mandatory choice: **ethernet**, **ip**, or **mpls**.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

allow-egress-remark-dscp *boolean*

Synopsis	Allow DSCP modification by the egress QoS policy
Context	**configure** oam-pm session *string* ip allow-egress-remark-dscp *boolean*
Tree	allow-egress-remark-dscp
Default	false
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

destination *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Destination IP address for the session
Context	**configure** oam-pm session *string* ip destination *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	destination
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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destination-udp-port *number*

Synopsis	Destination UDP port for the session
Context	**configure** oam-pm session *string* ip destination-udp-port *number*
Tree	destination-udp-port
Range	1 to 65535
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

do-not-fragment *boolean*

Synopsis	Do not allow packet fragmentation in the IPv4 header
Context	**configure** oam-pm session *string* ip do-not-fragment *boolean*
Tree	do-not-fragment
Default	false
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dscp *(keyword | keyword)*

Synopsis	DSCP value configured to the DSCP name
Context	**configure** oam-pm session *string* ip dscp *(keyword | keyword)*
Tree	dscp
Description	This command allows for the explicit setting of the DSCP rather than deriving the DSCP value from the egress network QoS policy 1 using the **fc** and **profile** values. Although disconnected from the **fc** and **profile** settings unless required, the three parameters should be aligned to ensure proper treatment within the node and along the path.
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Options	resolve
Default	resolve
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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fc *keyword*

Synopsis	Forwarding class for the session
Context	**configure** oam-pm session *string* ip fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

forwarding

Synopsis	Enable the **forwarding** context
Context	**configure** oam-pm session *string* ip forwarding
Tree	forwarding
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bypass-routing

Synopsis	Bypass the routing table when sending test packets
Context	**configure** oam-pm session *string* ip forwarding bypass-routing
Tree	bypass-routing
Notes	The following elements are part of a mandatory choice: **bypass-routing**, **interface**, or **next-hop**.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interface *string*

Synopsis	Interface name
Context	**configure** oam-pm session *string* ip forwarding interface *string*
Tree	interface
String Length	1 to 32

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Notes	The following elements are part of a mandatory choice: **bypass-routing**, **interface**, or **next-hop**.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address for forwarding
Context	**configure** oam-pm session *string* ip forwarding next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	next-hop
Notes	The following elements are part of a mandatory choice: **bypass-routing**, **interface**, or **next-hop**.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *(keyword | number)*

Synopsis	Pattern used to fill the packet padding field
Context	**configure** oam-pm session *string* ip pattern *(keyword | number)*
Tree	pattern
Range	0 to 65535
Options	sequential
Default	0
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

profile *keyword*

Synopsis	Profile type for the session
Context	**configure** oam-pm session *string* ip profile *keyword*
Tree	profile
Options	in, out
Default	out
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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router-instance *string*

Synopsis	Router instance for the session
Context	**configure** oam-pm session *string* ip router-instance *string*
Tree	router-instance
Default	Base
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source IP address for the session
Context	**configure** oam-pm session *string* ip source *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-udp-port *number*

Synopsis	Source UDP port for the session
Context	**configure** oam-pm session *string* ip source-udp-port *number*
Tree	source-udp-port
Range	64374 to 64383
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ttl *number*

Synopsis	TTL value for the session
Context	**configure** oam-pm session *string* ip ttl *number*
Tree	ttl
Range	1 to 255
Default	255
Introduced	16.0.R5

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tunnel

Synopsis	Enter the **tunnel** context
Context	**configure** oam-pm session *string* ip tunnel
Tree	tunnel
Description	Commands in this context configure packet tunneling options for the session. This command and the **oam-pm session ip forwarding** command are mutually exclusive.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mpls

Synopsis	Enable the **mpls** context
Context	**configure** oam-pm session *string* ip tunnel mpls
Tree	mpls
Description	Commands in this context configure the MPLS packet tunneling options for the session. Configure the **oam-pm session ip router-instance** to Base to configure commands in the tunnel MPLS context. When entering a context under MPLS, the system removes any previous configuration of any sibling context. You can only configure one of the contexts for each OAM-PM session.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rsvp-te

Synopsis	Enable the **rsvp-te** context
Context	**configure** oam-pm session *string* ip tunnel mpls rsvp-te
Tree	rsvp-te
Description	Commands in this context allow for the specification of RSVP-TE specific tunnel information used to transport the test packets. Entering this context removes all other tunnel-type options configured under the **configure oam-pm session ip tunnel mpls** context. Only a single MPLS type can be configured for an OAM-PM session.
Notes	The following elements are part of a choice: **rsvp-te**, **rsvp-te-auto**, **sr-isis**, **sr-ospf**, **sr-ospf3**, or **sr-te**.
Introduced	23.3.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lsp *string*

Synopsis	Name of LSP that carries the test packets
Context	**configure** oam-pm session *string* ip tunnel mpls rsvp-te lsp *string*
Tree	lsp
String Length	1 to 64
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rsvp-te-auto

Synopsis	Enable the **rsvp-te-auto** context
Context	**configure** oam-pm session *string* ip tunnel mpls rsvp-te-auto
Tree	rsvp-te-auto
Description	Commands in this context configure the RSVP-TE-Auto feature and **rsvp-te-auto** (RSVP TE with dynamically-created LSPs) packet tunneling options for the session. If you enter a context within the MPLS context, the system removes any previous configuration of any sibling context. You can only configure one of the contexts for each OAM-PM session.
Notes	The following elements are part of a choice: **rsvp-te**, **rsvp-te-auto**, **sr-isis**, **sr-ospf**, **sr-ospf3**, or **sr-te**.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

from *string*

Synopsis	IPv4 address used to identify the LSP to be tested
Context	**configure** oam-pm session *string* ip tunnel mpls rsvp-te-auto from *string*
Tree	from
Description	This command configures the headend of the RSV LSP. Configure the following three commands to identify an RSVP-TE Auto LSP: **from**, **to**, and **lsp-template**. When all three of these values are configured, the specific RSVP LSP can be identified and the test packets can be carried across the tunnel.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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lsp-template *string*

Synopsis	LSP template used to identify the LSP to be tested
Context	**configure** oam-pm session *string* ip tunnel mpls rsvp-te-auto lsp-template *string*
Tree	lsp-template
Description	This command configures the name of the LSP template used to identify the unique LSP. Configure the following three commands to identify an RSVP-TE Auto LSP: **from**, **to**, and **lsp-template**. When all three of these values are configured, the specific RSVP LSP can be identified and the test packets can be carried across the tunnel.
String Length	1 to 32
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

to *string*

Synopsis	IPv4 unicast address to identify the LSP to be tested
Context	**configure** oam-pm session *string* ip tunnel mpls rsvp-te-auto to *string*
Tree	to
Description	This command configures the termination point of the RSVP LSP. Configure the following three commands to identify an RSVP-TE Auto LSP: **from**, **to**, and **lsp-template**. When all three of these values are configured, the specific RSVP LSP can be identified and the test packets can be carried across the tunnel.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sr-isis

Synopsis	Enable the **sr-isis** context
Context	**configure** oam-pm session *string* ip tunnel mpls sr-isis
Tree	sr-isis
Description	Commands in this context allow for the specification of SR-ISIS specific tunnel information used to transport the test packets. Entering this context removes all the other tunnel type commands configured in the **configure oam-pm session ip tunnel mpls** context. Only a single MPLS type can be configured for an OAM-PM session.
Notes	The following elements are part of a choice: **rsvp-te**, **rsvp-te-auto**, **sr-isis**, **sr-ospf**, **sr-ospf3**, or **sr-te**.
Introduced	23.3.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

igp-instance *number*

Synopsis	IGP instance used to tunnel IP packets
Context	**configure** oam-pm session *string* ip tunnel mpls sr-isis igp-instance *number*
Tree	igp-instance
Description	This command configures the IGP instance to tunnel IP packets for the session test.
Range	0 to 127
Default	0
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

prefix *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP prefix to tunnel IP packets for the session tests
Context	**configure** oam-pm session *string* ip tunnel mpls sr-isis prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Description	This command configures the IP prefix used with the IGP instance to tunnel IP packets for the session tests.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sr-ospf

Synopsis	Enable the **sr-ospf** context
Context	**configure** oam-pm session *string* ip tunnel mpls sr-ospf
Tree	sr-ospf
Description	Commands in this context allow for the specification of SR-OSPF specific tunnel information used to transport the test packets. Entering this context removes all other tunnel type options configured under the **configure oam-pm session ip tunnel mpls** context. Only a single MPLS type can be configured for an OAM-PM session.
Notes	The following elements are part of a choice: **rsvp-te**, **rsvp-te-auto**, **sr-isis**, **sr-ospf**, **sr-ospf3**, or **sr-te**.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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igp-instance *number*

Synopsis	IGP instance used to tunnel IP packets
Context	**configure** oam-pm session *string* ip tunnel mpls sr-ospf igp-instance *number*
Tree	igp-instance
Range	0 to 31
Default	0
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

prefix *string*

Synopsis	IP prefix to tunnel IP packets for the session tests
Context	**configure** oam-pm session *string* ip tunnel mpls sr-ospf prefix *string*
Tree	prefix
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sr-ospf3

Synopsis	Enable the **sr-ospf3** context
Context	**configure** oam-pm session *string* ip tunnel mpls sr-ospf3
Tree	sr-ospf3
Description	Commands in this context allow for the specification of SR-OSPFv3 specific tunnel information used to transport the test packets. Entering this context removes all other tunnel type options configured under the **configure oam-pm session ip tunnel mpls** context. Only a single MPLS type can be configured for an OAM-PM session.
Notes	The following elements are part of a choice: **rsvp-te**, **rsvp-te-auto**, **sr-isis**, **sr-ospf**, **sr-ospf3**, or **sr-te**.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

igp-instance *number*

Synopsis	IGP instance used to tunnel IP packets
Context	**configure** oam-pm session *string* ip tunnel mpls sr-ospf3 igp-instance *number*

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Tree	igp-instance
Range	0 to 31 | 64 to 95
Default	0
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

prefix *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP prefix to tunnel IP packets for the session tests
Context	**configure** oam-pm session *string* ip tunnel mpls sr-ospf3 prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sr-te

Synopsis	Enable the **sr-te** context
Context	**configure** oam-pm session *string* ip tunnel mpls sr-te
Tree	sr-te
Description	Commands in this context allow for the specification of SR-TE specific tunnel information used to transport the test packets. Entering this context removes all other tunnel type options configured under the **configure oam-pm session ip tunnel mpls** context. Only a single MPLS type can be configured for an OAM-PM session.
Notes	The following elements are part of a choice: **rsvp-te**, **rsvp-te-auto**, **sr-isis**, **sr-ospf**, **sr-ospf3**, or **sr-te**.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lsp *string*

Synopsis	Name of LSP that carries the test packets
Context	**configure** oam-pm session *string* ip tunnel mpls sr-te lsp *string*
Tree	lsp
String Length	1 to 64
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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twamp-light

Synopsis	Enable the **twamp-light** context
Context	**configure** oam-pm session *string* ip twamp-light
Tree	twamp-light
Description	Commands in this context configure the TWAMP-Light (Two Way Active Measurement Protocol, Light) or STAMP (Simple Two Way Active Measurement Protocol) test for the session.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the test
Context	**configure** oam-pm session *string* ip twamp-light admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

allow-ipv6-udp-checksum-zero *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Process IPv6 packets with a zero UDP checksum
Context	**configure** oam-pm session *string* ip twamp-light allow-ipv6-udp-checksum-zero *boolean*
Tree	allow-ipv6-udp-checksum-zero
Description	When configured to **true**, this command configures the acceptance of IPv6 packets with UDP checksums of 0. This optional configuration allows the router to process arriving IPv6 TWAMP Test packets that contain IPv6 UDP checksum of 0x0000. The UDP port specific to this TWAMP Light test bypasses the default discard IPv6 UDP checksum 0x0000. If this optional command is not configured, IPv6 UDP checksum 0x000 arriving packets are discarded. When configured to **false**, packets that arrive with an IPv6 UDP checksum of 0x0000 are discarded.

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Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

delay-template *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reference to a streaming delay template for the test
Context	**configure** oam-pm session *string* ip twamp-light delay-template *string*
Tree	delay-template
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between transmission PDUs for the session's test
Context	**configure** oam-pm session *string* ip twamp-light interval *number*
Tree	interval
Range	50 | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 10000
Units	milliseconds
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

loss

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **loss** context

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Context	**configure** oam-pm session *string* ip twamp-light loss
Tree	loss
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

flr-threshold *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FLR threshold for the test
Context	**configure** oam-pm session *string* ip twamp-light loss flr-threshold *number*
Tree	flr-threshold
Range	0 to 100
Units	percent
Default	50
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

hli-force-count *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Increment HLI/CHLI counters regardless of availability
Context	**configure** oam-pm session *string* ip twamp-light loss hli-force-count *boolean*
Tree	hli-force-count
Default	false
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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timing

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **timing** context
Context	**configure** oam-pm session *string* ip twamp-light loss timing
Tree	timing
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

chli-threshold *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	CHLI threshold
Context	**configure** oam-pm session *string* ip twamp-light loss timing chli-threshold *number*
Tree	chli-threshold
Range	1 to 9
Default	5
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

consec-delta-t *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of consecutive delta-t intervals
Context	**configure** oam-pm session *string* ip twamp-light loss timing consec-delta-t *number*
Tree	consec-delta-t
Range	2 to 10
Default	10
Introduced	16.0.R5

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

frames-per-delta-t *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of frames sent in one delta-t
Context	**configure** oam-pm session *string* ip twamp-light loss timing frames-per-delta-t *number*
Tree	frames-per-delta-t
Range	1 to 50
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

loss-events

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **loss-events** context
Context	**configure** oam-pm session *string* ip twamp-light loss-events
Tree	loss-events
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

avg-flr-event [direction] *keyword*

Synopsis	Enter the **avg-flr-event** list instance
Context	**configure** oam-pm session *string* ip twamp-light loss-events avg-flr-event *keyword*
Tree	avg-flr-event
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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[**direction**] *keyword*

Synopsis	Traffic flow direction
Context	**configure** oam-pm session *string* ip twamp-light loss-events avg-flr-event *keyword*
Tree	avg-flr-event
Options	forward, backward
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

clear-threshold *decimal-number*

Synopsis	Clear threshold for the average FLR
Context	**configure** oam-pm session *string* ip twamp-light loss-events avg-flr-event *keyword* clear-threshold *decimal-number*
Tree	clear-threshold
Range	0.000 to 99.999
Units	percent
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

raise-threshold *decimal-number*

Synopsis	Raise threshold for the average FLR
Context	**configure** oam-pm session *string* ip twamp-light loss-events avg-flr-event *keyword* raise-threshold *decimal-number*
Tree	raise-threshold
Range	0.000 to 100.000
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

chli-event [direction] *keyword*

Synopsis	Enter the **chli-event** list instance

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Context	**configure** oam-pm session *string* ip twamp-light loss-events chli-event *keyword*
Tree	chli-event
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**direction**] *keyword*

Synopsis	Traffic flow direction
Context	**configure** oam-pm session *string* ip twamp-light loss-events chli-event *keyword*
Tree	chli-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

clear-threshold *number*

Synopsis	Clear threshold
Context	**configure** oam-pm session *string* ip twamp-light loss-events chli-event *keyword* clear-threshold *number*
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	**configure** oam-pm session *string* ip twamp-light loss-events chli-event *keyword* raise-threshold *number*
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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hli-event [direction] *keyword*

Synopsis	Enter the **hli-event** list instance
Context	**configure** oam-pm session *string* ip twamp-light loss-events hli-event *keyword*
Tree	hli-event
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**direction**] *keyword*

Synopsis	Traffic flow direction
Context	**configure** oam-pm session *string* ip twamp-light loss-events hli-event *keyword*
Tree	hli-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

clear-threshold *number*

Synopsis	Clear threshold
Context	**configure** oam-pm session *string* ip twamp-light loss-events hli-event *keyword* clear-threshold *number*
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	**configure** oam-pm session *string* ip twamp-light loss-events hli-event *keyword* raise-threshold *number*
Tree	raise-threshold
Range	1 to 864000

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Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

unavailability-event [direction] *keyword*

Synopsis	Enter the **unavailability-event** list instance
Context	**configure** oam-pm session *string* ip twamp-light loss-events unavailability-event *keyword*
Tree	unavailability-event
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**direction**] *keyword*

Synopsis	Traffic flow direction
Context	**configure** oam-pm session *string* ip twamp-light loss-events unavailability-event *keyword*
Tree	unavailability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

clear-threshold *number*

Synopsis	Clear threshold
Context	**configure** oam-pm session *string* ip twamp-light loss-events unavailability-event *keyword* clear-threshold *number*
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	**configure** oam-pm session *string* ip twamp-light loss-events unavailability-event *keyword* raise-threshold *number*
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

undet-availability-event [direction] *keyword*

Synopsis	Enter the **undet-availability-event** list instance
Context	**configure** oam-pm session *string* ip twamp-light loss-events undet-availability-event *keyword*
Tree	undet-availability-event
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**direction**] *keyword*

Synopsis	Traffic flow direction
Context	**configure** oam-pm session *string* ip twamp-light loss-events undet-availability-event *keyword*
Tree	undet-availability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

clear-threshold *number*

Synopsis	Clear threshold
Context	**configure** oam-pm session *string* ip twamp-light loss-events undet-availability-event *keyword* clear-threshold *number*
Tree	clear-threshold

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Range	0 to 863999
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	**configure** oam-pm session *string* ip twamp-light loss-events undet-availability-event *keyword* raise-threshold *number*
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

undet-unavailability-event [direction] *keyword*

Synopsis	Enter the **undet-unavailability-event** list instance
Context	**configure** oam-pm session *string* ip twamp-light loss-events undet-unavailability-event *keyword*
Tree	undet-unavailability-event
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**direction**] *keyword*

Synopsis	Traffic flow direction
Context	**configure** oam-pm session *string* ip twamp-light loss-events undet-unavailability-event *keyword*
Tree	undet-unavailability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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clear-threshold *number*

Synopsis	Clear threshold
Context	**configure** oam-pm session *string* ip twamp-light loss-events undet-unavailability-event *keyword* clear-threshold *number*
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	**configure** oam-pm session *string* ip twamp-light loss-events undet-unavailability-event *keyword* raise-threshold *number*
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pad-size *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Amount of packet padding sent for the TWAMP-Light test
Context	**configure** oam-pm session *string* ip twamp-light pad-size *number*
Tree	pad-size
Range	0 to 2000
Units	octets
Default	0
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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pad-tlv-size *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pad TLV size in each sent STAMP packet
Context	**configure** oam-pm session *string* ip twamp-light pad-tlv-size *number*
Tree	pad-tlv-size
Description	This command configures the PAD TLV included in the STAMP test packet with a total byte count specified by this command. TWAMP Light test packets do not allow TLVs. To pad the size of the TWAMP Light test packet the user must configure the **pad-size** command. STAMP test packets (the standard form of TWAMP Light) introduces TLVs for padding. Therefore, STAMP test packets must use the **pad-tlv-size** value.
Range	4 to 2000
Units	octets
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

record-stats *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Type of statistics recorded for the TWAMP-Light test
Context	**configure** oam-pm session *string* ip twamp-light record-stats *keyword*
Tree	record-stats
Options	delay, loss, delay-and-loss
Default	delay
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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session-sender-type *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Packet type sent by the test
Context	**configure** oam-pm session *string* ip twamp-light session-sender-type *keyword*
Tree	session-sender-type
Description	This command configures the type of test packet format to transmit. When the **stamp** option is configured, STAMP transmission, packet formatting, and packet processing is allowed and STAMP test packets support TLVs. When the **twamp-light** option is configured, TWAMP Light transmission, packet formatting, and packet processing is allowed, but TWAMP Light test packets do not allow TLVs.
Options	twamp-light, stamp
Default	twamp-light
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-duration *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Duration of an on-demand test
Context	**configure** oam-pm session *string* ip twamp-light test-duration *number*
Tree	test-duration
Range	1 to 86400
Units	seconds
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-id *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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Synopsis	Test ID
Context	**configure** oam-pm session *string* ip twamp-light test-id *number*
Tree	test-id
Range	0 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

timestamp-format *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TWAMP Light or STAMP test packet timestamp format
Context	**configure** oam-pm session *string* ip twamp-light timestamp-format *keyword*
Tree	timestamp-format
Description	This command configures the format of the timestamp structure and epoch to include in the STAMP and TWAMP Light test packets. The command option value also sets the z-bit in the test packet. When **timestamp-format** value is **ntp**, the z-bit in the test packet is 0. When the **timestamp-format** is **ptp**, the z-bit in the test packets is 1.
Options	ntp, ptp
Default	ntp
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

measurement-interval [duration] *keyword*

Synopsis	Enter the **measurement-interval** list instance
Context	**configure** oam-pm session *string* measurement-interval *keyword*
Tree	measurement-interval
Introduced	16.0.R5
Platforms	All

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[**duration**] *keyword*

Synopsis	Duration of the measurement interval
Context	**configure** oam-pm session *string* measurement-interval *keyword*
Tree	measurement-interval
Options	15-mins, 1-hour, 1-day, 5-mins
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

accounting-policy *reference*

Synopsis	Accounting policy for the measurement interval
Context	**configure** oam-pm session *string* measurement-interval *keyword* accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R5
Platforms	All

boundary-type *keyword*

Synopsis	Alignment of the start of the measurement interval
Context	**configure** oam-pm session *string* measurement-interval *keyword* boundary-type *keyword*
Tree	boundary-type
Options	clock-aligned, test-relative
Default	clock-aligned
Introduced	16.0.R5
Platforms	All

clock-offset *number*

Synopsis	Offset for a clock-aligned measurement interval
Context	**configure** oam-pm session *string* measurement-interval *keyword* clock-offset *number*
Tree	clock-offset

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Range	0 to 86399
Units	seconds
Default	0
Introduced	16.0.R5
Platforms	All

intervals-stored *number*

Synopsis	Maximum number of measurement intervals stored
Context	**configure** oam-pm session *string* measurement-interval *keyword* intervals-stored *number*
Tree	intervals-stored
Range	1 to 96
Introduced	16.0.R5
Platforms	All

threshold-cross-alerts

Synopsis	Enter the **threshold-cross-alerts** context
Context	**configure** oam-pm session *string* measurement-interval *keyword* threshold-cross-alerts
Tree	threshold-cross-alerts
Introduced	16.0.R5
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of TCAs for measurement interval
Context	**configure** oam-pm session *string* measurement-interval *keyword* threshold-cross-alerts admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R5
Platforms	All

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delay-events *boolean*

Synopsis	Enable delay TCAs for the measurement interval
Context	**configure** oam-pm session *string* measurement-interval *keyword* threshold-cross-alerts delay-events *boolean*
Tree	delay-events
Default	false
Introduced	16.0.R5
Platforms	All

loss-events *boolean*

Synopsis	Enable loss TCAs for the measurement interval
Context	**configure** oam-pm session *string* measurement-interval *keyword* threshold-cross-alerts loss-events *boolean*
Tree	loss-events
Default	false
Introduced	16.0.R5
Platforms	All

mpls

Synopsis	Enable the **mpls** context
Context	**configure** oam-pm session *string* mpls
Tree	mpls
Notes	The following elements are part of a mandatory choice: **ethernet**, **ip**, or **mpls**.
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dm

Synopsis	Enable the **dm** context
Context	**configure** oam-pm session *string* mpls dm
Tree	dm
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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admin-state *keyword*

Synopsis	Administrative state of the MPLS DM test
Context	**configure** oam-pm session *string* mpls dm admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

delay-template *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reference to a streaming delay template for the test
Context	**configure** oam-pm session *string* mpls dm delay-template *string*
Tree	delay-template
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Elapsed time between query messages sent for the test
Context	**configure** oam-pm session *string* mpls dm interval *number*
Tree	interval
Range	1000 | 2000 | 3000 | 4000 | 5000 | 6000 | 7000 | 8000 | 9000 | 10000
Units	milliseconds
Default	1000
Introduced	16.0.R6

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pad-tlv-size *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Size of the pad TLV in query messages sent for the test
Context	**configure** oam-pm session *string* mpls dm pad-tlv-size *number*
Tree	pad-tlv-size
Range	0 | 2 to 257
Units	octets
Default	0
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

reflect-pad *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Copy the pad TLV in each query to the response
Context	**configure** oam-pm session *string* mpls dm reflect-pad *boolean*
Tree	reflect-pad
Default	false
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-duration *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Duration of an on-demand test
Context	**configure** oam-pm session *string* mpls dm test-duration *number*

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Tree	test-duration
Range	1 to 86400
Units	seconds
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-id *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Test ID for query and response messages
Context	**configure** oam-pm session *string* mpls dm test-id *number*
Tree	test-id
Range	0 to 67108863
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dscp *keyword*

Synopsis	DSCP value for the session
Context	**configure** oam-pm session *string* mpls dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Default	be
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc *keyword*

Synopsis	Forwarding class for the session

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Context	**configure** oam-pm session *string* mpls fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lsp

Synopsis	Enter the **lsp** context
Context	**configure** oam-pm session *string* mpls lsp
Tree	lsp
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mpls-tp-static

Synopsis	Enable the **mpls-tp-static** context
Context	**configure** oam-pm session *string* mpls lsp mpls-tp-static
Tree	mpls-tp-static
Notes	The following elements are part of a choice: **mpls-tp-static**, **rsvp**, or **rsvp-auto**.
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lsp *string*

Synopsis	LSP to be tested
Context	**configure** oam-pm session *string* mpls lsp mpls-tp-static lsp *string*
Tree	lsp
String Length	1 to 64
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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rsvp

Synopsis	Enable the **rsvp** context
Context	**configure** oam-pm session *string* mpls lsp rsvp
Tree	rsvp
Notes	The following elements are part of a choice: **mpls-tp-static**, **rsvp**, or **rsvp-auto**.
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lsp *string*

Synopsis	LSP to be tested
Context	**configure** oam-pm session *string* mpls lsp rsvp lsp *string*
Tree	lsp
String Length	1 to 64
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

udp-return-object *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address used by far end of the test to send response
Context	**configure** oam-pm session *string* mpls lsp rsvp udp-return-object *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	udp-return-object
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rsvp-auto

Synopsis	Enable the **rsvp-auto** context
Context	**configure** oam-pm session *string* mpls lsp rsvp-auto
Tree	rsvp-auto
Notes	The following elements are part of a choice: **mpls-tp-static**, **rsvp**, or **rsvp-auto**.
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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from *string*

Synopsis	IPv4 address used to identify the LSP to be tested
Context	**configure** oam-pm session *string* mpls lsp rsvp-auto from *string*
Tree	from
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lsp-template *string*

Synopsis	LSP template used to identify the LSP to be tested
Context	**configure** oam-pm session *string* mpls lsp rsvp-auto lsp-template *string*
Tree	lsp-template
String Length	1 to 32
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

to *string*

Synopsis	IPv4 address used to identify the LSP to be tested
Context	**configure** oam-pm session *string* mpls lsp rsvp-auto to *string*
Tree	to
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

udp-return-object *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address used by far end of the test to send response
Context	**configure** oam-pm session *string* mpls lsp rsvp-auto udp-return-object *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	udp-return-object
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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pattern *(keyword | number)*

Synopsis	Pattern value repeated to fill padding field of packet
Context	**configure** oam-pm session *string* mpls pattern *(keyword | number)*
Tree	pattern
Range	0 to 65535
Options	sequential
Default	0
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

profile *keyword*

Synopsis	QoS profile for the session
Context	**configure** oam-pm session *string* mpls profile *keyword*
Tree	profile
Options	in, out
Default	out
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ttl *number*

Synopsis	MPLS TTL value for the session
Context	**configure** oam-pm session *string* mpls ttl *number*
Tree	ttl
Range	1 to 255
Default	255
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

session-type *keyword*

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Synopsis	Session type
Context	**configure** oam-pm session *string* session-type *keyword*
Tree	session-type
Options	proactive, on-demand
Default	proactive
Introduced	16.0.R5
Platforms	All

streaming

Synopsis	Enter the **streaming** context
Context	**configure** oam-pm streaming
Tree	streaming
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

delay-template [delay-template-name] *string*

Synopsis	Enter the **delay-template** list instance
Context	**configure** oam-pm streaming delay-template *string*
Tree	delay-template
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**delay-template-name**] *string*

Synopsis	Streaming delay template name
Context	**configure** oam-pm streaming delay-template *string*
Tree	delay-template
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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admin-state *keyword*

Synopsis	Administrative state of the delay template
Context	**configure** oam-pm streaming delay-template *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** oam-pm streaming delay-template *string* description *string*
Tree	description
String Length	1 to 80
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fd-avg [direction] *keyword*

Synopsis	Add a list entry for **fd-avg**
Context	**configure** oam-pm streaming delay-template *string* fd-avg *keyword*
Tree	fd-avg
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**direction**] *keyword*

Synopsis	Traffic flow direction of the OAM-PM test or metric
Context	**configure** oam-pm streaming delay-template *string* fd-avg *keyword*
Tree	fd-avg
Options	forward, backward, round-trip
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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ifdv-avg [direction] *keyword*

Synopsis	Add a list entry for **ifdv-avg**
Context	**configure** oam-pm streaming delay-template *string* ifdv-avg *keyword*
Tree	ifdv-avg
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**direction**] *keyword*

Synopsis	Traffic flow direction of the OAM-PM test or metric
Context	**configure** oam-pm streaming delay-template *string* ifdv-avg *keyword*
Tree	ifdv-avg
Options	forward, backward, round-trip
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sample-window *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Sample window duration for the template
Context	**configure** oam-pm streaming delay-template *string* sample-window *number*
Tree	sample-window
Range	10 to 60
Units	seconds
Default	60
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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window-integrity *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Measurements for the sample window validity
Context	**configure** oam-pm streaming delay-template *string* window-integrity *number*
Tree	window-integrity
Range	1 to 100
Units	percent
Default	50
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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3.30 openflow commands

```
configure
   –  openflow
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  of-controller number
         –  address string
         –  admin-state keyword
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  description string
         –  echo-interval number
         –  echo-multiple number
         –  ipv6-address string
         –  role keyword
         –  tls-server-profile reference
         –  version keyword
      –  of-switch string
         –  admin-state keyword
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  aux-channel boolean
         –  controller (ipv4-address-no-zone | ipv6-address-no-zone) port number
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  ofc-loopback (ipv4-address-no-zone | ipv6-address-no-zone)
            –  service-name string
            –  tls-client-profile reference
         –  description string
         –  echo-interval number
         –  echo-multiple number
         –  flowtable number
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  max-size number
            –  mismatch-action keyword
            –  switch-defined-cookie boolean
         –  logical-port-status keyword
         –  ofs-id number
```


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3.30.1 openflow command descriptions

openflow

Synopsis	Enter the **openflow** context
Context	**configure** openflow
Tree	openflow
Introduced	16.0.R4
Platforms	All

of-controller [controller-id] *number*

Synopsis	Enter the **of-controller** list instance
Context	**configure** openflow of-controller *number*
Tree	of-controller
Max. Instances	1
Introduced	16.0.R4
Platforms	VSR-NRC

[**controller-id**] *number*

Synopsis	OpenFlow controller ID
Context	**configure** openflow of-controller *number*
Tree	of-controller
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	VSR-NRC

address *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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Synopsis	Local IPv4 address for the OpenFlow controller
Context	**configure** openflow of-controller *number* address *string*
Tree	address
Introduced	16.0.R4
Platforms	VSR-NRC

admin-state *keyword*

Synopsis	Administrative state of OpenFlow controller instance
Context	**configure** openflow of-controller *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	VSR-NRC

description *string*

Synopsis	Text description
Context	**configure** openflow of-controller *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	VSR-NRC

echo-interval *number*

Synopsis	Interval for monitoring OpenFlow control channels
Context	**configure** openflow of-controller *number* echo-interval *number*
Tree	echo-interval
Range	10 to 3600
Units	seconds
Default	10
Introduced	16.0.R4
Platforms	VSR-NRC

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echo-multiple *number*

Synopsis	Consecutive lost messages before channel declared down
Context	**configure** openflow of-controller *number* echo-multiple *number*
Tree	echo-multiple
Range	3 to 100
Default	3
Introduced	16.0.R4
Platforms	VSR-NRC

ipv6-address *string*

Synopsis	IPv6 address for the OpenFlow channel to the controller
Context	**configure** openflow of-controller *number* ipv6-address *string*
Tree	ipv6-address
Introduced	19.10.R1
Platforms	VSR-NRC

role *keyword*

Synopsis	Role when multiple controllers connected to OF switch
Context	**configure** openflow of-controller *number* role *keyword*
Tree	role
Options	equal
Default	equal
Introduced	16.0.R4
Platforms	VSR-NRC

tls-server-profile *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Profile name used by the controller
Context	**configure** openflow of-controller *number* tls-server-profile *reference*

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Tree	tls-server-profile
Reference	**configure** system security tls server-tls-profile *string*
Introduced	16.0.R4
Platforms	VSR-NRC

version *keyword*

Synopsis	Version negotiated between OF controller and switch
Context	**configure** openflow of-controller *number* version *keyword*
Tree	version
Options	version-1-3-1
Default	version-1-3-1
Introduced	16.0.R4
Platforms	VSR-NRC

of-switch [name] *string*

Synopsis	Enter the **of-switch** list instance
Context	**configure** openflow of-switch *string*
Tree	of-switch
Max. Instances	8
Introduced	16.0.R4
Platforms	All

[**name**] *string*

Synopsis	OpenFlow switch name
Context	**configure** openflow of-switch *string*
Tree	of-switch
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the OpenFlow switch instance
Context	**configure** openflow of-switch *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

aux-channel *boolean*

Synopsis	Enable the auxiliary connection for the H-OFS instance
Context	**configure** openflow of-switch *string* aux-channel *boolean*
Tree	aux-channel
Default	false
Introduced	16.0.R4
Platforms	All

controller [address] *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number*

Synopsis	Enter the **controller** list instance
Context	**configure** openflow of-switch *string* controller *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number*
Tree	controller
Max. Instances	2
Introduced	16.0.R4
Platforms	All

[**address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the OpenFlow channel to the controller
Context	**configure** openflow of-switch *string* controller *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number*
Tree	controller

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Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

port *number*

Synopsis	Controller port ID
Context	**configure** openflow of-switch *string* controller *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number*
Tree	controller
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

ofc-loopback *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Loopback IP address in the VPRN
Context	**configure** openflow of-switch *string* controller *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* ofc-loopback *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ofc-loopback
Introduced	16.0.R4
Platforms	All

service-name *string*

Synopsis	Administrative service name
Context	**configure** openflow of-switch *string* controller *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* service-name *string*
Tree	service-name
String Length	1 to 64
Introduced	16.0.R4
Platforms	All

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tls-client-profile *reference*

Synopsis	TLS profile name for use on the control channel
Context	**configure** openflow of-switch *string* controller *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number* tls-client-profile *reference*
Tree	tls-client-profile
Reference	**configure** system security tls client-tls-profile *string*
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** openflow of-switch *string* description *string*
Tree	description
String Length	1 to 255
Introduced	16.0.R4
Platforms	All

echo-interval *number*

Synopsis	Interval for monitoring OpenFlow control channels
Context	**configure** openflow of-switch *string* echo-interval *number*
Tree	echo-interval
Range	1 to 3600
Units	seconds
Default	10
Introduced	16.0.R4
Platforms	All

echo-multiple *number*

Synopsis	Consecutive lost messages before channel declared down
Context	**configure** openflow of-switch *string* echo-multiple *number*
Tree	echo-multiple
Range	3 to 100

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Default	3
Introduced	16.0.R4
Platforms	All

flowtable [table-id] *number*

Synopsis	Enter the **flowtable** list instance
Context	**configure** openflow of-switch *string* flowtable *number*
Tree	flowtable
Max. Instances	1
Introduced	16.0.R4
Platforms	All

[**table-id**] *number*

Synopsis	OpenFlow table ID
Context	**configure** openflow of-switch *string* flowtable *number*
Tree	flowtable
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

max-size *number*

Synopsis	Maximum size of the flow table
Context	**configure** openflow of-switch *string* flowtable *number* max-size *number*
Tree	max-size
Range	1 to 524288
Default	1000
Introduced	16.0.R4
Platforms	All

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mismatch-action *keyword*

Synopsis	Action taken when no match entries found in flow table
Context	**configure** openflow of-switch *string* flowtable *number* mismatch-action *keyword*
Tree	mismatch-action
Options	drop, fall-through, packet-in
Default	fall-through
Introduced	16.0.R4
Platforms	All

switch-defined-cookie *boolean*

Synopsis	Enable switch-defined cookie encoding
Context	**configure** openflow of-switch *string* flowtable *number* switch-defined-cookie *boolean*
Tree	switch-defined-cookie
Default	false
Introduced	16.0.R4
Platforms	All

logical-port-status *keyword*

Synopsis	Logical port type for status change reporting
Context	**configure** openflow of-switch *string* logical-port-status *keyword*
Tree	logical-port-status
Options	rsvp-te, mpls-tp, sr-te
Max. Instances	3
Introduced	16.0.R4
Platforms	All

ofs-id *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	OFS switch ID

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Context	**configure** openflow of-switch *string* ofs-id *number*
Tree	ofs-id
Range	1 to 8
Introduced	16.0.R6
Platforms	All

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3.31 policy-options commands

```
configure
   –  policy-options
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  as-path string
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  expression string
      –  as-path-group string
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  entry number
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  expression string
      –  community string
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  expression
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  exact boolean
            –  expr string
         –  member string
      –  damping string
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  half-life number
         –  max-suppress number
         –  reuse number
         –  suppress number
      –  global-variables
         –  name string
            –  address (ipv4-address-no-zone | ipv6-address-no-zone)
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  decimal decimal-number
            –  number number
            –  prefix (ipv4-prefix | ipv6-prefix)
            –  value string
      –  policy-statement string
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  default-action
            –  action-type keyword
            –  add-paths-send-limit (number | keyword)
            –  admin-tag-policy (param-midstring-64 | string)
            –  advertise-label keyword
            –  aigp-metric
               –  add (number | string)
               –  set (keyword | number | string)
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  as-path
               –  add (param-midstring | string)
               –  replace (param-midstring | string)
            –  as-path-prepend
               –  as-path (number | string | keyword)
               –  repeat (number | string)
```


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configure policy-options policy-statement default-action bgp-high-priority

```
            - bgp-high-priority boolean
            - bgp-leak boolean
            - bgp-med
               - adjust string
               - set (keyword | number | string)
            - bgp-tunnel-metric
               - prefer-aigp boolean
               - prefer-med boolean
               - value (string | number)
            - community
               - add (param-midstring-64 | string)
               - apply-groups reference
               - apply-groups-exclude reference
               - remove (param-midstring-64 | string)
               - replace (param-midstring-64 | string)
            - create-mpls-tunnel boolean
            - create-udp-tunnel boolean
            - damping (keyword | param-midstring | string)
            - dest-class number
            - egress-statistics boolean
            - flex-algo (string | number)
            - ingress-statistics boolean
            - install-backup-path boolean
            - local-preference (number | string)
            - metric
               - add (number | string)
               - set (number | string)
               - subtract (number | string)
            - multicast-redirection
               - fwd-service string
               - ip-int-name string
            - nat-policy (param-midstring | string)
            - next-hop (keyword | ipv4-address-no-zone | ipv6-address-no-zone | string)
            - origin (keyword | string)
            - origin-validation-state (keyword | string)
            - preference (number | string)
            - resolve-static boolean
            - route-table-install boolean
            - source-class number
            - sr-label-index
               - prefer-igp boolean
               - value (string | number)
            - sr-maintenance-policy (param-midstring | string)
            - srv6-locator (param-midstring-64 | string)
            - srv6-micro-segment-locator (param-midstring-64 | string)
            - srv6-return-path-bfd-sid (policy-var-name | ipv6-address)
            - sticky-ecmp boolean
            - tag (number | string)
            - type (number | string)
         - description string
         - entry number
            - action
               - action-type keyword
               - add-paths-send-limit (number | keyword)
               - admin-tag-policy (param-midstring-64 | string)
               - advertise-label keyword
               - aigp-metric
                  - add (number | string)
                  - set (keyword | number | string)
               - apply-groups reference
               - apply-groups-exclude reference
               - as-path
                  - add (param-midstring | string)
                  - replace (param-midstring | string)
```


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configure policy-options policy-statement entry action as-path-prepend

```
            - as-path-prepend
              - as-path (number | string | keyword)
              - repeat (number | string)
            - bgp-high-priority boolean
            - bgp-leak boolean
            - bgp-med
              - adjust string
              - set (keyword | number | string)
            - bgp-tunnel-metric
              - prefer-aigp boolean
              - prefer-med boolean
              - value (string | number)
            - community
              - add (param-midstring-64 | string)
              - apply-groups reference
              - apply-groups-exclude reference
              - remove (param-midstring-64 | string)
              - replace (param-midstring-64 | string)
            - create-mpls-tunnel boolean
            - create-udp-tunnel boolean
            - damping (keyword | param-midstring | string)
            - dest-class number
            - egress-statistics boolean
            - flex-algo (string | number)
            - forwarding-class
              - fc keyword
              - priority keyword
            - ingress-statistics boolean
            - install-backup-path boolean
            - local-preference (number | string)
            - metric
              - add (number | string)
              - set (number | string)
              - subtract (number | string)
            - multicast-redirection
              - fwd-service string
              - ip-int-name string
            - nat-policy (param-midstring | string)
            - next-hop (keyword | ipv4-address-no-zone | ipv6-address-no-zone | string)
            - origin (keyword | string)
            - origin-validation-state (keyword | string)
            - preference (number | string)
            - resolve-static boolean
            - route-table-install boolean
            - source-class number
            - sr-label-index
              - prefer-igp boolean
              - value (string | number)
            - sr-maintenance-policy (param-midstring | string)
            - srv6-locator (param-midstring-64 | string)
            - srv6-micro-segment-locator (param-midstring-64 | string)
            - srv6-return-path-bfd-sid (policy-var-name | ipv6-address)
            - sticky-ecmp boolean
            - tag (number | string)
            - type (number | string)
          - apply-groups reference
          - apply-groups-exclude reference
          - conditional-expression
            - apply-groups reference
            - apply-groups-exclude reference
            - route-exists string
          - description string
          - from
            - aggregate-contributor boolean
```


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configure policy-options policy-statement entry from apply-groups

```
                - apply-groups reference
                - apply-groups-exclude reference
                - area string
                - as-path
                  - group (param-midstring | string)
                  - length
                    - qualifier keyword
                    - unique boolean
                    - value (number | string)
                  - name (param-midstring | string)
                - cluster-id
                  - ip-address string
                  - none-cluster-list boolean
                - color number
                - community
                  - count
                    - qualifier keyword
                    - type keyword
                    - value (number | string)
                  - expression string
                  - name (param-midstring-64 | string)
                - distinguisher number
                - endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
                - evpn-type keyword
                - external boolean
                - family keyword
                - flowspec
                  - dest (param-midstring | string)
                  - source (param-midstring | string)
                - group-address (param-midstring | string)
                - host-ip (param-midstring | string)
                - interface (named-item | interface-name | interface-name | interface-name)
                - interface-subnets
                  - ip-int-name string
                  - service string
                - level number
                - local-preference
                  - qualifier keyword
                  - value (number | string)
                - metric
                  - qualifier keyword
                  - value (number | string)
                - mvpn-type keyword
                - neighbor
                  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-
with-zone | ipv6-address-with-zone)
                  - prefix-list (param-midstring | string)
                - next-hop
                  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
                  - prefix-list (param-midstring | string)
                - origin keyword
                - origin-validation-state keyword
                - ospf-type number
                - path-type keyword
                - policy (string | string)
                - policy-variables
                  - name string
                    - address (ipv4-address-no-zone | ipv6-address-no-zone)
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - decimal decimal-number
                    - number number
                    - prefix (ipv4-prefix | ipv6-prefix)
                    - value string
```


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configure policy-options policy-statement entry from prefix-list

```
                - prefix-list (param-midstring-64 | string)
                - protocol
                  - instance (keyword | number)
                  - name keyword
                - route-distinguisher-list (param-midstring-64 | string)
                - source-address
                  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
                  - prefix-list (param-midstring | string)
                - srv6-sid-prefix (policy-var-name | ipv6-unicast-prefix)
                - srv6-tlv keyword
                - state keyword
                - tag (number | keyword)
            - to
                - apply-groups reference
                - apply-groups-exclude reference
                - level number
                - neighbor
                  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-
with-zone | ipv6-address-with-zone)
                  - prefix-list (param-midstring | string)
                - prefix-list (param-midstring-64 | string)
                - protocol
                  - instance (keyword | number)
                  - name keyword
        - entry-type keyword
        - named-entry string
            - action
                - action-type keyword
                - add-paths-send-limit (number | keyword)
                - admin-tag-policy (param-midstring-64 | string)
                - advertise-label keyword
                - aigp-metric
                  - add (number | string)
                  - set (keyword | number | string)
                - apply-groups reference
                - apply-groups-exclude reference
                - as-path
                  - add (param-midstring | string)
                  - replace (param-midstring | string)
                - as-path-prepend
                  - as-path (number | string | keyword)
                  - repeat (number | string)
                - bgp-high-priority boolean
                - bgp-leak boolean
                - bgp-med
                  - adjust string
                  - set (keyword | number | string)
                - bgp-tunnel-metric
                  - prefer-aigp boolean
                  - prefer-med boolean
                  - value (string | number)
                - community
                  - add (param-midstring-64 | string)
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - remove (param-midstring-64 | string)
                  - replace (param-midstring-64 | string)
                - create-mpls-tunnel boolean
                - create-udp-tunnel boolean
                - damping (keyword | param-midstring | string)
                - dest-class number
                - egress-statistics boolean
                - flex-algo (string | number)
                - forwarding-class
```


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configure policy-options policy-statement named-entry action forwarding-class fc

```
                - fc keyword
                - priority keyword
            - ingress-statistics boolean
            - install-backup-path boolean
            - local-preference (number | string)
            - metric
                - add (number | string)
                - set (number | string)
                - subtract (number | string)
            - multicast-redirection
                - fwd-service string
                - ip-int-name string
            - nat-policy (param-midstring | string)
            - next-hop (keyword | ipv4-address-no-zone | ipv6-address-no-zone | string)
            - origin (keyword | string)
            - origin-validation-state (keyword | string)
            - preference (number | string)
            - resolve-static boolean
            - route-table-install boolean
            - source-class number
            - sr-label-index
                - prefer-igp boolean
                - value (string | number)
            - sr-maintenance-policy (param-midstring | string)
            - srv6-locator (param-midstring-64 | string)
            - srv6-micro-segment-locator (param-midstring-64 | string)
            - srv6-return-path-bfd-sid (policy-var-name | ipv6-address)
            - sticky-ecmp boolean
            - tag (number | string)
            - type (number | string)
        - apply-groups reference
        - apply-groups-exclude reference
        - conditional-expression
            - apply-groups reference
            - apply-groups-exclude reference
            - route-exists string
        - description string
        - from
            - aggregate-contributor boolean
            - apply-groups reference
            - apply-groups-exclude reference
            - area string
            - as-path
                - group (param-midstring | string)
                - length
                    - qualifier keyword
                    - unique boolean
                    - value (number | string)
                - name (param-midstring | string)
            - cluster-id
                - ip-address string
                - none-cluster-list boolean
            - color number
            - community
                - count
                    - qualifier keyword
                    - type keyword
                    - value (number | string)
                - expression string
                - name (param-midstring-64 | string)
            - distinguisher number
            - endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
            - evpn-type keyword
            - external boolean
```


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configure policy-options policy-statement named-entry from family

```
                - family keyword
                - flowspec
                  - dest (param-midstring | string)
                  - source (param-midstring | string)
                - group-address (param-midstring | string)
                - host-ip (param-midstring | string)
                - interface (named-item | interface-name | interface-name | interface-name)
                - interface-subnets
                  - ip-int-name string
                  - service string
                - level number
                - local-preference
                  - qualifier keyword
                  - value (number | string)
                - metric
                  - qualifier keyword
                  - value (number | string)
                - mvpn-type keyword
                - neighbor
                  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-
with-zone | ipv6-address-with-zone)
                  - prefix-list (param-midstring | string)
                - next-hop
                  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
                  - prefix-list (param-midstring | string)
                - origin keyword
                - origin-validation-state keyword
                - ospf-type number
                - path-type keyword
                - policy (string | string)
                - policy-variables
                  - name string
                    - address (ipv4-address-no-zone | ipv6-address-no-zone)
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - decimal decimal-number
                    - number number
                    - prefix (ipv4-prefix | ipv6-prefix)
                    - value string
                - prefix-list (param-midstring-64 | string)
                - protocol
                  - instance (keyword | number)
                  - name keyword
                - route-distinguisher-list (param-midstring-64 | string)
                - source-address
                  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
                  - prefix-list (param-midstring | string)
                - srv6-sid-prefix (policy-var-name | ipv6-unicast-prefix)
                - srv6-tlv keyword
                - state keyword
                - tag (number | keyword)
            - to
                - apply-groups reference
                - apply-groups-exclude reference
                - level number
                - neighbor
                  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-
with-zone | ipv6-address-with-zone)
                  - prefix-list (param-midstring | string)
                - prefix-list (param-midstring-64 | string)
                - protocol
                  - instance (keyword | number)
                  - name keyword
      - prefix-list string
```


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configure policy-options prefix-list apply-groups

```
        - apply-groups reference
        - apply-groups-exclude reference
        - prefix (ipv4-prefix | ipv6-prefix) type keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - end-length number
          - mask-pattern (ipv4-address-no-zone | ipv6-address-no-zone)
          - start-length number
          - through-length number
          - to-prefix (ipv4-prefix | ipv6-prefix)
      - route-distinguisher-list string
        - apply-groups reference
        - apply-groups-exclude reference
        - rd-entry string
```


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3.31.1 policy-options command descriptions

policy-options

Synopsis	Enter the **policy-options** context
Context	**configure** policy-options
Tree	policy-options
Introduced	16.0.R1
Platforms	All

as-path [name] *string*

Synopsis	Enter the **as-path** list instance
Context	**configure** policy-options as-path *string*
Tree	as-path
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	AS path name
Context	**configure** policy-options as-path *string*
Tree	as-path
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

expression *string*

Synopsis	Regular expression string
Context	**configure** policy-options as-path *string* expression *string*
Tree	expression
Description	This command configures a route policy AS path regular expression statement to use in route policy entries.

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An AS path in a BGP route matches an AS path regular expression, if the path matches the pattern of the regular expression. A regular expression incorporates terms and operators that use the terms. An individual AS number is an elementary term in the AS path regular expression. More complex terms can be built from elementary terms. The following are key operators supported by SR OS:

- .
- *
- ?
- {n}
- {m,n}
- {m, }

To reverse the match criteria when specifying a list of ranges or single values using square brackets, use the non-match operator (^) before the elements within the square brackets.

String Length	1 to 255
Introduced	16.0.R1
Platforms	All

as-path-group [name] *string*

Synopsis	Enter the **as-path-group** list instance
Context	**configure** policy-options as-path-group *string*
Tree	as-path-group
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	AS path group name
Context	**configure** policy-options as-path-group *string*
Tree	as-path-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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entry [entry] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** policy-options as-path-group *string* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**entry**] *number*

Synopsis	AS path entry ID
Context	**configure** policy-options as-path-group *string* entry *number*
Tree	entry
Range	1 to 128
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

expression *string*

Synopsis	Regular expression string
Context	**configure** policy-options as-path-group *string* entry *number* expression *string*
Tree	expression
Description	This command configures an AS path group regular expression.

An AS path in a BGP route matches an AS path group, if the pattern of the path matches the concatenation of all regular expressions in the group. A regular expression incorporates terms and operators that use the terms. An individual AS number is an elementary term in the AS path regular expression. More complex terms can be built from elementary terms. The following are key operators supported by SR OS:

- .
- *
- ?
- {n}
- {m,n}
- {m, }

To reverse the match criteria when specifying a list of ranges or single values using square brackets, use the non-match operator (^) before the elements within the square brackets.

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String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

community [name] *string*

Synopsis	Enter the **community** list instance
Context	**configure** policy-options community *string*
Tree	community
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	Community name
Context	**configure** policy-options community *string*
Tree	community
Description	This command configures a route policy community name. String values must be composed of printable, 7-bit ASCII characters. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes.
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

expression

Synopsis	Enable the **expression** context
Context	**configure** policy-options community *string* expression
Tree	expression
Introduced	16.0.R1
Platforms	All

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exact *boolean*

Synopsis	Match exactly for the specified expression
Context	**configure** policy-options community *string* expression exact *boolean*
Tree	exact
Default	false
Introduced	16.0.R1
Platforms	All

expr *string*

Synopsis	Community expression value
Context	**configure** policy-options community *string* expression expr *string*
Tree	expr
String Length	1 to 900
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

member [member] *string*

Synopsis	Add a list entry for **member**
Context	**configure** policy-options community *string* member *string*
Tree	member
Introduced	16.0.R1
Platforms	All

[**member**] *string*

Synopsis	Community member value
Context	**configure** policy-options community *string* member *string*
Tree	member
Description	This command configures a BGP community value. Each member of a community list is a standard, extended, or large community value or a regular expression that potentially matches many community values. A regular expression incorporates terms and operators that use the terms. An individual numerical digit is an elementary term in the community regular expression. More complex terms

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can be built from elementary terms. The following are key operators supported by SR OS:

- .
- *
- ?
- {n}
- {m,n}
- {m, }

To reverse the match criteria when specifying a list of ranges or single values using square brackets, use the non-match operator (^) before the elements within the square brackets.

String Length	1 to 72
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

damping [name] *string*

Synopsis	Enter the **damping** list instance
Context	**configure** policy-options damping *string*
Tree	damping
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	Damping profile name
Context	**configure** policy-options damping *string*
Tree	damping
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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half-life *number*

Synopsis	Time after the FOM value is halved
Context	**configure** policy-options damping *string* half-life *number*
Tree	half-life
Range	1 to 45
Units	minutes
Introduced	16.0.R1
Platforms	All

max-suppress *number*

Synopsis	Maximum time for a route to remain suppressed
Context	**configure** policy-options damping *string* max-suppress *number*
Tree	max-suppress
Range	1 to 720
Units	minutes
Introduced	16.0.R1
Platforms	All

reuse *number*

Synopsis	Value below which a suppressed route can be used again
Context	**configure** policy-options damping *string* reuse *number*
Tree	reuse
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

suppress *number*

Synopsis	Value above which a route is suppressed
Context	**configure** policy-options damping *string* suppress *number*
Tree	suppress
Range	1 to 20000
Introduced	16.0.R1

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Platforms	All

global-variables

Synopsis	Enter the **global-variables** context
Context	**configure** policy-options global-variables
Tree	global-variables
Introduced	16.0.R4
Platforms	All

name [variable-name] *string*

Synopsis	Enter the **name** list instance
Context	**configure** policy-options global-variables name *string*
Tree	name
Max. Instances	1000
Introduced	16.0.R4
Platforms	All

[**variable-name**] *string*

Synopsis	Global variable name used to reference policy functions
Context	**configure** policy-options global-variables name *string*
Tree	name
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the policy variable
Context	**configure** policy-options global-variables name *string* address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	address

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Notes	The following elements are part of a mandatory choice: **address**, **decimal**, **number**, **prefix**, or **value**.
Introduced	16.0.R4
Platforms	All

decimal *decimal-number*

Synopsis	Attribute decimal to which variable name is resolved
Context	**configure** policy-options global-variables name *string* decimal *decimal-number*
Tree	decimal
Range	0.000 to 4294967295.000
Notes	The following elements are part of a mandatory choice: **address**, **decimal**, **number**, **prefix**, or **value**.
Introduced	19.7.R1
Platforms	All

number *number*

Synopsis	Numerical value of the policy variable
Context	**configure** policy-options global-variables name *string* number *number*
Tree	number
Range	0 to 4294967295
Notes	The following elements are part of a mandatory choice: **address**, **decimal**, **number**, **prefix**, or **value**.
Introduced	16.0.R4
Platforms	All

prefix *(ipv4-prefix | ipv6-prefix)*

Synopsis	Prefix value associated with the variable name
Context	**configure** policy-options global-variables name *string* prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Notes	The following elements are part of a mandatory choice: **address**, **decimal**, **number**, **prefix**, or **value**.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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value *string*

Synopsis	Policy variable value
Context	**configure** policy-options global-variables name *string* value *string*
Tree	value
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: **address**, **decimal**, **number**, **prefix**, or **value**.
Introduced	16.0.R4
Platforms	All

policy-statement [name] *string*

Synopsis	Enter the **policy-statement** list instance
Context	**configure** policy-options policy-statement *string*
Tree	policy-statement
Max. Instances	65535
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	Route policy statement name
Context	**configure** policy-options policy-statement *string*
Tree	policy-statement
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

default-action

Synopsis	Enable the **default-action** context
Context	**configure** policy-options policy-statement *string* default-action

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Tree	default-action
Introduced	16.0.R1
Platforms	All

action-type *keyword*

Synopsis	Action type for routes matching the route policy entry
Context	**configure** policy-options policy-statement *string* default-action action-type *keyword*
Tree	action-type
Options	accept, reject, next-entry, next-policy
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

add-paths-send-limit *(number | keyword)*

Synopsis	BGP Add-Paths send limit applied for routes
Context	**configure** policy-options policy-statement *string* default-action add-paths-send-limit *(number | keyword)*
Tree	add-paths-send-limit
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

admin-tag-policy *(param-midstring-64 | string)*

Synopsis	Administrative tag policy name
Context	**configure** policy-options policy-statement *string* default-action admin-tag-policy *(param-midstring-64 | string)*
Tree	admin-tag-policy
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

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advertise-label *keyword*

Synopsis	Label allocation for matched BGP routes
Context	**configure** policy-options policy-statement *string* default-action advertise-label *keyword*
Tree	advertise-label
Description	This command configures the label allocation method for advertised routes. The effect of this command depends on the context where the associated policy is applied.
Options	per-prefix, pop, pop-and-forward
Introduced	16.0.R1
Platforms	All

aigp-metric

Synopsis	Enter the **aigp-metric** context
Context	**configure** policy-options policy-statement *string* default-action aigp-metric
Tree	aigp-metric
Introduced	16.0.R1
Platforms	All

add *(number | string)*

Synopsis	AIGP metric to add
Context	**configure** policy-options policy-statement *string* default-action aigp-metric add *(number | string)*
Tree	add
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: **add** or **set**.
Introduced	16.0.R1
Platforms	All

set *(keyword | number | string)*

Synopsis	AIGP metric
Context	**configure** policy-options policy-statement *string* default-action aigp-metric set *(keyword | number | string)*
Tree	set

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String Length	1 to 32
Range	0 to 4294967295
Options	igp
Notes	The following elements are part of a choice: **add** or **set**.
Introduced	16.0.R1
Platforms	All

as-path

Synopsis	Enter the **as-path** context
Context	**configure** policy-options policy-statement *string* default-action as-path
Tree	as-path
Introduced	16.0.R1
Platforms	All

add *(param-midstring | string)*

Synopsis	AS path to add
Context	**configure** policy-options policy-statement *string* default-action as-path add *(param-midstring | string)*
Tree	add
String Length	1 to 32
Notes	The following elements are part of a choice: **add** or **replace**.
Introduced	16.0.R1
Platforms	All

replace *(param-midstring | string)*

Synopsis	AS path to replace
Context	**configure** policy-options policy-statement *string* default-action as-path replace *(param-midstring | string)*
Tree	replace
String Length	1 to 32
Notes	The following elements are part of a choice: **add** or **replace**.
Introduced	16.0.R1

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Platforms	All

as-path-prepend

Synopsis	Enter the **as-path-prepend** context
Context	**configure** policy-options policy-statement *string* default-action as-path-prepend
Tree	as-path-prepend
Introduced	16.0.R1
Platforms	All

as-path *(number | string | keyword)*

Synopsis	AS number to prepend to the AS path attribute
Context	**configure** policy-options policy-statement *string* default-action as-path-prepend as-path *(number | string | keyword)*
Tree	as-path
String Length	1 to 32
Range	1 to 4294967295
Options	most-recent
Introduced	16.0.R1
Platforms	All

repeat *(number | string)*

Synopsis	Number of times to prepend the specified AS number
Context	**configure** policy-options policy-statement *string* default-action as-path-prepend repeat *(number | string)*
Tree	repeat
String Length	1 to 32
Range	1 to 50
Default	1
Introduced	16.0.R1
Platforms	All

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bgp-high-priority *boolean*

Synopsis	Tag routes as high priority for fast table updates
Context	**configure** policy-options policy-statement *string* default-action bgp-high-priority *boolean*
Tree	bgp-high-priority
Description	When configured to **true**, eligible BGP routes matched by the policy entry or policy default-action are tagged as needing faster route table updates. This action applies only when the policy is applied as a BGP import policy to a base router BGP peer or VPRN BGP peer and applies only to the following route types: • IPv4 • label-IPv4 • IPv6 • label-IPv6 This command is useful when the BGP RIB contains a large number of routes and quick routing table updates are needed for a small subset of these routes. The effectiveness of this command decreases as the subset becomes a larger proportion of the total RIB. When configured to **false**, no routes are tagged for faster route table updates.
Default	false
Introduced	20.5.R1
Platforms	All

bgp-leak *boolean*

Synopsis	Allow leaking for BGP routes
Context	**configure** policy-options policy-statement *string* default-action bgp-leak *boolean*
Tree	bgp-leak
Default	false
Introduced	16.0.R1
Platforms	All

bgp-med

Synopsis	Enter the **bgp-med** context
Context	**configure** policy-options policy-statement *string* default-action bgp-med
Tree	bgp-med
Introduced	19.7.R1
Platforms	All

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adjust *string*

Synopsis	BGP-MED adjustment
Context	**configure** policy-options policy-statement *string* default-action bgp-med adjust *string*
Tree	adjust
String Length	1 to 64
Notes	The following elements are part of a choice: **adjust** or **set**.
Introduced	19.7.R1
Platforms	All

set *(keyword | number | string)*

Synopsis	BGP-MED assignment
Context	**configure** policy-options policy-statement *string* default-action bgp-med set *(keyword | number | string)*
Tree	set
String Length	1 to 32
Range	0 to 4294967295
Options	igp, min-igp
Notes	The following elements are part of a choice: **adjust** or **set**.
Introduced	19.7.R1
Platforms	All

bgp-tunnel-metric

Synopsis	Enter the **bgp-tunnel-metric** context
Context	**configure** policy-options policy-statement *string* default-action bgp-tunnel-metric
Tree	bgp-tunnel-metric
Description	Commands in this context configure the tunnel-table metrics associated with BGP label unicast routes that pass through to the default action of the policy.
Introduced	20.5.R1
Platforms	All

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prefer-aigp *boolean*

Synopsis	Use AIGP attribute as tunnel metric when present
Context	**configure** policy-options policy-statement *string* default-action bgp-tunnel-metric prefer-aigp *boolean*
Tree	prefer-aigp
Description	When configured to **true**, and a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy. The TTM metric of the tunnel is set to the AIGP metric value of the BGP-LU route plus the IGP cost to reach the BGP next-hop if it has the AIGP path attribute, otherwise it is set to the value implied by the value leaf. When configured to **false**, the AIGP attribute is removed from the advertised routes and is ignored if present in the received routes.
Default	false
Introduced	20.5.R1
Platforms	All

prefer-med *boolean*

Synopsis	Use MED attribute as tunnel metric when present
Context	**configure** policy-options policy-statement *string* default-action bgp-tunnel-metric prefer-med *boolean*
Tree	prefer-med
Description	When configured to **true**, if a BGP-LU route is selected for installation in the TTM and is matched by this action in a BGP import policy, the TTM metric of the tunnel is set to the MED metric value of the BGP-LU route with the IGP cost to reach the BGP next hop added to it. When configured to **false**, the BGP tunnel metric associated with the BGP-LU route accepted by this policy action is not determined using the MED attribute.
Default	false
Introduced	23.3.R1
Platforms	All

value *(string | number)*

Synopsis	BGP tunnel table metric value
Context	**configure** policy-options policy-statement *string* default-action bgp-tunnel-metric value *(string | number)*
Tree	value
Description	This command configures a BGP tunnel metric is assigned to routes that do not match any entry.

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If a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy, the TTM metric of the associated tunnel is set to this value (or the value associated with the parameter name) if either:

- the prefer-aigp option is set to false
- the prefer-aigp option is set to true but the BGP-LU route does not have an AIGP attribute

String Length	1 to 32
Range	0 to 4294967295
Introduced	20.5.R1
Platforms	All

community

Synopsis	Enter the **community** context
Context	**configure** policy-options policy-statement *string* default-action community
Tree	community
Introduced	16.0.R1
Platforms	All

add *(param-midstring-64 | string)*

Synopsis	List of community names to add
Context	**configure** policy-options policy-statement *string* default-action community add *(param-midstring-64 | string)*
Tree	add
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: (**add** and **remove**) or **replace**. This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

remove *(param-midstring-64 | string)*

Synopsis	List of community names to remove

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Context	**configure** policy-options policy-statement *string* default-action community remove *(param-midstring-64 | string)*
Tree	remove
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: (**add** and **remove**) or **replace**. This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

replace *(param-midstring-64 | string)*

Synopsis	List of community names to replace
Context	**configure** policy-options policy-statement *string* default-action community replace *(param-midstring-64 | string)*
Tree	replace
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: (**add** and **remove**) or **replace**. This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

create-mpls-tunnel *boolean*

Synopsis	Create an MPLS tunnel
Context	**configure** policy-options policy-statement *string* default-action create-mpls-tunnel *boolean*
Tree	create-mpls-tunnel
Description	When configured to **true**, the router creates an MPLS tunnel. This command is supported for only the following address families: • evpn • ipv4 • ipv6 • label-ipv4

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- label-ipv6
- vpn-ipv4
- vpn-ipv6

Default	false
Introduced	21.10.R1
Platforms	All

create-udp-tunnel *boolean*

Synopsis	Create an MPLS-over-UDP tunnel
Context	**configure** policy-options policy-statement *string* default-action create-udp-tunnel *boolean*
Tree	create-udp-tunnel
Default	false
Introduced	16.0.R1
Platforms	All

damping *(keyword | param-midstring | string)*

Synopsis	Damping profile used for routes
Context	**configure** policy-options policy-statement *string* default-action damping *(keyword | param-midstring | string)*
Tree	damping
String Length	1 to 32
Options	none
Introduced	16.0.R1
Platforms	All

dest-class *number*

Synopsis	Default destination class for the policy statement
Context	**configure** policy-options policy-statement *string* default-action dest-class *number*
Tree	dest-class
Description	This command specifies the policy accounting destination class index to associate with matched routes.
Range	1 to 255

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

egress-statistics *boolean*

Synopsis	Enable egress statistics for BGP-LU routes
Context	**configure** policy-options policy-statement *string* default-action egress-statistics *boolean*
Tree	egress-statistics
Description	When configured to **true**, this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on egress data paths. When configured to **false**, this command disables the allocation of statistical indexes to BGP-LU route entries.
Default	false
Introduced	20.10.R1
Platforms	All

flex-algo *(string | number)*

Synopsis	Flexible algorithm for BGP next-hop autobind operation
Context	**configure** policy-options policy-statement *string* default-action flex-algo *(string | number)*
Tree	flex-algo
Description	This command configures the Flex-Algorithm for use in the BGP next-hop automatic bind operation in a BGP import policy. A Flex-Algorithm aware autobind of the BGP next-hop is enabled when the route is matched by the policy statement entry. Flex-Algorithm aware next-hop lookup is supported for unicast BGP, VPRN, and BGP-LU. This command is not supported for multicast address families.
String Length	1 to 32
Range	128 to 255
Introduced	20.10.R1
Platforms	All

ingress-statistics *boolean*

Synopsis	Enable ingress statistics for BGP-LU routes
Context	**configure** policy-options policy-statement *string* default-action ingress-statistics *boolean*

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Tree	ingress-statistics
Description	When configured to **true**, this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on ingress data paths. For effective operation, a prefix must be advertised with a label per prefix for ILM statistics. When configured to **false**, this command disables the allocation of statistical indexes to BGP-LU route entries.
Default	false
Introduced	20.10.R1
Platforms	All

install-backup-path *boolean*

Synopsis	Install a preprogrammed backup path for the prefix
Context	**configure** policy-options policy-statement *string* default-action install-backup-path *boolean*
Tree	install-backup-path
Default	false
Introduced	16.0.R1
Platforms	All

local-preference *(number | string)*

Synopsis	BGP local preference for routes not matching any entry
Context	**configure** policy-options policy-statement *string* default-action local-preference *(number | string)*
Tree	local-preference
String Length	1 to 32
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

metric

Synopsis	Enter the **metric** context
Context	**configure** policy-options policy-statement *string* default-action metric
Tree	metric
Introduced	16.0.R1

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Platforms	All

add *(number | string)*

Synopsis	Metric to add
Context	**configure** policy-options policy-statement *string* default-action metric add *(number | string)*
Tree	add
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: **add**, **set**, or **subtract**.
Introduced	16.0.R1
Platforms	All

set *(number | string)*

Synopsis	Metric to assign
Context	**configure** policy-options policy-statement *string* default-action metric set *(number | string)*
Tree	set
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: **add**, **set**, or **subtract**.
Introduced	16.0.R1
Platforms	All

subtract *(number | string)*

Synopsis	Metric to subtract
Context	**configure** policy-options policy-statement *string* default-action metric subtract *(number | string)*
Tree	subtract
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: **add**, **set**, or **subtract**.
Introduced	16.0.R1

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Platforms	All

multicast-redirection

Synopsis	Enter the **multicast-redirection** context
Context	**configure** policy-options policy-statement *string* default-action multicast-redirection
Tree	multicast-redirection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fwd-service *string*

Synopsis	Service ID for multicast redirection
Context	**configure** policy-options policy-statement *string* default-action multicast-redirection fwd-service *string*
Tree	fwd-service
Default	Base
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-int-name *string*

Synopsis	Alternate interface where IGMP messages are redirected
Context	**configure** policy-options policy-statement *string* default-action multicast-redirection ip-int-name *string*
Tree	ip-int-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nat-policy *(param-midstring | string)*

Synopsis	BGP-VPN imported route and a NAT policy association
Context	**configure** policy-options policy-statement *string* default-action nat-policy *(param-midstring | string)*
Tree	nat-policy

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Description	This command assigns a NAT policy to the matched routes that do not have a more specific NAT policy configured under action. A dynamic route obtained by BGP-VPN can be imported into an inside (private side) routing context in NAT environment. This route must be associated with a NAT policy that maps traffic into a NAT pool and outside routing context. If the NAT policy is not specified within the route policy entry, the imported NAT route is, by default, associated with the default NAT policy defined in the NAT inside routing context. All BGP-VPN routes that are destined to be imported into the NAT inside routing context must have action-type **accept** regardless of whether the NAT policy is configured in the action.
String Length	1 to 32
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

next-hop *(keyword | ipv4-address-no-zone | ipv6-address-no-zone | string)*

Synopsis	Next-hop IP address applied to routes
Context	**configure** policy-options policy-statement *string* default-action next-hop *(keyword | ipv4-address-no-zone | ipv6-address-no-zone | string)*
Tree	next-hop
String Length	1 to 32
Options	peer-address, self
Introduced	16.0.R1
Platforms	All

origin *(keyword | string)*

Synopsis	BGP origin for routes that are exported into BGP
Context	**configure** policy-options policy-statement *string* default-action origin *(keyword | string)*
Tree	origin
String Length	1 to 32
Options	igp, egp, incomplete
Introduced	16.0.R1
Platforms	All

origin-validation-state *(keyword | string)*

Synopsis	Origin validation state for routes

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Context	**configure** policy-options policy-statement *string* default-action origin-validation-state *(keyword* | *string)*
Tree	origin-validation-state
String Length	1 to 32
Options	valid, not-found, invalid
Introduced	16.0.R1
Platforms	All

preference *(number* | *string)*

Synopsis	Route preference applied to routes
Context	**configure** policy-options policy-statement *string* default-action preference *(number* | *string)*
Tree	preference
String Length	1 to 32
Range	1 to 255
Introduced	16.0.R1
Platforms	All

resolve-static *boolean*

Synopsis	Resolve next hop of a static route for the BGP next hop
Context	**configure** policy-options policy-statement *string* default-action resolve-static *boolean*
Tree	resolve-static
Default	false
Introduced	16.0.R1
Platforms	All

route-table-install *boolean*

Synopsis	Allow BGP route installation in the route table
Context	**configure** policy-options policy-statement *string* default-action route-table-install *boolean*
Tree	route-table-install
Default	true
Introduced	19.10.R1

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Platforms	All

source-class *number*

Synopsis	Default source class for the policy statement
Context	**configure** policy-options policy-statement *string* default-action source-class *number*
Tree	source-class
Description	This command specifies the policy accounting source class index to associate with matched routes.
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

sr-label-index

Synopsis	Enter the **sr-label-index** context
Context	**configure** policy-options policy-statement *string* default-action sr-label-index
Tree	sr-label-index
Description	Commands in this context configure the policy action to associate a BGP segment-routing label index value with all /32 BGP labeled IPv4 routes. The use of this action in a policy entry that matches more than one /32 labeled IPv4 route may create SID conflicts. This action only takes effect in BGP peer import policies (and only on received /32 labeled IPv4 routes) and in route table import policies associated with the labeled IPv4 RIB. When this action occurs in a policy applied as a peer import policy, a prefix SID attribute can be added to a received /32 labeled IPv4 route that was not sent with this attribute, or the received prefix SID attribute can be replaced with a new one.
Introduced	19.10.R1
Platforms	All

prefer-igp *boolean*

Synopsis	Use the SR label index from the IGP route when present
Context	**configure** policy-options policy-statement *string* default-action sr-label-index prefer-igp *boolean*
Tree	prefer-igp

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Description	When configured to **true**, BGP obtains the SID index from the IGP route (if a SID index is present) and the **configure router bgp segment-routing prefix-sid-range global** command is set to **true**. This command applies only to route table import policies. When configured to **false**, or the SID index is not present in the IGP route, or the **configure router bgp segment-routing prefix-sid-range global** command is not set to **true**, BGP obtains the label index value from the **value** command.
Default	false
Introduced	19.10.R1
Platforms	All

value *(string | number)*

Synopsis	BGP SR label index associated with routes
Context	**configure** policy-options policy-statement *string* default-action sr-label-index value *(string | number)*
Tree	value
Description	This command specifies the BGP SR label index value to be associated with a route or routes. If this command specifies an index value that causes a SID conflict with another BGP route, all conflicting BGP routes are re-advertised with label values based on dynamic allocation rather than SID-based allocation. If this command specifies an index value that causes a SID conflict with an IGP route, the BGP route is re-advertised with a label value based on dynamic allocation rather than SID-based allocation.
String Length	1 to 32
Range	0 to 524287
Introduced	19.10.R1
Platforms	All

sr-maintenance-policy *(param-midstring | string)*

Synopsis	SR maintenance policy as an action
Context	**configure** policy-options policy-statement *string* default-action sr-maintenance-policy *(param-midstring | string)*
Tree	sr-maintenance-policy
Description	This command applies a named segment routing maintenance policy as an action for route policies. It is only used for SR policy routes.
String Length	1 to 32

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Introduced	20.10.R1
Platforms	All

srv6-locator *(param-midstring-64 | string)*

Synopsis	Locator for SRv6 TLV to use
Context	**configure** policy-options policy-statement *string* default-action srv6-locator *(param-midstring-64 | string)*
Tree	srv6-locator
Description	This command configures either a string encoding a midstring parameter delimited by at signs (@), or a reference to a named locator for the SRv6 TLV to use. For a VRF export policy, the referenced locator must already be configured using the commands in the **configure service vprn segment-routing-v6 locator** context. For a BGP export policy, the referenced locator must already be configured using the commands in the **configure router segment-routing segment-routing-v6 base-routing-instance locator** context.
String Length	1 to 64
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

srv6-micro-segment-locator *(param-midstring-64 | string)*

Synopsis	Micro-segment locator for SRv6 TLV to use
Context	**configure** policy-options policy-statement *string* default-action srv6-micro-segment-locator *(param-midstring-64 | string)*
Tree	srv6-micro-segment-locator
Description	This command configures either a string encoding a midstring parameter delimited by at signs (@), or a reference to a named micro-segment locator for the SRv6 TLV to use. For a VRF export policy, the referenced micro-segment locator must already be configured using the commands in the **configure service vprn segment-routing-v6 micro-segment-locator** context. For a BGP export policy, the referenced micro-SID locator must already be configured using the commands in the **configure router segment-routing segment-routing-v6 base-routing-instance micro-segment-locator** context.
String Length	1 to 64
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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srv6-return-path-bfd-sid *(policy-var-name | ipv6-address)*

Synopsis	SRv6 return path BFD SID applied to SRv6 policy routes
Context	**configure** policy-options policy-statement *string* default-action srv6-return-path-bfd-sid *(policy-var-name | ipv6-address)*
Tree	srv6-return-path-bfd-sid
Description	This command configures the S-BFD session to echo mode and pushes an additional SRv6 SID in the SRH only for S-BFD packets sent on the imported SRv6 policy.
String Length	1 to 32
Introduced	23.3.R1
Platforms	All

sticky-ecmp *boolean*

Synopsis	Specify the sticky ECMP flag for BGP ECMP routes
Context	**configure** policy-options policy-statement *string* default-action sticky-ecmp *boolean*
Tree	sticky-ecmp
Default	false
Introduced	16.0.R1
Platforms	All

tag *(number | string)*

Synopsis	OSPF RIP or IS-IS tag applied to routes
Context	**configure** policy-options policy-statement *string* default-action tag *(number | string)*
Tree	tag
String Length	1 to 32
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

type *(number | string)*

Synopsis	OSPF metric type applied to routes
Context	**configure** policy-options policy-statement *string* default-action type *(number | string)*
Tree	type

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String Length	1 to 32
Range	1 to 2
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** policy-options policy-statement *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** policy-options policy-statement *string* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**entry-id**] *number*

Synopsis	Entry ID for a route policy entry
Context	**configure** policy-options policy-statement *string* entry *number*
Tree	entry
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enable the **action** context

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Context	**configure** policy-options policy-statement *string* entry *number* action
Tree	action
Introduced	16.0.R1
Platforms	All

action-type *keyword*

Synopsis	Action type for routes matching the route policy entry
Context	**configure** policy-options policy-statement *string* entry *number* action action-type *keyword*
Tree	action-type
Options	accept, reject, next-entry, next-policy
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

add-paths-send-limit *(number | keyword)*

Synopsis	BGP Add-Paths send limit applied for routes
Context	**configure** policy-options policy-statement *string* entry *number* action add-paths-send-limit *(number | keyword)*
Tree	add-paths-send-limit
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

admin-tag-policy *(param-midstring-64 | string)*

Synopsis	Administrative tag policy name
Context	**configure** policy-options policy-statement *string* entry *number* action admin-tag-policy *(param-midstring-64 | string)*
Tree	admin-tag-policy
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

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advertise-label *keyword*

Synopsis	Label allocation for matched BGP routes
Context	**configure** policy-options policy-statement *string* entry *number* action advertise-label *keyword*
Tree	advertise-label
Description	This command configures the label allocation method for advertised routes. The effect of this command depends on the context where the associated policy is applied.
Options	per-prefix, pop, pop-and-forward
Introduced	16.0.R1
Platforms	All

aigp-metric

Synopsis	Enter the **aigp-metric** context
Context	**configure** policy-options policy-statement *string* entry *number* action aigp-metric
Tree	aigp-metric
Introduced	16.0.R1
Platforms	All

add *(number | string)*

Synopsis	AIGP metric to add
Context	**configure** policy-options policy-statement *string* entry *number* action aigp-metric add *(number | string)*
Tree	add
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: **add** or **set**.
Introduced	16.0.R1
Platforms	All

set *(keyword | number | string)*

Synopsis	AIGP metric

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Context	**configure** policy-options policy-statement *string* entry *number* action aigp-metric set *(keyword* | *number* | *string)*
Tree	set
String Length	1 to 32
Range	0 to 4294967295
Options	igp
Notes	The following elements are part of a choice: **add** or **set**.
Introduced	16.0.R1
Platforms	All

as-path

Synopsis	Enter the **as-path** context
Context	**configure** policy-options policy-statement *string* entry *number* action as-path
Tree	as-path
Introduced	16.0.R1
Platforms	All

add *(param-midstring* | *string)*

Synopsis	AS path to add
Context	**configure** policy-options policy-statement *string* entry *number* action as-path add *(param-midstring* | *string)*
Tree	add
String Length	1 to 32
Notes	The following elements are part of a choice: **add** or **replace**.
Introduced	16.0.R1
Platforms	All

replace *(param-midstring* | *string)*

Synopsis	AS path to replace
Context	**configure** policy-options policy-statement *string* entry *number* action as-path replace *(param-midstring* | *string)*
Tree	replace
String Length	1 to 32

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Notes	The following elements are part of a choice: **add** or **replace**.
Introduced	16.0.R1
Platforms	All

as-path-prepend

Synopsis	Enter the **as-path-prepend** context
Context	**configure** policy-options policy-statement *string* entry *number* action as-path-prepend
Tree	as-path-prepend
Introduced	16.0.R1
Platforms	All

as-path *(number | string | keyword)*

Synopsis	AS number to prepend to the AS path attribute
Context	**configure** policy-options policy-statement *string* entry *number* action as-path-prepend as-path *(number | string | keyword)*
Tree	as-path
String Length	1 to 32
Range	1 to 4294967295
Options	most-recent
Introduced	16.0.R1
Platforms	All

repeat *(number | string)*

Synopsis	Number of times to prepend the specified AS number
Context	**configure** policy-options policy-statement *string* entry *number* action as-path-prepend repeat *(number | string)*
Tree	repeat
String Length	1 to 32
Range	1 to 50
Default	1
Introduced	16.0.R1
Platforms	All

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bgp-high-priority *boolean*

Synopsis	Tag routes as high priority for fast table updates
Context	**configure** policy-options policy-statement *string* entry *number* action bgp-high-priority *boolean*
Tree	bgp-high-priority
Description	When configured to **true**, eligible BGP routes matched by the policy entry or policy default-action are tagged as needing faster route table updates. This action applies only when the policy is applied as a BGP import policy to a base router BGP peer or VPRN BGP peer and applies only to the following route types: • IPv4 • label-IPv4 • IPv6 • label-IPv6 This command is useful when the BGP RIB contains a large number of routes and quick routing table updates are needed for a small subset of these routes. The effectiveness of this command decreases as the subset becomes a larger proportion of the total RIB. When configured to **false**, no routes are tagged for faster route table updates.
Default	false
Introduced	20.5.R1
Platforms	All

bgp-leak *boolean*

Synopsis	Allow leaking for BGP routes
Context	**configure** policy-options policy-statement *string* entry *number* action bgp-leak *boolean*
Tree	bgp-leak
Default	false
Introduced	16.0.R1
Platforms	All

bgp-med

Synopsis	Enter the **bgp-med** context
Context	**configure** policy-options policy-statement *string* entry *number* action bgp-med
Tree	bgp-med
Introduced	19.7.R1

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Platforms	All

adjust *string*

Synopsis	BGP-MED adjustment
Context	**configure** policy-options policy-statement *string* entry *number* action bgp-med adjust *string*
Tree	adjust
String Length	1 to 64
Notes	The following elements are part of a choice: **adjust** or **set**.
Introduced	19.7.R1
Platforms	All

set *(keyword | number | string)*

Synopsis	BGP-MED assignment
Context	**configure** policy-options policy-statement *string* entry *number* action bgp-med set *(keyword | number | string)*
Tree	set
String Length	1 to 32
Range	0 to 4294967295
Options	igp, min-igp
Notes	The following elements are part of a choice: **adjust** or **set**.
Introduced	19.7.R1
Platforms	All

bgp-tunnel-metric

Synopsis	Enter the **bgp-tunnel-metric** context
Context	**configure** policy-options policy-statement *string* entry *number* action bgp-tunnel-metric
Tree	bgp-tunnel-metric
Description	Commands in this context configure the tunnel-table metrics associated with BGP label unicast routes that pass through to the default action of the policy.
Introduced	20.5.R1
Platforms	All

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prefer-aigp *boolean*

Synopsis	Use AIGP attribute as tunnel metric when present
Context	**configure** policy-options policy-statement *string* entry *number* action bgp-tunnel-metric prefer-aigp *boolean*
Tree	prefer-aigp
Description	When configured to **true**, and a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy. The TTM metric of the tunnel is set to the AIGP metric value of the BGP-LU route plus the IGP cost to reach the BGP next-hop if it has the AIGP path attribute, otherwise it is set to the value implied by the value leaf. When configured to **false**, the AIGP attribute is removed from the advertised routes and is ignored if present in the received routes.
Default	false
Introduced	20.5.R1
Platforms	All

prefer-med *boolean*

Synopsis	Use MED attribute as tunnel metric when present
Context	**configure** policy-options policy-statement *string* entry *number* action bgp-tunnel-metric prefer-med *boolean*
Tree	prefer-med
Description	When configured to **true**, if a BGP-LU route is selected for installation in the TTM and is matched by this action in a BGP import policy, the TTM metric of the tunnel is set to the MED metric value of the BGP-LU route with the IGP cost to reach the BGP next hop added to it. When configured to **false**, the BGP tunnel metric associated with the BGP-LU route accepted by this policy action is not determined using the MED attribute.
Default	false
Introduced	23.3.R1
Platforms	All

value *(string | number)*

Synopsis	BGP tunnel table metric value
Context	**configure** policy-options policy-statement *string* entry *number* action bgp-tunnel-metric value *(string | number)*
Tree	value

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Description	This command configures a BGP tunnel metric is assigned to routes that do not match any entry. If a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy, the TTM metric of the associated tunnel is set to this value (or the value associated with the parameter name) if either: • the prefer-aigp option is set to false • the prefer-aigp option is set to true but the BGP-LU route does not have an AIGP attribute
String Length	1 to 32
Range	0 to 4294967295
Introduced	20.5.R1
Platforms	All

community

Synopsis	Enter the **community** context
Context	**configure** policy-options policy-statement *string* entry *number* action community
Tree	community
Introduced	16.0.R1
Platforms	All

add *(param-midstring-64 | string)*

Synopsis	List of community names to add
Context	**configure** policy-options policy-statement *string* entry *number* action community add *(param-midstring-64 | string)*
Tree	add
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: (**add** and **remove**) or **replace**. This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

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remove *(param-midstring-64 | string)*

Synopsis	List of community names to remove
Context	**configure** policy-options policy-statement *string* entry *number* action community remove *(param-midstring-64 | string)*
Tree	remove
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: (**add** and **remove**) or **replace**. This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

replace *(param-midstring-64 | string)*

Synopsis	List of community names to replace
Context	**configure** policy-options policy-statement *string* entry *number* action community replace *(param-midstring-64 | string)*
Tree	replace
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: (**add** and **remove**) or **replace**. This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

create-mpls-tunnel *boolean*

Synopsis	Create an MPLS tunnel
Context	**configure** policy-options policy-statement *string* entry *number* action create-mpls-tunnel *boolean*
Tree	create-mpls-tunnel
Description	When configured to **true**, the router creates an MPLS tunnel. This command is supported for only the following address families: • evpn

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- ipv4
- ipv6
- label-ipv4
- label-ipv6
- vpn-ipv4
- vpn-ipv6

Default	false
Introduced	21.10.R1
Platforms	All

create-udp-tunnel *boolean*

Synopsis	Create an MPLS-over-UDP tunnel
Context	**configure** policy-options policy-statement *string* entry *number* action create-udp-tunnel *boolean*
Tree	create-udp-tunnel
Default	false
Introduced	16.0.R1
Platforms	All

damping *(keyword | param-midstring | string)*

Synopsis	Damping profile used for routes
Context	**configure** policy-options policy-statement *string* entry *number* action damping *(keyword | param-midstring | string)*
Tree	damping
String Length	1 to 32
Options	none
Introduced	16.0.R1
Platforms	All

dest-class *number*

Synopsis	Default destination class for the policy statement
Context	**configure** policy-options policy-statement *string* entry *number* action dest-class *number*
Tree	dest-class

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Description	This command specifies the policy accounting destination class index to associate with matched routes.
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

egress-statistics *boolean*

Synopsis	Enable egress statistics for BGP-LU routes
Context	**configure** policy-options policy-statement *string* entry *number* action egress-statistics *boolean*
Tree	egress-statistics
Description	When configured to **true**, this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on egress data paths. When configured to **false**, this command disables the allocation of statistical indexes to BGP-LU route entries.
Default	false
Introduced	20.10.R1
Platforms	All

flex-algo *(string | number)*

Synopsis	Flexible algorithm for BGP next-hop autobind operation
Context	**configure** policy-options policy-statement *string* entry *number* action flex-algo *(string | number)*
Tree	flex-algo
Description	This command configures the Flex-Algorithm for use in the BGP next-hop automatic bind operation in a BGP import policy. A Flex-Algorithm aware autobind of the BGP next-hop is enabled when the route is matched by the policy statement entry. Flex-Algorithm aware next-hop lookup is supported for unicast BGP, VPRN, and BGP-LU. This command is not supported for multicast address families.
String Length	1 to 32
Range	128 to 255
Introduced	20.10.R1
Platforms	All

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forwarding-class

Synopsis	Enter the **forwarding-class** context
Context	**configure** policy-options policy-statement *string* entry *number* action forwarding-class
Tree	forwarding-class
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc *keyword*

Synopsis	Forwarding class associated with the route
Context	**configure** policy-options policy-statement *string* entry *number* action forwarding-class fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *keyword*

Synopsis	Route priority
Context	**configure** policy-options policy-statement *string* entry *number* action forwarding-class priority *keyword*
Tree	priority
Options	low, high
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ingress-statistics *boolean*

Synopsis	Enable ingress statistics for BGP-LU routes
Context	**configure** policy-options policy-statement *string* entry *number* action ingress-statistics *boolean*
Tree	ingress-statistics
Description	When configured to **true**, this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on ingress data paths. For effective operation, a prefix must be advertised with a label per prefix for ILM statistics.

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When configured to **false**, this command disables the allocation of statistical indexes to BGP-LU route entries.

Default	false
Introduced	20.10.R1
Platforms	All

install-backup-path *boolean*

Synopsis	Install a preprogrammed backup path for the prefix
Context	**configure** policy-options policy-statement *string* entry *number* action install-backup-path *boolean*
Tree	install-backup-path
Default	false
Introduced	16.0.R1
Platforms	All

local-preference *(number | string)*

Synopsis	BGP local preference for routes not matching any entry
Context	**configure** policy-options policy-statement *string* entry *number* action local-preference *(number | string)*
Tree	local-preference
String Length	1 to 32
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

metric

Synopsis	Enter the **metric** context
Context	**configure** policy-options policy-statement *string* entry *number* action metric
Tree	metric
Introduced	16.0.R1
Platforms	All

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add *(number | string)*

Synopsis	Metric to add
Context	**configure** policy-options policy-statement *string* entry *number* action metric add *(number | string)*
Tree	add
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: **add**, **set**, or **subtract**.
Introduced	16.0.R1
Platforms	All

set *(number | string)*

Synopsis	Metric to assign
Context	**configure** policy-options policy-statement *string* entry *number* action metric set *(number | string)*
Tree	set
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: **add**, **set**, or **subtract**.
Introduced	16.0.R1
Platforms	All

subtract *(number | string)*

Synopsis	Metric to subtract
Context	**configure** policy-options policy-statement *string* entry *number* action metric subtract *(number | string)*
Tree	subtract
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: **add**, **set**, or **subtract**.
Introduced	16.0.R1
Platforms	All

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multicast-redirection

Synopsis	Enter the **multicast-redirection** context
Context	**configure** policy-options policy-statement *string* entry *number* action multicast-redirection
Tree	multicast-redirection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fwd-service *string*

Synopsis	Service ID for multicast redirection
Context	**configure** policy-options policy-statement *string* entry *number* action multicast-redirection fwd-service *string*
Tree	fwd-service
Default	Base
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-int-name *string*

Synopsis	Alternate interface where IGMP messages are redirected
Context	**configure** policy-options policy-statement *string* entry *number* action multicast-redirection ip-int-name *string*
Tree	ip-int-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nat-policy *(param-midstring | string)*

Synopsis	BGP-VPN imported route and a NAT policy association
Context	**configure** policy-options policy-statement *string* entry *number* action nat-policy *(param-midstring | string)*
Tree	nat-policy
Description	This command assigns a NAT policy to the matched routes that do not have a more specific NAT policy configured under action.

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A dynamic route obtained by BGP-VPN can be imported into an inside (private side) routing context in NAT environment. This route must be associated with a NAT policy that maps traffic into a NAT pool and outside routing context. If the NAT policy is not specified within the route policy entry, the imported NAT route is, by default, associated with the default NAT policy defined in the NAT inside routing context.

All BGP-VPN routes that are destined to be imported into the NAT inside routing context must have action-type **accept** regardless of whether the NAT policy is configured in the action.

String Length	1 to 32
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

next-hop *(keyword | ipv4-address-no-zone | ipv6-address-no-zone | string)*

Synopsis	Next-hop IP address applied to routes
Context	**configure** policy-options policy-statement *string* entry *number* action next-hop *(keyword | ipv4-address-no-zone | ipv6-address-no-zone | string)*
Tree	next-hop
String Length	1 to 32
Options	peer-address, self
Introduced	16.0.R1
Platforms	All

origin *(keyword | string)*

Synopsis	BGP origin for routes that are exported into BGP
Context	**configure** policy-options policy-statement *string* entry *number* action origin *(keyword | string)*
Tree	origin
String Length	1 to 32
Options	igp, egp, incomplete
Introduced	16.0.R1
Platforms	All

origin-validation-state *(keyword | string)*

Synopsis	Origin validation state for routes

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Context	**configure** policy-options policy-statement *string* entry *number* action origin-validation-state *(keyword | string)*
Tree	origin-validation-state
String Length	1 to 32
Options	valid, not-found, invalid
Introduced	16.0.R1
Platforms	All

preference *(number | string)*

Synopsis	Route preference applied to routes
Context	**configure** policy-options policy-statement *string* entry *number* action preference *(number | string)*
Tree	preference
String Length	1 to 32
Range	1 to 255
Introduced	16.0.R1
Platforms	All

resolve-static *boolean*

Synopsis	Resolve next hop of a static route for the BGP next hop
Context	**configure** policy-options policy-statement *string* entry *number* action resolve-static *boolean*
Tree	resolve-static
Default	false
Introduced	16.0.R1
Platforms	All

route-table-install *boolean*

Synopsis	Allow BGP route installation in the route table
Context	**configure** policy-options policy-statement *string* entry *number* action route-table-install *boolean*
Tree	route-table-install
Default	true

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Introduced	19.10.R1
Platforms	All

source-class *number*

Synopsis	Default source class for the policy statement
Context	**configure** policy-options policy-statement *string* entry *number* action source-class *number*
Tree	source-class
Description	This command specifies the policy accounting source class index to associate with matched routes.
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

sr-label-index

Synopsis	Enter the **sr-label-index** context
Context	**configure** policy-options policy-statement *string* entry *number* action sr-label-index
Tree	sr-label-index
Description	Commands in this context configure the policy action to associate a BGP segment-routing label index value with all /32 BGP labeled IPv4 routes. The use of this action in a policy entry that matches more than one /32 labeled IPv4 route may create SID conflicts. This action only takes effect in BGP peer import policies (and only on received /32 labeled IPv4 routes) and in route table import policies associated with the labeled IPv4 RIB. When this action occurs in a policy applied as a peer import policy, a prefix SID attribute can be added to a received /32 labeled IPv4 route that was not sent with this attribute, or the received prefix SID attribute can be replaced with a new one.
Introduced	19.10.R1
Platforms	All

prefer-igp *boolean*

Synopsis	Use the SR label index from the IGP route when present
Context	**configure** policy-options policy-statement *string* entry *number* action sr-label-index prefer-igp *boolean*

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Tree	prefer-igp
Description	When configured to **true**, BGP obtains the SID index from the IGP route (if a SID index is present) and the **configure router bgp segment-routing prefix-sid-range global** command is set to **true**. This command applies only to route table import policies. When configured to **false**, or the SID index is not present in the IGP route, or the **configure router bgp segment-routing prefix-sid-range global** command is not set to **true**, BGP obtains the label index value from the **value** command.
Default	false
Introduced	19.10.R1
Platforms	All

value *(string | number)*

Synopsis	BGP SR label index associated with routes
Context	**configure** policy-options policy-statement *string* entry *number* action sr-label-index value *(string | number)*
Tree	value
Description	This command specifies the BGP SR label index value to be associated with a route or routes. If this command specifies an index value that causes a SID conflict with another BGP route, all conflicting BGP routes are re-advertised with label values based on dynamic allocation rather than SID-based allocation. If this command specifies an index value that causes a SID conflict with an IGP route, the BGP route is re-advertised with a label value based on dynamic allocation rather than SID-based allocation.
String Length	1 to 32
Range	0 to 524287
Introduced	19.10.R1
Platforms	All

sr-maintenance-policy *(param-midstring | string)*

Synopsis	SR maintenance policy as an action
Context	**configure** policy-options policy-statement *string* entry *number* action sr-maintenance-policy *(param-midstring | string)*
Tree	sr-maintenance-policy
Description	This command applies a named segment routing maintenance policy as an action for route policies. It is only used for SR policy routes.

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String Length	1 to 32
Introduced	20.10.R1
Platforms	All

srv6-locator *(param-midstring-64 | string)*

Synopsis	Locator for SRv6 TLV to use
Context	**configure** policy-options policy-statement *string* entry *number* action srv6-locator *(param-midstring-64 | string)*
Tree	srv6-locator
Description	This command configures either a string encoding a midstring parameter delimited by at signs (@), or a reference to a named locator for the SRv6 TLV to use. For a VRF export policy, the referenced locator must already be configured using the commands in the **configure service vprn segment-routing-v6 locator** context. For a BGP export policy, the referenced locator must already be configured using the commands in the **configure router segment-routing segment-routing-v6 base-routing-instance locator** context.
String Length	1 to 64
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

srv6-micro-segment-locator *(param-midstring-64 | string)*

Synopsis	Micro-segment locator for SRv6 TLV to use
Context	**configure** policy-options policy-statement *string* entry *number* action srv6-micro-segment-locator *(param-midstring-64 | string)*
Tree	srv6-micro-segment-locator
Description	This command configures either a string encoding a midstring parameter delimited by at signs (@), or a reference to a named micro-segment locator for the SRv6 TLV to use. For a VRF export policy, the referenced micro-segment locator must already be configured using the commands in the **configure service vprn segment-routing-v6 micro-segment-locator** context. For a BGP export policy, the referenced micro-SID locator must already be configured using the commands in the **configure router segment-routing segment-routing-v6 base-routing-instance micro-segment-locator** context.
String Length	1 to 64
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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srv6-return-path-bfd-sid *(policy-var-name | ipv6-address)*

Synopsis	SRv6 return path BFD SID applied to SRv6 policy routes
Context	**configure** policy-options policy-statement *string* entry *number* action srv6-return-path-bfd-sid *(policy-var-name | ipv6-address)*
Tree	srv6-return-path-bfd-sid
Description	This command configures the S-BFD session to echo mode and pushes an additional SRv6 SID in the SRH only for S-BFD packets sent on the imported SRv6 policy.
String Length	1 to 32
Introduced	23.3.R1
Platforms	All

sticky-ecmp *boolean*

Synopsis	Specify the sticky ECMP flag for BGP ECMP routes
Context	**configure** policy-options policy-statement *string* entry *number* action sticky-ecmp *boolean*
Tree	sticky-ecmp
Default	false
Introduced	16.0.R1
Platforms	All

tag *(number | string)*

Synopsis	OSPF RIP or IS-IS tag applied to routes
Context	**configure** policy-options policy-statement *string* entry *number* action tag *(number | string)*
Tree	tag
String Length	1 to 32
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

type *(number | string)*

Synopsis	OSPF metric type applied to routes

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Context	**configure** policy-options policy-statement *string* entry *number* action type *(number | string)*
Tree	type
String Length	1 to 32
Range	1 to 2
Introduced	16.0.R1
Platforms	All

conditional-expression

Synopsis	Enable the **conditional-expression** context
Context	**configure** policy-options policy-statement *string* entry *number* conditional-expression
Tree	conditional-expression
Introduced	16.0.R1
Platforms	All

route-exists *string*

Synopsis	Conditional expression to test route existence
Context	**configure** policy-options policy-statement *string* entry *number* conditional-expression route-exists *string*
Tree	route-exists
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** policy-options policy-statement *string* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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from

Synopsis	Enable the **from** context
Context	**configure** policy-options policy-statement *string* entry *number* from
Tree	from
Description	Commands in this context configure policy match criteria based on the route's source or the protocol from which it is received. If conditions are not specified, all route sources are considered to match.
Introduced	16.0.R1
Platforms	All

aggregate-contributor *boolean*

Synopsis	Enable aggregate route match criterion
Context	**configure** policy-options policy-statement *string* entry *number* from aggregate-contributor *boolean*
Tree	aggregate-contributor
Description	When configured to **true**, matches all routes (BGP and non-BGP) that have contributed to an active aggregate route. If the prefix tree above a particular route includes no active aggregate routes or the most specific active aggregate route in the prefix tree above this route has a policy that rejects the route, then it is not considered as an aggregate-contributor. This match condition is only supported when used in a BGP export policy. If it is used in an entry of a BGP import policy, **vrf-export** policy or **vrf-import** policy, no routes are matched by that entry. When configured to **false**, no routes (BGP and non-BGP) that have contributed to an active aggregate route are matched.
Default	false
Introduced	20.10.R1
Platforms	All

area *string*

Synopsis	OSPF area as a match criterion
Context	**configure** policy-options policy-statement *string* entry *number* from area *string*
Tree	area
Introduced	16.0.R1
Platforms	All

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as-path

Synopsis	Enter the **as-path** context
Context	**configure** policy-options policy-statement *string* entry *number* from as-path
Tree	as-path
Introduced	16.0.R1
Platforms	All

group *(param-midstring | string)*

Synopsis	AS path group as a match criterion
Context	**configure** policy-options policy-statement *string* entry *number* from as-path group *(param-midstring | string)*
Tree	group
String Length	1 to 32
Notes	The following elements are part of a choice: **group** or **name**.
Introduced	16.0.R1
Platforms	All

length

Synopsis	Enter the **length** context
Context	**configure** policy-options policy-statement *string* entry *number* from as-path length
Tree	length
Introduced	16.0.R1
Platforms	All

qualifier *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	**configure** policy-options policy-statement *string* entry *number* from as-path length qualifier *keyword*
Tree	qualifier
Options	equal, or-higher, or-lower
Default	equal
Introduced	16.0.R1

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Platforms	All

unique *boolean*

Synopsis	Use unique AS numbers as matching criteria
Context	**configure** policy-options policy-statement *string* entry *number* from as-path length unique *boolean*
Tree	unique
Default	false
Introduced	16.0.R1
Platforms	All

value *(number | string)*

Synopsis	AS numbers in the AS path that match on the BGP route
Context	**configure** policy-options policy-statement *string* entry *number* from as-path length value *(number | string)*
Tree	value
String Length	1 to 32
Range	0 to 255
Introduced	16.0.R1
Platforms	All

name *(param-midstring | string)*

Synopsis	AS path name to match
Context	**configure** policy-options policy-statement *string* entry *number* from as-path name *(param-midstring | string)*
Tree	name
Description	This command specifies an AS path regular expression name for the route policy entry. Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@," "start@variable@end", "@variable@end", or "start@variable@".
String Length	1 to 32
Notes	The following elements are part of a choice: **group** or **name**.
Introduced	16.0.R1
Platforms	All

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cluster-id

Synopsis	Enter the **cluster-id** context
Context	**configure** policy-options policy-statement *string* entry *number* from cluster-id
Tree	cluster-id
Introduced	16.0.R1
Platforms	All

ip-address *string*

Synopsis	Cluster list attribute IP addresses for route matching
Context	**configure** policy-options policy-statement *string* entry *number* from cluster-id ip-address *string*
Tree	ip-address
Max. Instances	5
Notes	The following elements are part of a choice: **ip-address** or **none-cluster-list**. This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

none-cluster-list *boolean*

Synopsis	Specify matching BGP routes without a cluster ID
Context	**configure** policy-options policy-statement *string* entry *number* from cluster-id none-cluster-list *boolean*
Tree	none-cluster-list
Default	false
Notes	The following elements are part of a choice: **ip-address** or **none-cluster-list**.
Introduced	16.0.R1
Platforms	All

color *number*

Synopsis	Color ID as a match criterion
Context	**configure** policy-options policy-statement *string* entry *number* from color *number*

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Tree	color
Description	This command configures an SR Policy color ID as a route policy match criterion. This match criterion is only used in import policies.
Range	0 to 4294967295
Introduced	20.10.R1
Platforms	All

community

Synopsis	Enter the **community** context
Context	**configure** policy-options policy-statement *string* entry *number* from community
Tree	community
Introduced	16.0.R1
Platforms	All

count

Synopsis	Enter the **count** context
Context	**configure** policy-options policy-statement *string* entry *number* from community count
Tree	count
Introduced	16.0.R1
Platforms	All

qualifier *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	**configure** policy-options policy-statement *string* entry *number* from community count qualifier *keyword*
Tree	qualifier
Options	equal, or-higher, or-lower
Default	equal
Introduced	16.0.R1
Platforms	All

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type *keyword*

Synopsis	Community count to match the community count criteria
Context	**configure** policy-options policy-statement *string* entry *number* from community count type *keyword*
Tree	type
Options	standard, extended, large
Introduced	16.0.R1
Platforms	All

value *(number | string)*

Synopsis	Number of BGP communities to match the BGP route
Context	**configure** policy-options policy-statement *string* entry *number* from community count value *(number | string)*
Tree	value
String Length	1 to 32
Range	0 to 1024
Introduced	16.0.R1
Platforms	All

expression *string*

Synopsis	Community expression name as a match criterion
Context	**configure** policy-options policy-statement *string* entry *number* from community expression *string*
Tree	expression
String Length	1 to 900
Notes	The following elements are part of a choice: **expression** or **name**.
Introduced	16.0.R1
Platforms	All

name *(param-midstring-64 | string)*

Synopsis	Community list name
Context	**configure** policy-options policy-statement *string* entry *number* from community name *(param-midstring-64 | string)*

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Tree	name
String Length	1 to 64
Notes	The following elements are part of a choice: **expression** or **name**.
Introduced	16.0.R1
Platforms	All

distinguisher *number*

Synopsis	SR policy distinguisher as a match criterion
Context	**configure** policy-options policy-statement *string* entry *number* from distinguisher *number*
Tree	distinguisher
Description	This command configures an SR Policy distinguisher as a route policy match criterion. This match criterion is only used in import policies.
Range	0 to 4294967295
Introduced	20.10.R1
Platforms	All

endpoint *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	SR policy endpoint address as a match criterion
Context	**configure** policy-options policy-statement *string* entry *number* from endpoint *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	endpoint
Description	This command configures an SR Policy endpoint address as a route policy match criterion. This match criterion is only used in import policies.
Introduced	20.10.R1
Platforms	All

evpn-type *keyword*

Synopsis	EVPN type as a match criterion for the entry
Context	**configure** policy-options policy-statement *string* entry *number* from evpn-type *keyword*
Tree	evpn-type
Options	ethernet-auto-discovery, mac-ip-advertisement, inclusive-multicast, ethernet-segment, ip-prefix, selective-multicast, multicast-join-sync, multicast-leave-sync, selective-pmsi-auto-discovery

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Introduced	16.0.R4
Platforms	All

external *boolean*

Synopsis	Specify the external IS-IS route as a match criterion
Context	**configure** policy-options policy-statement *string* entry *number* from external *boolean*
Tree	external
Default	false
Introduced	16.0.R1
Platforms	All

family *keyword*

Synopsis	Address family as the match condition
Context	**configure** policy-options policy-statement *string* entry *number* from family *keyword*
Tree	family
Options	ipv4, vpn-ipv4, ipv6, mcast-ipv4, vpn-ipv6, l2-vpn, mvpn-ipv4, mdt-safi, ms-pw, flow-ipv4, route-target, mcast-vpn-ipv4, mvpn-ipv6, flow-ipv6, evpn, mcast-ipv6, label-ipv4, label-ipv6, bgp-ls, mcast-vpn-ipv6, sr-policy-ipv4, sr-policy-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Max. Instances	20
Introduced	16.0.R1
Platforms	All

flowspec

Synopsis	Enter the **flowspec** context
Context	**configure** policy-options policy-statement *string* entry *number* from flowspec
Tree	flowspec
Introduced	16.0.R4
Platforms	All

dest *(param-midstring | string)*

Synopsis	BGP FlowSpec route matches per destination IP prefix

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Context	**configure** policy-options policy-statement *string* entry *number* from flowspec dest *(param-midstring* | *string)*
Tree	dest
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

source *(param-midstring* | *string)*

Synopsis	BGP FlowSpec route matches per the source IP prefix
Context	**configure** policy-options policy-statement *string* entry *number* from flowspec source *(param-midstring* | *string)*
Tree	source
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

group-address *(param-midstring* | *string)*

Synopsis	Prefix list of multicast group addresses for mathcing
Context	**configure** policy-options policy-statement *string* entry *number* from group-address *(param-midstring* | *string)*
Tree	group-address
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

host-ip *(param-midstring* | *string)*

Synopsis	Prefix list of IGMP host IP addresses for matching
Context	**configure** policy-options policy-statement *string* entry *number* from host-ip *(param-midstring* | *string)*
Tree	host-ip
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

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interface *(named-item | interface-name | interface-name | interface-name)*

Synopsis	Interface name as match criterion
Context	**configure** policy-options policy-statement *string* entry *number* from interface *(named-item | interface-name | interface-name | interface-name)*
Tree	interface
String Length	1 to 32
Max. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

interface-subnets

Synopsis	Enter the **interface-subnets** context
Context	**configure** policy-options policy-statement *string* entry *number* from interface-subnets
Tree	interface-subnets
Description	Commands in this context configure the applied router instance and interfaces that are used as the matching condition within each policy statement entry when exporting the IP address of the associated interface to a routing protocol. The interface subnet policy statement match criterion is applied to the following unicast use case contexts: • **export**, when used with OSPFv2, OSPFv3, IS-IS, RIP, RIPng, and BGP • **route-table-import**, when used with BGP • **vrf-export**, when used with MP-BGP
Introduced	21.2.R1
Platforms	All

ip-int-name *string*

Synopsis	Interface name as the match criterion
Context	**configure** policy-options policy-statement *string* entry *number* from interface-subnets ip-int-name *string*
Tree	ip-int-name
Description	This command specifies the interface name to match when exporting the IP address of the associated interface to a routing protocol.

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String Length	1 to 32
Max. Instances	10
Notes	This element is ordered by the user.
Introduced	21.2.R1
Platforms	All

service *string*

Synopsis	Service ID of the interface subnets
Context	**configure** policy-options policy-statement *string* entry *number* from interface-subnets service *string*
Tree	service
Default	Base
Introduced	21.2.R1
Platforms	All

level *number*

Synopsis	IS-IS route level as a match criterion
Context	**configure** policy-options policy-statement *string* entry *number* from level *number*
Tree	level
Range	1 to 2
Introduced	16.0.R1
Platforms	All

local-preference

Synopsis	Enter the **local-preference** context
Context	**configure** policy-options policy-statement *string* entry *number* from local-preference
Tree	local-preference
Introduced	16.0.R1
Platforms	All

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qualifier *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	**configure** policy-options policy-statement *string* entry *number* from local-preference qualifier *keyword*
Tree	qualifier
Options	equal, or-higher, or-lower
Default	equal
Introduced	16.0.R1
Platforms	All

value *(number | string)*

Synopsis	BGP routes per local preference value or variable name
Context	**configure** policy-options policy-statement *string* entry *number* from local-preference value *(number | string)*
Tree	value
String Length	1 to 32
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

metric

Synopsis	Enter the **metric** context
Context	**configure** policy-options policy-statement *string* entry *number* from metric
Tree	metric
Introduced	16.0.R1
Platforms	All

qualifier *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	**configure** policy-options policy-statement *string* entry *number* from metric qualifier *keyword*
Tree	qualifier
Options	equal, or-higher, or-lower

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Default	equal
Introduced	16.0.R1
Platforms	All

value *(number | string)*

Synopsis	Local preference value or variable name
Context	**configure** policy-options policy-statement *string* entry *number* from metric value *(number | string)*
Tree	value
String Length	1 to 32
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

mvpn-type *keyword*

Synopsis	MVPN type as a match criterion for the entry
Context	**configure** policy-options policy-statement *string* entry *number* from mvpn-type *keyword*
Tree	mvpn-type
Options	intra-as-ipmsi-auto-discovery, inter-as-ipmsi-auto-discovery, s-pmsi-auto-discovery, intra-as-segment-leaf-auto-discovery, source-active-auto-discovery, shared-tree-join, source-tree-join
Introduced	16.0.R1
Platforms	All

neighbor

Synopsis	Enter the **neighbor** context
Context	**configure** policy-options policy-statement *string* entry *number* from neighbor
Tree	neighbor
Introduced	16.0.R1
Platforms	All

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ip-address *(ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-with-zone | ipv6-address-with-zone)*

Synopsis	IP address to match the neighbor
Context	**configure** policy-options policy-statement *string* entry *number* from neighbor ip-address *(ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-with-zone | ipv6-address-with-zone)*
Tree	ip-address
Notes	The following elements are part of a choice: **ip-address** or **prefix-list**.
Introduced	16.0.R1
Platforms	All

prefix-list *(param-midstring | string)*

Synopsis	Name to match the neighbor prefix list
Context	**configure** policy-options policy-statement *string* entry *number* from neighbor prefix-list *(param-midstring | string)*
Tree	prefix-list
String Length	1 to 32
Notes	The following elements are part of a choice: **ip-address** or **prefix-list**.
Introduced	16.0.R1
Platforms	All

next-hop

Synopsis	Enter the **next-hop** context
Context	**configure** policy-options policy-statement *string* entry *number* from next-hop
Tree	next-hop
Introduced	16.0.R1
Platforms	All

ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the next hop to match
Context	**configure** policy-options policy-statement *string* entry *number* from next-hop ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-address

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Notes	The following elements are part of a choice: **ip-address** or **prefix-list**.
Introduced	16.0.R1
Platforms	All

prefix-list *(param-midstring | string)*

Synopsis	Name of a next hop prefix list to match
Context	**configure** policy-options policy-statement *string* entry *number* from next-hop prefix-list *(param-midstring | string)*
Tree	prefix-list
String Length	1 to 32
Notes	The following elements are part of a choice: **ip-address** or **prefix-list**.
Introduced	16.0.R1
Platforms	All

origin *keyword*

Synopsis	Route origin match criteria
Context	**configure** policy-options policy-statement *string* entry *number* from origin *keyword*
Tree	origin
Description	This command configures a match criteria for the origin attribute of the route. The origin attribute is applicable to BGP routes and to the following subscriber-management routes: Host routes (for example, IPv4 /32 address, or IPv6 SLAAC prefix) carry the origin attribute with AAA, dynamic, or static values, depending on the address assignment method. For CUPS hosts, the origin attribute is always PFCP. Host routes can also be distinguished using the **sub-mgmt** option for the **protocol** command. Dynamically provisioned prefixes or loopback addresses use AAA or PFCP origin values, depending on the protocol that provides the prefix and address. Dynamic routes can also be distinguished using the **direct** option for the **protocol** command. Statically configured prefixes under the subscriber interface do not have an origin attribute. These routes can be distinguished using the **direct** option for the **protocol** command. Framed routes for non-CUPS hosts do not have an origin attribute. Framed routes for CUPS hosts use PFCP for the origin attribute. Alternatively, framed routes can be distinguished using the **managed** option for the **protocol** command. The values that are specific to subscriber-management routes are never carried in BGP updates as part of the BGP origin attribute and are not visible within the BGP process.
Options	igp, egp, incomplete, any, aaa, dynamic, static, bonding, pfcp

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Introduced	16.0.R1
Platforms	All

origin-validation-state *keyword*

Synopsis	Origin validation state used for match criteria
Context	**configure** policy-options policy-statement *string* entry *number* from origin-validation-state *keyword*
Tree	origin-validation-state
Description	This command specifies a validation state that is used to match BGP routes based on their origin validation state.
Options	valid, not-found, invalid
Introduced	16.0.R1
Platforms	All

ospf-type *number*

Synopsis	OSPF type metric applied to unmatching route entries
Context	**configure** policy-options policy-statement *string* entry *number* from ospf-type *number*
Tree	ospf-type
Range	1 to 2
Introduced	16.0.R1
Platforms	All

path-type *keyword*

Synopsis	Path type as a match criterion
Context	**configure** policy-options policy-statement *string* entry *number* from path-type *keyword*
Tree	path-type
Options	ibgp, ebgp
Introduced	16.0.R1
Platforms	All

policy *(string | string)*

Synopsis	Policy statement as a match criterion

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Context	**configure** policy-options policy-statement *string* entry *number* from policy *(string | string)*
Tree	policy
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

policy-variables

Synopsis	Enter the **policy-variables** context
Context	**configure** policy-options policy-statement *string* entry *number* from policy-variables
Tree	policy-variables
Introduced	16.0.R1
Platforms	All

name [variable-name] *string*

Synopsis	Enter the **name** list instance
Context	**configure** policy-options policy-statement *string* entry *number* from policy-variables name *string*
Tree	name
Max. Instances	10
Introduced	16.0.R1
Platforms	All

[**variable-name**] *string*

Synopsis	Global variable name used to reference policy functions
Context	**configure** policy-options policy-statement *string* entry *number* from policy-variables name *string*
Tree	name
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the policy variable
Context	**configure** policy-options policy-statement *string* entry *number* from policy-variables name *string* address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	address
Notes	The following elements are part of a mandatory choice: **address**, **decimal**, **number**, **prefix**, or **value**.
Introduced	16.0.R1
Platforms	All

decimal *decimal-number*

Synopsis	Attribute decimal to which variable name is resolved
Context	**configure** policy-options policy-statement *string* entry *number* from policy-variables name *string* decimal *decimal-number*
Tree	decimal
Range	0.000 to 4294967295.000
Notes	The following elements are part of a mandatory choice: **address**, **decimal**, **number**, **prefix**, or **value**.
Introduced	19.7.R1
Platforms	All

number *number*

Synopsis	Numerical value of the policy variable
Context	**configure** policy-options policy-statement *string* entry *number* from policy-variables name *string* number *number*
Tree	number
Range	0 to 4294967295
Notes	The following elements are part of a mandatory choice: **address**, **decimal**, **number**, **prefix**, or **value**.
Introduced	16.0.R1
Platforms	All

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prefix *(ipv4-prefix | ipv6-prefix)*

Synopsis	Prefix value associated with the variable name
Context	**configure** policy-options policy-statement *string* entry *number* from policy-variables name *string* prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Notes	The following elements are part of a mandatory choice: **address**, **decimal**, **number**, **prefix**, or **value**.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *string*

Synopsis	Policy variable value
Context	**configure** policy-options policy-statement *string* entry *number* from policy-variables name *string* value *string*
Tree	value
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: **address**, **decimal**, **number**, **prefix**, or **value**.
Introduced	16.0.R1
Platforms	All

prefix-list *(param-midstring-64 | string)*

Synopsis	Prefix list as match criterion
Context	**configure** policy-options policy-statement *string* entry *number* from prefix-list *(param-midstring-64 | string)*
Tree	prefix-list
String Length	1 to 64
Max. Instances	28
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

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protocol

Synopsis	Enter the **protocol** context
Context	**configure** policy-options policy-statement *string* entry *number* from protocol
Tree	protocol
Description	Commands in this context configure the match criterion based on protocols for a route policy statement entry and may be used for both import and export policies.
Introduced	16.0.R1
Platforms	All

instance *(keyword | number)*

Synopsis	Instance for protocol IS-IS, OSPF, or OSPFv3 to match
Context	**configure** policy-options policy-statement *string* entry *number* from protocol instance *(keyword | number)*
Tree	instance
Description	This command specifies the OSPF, OSPFv3, or IS-IS instance to be used as the match criterion. When this command is explicitly configured, the **name** command must be configured to identify the protocol (OSPF, OSPFv3, or IS-IS).
Range	0 to 127
Options	all
Default	0
Introduced	16.0.R1
Platforms	All

name *keyword*

Synopsis	List of protocol names as the match criterion
Context	**configure** policy-options policy-statement *string* entry *number* from protocol name *keyword*
Tree	name
Description	This command specifies a protocol list for the match criterion. If multiple protocols are specified, the protocol names must belong to the following protocol set: • direct • static • isis • aggregate

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- bgp
- bgp-label
- direct-interface

If multiple protocols are specified, the **instance** command cannot be explicitly configured.

The protocol **direct-interface** route type matches the specific direct interface host IPv4 /32 and IPv6 /128 routes.

Options	direct, static, bgp, isis, ospf, rip, aggregate, bgp-vpn, igmp, pim, ospf3, ldp, sub-mgmt, mld, managed, vpn-leak, nat, periodic, ipsec, dhcpv6-pd, dhcpv6-na, dhcpv6-ta, dhcpv6-pd-excl, ripng, bgp-label, direct-interface, arp-nd, rib-api, dhcp-client, evpn-ifl, srv6, video
Max. Instances	5
Introduced	16.0.R1
Platforms	All

route-distinguisher-list *(param-midstring-64 | string)*

Synopsis	Route distinguisher list as a match criterion
Context	**configure** policy-options policy-statement *string* entry *number* from route-distinguisher-list *(param-midstring-64 | string)*
Tree	route-distinguisher-list
Description	This command specifies the (possibly parameterized) name of a route distinguisher (RD) list. This match condition is supported by policies applied as VRF-import or BGP peer import policies. A BGP route can match a policy entry with this match criterion if the NLRI field contains an RD that is matched by at least one of the entries in the RD list. BGP routes belonging to address families other than VPN-IPv4, VPN-IPv6, MCAST-VPN-IPv4, MCAST-VPN-IPv6, EVPN, FlowSpec-VPN IPv4, FlowSpec-VPN IPv6, MVPN-IPv4, or MVPN-IPv6 route do not match policy entries with this match criterion.
String Length	1 to 64
Introduced	23.3.R1
Platforms	All

source-address

Synopsis	Enter the **source-address** context
Context	**configure** policy-options policy-statement *string* entry *number* from source-address
Tree	source-address

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Introduced	16.0.R1
Platforms	All

ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source IP address to match
Context	**configure** policy-options policy-statement *string* entry *number* from source-address ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-address
Notes	The following elements are part of a choice: **ip-address** or **prefix-list**.
Introduced	16.0.R1
Platforms	All

prefix-list *(param-midstring | string)*

Synopsis	Name of a source address prefix list to match
Context	**configure** policy-options policy-statement *string* entry *number* from source-address prefix-list *(param-midstring | string)*
Tree	prefix-list
String Length	1 to 32
Notes	The following elements are part of a choice: **ip-address** or **prefix-list**.
Introduced	16.0.R1
Platforms	All

srv6-sid-prefix *(policy-var-name | ipv6-unicast-prefix)*

Synopsis	SRv6 SID value as the match criterion for the BGP route
Context	**configure** policy-options policy-statement *string* entry *number* from srv6-sid-prefix *(policy-var-name | ipv6-unicast-prefix)*
Tree	srv6-sid-prefix
Description	This command configures either the name of a prefix policy variable or an IPv6 prefix and prefix length, as a match criterion for a BGP route. **Note**: If the name of a prefix policy variable is the match criterion, the name must start and end with an at sign (@). A BGP route matches this condition if it has an SRv6 TLV, and the SID value in that TLV is matched by the bits of the IPv6 prefix (up to the specified prefix length).

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This match condition is supported in BGP import policies, BGP export policies, and VRF or VSI import policies.

The SID value used as the match criterion can also be a micro-segment (uSID) value.

String Length	1 to 32
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

srv6-tlv *keyword*

Synopsis	SRv6 TLV presence as match criterion for BGP route
Context	**configure** policy-options policy-statement *string* entry *number* from srv6-tlv *keyword*
Tree	srv6-tlv
Description	This command configures whether the entry matches a BGP route with a prefix SID attribute containing an SRv6 TLV. If this command is not configured, a BGP route can match the entry, regardless of whether it has a prefix SID attribute or whether that prefix SID attribute has SRv6 TLVs. This match condition is supported in BGP import policies, BGP export policies, and VRF or VSI import policies. If the **present** option is configured, a BGP route only matches this entry if it has a prefix SID attribute containing an SRv6 TLV. If the **not-present** option is configured, a BGP route only matches this entry if it does not have a prefix SID attribute containing an SRv6 TLV.
Options	present, not-present
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

state *keyword*

Synopsis	State used as a match criterion
Context	**configure** policy-options policy-statement *string* entry *number* from state *keyword*
Tree	state
Description	This command configures a criterion that identifies in resilient gateways which routes are associated with an active context and which routes are associated with a standby context.
Options	srrp-master, srrp-non-master, ipsec-master-with-peer, ipsec-master-without-peer, ipsec-non-master, fsg-active, fsg-standby
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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tag *(number | keyword)*

Synopsis	Route tag used as a match criterion
Context	**configure** policy-options policy-statement *string* entry *number* from tag *(number | keyword)*
Tree	tag
Range	1 to 4294967295
Options	no-tag
Introduced	16.0.R1
Platforms	All

to

Synopsis	Enable the **to** context
Context	**configure** policy-options policy-statement *string* entry *number* to
Tree	to
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	IS-IS route level as a match criterion
Context	**configure** policy-options policy-statement *string* entry *number* to level *number*
Tree	level
Range	1 to 2
Introduced	16.0.R1
Platforms	All

neighbor

Synopsis	Enter the **neighbor** context
Context	**configure** policy-options policy-statement *string* entry *number* to neighbor
Tree	neighbor
Introduced	16.0.R1
Platforms	All

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ip-address *(ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-with-zone | ipv6-address-with-zone)*

Synopsis	IP address to match the neighbor
Context	**configure** policy-options policy-statement *string* entry *number* to neighbor ip-address *(ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-with-zone | ipv6-address-with-zone)*
Tree	ip-address
Notes	The following elements are part of a choice: **ip-address** or **prefix-list**.
Introduced	16.0.R1
Platforms	All

prefix-list *(param-midstring | string)*

Synopsis	Name to match the neighbor prefix list
Context	**configure** policy-options policy-statement *string* entry *number* to neighbor prefix-list *(param-midstring | string)*
Tree	prefix-list
String Length	1 to 32
Notes	The following elements are part of a choice: **ip-address** or **prefix-list**.
Introduced	16.0.R1
Platforms	All

prefix-list *(param-midstring-64 | string)*

Synopsis	Prefix list as match criterion
Context	**configure** policy-options policy-statement *string* entry *number* to prefix-list *(param-midstring-64 | string)*
Tree	prefix-list
String Length	1 to 64
Max. Instances	28
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

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protocol

Synopsis	Enter the **protocol** context
Context	**configure** policy-options policy-statement *string* entry *number* to protocol
Tree	protocol
Introduced	16.0.R1
Platforms	All

instance *(keyword | number)*

Synopsis	Instance for the IS-IS, OSPF, or OSPF3 protocol
Context	**configure** policy-options policy-statement *string* entry *number* to protocol instance *(keyword | number)*
Tree	instance
Range	0 to 127
Options	all
Default	0
Introduced	16.0.R1
Platforms	All

name *keyword*

Synopsis	Protocol name to match
Context	**configure** policy-options policy-statement *string* entry *number* to protocol name *keyword*
Tree	name
Options	bgp, isis, ospf, rip, bgp-vpn, ospf3, ldp, vpn-leak, ripng, bgp-label, evpn-ifl
Max. Instances	2
Introduced	16.0.R1
Platforms	All

entry-type *keyword*

Synopsis	The entry type for a route policy entry
Context	**configure** policy-options policy-statement *string* entry-type *keyword*
Tree	entry-type

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Options	numbered, named
Default	numbered
Introduced	19.10.R1
Platforms	All

named-entry [entry-name] *string*

Synopsis	Enter the **named-entry** list instance
Context	**configure** policy-options policy-statement *string* named-entry *string*
Tree	named-entry
Max. Instances	16384
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

[**entry-name**] *string*

Synopsis	Route policy entry name
Context	**configure** policy-options policy-statement *string* named-entry *string*
Tree	named-entry
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

action

Synopsis	Enable the **action** context
Context	**configure** policy-options policy-statement *string* named-entry *string* action
Tree	action
Introduced	19.10.R1
Platforms	All

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action-type *keyword*

Synopsis	Action type for routes matching the route policy entry
Context	**configure** policy-options policy-statement *string* named-entry *string* action action-type *keyword*
Tree	action-type
Options	accept, reject, next-entry, next-policy
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

add-paths-send-limit *(number | keyword)*

Synopsis	BGP Add-Paths send limit applied for routes
Context	**configure** policy-options policy-statement *string* named-entry *string* action add-paths-send-limit *(number | keyword)*
Tree	add-paths-send-limit
Range	1 to 16
Options	multipaths
Introduced	19.10.R1
Platforms	All

admin-tag-policy *(param-midstring-64 | string)*

Synopsis	Administrative tag policy name
Context	**configure** policy-options policy-statement *string* named-entry *string* action admin-tag-policy *(param-midstring-64 | string)*
Tree	admin-tag-policy
String Length	1 to 64
Introduced	19.10.R1
Platforms	All

advertise-label *keyword*

Synopsis	Label allocation for matched BGP routes
Context	**configure** policy-options policy-statement *string* named-entry *string* action advertise-label *keyword*

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Tree	advertise-label
Description	This command configures the label allocation method for advertised routes. The effect of this command depends on the context where the associated policy is applied.
Options	per-prefix, pop, pop-and-forward
Introduced	19.10.R1
Platforms	All

aigp-metric

Synopsis	Enter the **aigp-metric** context
Context	**configure** policy-options policy-statement *string* named-entry *string* action aigp-metric
Tree	aigp-metric
Introduced	19.10.R1
Platforms	All

add *(number | string)*

Synopsis	AIGP metric to add
Context	**configure** policy-options policy-statement *string* named-entry *string* action aigp-metric add *(number | string)*
Tree	add
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: **add** or **set**.
Introduced	19.10.R1
Platforms	All

set *(keyword | number | string)*

Synopsis	AIGP metric
Context	**configure** policy-options policy-statement *string* named-entry *string* action aigp-metric set *(keyword | number | string)*
Tree	set
String Length	1 to 32
Range	0 to 4294967295
Options	igp

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Notes	The following elements are part of a choice: **add** or **set**.
Introduced	19.10.R1
Platforms	All

as-path

Synopsis	Enter the **as-path** context
Context	**configure** policy-options policy-statement *string* named-entry *string* action as-path
Tree	as-path
Introduced	19.10.R1
Platforms	All

add *(param-midstring | string)*

Synopsis	AS path to add
Context	**configure** policy-options policy-statement *string* named-entry *string* action as-path add *(param-midstring | string)*
Tree	add
String Length	1 to 32
Notes	The following elements are part of a choice: **add** or **replace**.
Introduced	19.10.R1
Platforms	All

replace *(param-midstring | string)*

Synopsis	AS path to replace
Context	**configure** policy-options policy-statement *string* named-entry *string* action as-path replace *(param-midstring | string)*
Tree	replace
String Length	1 to 32
Notes	The following elements are part of a choice: **add** or **replace**.
Introduced	19.10.R1
Platforms	All

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as-path-prepend

Synopsis	Enter the **as-path-prepend** context
Context	**configure** policy-options policy-statement *string* named-entry *string* action as-path-prepend
Tree	as-path-prepend
Introduced	19.10.R1
Platforms	All

as-path *(number | string | keyword)*

Synopsis	AS number to prepend to the AS path attribute
Context	**configure** policy-options policy-statement *string* named-entry *string* action as-path-prepend as-path *(number | string | keyword)*
Tree	as-path
String Length	1 to 32
Range	1 to 4294967295
Options	most-recent
Introduced	19.10.R1
Platforms	All

repeat *(number | string)*

Synopsis	Number of times to prepend the specified AS number
Context	**configure** policy-options policy-statement *string* named-entry *string* action as-path-prepend repeat *(number | string)*
Tree	repeat
String Length	1 to 32
Range	1 to 50
Default	1
Introduced	19.10.R1
Platforms	All

bgp-high-priority *boolean*

Synopsis	Tag routes as high priority for fast table updates

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Context	**configure** policy-options policy-statement *string* named-entry *string* action bgp-high-priority *boolean*
Tree	bgp-high-priority
Description	When configured to **true**, eligible BGP routes matched by the policy entry or policy default-action are tagged as needing faster route table updates. This action applies only when the policy is applied as a BGP import policy to a base router BGP peer or VPRN BGP peer and applies only to the following route types: • IPv4 • label-IPv4 • IPv6 • label-IPv6 This command is useful when the BGP RIB contains a large number of routes and quick routing table updates are needed for a small subset of these routes. The effectiveness of this command decreases as the subset becomes a larger proportion of the total RIB. When configured to **false**, no routes are tagged for faster route table updates.
Default	false
Introduced	20.5.R1
Platforms	All

bgp-leak *boolean*

Synopsis	Allow leaking for BGP routes
Context	**configure** policy-options policy-statement *string* named-entry *string* action bgp-leak *boolean*
Tree	bgp-leak
Default	false
Introduced	19.10.R1
Platforms	All

bgp-med

Synopsis	Enter the **bgp-med** context
Context	**configure** policy-options policy-statement *string* named-entry *string* action bgp-med
Tree	bgp-med
Introduced	19.10.R1
Platforms	All

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adjust *string*

Synopsis	BGP-MED adjustment
Context	**configure** policy-options policy-statement *string* named-entry *string* action bgp-med adjust *string*
Tree	adjust
String Length	1 to 64
Notes	The following elements are part of a choice: **adjust** or **set**.
Introduced	19.10.R1
Platforms	All

set *(keyword | number | string)*

Synopsis	BGP-MED assignment
Context	**configure** policy-options policy-statement *string* named-entry *string* action bgp-med set *(keyword | number | string)*
Tree	set
String Length	1 to 32
Range	0 to 4294967295
Options	igp, min-igp
Notes	The following elements are part of a choice: **adjust** or **set**.
Introduced	19.10.R1
Platforms	All

bgp-tunnel-metric

Synopsis	Enter the **bgp-tunnel-metric** context
Context	**configure** policy-options policy-statement *string* named-entry *string* action bgp-tunnel-metric
Tree	bgp-tunnel-metric
Description	Commands in this context configure the tunnel-table metrics associated with BGP label unicast routes that pass through to the default action of the policy.
Introduced	20.5.R1
Platforms	All

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prefer-aigp *boolean*

Synopsis	Use AIGP attribute as tunnel metric when present
Context	**configure** policy-options policy-statement *string* named-entry *string* action bgp-tunnel-metric prefer-aigp *boolean*
Tree	prefer-aigp
Description	When configured to **true**, and a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy. The TTM metric of the tunnel is set to the AIGP metric value of the BGP-LU route plus the IGP cost to reach the BGP next-hop if it has the AIGP path attribute, otherwise it is set to the value implied by the value leaf. When configured to **false**, the AIGP attribute is removed from the advertised routes and is ignored if present in the received routes.
Default	false
Introduced	20.5.R1
Platforms	All

prefer-med *boolean*

Synopsis	Use MED attribute as tunnel metric when present
Context	**configure** policy-options policy-statement *string* named-entry *string* action bgp-tunnel-metric prefer-med *boolean*
Tree	prefer-med
Description	When configured to **true**, if a BGP-LU route is selected for installation in the TTM and is matched by this action in a BGP import policy, the TTM metric of the tunnel is set to the MED metric value of the BGP-LU route with the IGP cost to reach the BGP next hop added to it. When configured to **false**, the BGP tunnel metric associated with the BGP-LU route accepted by this policy action is not determined using the MED attribute.
Default	false
Introduced	23.3.R1
Platforms	All

value *(string | number)*

Synopsis	BGP tunnel table metric value
Context	**configure** policy-options policy-statement *string* named-entry *string* action bgp-tunnel-metric value *(string | number)*
Tree	value
Description	This command configures a BGP tunnel metric is assigned to routes that do not match any entry.

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If a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy, the TTM metric of the associated tunnel is set to this value (or the value associated with the parameter name) if either:

- the prefer-aigp option is set to false
- the prefer-aigp option is set to true but the BGP-LU route does not have an AIGP attribute

String Length	1 to 32
Range	0 to 4294967295
Introduced	20.5.R1
Platforms	All

community

Synopsis	Enter the **community** context
Context	**configure** policy-options policy-statement *string* named-entry *string* action community
Tree	community
Introduced	19.10.R1
Platforms	All

add *(param-midstring-64 | string)*

Synopsis	List of community names to add
Context	**configure** policy-options policy-statement *string* named-entry *string* action community add *(param-midstring-64 | string)*
Tree	add
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: (**add** and **remove**) or **replace**. This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

remove *(param-midstring-64 | string)*

Synopsis	List of community names to remove

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Context	**configure** policy-options policy-statement *string* named-entry *string* action community remove *(param-midstring-64 | string)*
Tree	remove
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: (**add** and **remove**) or **replace**. This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

replace *(param-midstring-64 | string)*

Synopsis	List of community names to replace
Context	**configure** policy-options policy-statement *string* named-entry *string* action community replace *(param-midstring-64 | string)*
Tree	replace
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: (**add** and **remove**) or **replace**. This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

create-mpls-tunnel *boolean*

Synopsis	Create an MPLS tunnel
Context	**configure** policy-options policy-statement *string* named-entry *string* action create-mpls-tunnel *boolean*
Tree	create-mpls-tunnel
Description	When configured to **true**, the router creates an MPLS tunnel. This command is supported for only the following address families: • evpn • ipv4 • ipv6 • label-ipv4

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- label-ipv6
- vpn-ipv4
- vpn-ipv6

Default	false
Introduced	21.10.R1
Platforms	All

create-udp-tunnel *boolean*

Synopsis	Create an MPLS-over-UDP tunnel
Context	**configure** policy-options policy-statement *string* named-entry *string* action create-udp-tunnel *boolean*
Tree	create-udp-tunnel
Default	false
Introduced	19.10.R1
Platforms	All

damping *(keyword | param-midstring | string)*

Synopsis	Damping profile used for routes
Context	**configure** policy-options policy-statement *string* named-entry *string* action damping *(keyword | param-midstring | string)*
Tree	damping
String Length	1 to 32
Options	none
Introduced	19.10.R1
Platforms	All

dest-class *number*

Synopsis	Default destination class for the policy statement
Context	**configure** policy-options policy-statement *string* named-entry *string* action dest-class *number*
Tree	dest-class
Description	This command specifies the policy accounting destination class index to associate with matched routes.

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Range	1 to 255
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

egress-statistics *boolean*

Synopsis	Enable egress statistics for BGP-LU routes
Context	**configure** policy-options policy-statement *string* named-entry *string* action egress-statistics *boolean*
Tree	egress-statistics
Description	When configured to **true**, this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on egress data paths. When configured to **false**, this command disables the allocation of statistical indexes to BGP-LU route entries.
Default	false
Introduced	20.10.R1
Platforms	All

flex-algo *(string | number)*

Synopsis	Flexible algorithm for BGP next-hop autobind operation
Context	**configure** policy-options policy-statement *string* named-entry *string* action flex-algo *(string | number)*
Tree	flex-algo
Description	This command configures the Flex-Algorithm for use in the BGP next-hop automatic bind operation in a BGP import policy. A Flex-Algorithm aware autobind of the BGP next-hop is enabled when the route is matched by the policy statement entry. Flex-Algorithm aware next-hop lookup is supported for unicast BGP, VPRN, and BGP-LU. This command is not supported for multicast address families.
String Length	1 to 32
Range	128 to 255
Introduced	20.10.R1
Platforms	All

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forwarding-class

Synopsis	Enter the **forwarding-class** context
Context	**configure** policy-options policy-statement *string* named-entry *string* action forwarding-class
Tree	forwarding-class
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc *keyword*

Synopsis	Forwarding class associated with the route
Context	**configure** policy-options policy-statement *string* named-entry *string* action forwarding-class fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *keyword*

Synopsis	Route priority
Context	**configure** policy-options policy-statement *string* named-entry *string* action forwarding-class priority *keyword*
Tree	priority
Options	low, high
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ingress-statistics *boolean*

Synopsis	Enable ingress statistics for BGP-LU routes
Context	**configure** policy-options policy-statement *string* named-entry *string* action ingress-statistics *boolean*
Tree	ingress-statistics
Description	When configured to **true**, this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on ingress data paths. For effective operation, a prefix must be advertised with a label per prefix for ILM statistics.

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When configured to **false**, this command disables the allocation of statistical indexes to BGP-LU route entries.

Default	false
Introduced	20.10.R1
Platforms	All

install-backup-path *boolean*

Synopsis	Install a preprogrammed backup path for the prefix
Context	**configure** policy-options policy-statement *string* named-entry *string* action install-backup-path *boolean*
Tree	install-backup-path
Default	false
Introduced	19.10.R1
Platforms	All

local-preference *(number | string)*

Synopsis	BGP local preference for routes not matching any entry
Context	**configure** policy-options policy-statement *string* named-entry *string* action local-preference *(number | string)*
Tree	local-preference
String Length	1 to 32
Range	0 to 4294967295
Introduced	19.10.R1
Platforms	All

metric

Synopsis	Enter the **metric** context
Context	**configure** policy-options policy-statement *string* named-entry *string* action metric
Tree	metric
Introduced	19.10.R1
Platforms	All

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add *(number | string)*

Synopsis	Metric to add
Context	**configure** policy-options policy-statement *string* named-entry *string* action metric add *(number | string)*
Tree	add
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: **add**, **set**, or **subtract**.
Introduced	19.10.R1
Platforms	All

set *(number | string)*

Synopsis	Metric to assign
Context	**configure** policy-options policy-statement *string* named-entry *string* action metric set *(number | string)*
Tree	set
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: **add**, **set**, or **subtract**.
Introduced	19.10.R1
Platforms	All

subtract *(number | string)*

Synopsis	Metric to subtract
Context	**configure** policy-options policy-statement *string* named-entry *string* action metric subtract *(number | string)*
Tree	subtract
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: **add**, **set**, or **subtract**.
Introduced	19.10.R1
Platforms	All

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multicast-redirection

Synopsis	Enter the **multicast-redirection** context
Context	**configure** policy-options policy-statement *string* named-entry *string* action multicast-redirection
Tree	multicast-redirection
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fwd-service *string*

Synopsis	Service ID for multicast redirection
Context	**configure** policy-options policy-statement *string* named-entry *string* action multicast-redirection fwd-service *string*
Tree	fwd-service
Default	Base
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-int-name *string*

Synopsis	Alternate interface where IGMP messages are redirected
Context	**configure** policy-options policy-statement *string* named-entry *string* action multicast-redirection ip-int-name *string*
Tree	ip-int-name
String Length	1 to 32
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nat-policy *(param-midstring | string)*

Synopsis	BGP-VPN imported route and a NAT policy association
Context	**configure** policy-options policy-statement *string* named-entry *string* action nat-policy *(param-midstring | string)*
Tree	nat-policy
Description	This command assigns a NAT policy to the matched routes that do not have a more specific NAT policy configured under action.

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A dynamic route obtained by BGP-VPN can be imported into an inside (private side) routing context in NAT environment. This route must be associated with a NAT policy that maps traffic into a NAT pool and outside routing context. If the NAT policy is not specified within the route policy entry, the imported NAT route is, by default, associated with the default NAT policy defined in the NAT inside routing context.

All BGP-VPN routes that are destined to be imported into the NAT inside routing context must have action-type **accept** regardless of whether the NAT policy is configured in the action.

String Length	1 to 32
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

next-hop *(keyword | ipv4-address-no-zone | ipv6-address-no-zone | string)*

Synopsis	Next-hop IP address applied to routes
Context	**configure** policy-options policy-statement *string* named-entry *string* action next-hop *(keyword | ipv4-address-no-zone | ipv6-address-no-zone | string)*
Tree	next-hop
String Length	1 to 32
Options	peer-address, self
Introduced	19.10.R1
Platforms	All

origin *(keyword | string)*

Synopsis	BGP origin for routes that are exported into BGP
Context	**configure** policy-options policy-statement *string* named-entry *string* action origin *(keyword | string)*
Tree	origin
String Length	1 to 32
Options	igp, egp, incomplete
Introduced	19.10.R1
Platforms	All

origin-validation-state *(keyword | string)*

Synopsis	Origin validation state for routes

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Context	**configure** policy-options policy-statement *string* named-entry *string* action origin-validation-state *(keyword | string)*
Tree	origin-validation-state
String Length	1 to 32
Options	valid, not-found, invalid
Introduced	19.10.R1
Platforms	All

preference *(number | string)*

Synopsis	Route preference applied to routes
Context	**configure** policy-options policy-statement *string* named-entry *string* action preference *(number | string)*
Tree	preference
String Length	1 to 32
Range	1 to 255
Introduced	19.10.R1
Platforms	All

resolve-static *boolean*

Synopsis	Resolve next hop of a static route for the BGP next hop
Context	**configure** policy-options policy-statement *string* named-entry *string* action resolve-static *boolean*
Tree	resolve-static
Default	false
Introduced	19.10.R1
Platforms	All

route-table-install *boolean*

Synopsis	Allow BGP route installation in the route table
Context	**configure** policy-options policy-statement *string* named-entry *string* action route-table-install *boolean*
Tree	route-table-install
Default	true

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Introduced	19.10.R1
Platforms	All

source-class *number*

Synopsis	Default source class for the policy statement
Context	**configure** policy-options policy-statement *string* named-entry *string* action source-class *number*
Tree	source-class
Description	This command specifies the policy accounting source class index to associate with matched routes.
Range	1 to 255
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

sr-label-index

Synopsis	Enter the **sr-label-index** context
Context	**configure** policy-options policy-statement *string* named-entry *string* action sr-label-index
Tree	sr-label-index
Description	Commands in this context configure the policy action to associate a BGP segment-routing label index value with all /32 BGP labeled IPv4 routes. The use of this action in a policy entry that matches more than one /32 labeled IPv4 route may create SID conflicts. This action only takes effect in BGP peer import policies (and only on received /32 labeled IPv4 routes) and in route table import policies associated with the labeled IPv4 RIB. When this action occurs in a policy applied as a peer import policy, a prefix SID attribute can be added to a received /32 labeled IPv4 route that was not sent with this attribute, or the received prefix SID attribute can be replaced with a new one.
Introduced	19.10.R1
Platforms	All

prefer-igp *boolean*

Synopsis	Use the SR label index from the IGP route when present
Context	**configure** policy-options policy-statement *string* named-entry *string* action sr-label-index prefer-igp *boolean*

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Tree	prefer-igp
Description	When configured to **true**, BGP obtains the SID index from the IGP route (if a SID index is present) and the **configure router bgp segment-routing prefix-sid-range global** command is set to **true**. This command applies only to route table import policies. When configured to **false**, or the SID index is not present in the IGP route, or the **configure router bgp segment-routing prefix-sid-range global** command is not set to **true**, BGP obtains the label index value from the **value** command.
Default	false
Introduced	19.10.R1
Platforms	All

value *(string | number)*

Synopsis	BGP SR label index associated with routes
Context	**configure** policy-options policy-statement *string* named-entry *string* action sr-label-index value *(string | number)*
Tree	value
Description	This command specifies the BGP SR label index value to be associated with a route or routes. If this command specifies an index value that causes a SID conflict with another BGP route, all conflicting BGP routes are re-advertised with label values based on dynamic allocation rather than SID-based allocation. If this command specifies an index value that causes a SID conflict with an IGP route, the BGP route is re-advertised with a label value based on dynamic allocation rather than SID-based allocation.
String Length	1 to 32
Range	0 to 524287
Introduced	19.10.R1
Platforms	All

sr-maintenance-policy *(param-midstring | string)*

Synopsis	SR maintenance policy as an action
Context	**configure** policy-options policy-statement *string* named-entry *string* action sr-maintenance-policy *(param-midstring | string)*
Tree	sr-maintenance-policy
Description	This command applies a named segment routing maintenance policy as an action for route policies. It is only used for SR policy routes.

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String Length	1 to 32
Introduced	20.10.R1
Platforms	All

srv6-locator *(param-midstring-64 | string)*

Synopsis	Locator for SRv6 TLV to use
Context	**configure** policy-options policy-statement *string* named-entry *string* action srv6-locator *(param-midstring-64 | string)*
Tree	srv6-locator
Description	This command configures either a string encoding a midstring parameter delimited by at signs (@), or a reference to a named locator for the SRv6 TLV to use. For a VRF export policy, the referenced locator must already be configured using the commands in the **configure service vprn segment-routing-v6 locator** context. For a BGP export policy, the referenced locator must already be configured using the commands in the **configure router segment-routing segment-routing-v6 base-routing-instance locator** context.
String Length	1 to 64
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

srv6-micro-segment-locator *(param-midstring-64 | string)*

Synopsis	Micro-segment locator for SRv6 TLV to use
Context	**configure** policy-options policy-statement *string* named-entry *string* action srv6-micro-segment-locator *(param-midstring-64 | string)*
Tree	srv6-micro-segment-locator
Description	This command configures either a string encoding a midstring parameter delimited by at signs (@), or a reference to a named micro-segment locator for the SRv6 TLV to use. For a VRF export policy, the referenced micro-segment locator must already be configured using the commands in the **configure service vprn segment-routing-v6 micro-segment-locator** context. For a BGP export policy, the referenced micro-SID locator must already be configured using the commands in the **configure router segment-routing segment-routing-v6 base-routing-instance micro-segment-locator** context.
String Length	1 to 64
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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srv6-return-path-bfd-sid *(policy-var-name | ipv6-address)*

Synopsis	SRv6 return path BFD SID applied to SRv6 policy routes
Context	**configure** policy-options policy-statement *string* named-entry *string* action srv6-return-path-bfd-sid *(policy-var-name | ipv6-address)*
Tree	srv6-return-path-bfd-sid
Description	This command configures the S-BFD session to echo mode and pushes an additional SRv6 SID in the SRH only for S-BFD packets sent on the imported SRv6 policy.
String Length	1 to 32
Introduced	23.3.R1
Platforms	All

sticky-ecmp *boolean*

Synopsis	Specify the sticky ECMP flag for BGP ECMP routes
Context	**configure** policy-options policy-statement *string* named-entry *string* action sticky-ecmp *boolean*
Tree	sticky-ecmp
Default	false
Introduced	19.10.R1
Platforms	All

tag *(number | string)*

Synopsis	OSPF RIP or IS-IS tag applied to routes
Context	**configure** policy-options policy-statement *string* named-entry *string* action tag *(number | string)*
Tree	tag
String Length	1 to 32
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

type *(number | string)*

Synopsis	OSPF metric type applied to routes

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Context	**configure** policy-options policy-statement *string* named-entry *string* action type *(number | string)*
Tree	type
String Length	1 to 32
Range	1 to 2
Introduced	19.10.R1
Platforms	All

conditional-expression

Synopsis	Enable the **conditional-expression** context
Context	**configure** policy-options policy-statement *string* named-entry *string* conditional-expression
Tree	conditional-expression
Introduced	19.10.R1
Platforms	All

route-exists *string*

Synopsis	Conditional expression to test route existence
Context	**configure** policy-options policy-statement *string* named-entry *string* conditional-expression route-exists *string*
Tree	route-exists
String Length	1 to 255
Introduced	19.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** policy-options policy-statement *string* named-entry *string* description *string*
Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

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from

Synopsis	Enable the **from** context
Context	**configure** policy-options policy-statement *string* named-entry *string* from
Tree	from
Introduced	19.10.R1
Platforms	All

aggregate-contributor *boolean*

Synopsis	Enable aggregate route match criterion
Context	**configure** policy-options policy-statement *string* named-entry *string* from aggregate-contributor *boolean*
Tree	aggregate-contributor
Description	When configured to **true**, matches all routes (BGP and non-BGP) that have contributed to an active aggregate route. If the prefix tree above a particular route includes no active aggregate routes or the most specific active aggregate route in the prefix tree above this route has a policy that rejects the route, then it is not considered as an aggregate-contributor. This match condition is only supported when used in a BGP export policy. If it is used in an entry of a BGP import policy, **vrf-export** policy or **vrf-import** policy, no routes are matched by that entry. When configured to **false**, no routes (BGP and non-BGP) that have contributed to an active aggregate route are matched.
Default	false
Introduced	20.10.R1
Platforms	All

area *string*

Synopsis	OSPF area as a match criterion
Context	**configure** policy-options policy-statement *string* named-entry *string* from area *string*
Tree	area
Introduced	19.10.R1
Platforms	All

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as-path

Synopsis	Enter the **as-path** context
Context	**configure** policy-options policy-statement *string* named-entry *string* from as-path
Tree	as-path
Introduced	19.10.R1
Platforms	All

group *(param-midstring | string)*

Synopsis	AS path group as a match criterion
Context	**configure** policy-options policy-statement *string* named-entry *string* from as-path group *(param-midstring | string)*
Tree	group
String Length	1 to 32
Notes	The following elements are part of a choice: **group** or **name**.
Introduced	19.10.R1
Platforms	All

length

Synopsis	Enter the **length** context
Context	**configure** policy-options policy-statement *string* named-entry *string* from as-path length
Tree	length
Introduced	19.10.R1
Platforms	All

qualifier *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	**configure** policy-options policy-statement *string* named-entry *string* from as-path length qualifier *keyword*
Tree	qualifier
Options	equal, or-higher, or-lower
Default	equal
Introduced	19.10.R1

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Platforms	All

unique *boolean*

Synopsis	Use unique AS numbers as matching criteria
Context	**configure** policy-options policy-statement *string* named-entry *string* from as-path length unique *boolean*
Tree	unique
Default	false
Introduced	19.10.R1
Platforms	All

value *(number | string)*

Synopsis	AS numbers in the AS path that match on the BGP route
Context	**configure** policy-options policy-statement *string* named-entry *string* from as-path length value *(number | string)*
Tree	value
String Length	1 to 32
Range	0 to 255
Introduced	19.10.R1
Platforms	All

name *(param-midstring | string)*

Synopsis	AS path name to match
Context	**configure** policy-options policy-statement *string* named-entry *string* from as-path name *(param-midstring | string)*
Tree	name
Description	This command specifies an AS path regular expression name for the route policy entry. Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@," "start@variable@end", "@variable@end", or "start@variable@".
String Length	1 to 32
Notes	The following elements are part of a choice: **group** or **name**.
Introduced	19.10.R1
Platforms	All

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cluster-id

Synopsis	Enter the **cluster-id** context
Context	**configure** policy-options policy-statement *string* named-entry *string* from cluster-id
Tree	cluster-id
Introduced	19.10.R1
Platforms	All

ip-address *string*

Synopsis	Cluster list attribute IP addresses for route matching
Context	**configure** policy-options policy-statement *string* named-entry *string* from cluster-id ip-address *string*
Tree	ip-address
Max. Instances	5
Notes	The following elements are part of a choice: **ip-address** or **none-cluster-list**. This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

none-cluster-list *boolean*

Synopsis	Specify matching BGP routes without a cluster ID
Context	**configure** policy-options policy-statement *string* named-entry *string* from cluster-id none-cluster-list *boolean*
Tree	none-cluster-list
Default	false
Notes	The following elements are part of a choice: **ip-address** or **none-cluster-list**.
Introduced	19.10.R1
Platforms	All

color *number*

Synopsis	Color ID as a match criterion
Context	**configure** policy-options policy-statement *string* named-entry *string* from color *number*

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Tree	color
Description	This command configures an SR Policy color ID as a route policy match criterion. This match criterion is only used in import policies.
Range	0 to 4294967295
Introduced	20.10.R1
Platforms	All

community

Synopsis	Enter the **community** context
Context	**configure** policy-options policy-statement *string* named-entry *string* from community
Tree	community
Introduced	19.10.R1
Platforms	All

count

Synopsis	Enter the **count** context
Context	**configure** policy-options policy-statement *string* named-entry *string* from community count
Tree	count
Introduced	19.10.R1
Platforms	All

qualifier *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	**configure** policy-options policy-statement *string* named-entry *string* from community count qualifier *keyword*
Tree	qualifier
Options	equal, or-higher, or-lower
Default	equal
Introduced	19.10.R1
Platforms	All

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type *keyword*

Synopsis	Community count to match the community count criteria
Context	**configure** policy-options policy-statement *string* named-entry *string* from community count type *keyword*
Tree	type
Options	standard, extended, large
Introduced	19.10.R1
Platforms	All

value *(number | string)*

Synopsis	Number of BGP communities to match the BGP route
Context	**configure** policy-options policy-statement *string* named-entry *string* from community count value *(number | string)*
Tree	value
String Length	1 to 32
Range	0 to 1024
Introduced	19.10.R1
Platforms	All

expression *string*

Synopsis	Community expression name as a match criterion
Context	**configure** policy-options policy-statement *string* named-entry *string* from community expression *string*
Tree	expression
String Length	1 to 900
Notes	The following elements are part of a choice: **expression** or **name**.
Introduced	19.10.R1
Platforms	All

name *(param-midstring-64 | string)*

Synopsis	Community list name
Context	**configure** policy-options policy-statement *string* named-entry *string* from community name *(param-midstring-64 | string)*

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Tree	name
String Length	1 to 64
Notes	The following elements are part of a choice: **expression** or **name**.
Introduced	19.10.R1
Platforms	All

distinguisher *number*

Synopsis	SR policy distinguisher as a match criterion
Context	**configure** policy-options policy-statement *string* named-entry *string* from distinguisher *number*
Tree	distinguisher
Description	This command configures an SR Policy distinguisher as a route policy match criterion. This match criterion is only used in import policies.
Range	0 to 4294967295
Introduced	20.10.R1
Platforms	All

endpoint *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	SR policy endpoint address as a match criterion
Context	**configure** policy-options policy-statement *string* named-entry *string* from endpoint *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	endpoint
Description	This command configures an SR Policy endpoint address as a route policy match criterion. This match criterion is only used in import policies.
Introduced	20.10.R1
Platforms	All

evpn-type *keyword*

Synopsis	EVPN type as a match criterion for the entry
Context	**configure** policy-options policy-statement *string* named-entry *string* from evpn-type *keyword*
Tree	evpn-type

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Options	ethernet-auto-discovery, mac-ip-advertisement, inclusive-multicast, ethernet-segment, ip-prefix, selective-multicast, multicast-join-sync, multicast-leave-sync, selective-pmsi-auto-discovery
Introduced	19.10.R1
Platforms	All

external *boolean*

Synopsis	Specify the external IS-IS route as a match criterion
Context	**configure** policy-options policy-statement *string* named-entry *string* from external *boolean*
Tree	external
Default	false
Introduced	19.10.R1
Platforms	All

family *keyword*

Synopsis	Address family as the match condition
Context	**configure** policy-options policy-statement *string* named-entry *string* from family *keyword*
Tree	family
Options	ipv4, vpn-ipv4, ipv6, mcast-ipv4, vpn-ipv6, l2-vpn, mvpn-ipv4, mdt-safi, ms-pw, flow-ipv4, route-target, mcast-vpn-ipv4, mvpn-ipv6, flow-ipv6, evpn, mcast-ipv6, label-ipv4, label-ipv6, bgp-ls, mcast-vpn-ipv6, sr-policy-ipv4, sr-policy-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Max. Instances	20
Introduced	19.10.R1
Platforms	All

flowspec

Synopsis	Enter the **flowspec** context
Context	**configure** policy-options policy-statement *string* named-entry *string* from flowspec
Tree	flowspec
Introduced	19.10.R1
Platforms	All

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dest *(param-midstring | string)*

Synopsis	BGP FlowSpec route matches per destination IP prefix
Context	**configure** policy-options policy-statement *string* named-entry *string* from flowspec dest *(param-midstring | string)*
Tree	dest
String Length	1 to 32
Introduced	19.10.R1
Platforms	All

source *(param-midstring | string)*

Synopsis	BGP FlowSpec route matches per the source IP prefix
Context	**configure** policy-options policy-statement *string* named-entry *string* from flowspec source *(param-midstring | string)*
Tree	source
String Length	1 to 32
Introduced	19.10.R1
Platforms	All

group-address *(param-midstring | string)*

Synopsis	Prefix list of multicast group addresses for mathcing
Context	**configure** policy-options policy-statement *string* named-entry *string* from group-address *(param-midstring | string)*
Tree	group-address
String Length	1 to 32
Introduced	19.10.R1
Platforms	All

host-ip *(param-midstring | string)*

Synopsis	Prefix list of IGMP host IP addresses for matching
Context	**configure** policy-options policy-statement *string* named-entry *string* from host-ip *(param-midstring | string)*
Tree	host-ip

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String Length	1 to 32
Introduced	19.10.R1
Platforms	All

interface *(named-item | interface-name | interface-name | interface-name)*

Synopsis	Interface name as match criterion
Context	**configure** policy-options policy-statement *string* named-entry *string* from interface *(named-item | interface-name | interface-name | interface-name)*
Tree	interface
String Length	1 to 32
Max. Instances	1
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

interface-subnets

Synopsis	Enter the **interface-subnets** context
Context	**configure** policy-options policy-statement *string* named-entry *string* from interface-subnets
Tree	interface-subnets
Description	Commands in this context configure the applied router instance and interfaces that are used as the matching condition within each policy statement entry when exporting the IP address of the associated interface to a routing protocol. The interface subnet policy statement match criterion is applied to the following unicast use case contexts: • **export**, when used with OSPFv2, OSPFv3, IS-IS, RIP, RIPng, and BGP • **route-table-import**, when used with BGP • **vrf-export**, when used with MP-BGP
Introduced	21.2.R1
Platforms	All

ip-int-name *string*

Synopsis	Interface name as the match criterion

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Context	**configure** policy-options policy-statement *string* named-entry *string* from interface-subnets ip-int-name *string*
Tree	ip-int-name
Description	This command specifies the interface name to match when exporting the IP address of the associated interface to a routing protocol.
String Length	1 to 32
Max. Instances	10
Notes	This element is ordered by the user.
Introduced	21.2.R1
Platforms	All

service *string*

Synopsis	Service ID of the interface subnets
Context	**configure** policy-options policy-statement *string* named-entry *string* from interface-subnets service *string*
Tree	service
Default	Base
Introduced	21.2.R1
Platforms	All

level *number*

Synopsis	IS-IS route level as a match criterion
Context	**configure** policy-options policy-statement *string* named-entry *string* from level *number*
Tree	level
Range	1 to 2
Introduced	19.10.R1
Platforms	All

local-preference

Synopsis	Enter the **local-preference** context
Context	**configure** policy-options policy-statement *string* named-entry *string* from local-preference

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Tree	local-preference
Introduced	19.10.R1
Platforms	All

qualifier *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	**configure** policy-options policy-statement *string* named-entry *string* from local-preference qualifier *keyword*
Tree	qualifier
Options	equal, or-higher, or-lower
Default	equal
Introduced	19.10.R1
Platforms	All

value *(number | string)*

Synopsis	BGP routes per local preference value or variable name
Context	**configure** policy-options policy-statement *string* named-entry *string* from local-preference value *(number | string)*
Tree	value
String Length	1 to 32
Range	0 to 4294967295
Introduced	19.10.R1
Platforms	All

metric

Synopsis	Enter the **metric** context
Context	**configure** policy-options policy-statement *string* named-entry *string* from metric
Tree	metric
Introduced	19.10.R1
Platforms	All

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qualifier *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	**configure** policy-options policy-statement *string* named-entry *string* from metric qualifier *keyword*
Tree	qualifier
Options	equal, or-higher, or-lower
Default	equal
Introduced	19.10.R1
Platforms	All

value *(number | string)*

Synopsis	Local preference value or variable name
Context	**configure** policy-options policy-statement *string* named-entry *string* from metric value *(number | string)*
Tree	value
String Length	1 to 32
Range	0 to 4294967295
Introduced	19.10.R1
Platforms	All

mvpn-type *keyword*

Synopsis	MVPN type as a match criterion for the entry
Context	**configure** policy-options policy-statement *string* named-entry *string* from mvpn-type *keyword*
Tree	mvpn-type
Options	intra-as-ipmsi-auto-discovery, inter-as-ipmsi-auto-discovery, s-pmsi-auto-discovery, intra-as-segment-leaf-auto-discovery, source-active-auto-discovery, shared-tree-join, source-tree-join
Introduced	19.10.R1
Platforms	All

neighbor

Synopsis	Enter the **neighbor** context

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Context	**configure** policy-options policy-statement *string* named-entry *string* from neighbor
Tree	neighbor
Introduced	19.10.R1
Platforms	All

ip-address *(ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-with-zone | ipv6-address-with-zone)*

Synopsis	IP address to match the neighbor
Context	**configure** policy-options policy-statement *string* named-entry *string* from neighbor ip-address *(ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-with-zone | ipv6-address-with-zone)*
Tree	ip-address
Notes	The following elements are part of a choice: **ip-address** or **prefix-list**.
Introduced	19.10.R1
Platforms	All

prefix-list *(param-midstring | string)*

Synopsis	Name to match the neighbor prefix list
Context	**configure** policy-options policy-statement *string* named-entry *string* from neighbor prefix-list *(param-midstring | string)*
Tree	prefix-list
String Length	1 to 32
Notes	The following elements are part of a choice: **ip-address** or **prefix-list**.
Introduced	19.10.R1
Platforms	All

next-hop

Synopsis	Enter the **next-hop** context
Context	**configure** policy-options policy-statement *string* named-entry *string* from next-hop
Tree	next-hop
Introduced	19.10.R1
Platforms	All

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ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the next hop to match
Context	**configure** policy-options policy-statement *string* named-entry *string* from next-hop ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-address
Notes	The following elements are part of a choice: **ip-address** or **prefix-list**.
Introduced	19.10.R1
Platforms	All

prefix-list *(param-midstring | string)*

Synopsis	Name of a next hop prefix list to match
Context	**configure** policy-options policy-statement *string* named-entry *string* from next-hop prefix-list *(param-midstring | string)*
Tree	prefix-list
String Length	1 to 32
Notes	The following elements are part of a choice: **ip-address** or **prefix-list**.
Introduced	19.10.R1
Platforms	All

origin *keyword*

Synopsis	Route origin match criteria
Context	**configure** policy-options policy-statement *string* named-entry *string* from origin *keyword*
Tree	origin
Description	This command configures a match criteria for the origin attribute of the route. The origin attribute is applicable to BGP routes and to the following subscriber-management routes: Host routes (for example, IPv4 /32 address, or IPv6 SLAAC prefix) carry the origin attribute with AAA, dynamic, or static values, depending on the address assignment method. For CUPS hosts, the origin attribute is always PFCP. Host routes can also be distinguished using the **sub-mgmt** option for the **protocol** command. Dynamically provisioned prefixes or loopback addresses use AAA or PFCP origin values, depending on the protocol that provides the prefix and address. Dynamic routes can also be distinguished using the **direct** option for the **protocol** command.

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Statically configured prefixes under the subscriber interface do not have an origin attribute. These routes can be distinguished using the **direct** option for the **protocol** command.

Framed routes for non-CUPS hosts do not have an origin attribute. Framed routes for CUPS hosts use PFCP for the origin attribute. Alternatively, framed routes can be distinguished using the **managed** option for the **protocol** command.

The values that are specific to subscriber-management routes are never carried in BGP updates as part of the BGP origin attribute and are not visible within the BGP process.

Options	igp, egp, incomplete, any, aaa, dynamic, static, bonding, pfcp
Introduced	19.10.R1
Platforms	All

origin-validation-state *keyword*

Synopsis	Origin validation state used for match criteria
Context	**configure** policy-options policy-statement *string* named-entry *string* from origin-validation-state *keyword*
Tree	origin-validation-state
Description	This command specifies a validation state that is used to match BGP routes based on their origin validation state.
Options	valid, not-found, invalid
Introduced	19.10.R1
Platforms	All

ospf-type *number*

Synopsis	OSPF type metric applied to unmatching route entries
Context	**configure** policy-options policy-statement *string* named-entry *string* from ospf-type *number*
Tree	ospf-type
Range	1 to 2
Introduced	19.10.R1
Platforms	All

path-type *keyword*

Synopsis	Path type as a match criterion

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Context	**configure** policy-options policy-statement *string* named-entry *string* from path-type *keyword*
Tree	path-type
Options	ibgp, ebgp
Introduced	19.10.R1
Platforms	All

policy *(string | string)*

Synopsis	Policy statement as a match criterion
Context	**configure** policy-options policy-statement *string* named-entry *string* from policy *(string | string)*
Tree	policy
String Length	1 to 255
Introduced	19.10.R1
Platforms	All

policy-variables

Synopsis	Enter the **policy-variables** context
Context	**configure** policy-options policy-statement *string* named-entry *string* from policy-variables
Tree	policy-variables
Introduced	19.10.R1
Platforms	All

name [variable-name] *string*

Synopsis	Enter the **name** list instance
Context	**configure** policy-options policy-statement *string* named-entry *string* from policy-variables name *string*
Tree	name
Description	Commands in this context configure global variables for use across BGP peers of a common type (transit, peer, customer, and so on).
Max. Instances	10
Introduced	19.10.R1

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Platforms	All

[**variable-name**] *string*

Synopsis	Global variable name used to reference policy functions
Context	**configure** policy-options policy-statement *string* named-entry *string* from policy-variables name *string*
Tree	name
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the policy variable
Context	**configure** policy-options policy-statement *string* named-entry *string* from policy-variables name *string* address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	address
Notes	The following elements are part of a mandatory choice: **address**, **decimal**, **number**, **prefix**, or **value**.
Introduced	19.10.R1
Platforms	All

decimal *decimal-number*

Synopsis	Attribute decimal to which variable name is resolved
Context	**configure** policy-options policy-statement *string* named-entry *string* from policy-variables name *string* decimal *decimal-number*
Tree	decimal
Range	0.000 to 4294967295.000
Notes	The following elements are part of a mandatory choice: **address**, **decimal**, **number**, **prefix**, or **value**.
Introduced	19.10.R1
Platforms	All

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number *number*

Synopsis	Numerical value of the policy variable
Context	**configure** policy-options policy-statement *string* named-entry *string* from policy-variables name *string* number *number*
Tree	number
Range	0 to 4294967295
Notes	The following elements are part of a mandatory choice: **address**, **decimal**, **number**, **prefix**, or **value**.
Introduced	19.10.R1
Platforms	All

prefix *(ipv4-prefix | ipv6-prefix)*

Synopsis	Prefix value associated with the variable name
Context	**configure** policy-options policy-statement *string* named-entry *string* from policy-variables name *string* prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Notes	The following elements are part of a mandatory choice: **address**, **decimal**, **number**, **prefix**, or **value**.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *string*

Synopsis	Policy variable value
Context	**configure** policy-options policy-statement *string* named-entry *string* from policy-variables name *string* value *string*
Tree	value
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: **address**, **decimal**, **number**, **prefix**, or **value**.
Introduced	19.10.R1
Platforms	All

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prefix-list *(param-midstring-64 | string)*

Synopsis	Prefix list as match criterion
Context	**configure** policy-options policy-statement *string* named-entry *string* from prefix-list *(param-midstring-64 | string)*
Tree	prefix-list
String Length	1 to 64
Max. Instances	28
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

protocol

Synopsis	Enter the **protocol** context
Context	**configure** policy-options policy-statement *string* named-entry *string* from protocol
Tree	protocol
Description	Commands in this context configure the match criterion based on protocols for a route policy statement entry and may be used for both import and export policies.
Introduced	19.10.R1
Platforms	All

instance *(keyword | number)*

Synopsis	Instance for protocol IS-IS, OSPF, or OSPFv3 to match
Context	**configure** policy-options policy-statement *string* named-entry *string* from protocol instance *(keyword | number)*
Tree	instance
Description	This command specifies the OSPF, OSPFv3, or IS-IS instance to be used as the match criterion. When this command is explicitly configured, the **name** command must be configured to identify the protocol (OSPF, OSPFv3, or IS-IS).
Range	0 to 127
Options	all
Default	0
Introduced	19.10.R1

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Platforms	All

name *keyword*

Synopsis	List of protocol names as the match criterion
Context	**configure** policy-options policy-statement *string* named-entry *string* from protocol name *keyword*
Tree	name
Description	This command specifies a protocol list for the match criterion. If multiple protocols are specified, the protocol names must belong to the following protocol set: • direct • static • isis • aggregate • bgp • bgp-label • direct-interface If multiple protocols are specified, the **instance** command cannot be explicitly configured. The protocol **direct-interface** route type matches the specific direct interface host IPv4 /32 and IPv6 /128 routes.
Options	direct, static, bgp, isis, ospf, rip, aggregate, bgp-vpn, igmp, pim, ospf3, ldp, sub-mgmt, mld, managed, vpn-leak, nat, periodic, ipsec, dhcpv6-pd, dhcpv6-na, dhcpv6-ta, dhcpv6-pd-excl, ripng, bgp-label, direct-interface, arp-nd, rib-api, dhcp-client, evpn-ifl, srv6, video
Max. Instances	5
Introduced	19.10.R1
Platforms	All

route-distinguisher-list *(param-midstring-64 | string)*

Synopsis	Route distinguisher list as a match criterion
Context	**configure** policy-options policy-statement *string* named-entry *string* from route-distinguisher-list *(param-midstring-64 | string)*
Tree	route-distinguisher-list
Description	This command specifies the (possibly parameterized) name of a route distinguisher (RD) list.

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This match condition is supported by policies applied as VRF-import or BGP peer import policies. A BGP route can match a policy entry with this match criterion if the NLRI field contains an RD that is matched by at least one of the entries in the RD list.

BGP routes belonging to address families other than VPN-IPv4, VPN-IPv6, MCAST-VPN-IPv4, MCAST-VPN-IPv6, EVPN, FlowSpec-VPN IPv4, FlowSpec-VPN IPv6, MVPN-IPv4, or MVPN-IPv6 route do not match policy entries with this match criterion.

String Length	1 to 64
Introduced	23.3.R1
Platforms	All

source-address

Synopsis	Enter the **source-address** context
Context	**configure** policy-options policy-statement *string* named-entry *string* from source-address
Tree	source-address
Introduced	19.10.R1
Platforms	All

ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source IP address to match
Context	**configure** policy-options policy-statement *string* named-entry *string* from source-address ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-address
Notes	The following elements are part of a choice: **ip-address** or **prefix-list**.
Introduced	19.10.R1
Platforms	All

prefix-list *(param-midstring | string)*

Synopsis	Name of a source address prefix list to match
Context	**configure** policy-options policy-statement *string* named-entry *string* from source-address prefix-list *(param-midstring | string)*
Tree	prefix-list
String Length	1 to 32
Notes	The following elements are part of a choice: **ip-address** or **prefix-list**.

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Introduced	19.10.R1
Platforms	All

srv6-sid-prefix *(policy-var-name | ipv6-unicast-prefix)*

Synopsis	SRv6 SID value as the match criterion for the BGP route
Context	**configure** policy-options policy-statement *string* named-entry *string* from srv6-sid-prefix *(policy-var-name | ipv6-unicast-prefix)*
Tree	srv6-sid-prefix
Description	This command configures either the name of a prefix policy variable or an IPv6 prefix and prefix length, as a match criterion for a BGP route. **Note**: If the name of a prefix policy variable is the match criterion, the name must start and end with an at sign (@). A BGP route matches this condition if it has an SRv6 TLV, and the SID value in that TLV is matched by the bits of the IPv6 prefix (up to the specified prefix length). This match condition is supported in BGP import policies, BGP export policies, and VRF or VSI import policies. The SID value used as the match criterion can aslo be a micro-segment (uSID) value.
String Length	1 to 32
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

srv6-tlv *keyword*

Synopsis	SRv6 TLV presence as match criterion for BGP route
Context	**configure** policy-options policy-statement *string* named-entry *string* from srv6-tlv *keyword*
Tree	srv6-tlv
Description	This command configures whether the entry matches a BGP route with a prefix SID attribute containing an SRv6 TLV. If this command is not configured, a BGP route can match the entry, regardless of whether it has a prefix SID attribute or whether that prefix SID attribute has SRv6 TLVs. This match condition is supported in BGP import policies, BGP export policies, and VRF or VSI import policies. If the **present** option is configured, a BGP route only matches this entry if it has a prefix SID attribute containing an SRv6 TLV. If the **not-present** option is configured, a BGP route only matches this entry if it does not have a prefix SID attribute containing an SRv6 TLV.
Options	present, not-present

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Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

state *keyword*

Synopsis	State used as a match criterion
Context	**configure** policy-options policy-statement *string* named-entry *string* from state *keyword*
Tree	state
Description	This command configures a criterion that identifies in resilient gateways which routes are associated with an active context and which routes are associated with a standby context.
Options	srrp-master, srrp-non-master, ipsec-master-with-peer, ipsec-master-without-peer, ipsec-non-master, fsg-active, fsg-standby
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tag *(number | keyword)*

Synopsis	Route tag used as a match criterion
Context	**configure** policy-options policy-statement *string* named-entry *string* from tag *(number | keyword)*
Tree	tag
Range	1 to 4294967295
Options	no-tag
Introduced	19.10.R1
Platforms	All

to

Synopsis	Enable the **to** context
Context	**configure** policy-options policy-statement *string* named-entry *string* to
Tree	to
Introduced	19.10.R1
Platforms	All

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level *number*

Synopsis	IS-IS route level as a match criterion
Context	**configure** policy-options policy-statement *string* named-entry *string* to level *number*
Tree	level
Range	1 to 2
Introduced	19.10.R1
Platforms	All

neighbor

Synopsis	Enter the **neighbor** context
Context	**configure** policy-options policy-statement *string* named-entry *string* to neighbor
Tree	neighbor
Introduced	19.10.R1
Platforms	All

ip-address *(ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-with-zone | ipv6-address-with-zone)*

Synopsis	IP address to match the neighbor
Context	**configure** policy-options policy-statement *string* named-entry *string* to neighbor ip-address *(ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-with-zone | ipv6-address-with-zone)*
Tree	ip-address
Notes	The following elements are part of a choice: **ip-address** or **prefix-list**.
Introduced	19.10.R1
Platforms	All

prefix-list *(param-midstring | string)*

Synopsis	Name to match the neighbor prefix list
Context	**configure** policy-options policy-statement *string* named-entry *string* to neighbor prefix-list *(param-midstring | string)*
Tree	prefix-list
String Length	1 to 32
Notes	The following elements are part of a choice: **ip-address** or **prefix-list**.

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Introduced	19.10.R1
Platforms	All

prefix-list *(param-midstring-64 | string)*

Synopsis	Prefix list as match criterion
Context	**configure** policy-options policy-statement *string* named-entry *string* to prefix-list *(param-midstring-64 | string)*
Tree	prefix-list
String Length	1 to 64
Max. Instances	28
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

protocol

Synopsis	Enter the **protocol** context
Context	**configure** policy-options policy-statement *string* named-entry *string* to protocol
Tree	protocol
Introduced	19.10.R1
Platforms	All

instance *(keyword | number)*

Synopsis	Instance for the IS-IS, OSPF, or OSPF3 protocol
Context	**configure** policy-options policy-statement *string* named-entry *string* to protocol instance *(keyword | number)*
Tree	instance
Range	0 to 127
Options	all
Default	0
Introduced	19.10.R1
Platforms	All

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name *keyword*

Synopsis	Protocol name to match
Context	**configure** policy-options policy-statement *string* named-entry *string* to protocol name *keyword*
Tree	name
Options	bgp, isis, ospf, rip, bgp-vpn, ospf3, ldp, vpn-leak, ripng, bgp-label, evpn-ifl
Max. Instances	2
Introduced	19.10.R1
Platforms	All

prefix-list [name] *string*

Synopsis	Enter the **prefix-list** list instance
Context	**configure** policy-options prefix-list *string*
Tree	prefix-list
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	Prefix list name
Context	**configure** policy-options prefix-list *string*
Tree	prefix-list
Description	This command specifies the name for a prefix list. Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", "@variable@end", or "start@variable@".
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

prefix [ip-prefix] *(ipv4-prefix | ipv6-prefix)* type *keyword*

Synopsis	Enter the **prefix** list instance

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Context	**configure** policy-options prefix-list *string* prefix *(ipv4-prefix | ipv6-prefix)* type *keyword*
Tree	prefix
Introduced	16.0.R1
Platforms	All

[**ip-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP prefix associated with the prefix length
Context	**configure** policy-options prefix-list *string* prefix *(ipv4-prefix | ipv6-prefix)* type *keyword*
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Prefix list match type
Context	**configure** policy-options prefix-list *string* prefix *(ipv4-prefix | ipv6-prefix)* type *keyword*
Tree	prefix
Options	exact, longer, through, range, to, address-mask
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end-length *number*

Synopsis	Prefix range end length
Context	**configure** policy-options prefix-list *string* prefix *(ipv4-prefix | ipv6-prefix)* type *keyword* end-length *number*
Tree	end-length
Range	0 to 128
Notes	The following elements are part of a choice: **mask-pattern**, (**end-length** and **start-length**), **through-length**, or **to-prefix**.
Introduced	16.0.R1
Platforms	All

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mask-pattern [address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Add a list entry for **mask-pattern**
Context	**configure** policy-options prefix-list *string* prefix *(ipv4-prefix | ipv6-prefix)* type *keyword* mask-pattern *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	mask-pattern
Notes	The following elements are part of a choice: **mask-pattern**, (**end-length** and **start-length**), **through-length**, or **to-prefix**.
Introduced	20.7.R1
Platforms	All

[**address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Address mask for matching routes to the prefix entry
Context	**configure** policy-options prefix-list *string* prefix *(ipv4-prefix | ipv6-prefix)* type *keyword* mask-pattern *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	mask-pattern
Description	This command specifies the address mask to compare against the prefix entry to determine whether the route is considered a match. A route matches the prefix entry if the following conditions are met. • The bitwise logical AND of the prefix address and its mask matches the bitwise logical AND of the route address and its mask. • The prefix length of the prefix entry matches the prefix length of the route. For example, for a prefix entry of 17.1.0.0/32, routes with an address 17.1.x.0 (where x can be 0 through 255) and a prefix length of 32 match the entry.
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

start-length *number*

Synopsis	Start in the prefix range length
Context	**configure** policy-options prefix-list *string* prefix *(ipv4-prefix | ipv6-prefix)* type *keyword* start-length *number*
Tree	start-length
Range	0 to 128

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Notes	The following elements are part of a choice: **mask-pattern**, (**end-length** and **start-length**), **through-length**, or **to-prefix**.
Introduced	16.0.R1
Platforms	All

through-length *number*

Synopsis	Prefix through length
Context	**configure** policy-options prefix-list *string* prefix *(ipv4-prefix | ipv6-prefix)* type *keyword* through-length *number*
Tree	through-length
Range	0 to 128
Notes	The following elements are part of a choice: **mask-pattern**, (**end-length** and **start-length**), **through-length**, or **to-prefix**.
Introduced	16.0.R1
Platforms	All

to-prefix [ip-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Add a list entry for **to-prefix**
Context	**configure** policy-options prefix-list *string* prefix *(ipv4-prefix | ipv6-prefix)* type *keyword* to-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	to-prefix
Notes	The following elements are part of a choice: **mask-pattern**, (**end-length** and **start-length**), **through-length**, or **to-prefix**.
Introduced	20.7.R1
Platforms	All

[**ip-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP prefix for "to" match type
Context	**configure** policy-options prefix-list *string* prefix *(ipv4-prefix | ipv6-prefix)* type *keyword* to-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	to-prefix
Description	This command configures an IP prefix to use in a route policy prefix list for the to match type. If the prefix entry is in the format *prefix1*/*length1*, and this command is configured in the format *prefix2*/*length2*, a route matches the prefix entry if the following conditions are met.

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- The route shares the same most-significant bits (specified by *length1*) with the prefix entry
- The route shares the same most-significant bits (specified by *length2*) with this IP prefix value
- The prefix length of the route is in the range of *length1* to *length2* (inclusive)

For example, for a prefix entry of 10.0.0.8 with a to IP prefix value of 10.0.0.0/32, routes 10.0.0.0/8, 10.0.0.0/9, 10.0.0.0.0/10, and so on, to 10.0.0.0/32 are considered matches for the prefix entry.

Notes This element is part of a list key.

Introduced 20.7.R1

Platforms All

route-distinguisher-list [name] *string*

Synopsis Enter the **route-distinguisher-list** list instance

Context **configure** policy-options route-distinguisher-list *string*

Tree route-distinguisher-list

Introduced 23.3.R1

Platforms All

[**name**] *string*

Synopsis Route distinguisher list name

Context **configure** policy-options route-distinguisher-list *string*

Tree route-distinguisher-list

Description This command creates a list of entries used to match the RD in BGP routes of specific address families.

String Length 1 to 64

Notes This element is part of a list key.

Introduced 23.3.R1

Platforms All

rd-entry [rd] *string*

Synopsis Add a list entry for **rd-entry**

Context **configure** policy-options route-distinguisher-list *string* rd-entry *string*

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Tree	rd-entry
Max. Instances	128
Introduced	23.3.R1
Platforms	All

[**rd**] *string*

Synopsis	Route distinguisher
Context	**configure** policy-options route-distinguisher-list *string* rd-entry *string*
Tree	rd-entry
Description	This command creates an RD matching entry containing an IPv4 address or ASN and the assigned number. The following formats are supported: • *a.b.c.d*/*m*:* – RD in IPv4 format with a wildcard character (such as 10.0.0.0/16:*) • *a.b.c.d*/*m*:*n* – RD in IPv4 format with a specific number (such as 10.0.0.2/32:535) • *asn*:* – RD in ASN format with a wildcard character (such as 65000:*) • *asn*:*n* – RD in ASN format with a specific number (such as 65000:535) See the "Route distinguishers" section of the *7450 ESS, 7750 SR, 7950 XRS, and VSR Layer 3 Services Guide: IES and VPRN* for information about Type values.
String Length	3 to 28
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

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3.32 port commands

```
configure
   –  port string
      –  access
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  egress
            –  pool string
               –  amber-alarm-threshold number
               –  apply-groups reference
               –  apply-groups-exclude reference
               –  red-alarm-threshold number
               –  resv-cbs
                  –  amber-alarm-action
                     –  max number
                     –  step number
                  –  cbs (number | keyword)
               –  slope-policy reference
         –  ingress
            –  pool string
               –  amber-alarm-threshold number
               –  apply-groups reference
               –  apply-groups-exclude reference
               –  red-alarm-threshold number
               –  resv-cbs
                  –  amber-alarm-action
                     –  max number
                     –  step number
                  –  cbs (number | keyword)
               –  slope-policy reference
      –  admin-state keyword
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  connector
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  breakout keyword
         –  rs-fec-mode keyword
      –  ddm-events boolean
      –  description string
      –  dist-cpu-protection
         –  policy reference
      –  dwdm
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  coherent
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  compatibility keyword
            –  cpr-window-size number
            –  dispersion number
            –  mode keyword
            –  report-alarm
               –  hosttx boolean
               –  mod boolean
               –  modflt boolean
               –  netrx boolean
               –  nettx boolean
            –  rx-los-reaction keyword
            –  rx-los-thresh decimal-number
```


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configure port dwdm coherent sweep

```
            - sweep
               - end number
               - start number
            - target-power decimal-number
         - frequency number
      - ethernet
         - access
            - apply-groups reference
            - apply-groups-exclude reference
            - bandwidth number
            - booking-factor number
            - egress
               - queue-group reference instance-id number
                  - accounting-policy reference
                  - aggregate-rate
                     - limit-unused-bandwidth boolean
                     - queue-frame-based-accounting boolean
                     - rate (number | keyword)
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - collect-stats boolean
                  - description string
                  - host-match
                     - int-dest-id string
                  - hs-turbo boolean
                  - queue-overrides
                     - queue reference
                        - adaptation-rule
                           - cir keyword
                           - pir keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - burst-limit (number | keyword)
                        - cbs (number | keyword)
                        - drop-tail
                           - low
                              - percent-reduction-from-mbs (number | keyword)
                        - mbs (number | keyword)
                        - monitor-queue-depth
                           - fast-polling boolean
                           - violation-threshold decimal-number
                        - parent
                           - cir-weight number
                           - weight number
                        - percent-rate
                           - cir decimal-number
                           - pir decimal-number
                        - rate
                           - cir (number | keyword)
                           - pir (number | keyword)
                  - scheduler-policy
                     - overrides
                        - scheduler string
                           - apply-groups reference
                           - apply-groups-exclude reference
                           - parent
                              - cir-weight number
                              - weight number
                           - rate
                              - cir (number | keyword)
                              - pir (number | keyword)
                     - policy-name reference
               - virtual-port string
                  - aggregate-rate
```


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configure port ethernet access egress virtual-port aggregate-rate limit-unused-bandwidth

```
                    - limit-unused-bandwidth boolean
                    - rate (number | keyword)
                 - apply-groups reference
                 - apply-groups-exclude reference
                 - description string
                 - host-match
                    - int-dest-id string
                 - hw-agg-shaper-scheduler-policy reference
                 - lag-per-link-hash
                    - class number
                    - weight number
                 - monitor-hw-agg-shaper-scheduler boolean
                 - monitor-port-scheduler boolean
                 - multicast-hqos-adjustment boolean
                 - port-scheduler-policy reference
                 - scheduler-policy
                    - policy-name reference
           - ingress
              - queue-group reference
                 - accounting-policy reference
                 - apply-groups reference
                 - apply-groups-exclude reference
                 - collect-stats boolean
                 - description string
                 - queue-overrides
                    - queue reference
                       - adaptation-rule
                          - cir keyword
                          - pir keyword
                       - apply-groups reference
                       - apply-groups-exclude reference
                       - cbs (number | keyword)
                       - drop-tail
                          - low
                             - percent-reduction-from-mbs (number | keyword)
                       - mbs (number | keyword)
                       - monitor-queue-depth
                          - fast-polling boolean
                       - rate
                          - cir (number | keyword)
                          - pir (number | keyword)
                 - scheduler-policy
                    - overrides
                       - scheduler string
                          - apply-groups reference
                          - apply-groups-exclude reference
                          - parent
                             - cir-weight number
                             - weight number
                          - rate
                             - cir (number | keyword)
                             - pir (number | keyword)
                    - policy-name reference
        - accounting-policy reference
        - apply-groups reference
        - apply-groups-exclude reference
        - autonegotiate keyword
        - collect-stats boolean
        - crc-monitor
           - signal-degrade
              - multiplier number
              - threshold number
           - signal-failure
              - multiplier number
```


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configure port ethernet crc-monitor signal-failure threshold

```
            - threshold number
         - window-size number
      - dampening
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - half-life number
         - max-suppress-time number
         - reuse-threshold number
         - suppress-threshold number
      - discard-rx-pause-frames boolean
      - dot1q-etype string
      - dot1x
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - macsec
            - apply-groups reference
            - apply-groups-exclude reference
            - exclude-mac-policy reference
            - exclude-protocol
               - cdp boolean
               - eapol-start boolean
               - efm-oam boolean
               - eth-cfm boolean
               - lacp boolean
               - lldp boolean
               - ptp boolean
               - ubfd boolean
            - rx-must-be-encrypted boolean
            - sub-port number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - ca-name reference
               - eapol-destination-address string
               - encap-match
                  - all-match boolean
                  - double-tag string
                  - single-tag string
                  - untagged boolean
               - max-peers number
         - max-authentication-requests number
         - per-host-authentication
            - admin-state keyword
            - allowed-source-macs
               - mac-address string
            - authenticator-init boolean
         - port-control keyword
         - quiet-period number
         - radius-policy reference
         - radius-server-policy reference
         - radius-server-policy-acct reference
         - radius-server-policy-auth reference
         - re-authentication
            - period number
         - server-timeout number
         - supplicant-timeout number
         - transmit-period number
         - tunnel-dot1q boolean
         - tunnel-qinq boolean
         - tunneling boolean
      - down-on-internal-error
         - tx-laser keyword
```


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configure port ethernet down-when-looped

```
        - down-when-looped
          - admin-state keyword
          - keep-alive number
          - retry-timeout number
          - use-broadcast-address boolean
        - duplex keyword
        - efm-oam
          - accept-remote-loopback boolean
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - discovery
            - advertise-capabilities
              - link-monitoring boolean
          - dying-gasp-tx-on-reset boolean
          - grace-tx boolean
          - grace-vendor-oui string
          - hold-time number
          - ignore-efm-state boolean
          - link-monitoring
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - errored-frame
              - admin-state keyword
              - event-notification boolean
              - sd-threshold number
              - sf-threshold number
              - window number
            - errored-frame-period
              - admin-state keyword
              - event-notification boolean
              - sd-threshold number
              - sf-threshold number
              - window number
            - errored-frame-seconds
              - admin-state keyword
              - event-notification boolean
              - sd-threshold number
              - sf-threshold number
              - window number
            - errored-symbols
              - admin-state keyword
              - event-notification boolean
              - sd-threshold number
              - sf-threshold number
              - window number
            - local-sf-action
              - event-notification-burst number
              - info-notification
                - critical-event boolean
                - dying-gasp boolean
              - local-port-action keyword
          - mode keyword
          - multiplier number
          - peer-rdi-rx
            - critical-event keyword
            - dying-gasp keyword
            - event-notification keyword
            - link-fault keyword
          - transmit-interval number
          - trigger-fault keyword
          - tunneling boolean
        - egress
```


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configure port ethernet egress apply-groups

```
            - apply-groups reference
            - apply-groups-exclude reference
            - eth-bn-rate-changes boolean
            - hs-port-pool-policy reference
            - hs-scheduler-policy
               - overrides
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - group number
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - rate (number | keyword)
                  - max-rate (number | keyword)
                  - scheduling-class number
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - rate (number | keyword)
                     - weight number
               - policy-name reference
            - hs-secondary-shaper string
               - aggregate
                  - low-burst-max-class number
                  - rate (number | keyword)
               - apply-groups reference
               - apply-groups-exclude reference
               - class number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - rate (number | keyword)
               - description string
            - hw-agg-shaper-scheduler
               - monitor boolean
               - policy-name reference
            - monitor-port-scheduler boolean
            - port-scheduler-policy
               - overrides
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - level number
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - percent-rate
                        - cir decimal-number
                        - pir decimal-number
                     - rate
                        - cir (number | keyword)
                        - pir (number | keyword)
                  - max-rate
                     - percent-rate decimal-number
                     - rate (number | keyword)
               - policy-name reference
            - rate number
         - elmi
            - apply-groups reference
            - apply-groups-exclude reference
            - mode keyword
            - n393 number
            - t391 number
            - t392 number
         - encap-type keyword
         - eth-cfm
            - mep md-admin-name reference ma-admin-name reference mep-id number
               - admin-state keyword
               - ais
```


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configure port ethernet eth-cfm mep ais client-meg-level

```
                  - client-meg-level number
                  - interface-support boolean
                  - interval number
                  - low-priority-defect keyword
                  - priority number
               - alarm-notification
                  - fng-alarm-time number
                  - fng-reset-time number
               - apply-groups reference
               - apply-groups-exclude reference
               - ccm boolean
               - ccm-ltm-priority number
               - ccm-padding-size number
               - ccm-tlv-ignore keyword
               - collect-lmm-stats boolean
               - csf
                  - multiplier decimal-number
               - description string
               - eth-bn
                  - receive boolean
                  - rx-update-pacing number
               - eth-test
                  - bit-error-threshold number
                  - test-pattern
                     - crc-tlv boolean
                     - pattern keyword
               - facility-fault boolean
               - grace
                  - eth-ed
                     - max-rx-defect-window number
                     - priority number
                     - rx-eth-ed boolean
                     - tx-eth-ed boolean
                  - eth-vsm-grace
                     - rx-eth-vsm-grace boolean
                     - tx-eth-vsm-grace boolean
               - low-priority-defect keyword
               - mac-address string
               - one-way-delay-threshold number
               - vlan (number | keyword)
         - hold-time
            - down number
            - units keyword
            - up number
         - ingress
            - rate number
         - lacp-tunnel boolean
         - lldp
            - apply-groups reference
            - apply-groups-exclude reference
            - dest-mac keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - notification boolean
               - port-id-subtype keyword
               - receive boolean
               - transmit boolean
               - tunnel-nearest-bridge boolean
               - tx-mgmt-address keyword
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
               - tx-tlvs
                  - port-desc boolean
```


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configure port ethernet lldp dest-mac tx-tlvs sys-cap

```
                  - sys-cap boolean
                  - sys-desc boolean
                  - sys-name boolean
         - load-balancing-algorithm keyword
         - mac-address string
         - min-frame-length number
         - mode keyword
         - mtu number
         - network
            - accounting-policy reference
            - apply-groups reference
            - apply-groups-exclude reference
            - collect-stats boolean
            - egress
               - port-queues
                  - overrides
                     - queue number
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - monitor-queue-depth
                           - fast-polling boolean
                           - violation-threshold decimal-number
               - queue-group reference instance-id number
                  - accounting-policy reference
                  - aggregate-rate
                     - limit-unused-bandwidth boolean
                     - queue-frame-based-accounting boolean
                     - rate (number | keyword)
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - collect-stats boolean
                  - description string
                  - hs-turbo boolean
                  - policer-control-policy reference
                  - queue-overrides
                     - queue reference
                        - adaptation-rule
                           - cir keyword
                           - pir keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - cbs (number | keyword)
                        - drop-tail
                           - low
                              - percent-reduction-from-mbs (number | keyword)
                        - mbs (number | keyword)
                        - monitor-queue-depth
                           - fast-polling boolean
                           - violation-threshold decimal-number
                        - percent-rate
                           - cir decimal-number
                           - pir decimal-number
                        - rate
                           - cir (number | keyword)
                           - pir (number | keyword)
                  - scheduler-policy
                     - policy-name reference
               - queue-policy reference
         - pbb-etype string
         - ptp-asymmetry number
         - qinq-etype string
         - report-alarm
            - alignment-marker-not-locked boolean
            - block-not-locked boolean
```


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configure port ethernet report-alarm duplicate-lane

```
            - duplicate-lane boolean
            - frame-not-locked boolean
            - high-ber boolean
            - local boolean
            - remote boolean
            - signal-fail boolean
         - rs-fec-mode keyword
         - single-fiber boolean
         - speed number
         - ssm
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - code-type keyword
            - esmc-tunnel boolean
            - tx-dus boolean
         - symbol-monitor
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - signal-degrade
               - multiplier number
               - threshold number
            - signal-failure
               - multiplier number
               - threshold number
            - window-size number
         - util-stats-interval number
         - xgig keyword
      - gnss
         - antenna-cable-delay number
         - apply-groups reference
         - apply-groups-exclude reference
         - constellation
            - galileo boolean
            - glonass boolean
            - gps boolean
         - elevation-mask-angle number
      - hybrid-buffer-allocation
         - egress-weight
            - access number
            - network number
         - ingress-weight
            - access number
            - network number
      - modify-buffer-allocation
         - percentage-of-rate
            - egress number
            - ingress number
      - monitor-agg-egress-queue-stats boolean
      - monitor-oper-group reference
      - network
         - apply-groups reference
         - apply-groups-exclude reference
         - egress
            - pool string
               - amber-alarm-threshold number
               - apply-groups reference
               - apply-groups-exclude reference
               - red-alarm-threshold number
               - resv-cbs
                  - amber-alarm-action
                     - max number
                     - step number
```


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configure port network egress pool resv-cbs cbs

```
                - cbs (number | keyword)
            - slope-policy reference
    - oper-group reference
    - otu
        - apply-groups reference
        - apply-groups-exclude reference
        - async-mapping boolean
        - fec keyword
        - fine-granularity-ber
            - signal-degrade
                - clear
                    - multiplier number
                    - threshold number
                - raise
                    - multiplier number
                    - threshold number
            - signal-failure
                - clear
                    - multiplier number
                    - threshold number
                - raise
                    - multiplier number
                    - threshold number
        - otu2-lan-data-rate keyword
        - path-monitoring
            - trail-trace-identifier
                - expected
                    - auto-generated
                    - bytes string
                    - string string
                - mismatch-reaction keyword
                - transmit
                    - auto-generated
                    - bytes string
                    - string string
        - payload-structure-identifier
            - payload
                - expected keyword
                - mismatch-reaction keyword
                - transmit keyword
        - report-alarm
            - fec-fail boolean
            - fec-sd boolean
            - fec-sf boolean
            - fec-uncorr boolean
            - loc boolean
            - lof boolean
            - lom boolean
            - los boolean
            - odu-ais boolean
            - odu-bdi boolean
            - odu-lck boolean
            - odu-oci boolean
            - odu-tim boolean
            - opu-plm boolean
            - otu-ais boolean
            - otu-bdi boolean
            - otu-ber-sd boolean
            - otu-ber-sf boolean
            - otu-biae boolean
            - otu-iae boolean
            - otu-tim boolean
        - sd-threshold number
        - section-monitoring
```


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configure port otu section-monitoring trail-trace-identifier

```
            - trail-trace-identifier
               - expected
                  - auto-generated
                  - bytes string
                  - string string
               - mismatch-reaction keyword
               - transmit
                  - auto-generated
                  - bytes string
                  - string string
         - sf-sd-method keyword
         - sf-threshold number
      - sonet-sdh
         - apply-groups reference
         - apply-groups-exclude reference
         - clock-source keyword
         - framing keyword
         - group string
            - apply-groups reference
            - apply-groups-exclude reference
            - payload keyword
         - hold-time
            - down number
            - up number
         - loopback keyword
         - path string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - crc number
            - description string
            - egress
               - port-scheduler-policy
                  - overrides
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - level number
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - percent-rate
                           - cir decimal-number
                           - pir decimal-number
                        - rate
                           - cir (number | keyword)
                           - pir (number | keyword)
                     - max-rate
                        - percent-rate decimal-number
                        - rate (number | keyword)
                  - policy-name reference
            - load-balancing-algorithm keyword
            - mac-address string
            - mode keyword
            - mtu number
            - network
               - accounting-policy reference
               - apply-groups reference
               - apply-groups-exclude reference
               - collect-stats boolean
               - queue-policy reference
            - payload keyword
            - report-alarm
               - pais boolean
               - plcd boolean
               - plop boolean
```


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configure port sonet-sdh path report-alarm pplm

```
                - pplm boolean
                - prdi boolean
                - prei boolean
                - puneq boolean
            - scramble boolean
            - signal-label string
            - trace-string (keyword | string)
        - report-alarm
            - lais boolean
            - lb2er-sd boolean
            - lb2er-sf boolean
            - loc boolean
            - lrdi boolean
            - lrei boolean
            - slof boolean
            - slos boolean
            - ss1f boolean
        - sd-threshold number
        - section-trace
            - byte string
            - increment-z0
            - string string
        - sf-threshold number
        - single-fiber boolean
        - speed keyword
        - suppress-low-order-alarms boolean
        - tx-dus boolean
    - tdm
        - apply-groups reference
        - apply-groups-exclude reference
        - buildout keyword
        - ds1 string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - ber-threshold
                - signal-degrade number
                - signal-failure number
            - channel-group number
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - description string
                - egress
                    - port-scheduler-policy
                        - overrides
                            - apply-groups reference
                            - apply-groups-exclude reference
                            - level number
                                - apply-groups reference
                                - apply-groups-exclude reference
                                - percent-rate
                                    - cir decimal-number
                                    - pir decimal-number
                                - rate
                                    - cir (number | keyword)
                                    - pir (number | keyword)
                            - max-rate
                                - percent-rate decimal-number
                                - rate (number | keyword)
                        - policy-name reference
                - encap-type keyword
                - idle-payload-fill
                    - all-ones
```


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```
                - pattern number
            - idle-signal-fill
                - all-ones
                - pattern number
            - load-balancing-algorithm keyword
            - mac-address string
            - mode keyword
            - mtu number
            - network
                - accounting-policy reference
                - apply-groups reference
                - apply-groups-exclude reference
                - collect-stats boolean
                - queue-policy reference
            - speed number
            - timeslot number
        - clock-source keyword
        - framing keyword
        - loopback keyword
        - remote-loop-respond boolean
        - report-alarm
            - ais boolean
            - ber-sd boolean
            - ber-sf boolean
            - looped boolean
            - los boolean
            - oof boolean
            - rai boolean
        - signal-mode keyword
    - ds3 string
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - channelized keyword
        - clock-source keyword
        - crc number
        - description string
        - egress
            - port-scheduler-policy
                - overrides
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - level number
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - percent-rate
                            - cir decimal-number
                            - pir decimal-number
                        - rate
                            - cir (number | keyword)
                            - pir (number | keyword)
                    - max-rate
                        - percent-rate decimal-number
                        - rate (number | keyword)
                - policy-name reference
        - encap-type keyword
        - feac-loop-respond boolean
        - framing keyword
        - idle-cycle-flag keyword
        - load-balancing-algorithm keyword
        - loopback keyword
        - mac-address string
        - maintenance-data-link
            - equipment-id-code string
```


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```
            - facility-id-code string
            - frame-id-code string
            - generator-string string
            - location-id-code string
            - port-string string
            - transmit-message-type
               - idle-signal boolean
               - path boolean
               - test-signal boolean
            - unit-id-code string
         - mode keyword
         - mtu number
         - network
            - accounting-policy reference
            - apply-groups reference
            - apply-groups-exclude reference
            - collect-stats boolean
            - queue-policy reference
         - report-alarm
            - ais boolean
            - looped boolean
            - los boolean
            - oof boolean
            - rai boolean
         - scramble boolean
         - subrate
            - csu-mode keyword
            - rate-step number
      - e1 string
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - ber-threshold
            - signal-degrade number
            - signal-failure number
         - channel-group number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - egress
               - port-scheduler-policy
                  - overrides
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - level number
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - percent-rate
                           - cir decimal-number
                           - pir decimal-number
                        - rate
                           - cir (number | keyword)
                           - pir (number | keyword)
                     - max-rate
                        - percent-rate decimal-number
                        - rate (number | keyword)
                  - policy-name reference
            - encap-type keyword
            - idle-payload-fill
               - all-ones
               - pattern number
            - idle-signal-fill
               - all-ones
```


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configure port tdm e1 channel-group idle-signal-fill pattern

```
                  - pattern number
               - load-balancing-algorithm keyword
               - mac-address string
               - mode keyword
               - mtu number
               - network
                  - accounting-policy reference
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - collect-stats boolean
                  - queue-policy reference
               - speed number
               - timeslot number
            - clock-source keyword
            - framing keyword
            - loopback keyword
            - national-bits
               - sa4 boolean
               - sa5 boolean
               - sa6 boolean
               - sa7 boolean
               - sa8 boolean
            - report-alarm
               - ais boolean
               - ber-sd boolean
               - ber-sf boolean
               - looped boolean
               - los boolean
               - oof boolean
               - rai boolean
            - signal-mode keyword
         - e3 string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - clock-source keyword
            - crc number
            - description string
            - egress
               - port-scheduler-policy
                  - overrides
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - level number
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - percent-rate
                           - cir decimal-number
                           - pir decimal-number
                        - rate
                           - cir (number | keyword)
                           - pir (number | keyword)
                     - max-rate
                        - percent-rate decimal-number
                        - rate (number | keyword)
                  - policy-name reference
            - encap-type keyword
            - framing keyword
            - idle-cycle-flag keyword
            - load-balancing-algorithm keyword
            - loopback keyword
            - mac-address string
            - mode keyword
            - mtu number
```


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```
            - network
               - accounting-policy reference
               - apply-groups reference
               - apply-groups-exclude reference
               - collect-stats boolean
               - queue-policy reference
            - report-alarm
               - ais boolean
               - looped boolean
               - los boolean
               - oof boolean
               - rai boolean
            - scramble boolean
         - hold-time
            - down number
            - up number
      - transceiver
         - apply-groups reference
         - apply-groups-exclude reference
         - digital-coherent-optics boolean
```


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3.32.1 port command descriptions

port [port-id] *string*

Synopsis	Enter the **port** list instance
Context	**configure** port *string*
Tree	port
Introduced	16.0.R1
Platforms	All

[**port-id**] *string*

Synopsis	Port ID
Context	**configure** port *string*
Tree	port
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

access

Synopsis	Enter the **access** context
Context	**configure** port *string* access
Tree	access
Description	Commands in this context configure egress and ingress pool policy commands.
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** port *string* access egress
Tree	egress

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Description	Commands in this context specify the configuration of access egress buffer pools to determine how a CBS-reserved space is handled and the strategy for utilizing the shared buffer space.
Introduced	16.0.R1
Platforms	All

pool [name] *string*

Synopsis	Enter the **pool** list instance
Context	**configure** port *string* access egress pool *string*
Tree	pool
Description	Commands in this context configure pool policies for the pool instance.
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	Pool name for the access port
Context	**configure** port *string* access egress pool *string*
Tree	pool
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

amber-alarm-threshold *number*

Synopsis	Threshold for the amber alarm on oversubscription
Context	**configure** port *string* access egress pool *string* amber-alarm-threshold *number*
Tree	amber-alarm-threshold
Range	1 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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red-alarm-threshold *number*

Synopsis	Threshold for the red alarm on oversubscription
Context	**configure** port *string* access egress pool *string* red-alarm-threshold *number*
Tree	red-alarm-threshold
Range	1 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

resv-cbs

Synopsis	Enter the **resv-cbs** context
Context	**configure** port *string* access egress pool *string* resv-cbs
Tree	resv-cbs
Introduced	16.0.R1
Platforms	All

amber-alarm-action

Synopsis	Enter the **amber-alarm-action** context
Context	**configure** port *string* access egress pool *string* resv-cbs amber-alarm-action
Tree	amber-alarm-action
Introduced	16.0.R1
Platforms	All

max *number*

Synopsis	Maximum percentage for reserved CBS of the pool
Context	**configure** port *string* access egress pool *string* resv-cbs amber-alarm-action max *number*
Tree	max
Description	This command specifies the maximum percentage for the reserved CBS of the pool. The maximum reserved CBS must not be less than the value of the reserved CBS. To enable adaptive CBS sizing the **max**, **step**, and **cbs** commands must be configured. The **cbs** command must also be configured to a percentage other than the default value.

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When unconfigured, CBS adaptive sizing is not enabled.

Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

step *number*

Synopsis	Step-size percentage for reserved CBS of the pool
Context	**configure** port *string* access egress pool *string* resv-cbs amber-alarm-action step *number*
Tree	step
Description	This command specifies the step-size percentage for the reserved CBS of the pool. To enable adaptive CBS sizing the **max**, **step**, and **cbs** commands must be configured. The **cbs** command must also be configured to a percentage other than the default value. When unconfigured, CBS adaptive sizing is not enabled.
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

cbs *(number | keyword)*

Synopsis	Percentage of the pool buffer space reserved for CBS
Context	**configure** port *string* access egress pool *string* resv-cbs cbs *(number | keyword)*
Tree	cbs
Range	0 to 100
Units	percent
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

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slope-policy *reference*

Synopsis	Policy for the RED slope and TAF values
Context	**configure** port *string* access egress pool *string* slope-policy *reference*
Tree	slope-policy
Reference	**configure** qos slope-policy *string*
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the **ingress** context
Context	**configure** port *string* access ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

pool [name] *string*

Synopsis	Enter the **pool** list instance
Context	**configure** port *string* access ingress pool *string*
Tree	pool
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	Pool name for the access port
Context	**configure** port *string* access ingress pool *string*
Tree	pool
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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amber-alarm-threshold *number*

Synopsis	Threshold for the amber alarm on oversubscription
Context	**configure** port *string* access ingress pool *string* amber-alarm-threshold *number*
Tree	amber-alarm-threshold
Range	1 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

red-alarm-threshold *number*

Synopsis	Threshold for the red alarm on oversubscription
Context	**configure** port *string* access ingress pool *string* red-alarm-threshold *number*
Tree	red-alarm-threshold
Range	1 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

resv-cbs

Synopsis	Enter the **resv-cbs** context
Context	**configure** port *string* access ingress pool *string* resv-cbs
Tree	resv-cbs
Introduced	16.0.R1
Platforms	All

amber-alarm-action

Synopsis	Enter the **amber-alarm-action** context
Context	**configure** port *string* access ingress pool *string* resv-cbs amber-alarm-action
Tree	amber-alarm-action
Introduced	16.0.R1
Platforms	All

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max *number*

Synopsis	Maximum percentage for reserved CBS of the pool
Context	**configure** port *string* access ingress pool *string* resv-cbs amber-alarm-action max *number*
Tree	max
Description	This command specifies the maximum percentage for the reserved CBS of the pool. The maximum reserved CBS must not be less than the value of the reserved CBS. To enable adaptive CBS sizing the **max**, **step**, and **cbs** commands must be configured. The **cbs** command must also be configured to a percentage other than the default value. When unconfigured, CBS adaptive sizing is not enabled.
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

step *number*

Synopsis	Step-size percentage for reserved CBS of the pool
Context	**configure** port *string* access ingress pool *string* resv-cbs amber-alarm-action step *number*
Tree	step
Description	This command specifies the step-size percentage for the reserved CBS of the pool. To enable adaptive CBS sizing the **max**, **step**, and **cbs** commands must be configured. The **cbs** command must also be configured to a percentage other than the default value. When unconfigured, CBS adaptive sizing is not enabled.
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

cbs *(number | keyword)*

Synopsis	Percentage of the pool buffer space reserved for CBS
Context	**configure** port *string* access ingress pool *string* resv-cbs cbs *(number | keyword)*

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Tree	cbs
Range	0 to 100
Units	percent
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

slope-policy *reference*

Synopsis	Policy for the RED slope and TAF values
Context	**configure** port *string* access ingress pool *string* slope-policy *reference*
Tree	slope-policy
Reference	**configure** qos slope-policy *string*
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the port
Context	**configure** port *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

connector

Synopsis	Enter the **connector** context
Context	**configure** port *string* connector
Tree	connector
Description	Commands in this context configure connector ports and modes.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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breakout *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Port breakout of the transceiver used in the connector
Context	**configure** port *string* connector breakout *keyword*
Tree	breakout
Description	This command defines the port breakout of the transceiver used in the connector. Specifying the type triggers the creation of the ports that will be accessible under the connector. When a QSFP28 connector uses an SFP+ optical module with the QSFP28-to-SFP+/SFP28 adapter, set this command to c1-10g. This value indicates the presence of the adapter. For some connectors (for example, QSFPDD), there can be overlap in the breakout for different host interfaces. The same port breakout can be supported on an optical modules that uses a host interface of CAUI-4 as another optical module that uses 100GAUI-2. To distinguish from the CAUI-4 host interface, the '-aui2' suffix is used on some breakout options. This is only necessary where there is overlap. In other situations, the SR OS will set the host interface correctly without requiring the distinction in the breakout option.
Options	c1-40g, c4-10g, c1-100g, c4-25g, c10-10g, c1-400g, c2-100g, c4-100g, c1-10g, c1-25g, c1-50g, c8-50g, c1-800g, c3-100g, c8-100g, c2-400g, c1-1g, c1-100g-aui2, c2-100g-aui2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rs-fec-mode *keyword*

Synopsis	RS-FEC mode for the Ethernet connector
Context	**configure** port *string* connector rs-fec-mode *keyword*
Tree	rs-fec-mode
Description	This command specifies the RS-FEC (Reed-Solomon Forward Error Correction) mode on the Ethernet connector. See "Forward Error Correction" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR Interface Configuration Guide* for more information about FEC settings.
Options	cl91-514-528, cl91-514-544
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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ddm-events *boolean*

Synopsis	Enable Digital Diagnostic Monitoring (DDM) events
Context	**configure** port *string* ddm-events *boolean*
Tree	ddm-events
Default	true
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** port *string* description *string*
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

dist-cpu-protection

Synopsis	Enter the **dist-cpu-protection** context
Context	**configure** port *string* dist-cpu-protection
Tree	dist-cpu-protection
Introduced	21.5.R1
Platforms	All

policy *reference*

Synopsis	Distributed CPU protection policy name
Context	**configure** port *string* dist-cpu-protection policy *reference*
Tree	policy
Reference	**configure** system security dist-cpu-protection policy *string*
Introduced	21.5.R1
Platforms	All

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dwdm

Synopsis	Enter the **dwdm** context
Context	**configure** port *string* dwdm
Tree	dwdm
Description	Commands in this context configure the Dense Wavelength Division Multiplexing (DWDM) parameters for the port.
Introduced	16.0.R1
Platforms	All

coherent

Synopsis	Enter the **coherent** context
Context	**configure** port *string* dwdm coherent
Tree	coherent
Description	Commands in this context configure the coherent optical module.
Introduced	16.0.R1
Platforms	All

compatibility *keyword*

Synopsis	Optical mode and rate of operation
Context	**configure** port *string* dwdm coherent compatibility *keyword*
Tree	compatibility
Options	long-haul, metro, access, interop, interop2, interop3, long-haul-non-differential, oif-400g-zr, open-zrp-ofec1, open-zrp-ofec2
Default	long-haul
Introduced	16.0.R1
Platforms	All

cpr-window-size *number*

Synopsis	Window size for the carrier phase recovery
Context	**configure** port *string* dwdm coherent cpr-window-size *number*
Tree	cpr-window-size

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Description	This command configures the window size for the carrier phase recovery. When this command is changed, the link bounces because the receiver needs to be reconfigured.
Range	2 | 4 | 8 | 16 | 32 | 64
Units	symbols
Default	32
Introduced	16.0.R1
Platforms	All

dispersion *number*

Synopsis	Residual chromatic dispersion compensation
Context	**configure** port *string* dwdm coherent dispersion *number*
Tree	dispersion
Description	This command specifies the residual chromatic dispersion compensation when the coherent receiver is operating in manual dispersion control mode.
Range	-50000 to 50000
Units	picoseconds per nanometer
Introduced	16.0.R1
Platforms	All

mode *keyword*

Synopsis	Mode used to compensate for chromatic dispersion
Context	**configure** port *string* dwdm coherent mode *keyword*
Tree	mode
Options	automatic, manual
Default	automatic
Introduced	16.0.R1
Platforms	All

report-alarm

Synopsis	Enter the **report-alarm** context
Context	**configure** port *string* dwdm coherent report-alarm

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Tree	report-alarm
Description	Commands in this context configure the alarms reported for the coherent module.
Introduced	16.0.R1
Platforms	All

hosttx *boolean*

Synopsis	Report the host (electrical side) transmit alarm
Context	**configure** port *string* dwdm coherent report-alarm hosttx *boolean*
Tree	hosttx
Default	true
Introduced	16.0.R1
Platforms	All

mod *boolean*

Synopsis	Report the module alarm
Context	**configure** port *string* dwdm coherent report-alarm mod *boolean*
Tree	mod
Default	true
Introduced	16.0.R1
Platforms	All

modflt *boolean*

Synopsis	Report the module fault alarm
Context	**configure** port *string* dwdm coherent report-alarm modflt *boolean*
Tree	modflt
Default	true
Introduced	16.0.R1
Platforms	All

netrx *boolean*

Synopsis	Report the network (optical side) receive alarm

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Context	**configure** port *string* dwdm coherent report-alarm netrx *boolean*
Tree	netrx
Default	true
Introduced	16.0.R1
Platforms	All

nettx *boolean*

Synopsis	Report the network (optical side) transmit alarm
Context	**configure** port *string* dwdm coherent report-alarm nettx *boolean*
Tree	nettx
Default	true
Introduced	16.0.R1
Platforms	All

rx-los-reaction *keyword*

Synopsis	Reaction to an RX LOS
Context	**configure** port *string* dwdm coherent rx-los-reaction *keyword*
Tree	rx-los-reaction
Description	This command configures the reaction to an RX LOS. **Note:** If this command is disabled for some coherent DWDM transceivers, the transceiver only reports local fault alarms when an RX LOS condition occurs; however, the port returns to service faster after the LOS condition is cleared. For these transceivers, if this command is enabled, there is better visibility of individual alarms (for example, signal-fail, local fault, no-am-lock), but the port takes longer to service after the LOS condition is cleared.
Options	none, squelch
Default	squelch
Introduced	16.0.R1
Platforms	All

rx-los-thresh *decimal-number*

Synopsis	Average input power LOS threshold
Context	**configure** port *string* dwdm coherent rx-los-thresh *decimal-number*
Tree	rx-los-thresh

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Range	-30 to -13
Units	decibel-milliwatts
Default	-23
Introduced	16.0.R1
Platforms	All

sweep

Synopsis	Enter the **sweep** context
Context	**configure** port *string* dwdm coherent sweep
Tree	sweep
Description	Commands in this context allow users to configure the dispersion sweep **start** and **end** values for the automatic mode of coherent control. If the user knows the approximate or theoretical residual dispersion of the link, these commands can be used to limit the range of sweeping for the automatic control mode and therefore achieve a faster link up.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the dispersion compensation range
Context	**configure** port *string* dwdm coherent sweep end *number*
Tree	end
Range	-50000 to 50000
Units	picoseconds per nanometer
Default	2000
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the dispersion compensation range
Context	**configure** port *string* dwdm coherent sweep start *number*
Tree	start
Range	-50000 to 50000
Units	picoseconds per nanometer

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Default	-25500
Introduced	16.0.R1
Platforms	All

target-power *decimal-number*

Synopsis	Average output power target for the port
Context	**configure** port *string* dwdm coherent target-power *decimal-number*
Tree	target-power
Range	-20 to 3
Units	decibel-milliwatts
Default	1
Introduced	16.0.R1
Platforms	All

frequency *number*

Synopsis	Center frequency for tunable DWDM optical interface
Context	**configure** port *string* dwdm frequency *number*
Tree	frequency
Description	This command configures the center frequency to use for a tunable DWDM optical interface. This command can be used to specify any frequency in the C band. To set the DWDM frequency, the port must be a physical port and the provisioned MDA type must have DWDM tunable optics (for example, p1-100g-tun-b), or the MDA must support the option of tunable DWDM optic modules. This command replaces the **configure port dwdm channel** command.
Range	191100000 to 196150000
Units	megahertz
Introduced	21.10.R3
Platforms	All

ethernet

Synopsis	Enter the **ethernet** context
Context	**configure** port *string* ethernet
Tree	ethernet

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Description	Commands in this context configure Ethernet port attributes. This context can only be used when configuring Fast Ethernet, Gigabit, or 10-Gb Ethernet LAN ports on an appropriate MDA.
Introduced	16.0.R1
Platforms	All

access

Synopsis	Enter the **access** context
Context	**configure** port *string* ethernet access
Tree	access
Description	Commands in this context configure Ethernet access port commands.
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Administrative bandwidth assigned to Ethernet ports
Context	**configure** port *string* ethernet access bandwidth *number*
Tree	bandwidth
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

booking-factor *number*

Synopsis	Booking factor applied to the Ethernet port
Context	**configure** port *string* ethernet access booking-factor *number*
Tree	booking-factor
Range	1 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

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egress

Synopsis	Enter the **egress** context
Context	**configure** port *string* ethernet access egress
Tree	egress
Description	Commands in this context configure Ethernet access egress port commands.
Introduced	16.0.R1
Platforms	All

queue-group [queue-group-name] *reference* instance-id *number*

Synopsis	Enter the **queue-group** list instance
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number*
Tree	queue-group
Introduced	16.0.R1
Platforms	All

[**queue-group-name**] *reference*

Synopsis	Queue group name
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number*
Tree	queue-group
Reference	**configure** qos queue-group-templates egress queue-group *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

instance-id *number*

Synopsis	Instance ID for the egress queue group
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number*
Tree	queue-group
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

accounting-policy *reference*

Synopsis	Accounting policy for the Ethernet port
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R1
Platforms	All

aggregate-rate

Synopsis	Enter the **aggregate-rate** context
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* aggregate-rate
Tree	aggregate-rate
Introduced	16.0.R1
Platforms	All

limit-unused-bandwidth *boolean*

Synopsis	Control unused bandwidth
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* aggregate-rate limit-unused-bandwidth *boolean*
Tree	limit-unused-bandwidth
Default	false
Introduced	16.0.R1
Platforms	All

queue-frame-based-accounting *boolean*

Synopsis	Enable frame-based accounting on policers and queues
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* aggregate-rate queue-frame-based-accounting *boolean*

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Tree	queue-frame-based-accounting
Default	false
Introduced	16.0.R1
Platforms	All

rate *(number | keyword)*

Synopsis	Aggregate rate for all queues
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* aggregate-rate rate *(number | keyword)*
Tree	rate
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1

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Platforms	All

host-match

Synopsis	Enter the **host-match** context
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* host-match
Tree	host-match
Introduced	16.0.R1
Platforms	All

int-dest-id [destination-string] *string*

Synopsis	Add a list entry for **int-dest-id**
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* host-match int-dest-id *string*
Tree	int-dest-id
Introduced	16.0.R1
Platforms	All

[destination-string] *string*

Synopsis	Host match destination ID
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* host-match int-dest-id *string*
Tree	int-dest-id
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

hs-turbo *boolean*

Synopsis	Enable HS turbo queues for higher throughput
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* hs-turbo *boolean*

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Tree	hs-turbo
Description	When configured to **true**, this command enables HS turbo queues that allow the corresponding HSQ queue group queues to achieve a higher throughput. This command is not applicable to 10G ports and is ignored when it is configured under a queue group instance on a 10G port. When configured to **false**, HS turbo queues are disabled.
Default	false
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

queue-overrides

Synopsis	Enter the **queue-overrides** context
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides
Tree	queue-overrides
Introduced	16.0.R1
Platforms	All

queue [queue-id] *reference*

Synopsis	Enter the **queue** list instance
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides queue *reference*
Tree	queue
Introduced	16.0.R1
Platforms	All

[queue-id] *reference*

Synopsis	Queue ID
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides queue *reference*
Tree	queue
Reference	**configure** qos queue-group-templates egress queue-group *string* queue *number*
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides queue *reference* adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides queue *reference* adaptation-rule cir *keyword*
Tree	cir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides queue *reference* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

burst-limit *(number | keyword)*

Synopsis	Override for the shaping burst size for the queue
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides queue *reference* burst-limit *(number | keyword)*

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Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

cbs *(number | keyword)*

Synopsis	CBS for the template queue
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides queue *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the **drop-tail** context
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides queue *reference* drop-tail
Tree	drop-tail
Description	Commands in this context configure queue drop tail commands.
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the **low** context
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides queue *reference* drop-tail low
Tree	low

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Description	Commands in this context configure the queue low drop tail commands. The low drop tail defines the queue depth beyond which the out-of-profile packets are not accepted into the queue and discarded.
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs *(number | keyword)*

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides queue *reference* drop-tail low percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Description	This command overrides the low queue drop tail as a percentage reduction from the MBS of the queue. For example, if a queue has an MBS of 600 kbytes and this percentage is configured to be 30% for the low drop tail, the low drop tail is set to 420 kbytes and the out-of-profile packets are not accepted into the queue if its depth is greater than this value, and is therefore discarded.
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

mbs *(number | keyword)*

Synopsis	MBS for the template queue
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides queue *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the **monitor-queue-depth** context

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Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides queue *reference* monitor-queue-depth
Tree	monitor-queue-depth
Introduced	20.10.R1
Platforms	All

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides queue *reference* monitor-queue-depth fast-polling *boolean*
Tree	fast-polling
Description	When configured to **true**, this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth. When configured to **false**, fast queue polling is not enabled.
Default	false
Introduced	20.10.R1
Platforms	All

violation-threshold *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides queue *reference* monitor-queue-depth violation-threshold *decimal-number*
Tree	violation-threshold
Description	This command specifies threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

parent

Synopsis	Enter the **parent** context
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides queue *reference* parent

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Tree	parent
Description	Commands in this context define the weight of the queue treatment by the parent scheduler that further governs the available bandwidth given to the queue, aside from the queue PIR setting. When multiple schedulers or queues share a child status with the parent scheduler, the weight or level commands define how the queue contends with the other children for the parent bandwidth.
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	CIR that overrides the parent for the queue group
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides queue *reference* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	PIR that overrides the parent for the queue group
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides queue *reference* parent weight *number*
Tree	weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides queue *reference* percent-rate
Tree	percent-rate
Description	Commands in this context specify percent rates.

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These commands are ignored for egress HSQ queue group queues, which are attached to an HS WRR group within an associated HS attachment policy. In this case, the configuration of the percent rate is performed under the **hs-wrr-group** command within the egress queue group template.

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 16.0.R1

Platforms All

cir *decimal-number*

Synopsis CIR for the queue

Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides queue *reference* percent-rate cir *decimal-number*

Tree cir

Range 0.00 to 100.00

Units percent

Introduced 16.0.R1

Platforms All

pir *decimal-number*

Synopsis PIR for the queue

Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides queue *reference* percent-rate pir *decimal-number*

Tree pir

Range 0.01 to 100.00

Units percent

Introduced 16.0.R1

Platforms All

rate

Synopsis Enter the **rate** context

Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides queue *reference* rate

Tree rate

Notes The following elements are part of a choice: **percent-rate** or **rate**.

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Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	CIR for the queue
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides queue *reference* rate cir *(number | keyword)*
Tree	cir
Description	This command specifies the administrative CIR used by the queue. When the **rate** command is executed, a CIR setting is optional. Fractional values are not allowed and must be given as a positive integer. The CIR defines the rate at which the system prioritizes the queue over other queues competing for the same bandwidth. In-profile then out-of-profile packets are preferentially queued by the system at egress and at subsequent next hop nodes where the packet can traverse. To be properly handled throughout the network, the packets must be marked accordingly for profiling at each hop. The CIR can be used by the queue's parent **cir-level** and **cir-weight** commands to define the amount of bandwidth considered to be committed for the child queue during bandwidth allocation by the parent scheduler.
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	PIR for the queue
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* queue-overrides queue *reference* rate pir *(number | keyword)*
Tree	pir
Description	This command specifies the administrative PIR used by the queue. When the **rate** command is executed, a valid PIR setting must be explicitly defined. Fractional values are not allowed and must be given as a positive integer. The actual PIR rate is dependent on the queue's **adaptation-rule** commands and the actual hardware where the queue is provisioned. The PIR defines the maximum rate that the queue can transmit packets out an egress interface (for SAP egress queues). Defining a PIR does not necessarily guarantee that

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the queue can transmit at the intended rate. The actual rate sustained by the queue can be limited by oversubscription factors or available egress bandwidth.

Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

scheduler-policy

Synopsis	Enter the **scheduler-policy** context
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* scheduler-policy
Tree	scheduler-policy
Description	Commands in this context configure a scheduler policy for the egress queue group.
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the **overrides** context
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* scheduler-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

scheduler [scheduler-name] *string*

Synopsis	Enter the **scheduler** list instance
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* scheduler-policy overrides scheduler *string*
Tree	scheduler
Description	Commands in this context are used to override specific attributes of the specified scheduler name. A scheduler defines bandwidth controls that limit each child (other schedulers and queues) associated with the scheduler. Scheduler objects are created within the hierarchical tiers of the policy. It is assumed that each scheduler created has

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queues or other schedulers defined as child associations. The scheduler can be a child which takes bandwidth from a scheduler in a higher tier.

A total of 32 schedulers can be created within a single scheduler policy with no restriction on the distribution between the tiers. The scheduler name must exist in the applied scheduler policy.

Introduced 16.0.R1

Platforms All

[**scheduler-name**] *string*

Synopsis Scheduler name

Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number* scheduler-policy overrides scheduler *string*

Tree scheduler

Description This command specifies the scheduler name. Valid names consist of any string composed of printable, 7-bit ASCII characters. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes.

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

parent

Synopsis Enter the **parent** context

Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number* scheduler-policy overrides scheduler *string* parent

Tree parent

Description Commands in this context are used to override the scheduler's parent weight and CIR weight. The weights apply to the associated level or CIR level configured in the applied scheduler policy.

The override weights are ignored if the scheduler does not have a parent command configured in the scheduler policy. This allows the parent of the scheduler to be removed from the scheduler policy without having to remove all of the queue group overrides. If the parent scheduler does not exist, causing the configured scheduler to be fostered on an egress port scheduler, then the override weights are ignored.

Introduced 16.0.R1

Platforms All

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cir-weight *number*

Synopsis	CIR that overrides the parent
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* scheduler-policy overrides scheduler *string* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	PIR that overrides the parent
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* scheduler-policy overrides scheduler *string* parent weight *number*
Tree	weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* scheduler-policy overrides scheduler *string* rate
Tree	rate
Description	Commands in this context override specific attributes of the specified scheduler rate. The actual operating rate of the scheduler is limited by bandwidth constraints other than its maximum rate. The scheduler's parent scheduler may not have the available bandwidth to meet the scheduler's needs. The bandwidth available to the parent scheduler could be allocated to other child schedulers or the child queues on the parent scheduler may be based on a higher priority. The children of the scheduler may not need the maximum rate available to the scheduler due to an insufficient offered load or limits to their own maximum rates.
Introduced	16.0.R1
Platforms	All

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cir *(number | keyword)*

Synopsis	CIR for the scheduler
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* scheduler-policy overrides scheduler *string* rate cir *(number | keyword)*
Tree	cir
Description	This command specifies the CIR. When a parent is associated with the scheduler, this command provides the amount of bandwidth to be considered during the parent scheduler's within-cir distribution phase. When the **rate** command is executed, a valid PIR setting must be explicitly defined before specifying the CIR. If the CIR is set to **max**, the CIR rate is set to infinity. The **sum** keyword specifies that the CIR be used as the summed CIR values of the children schedulers, policers, or queues.
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	PIR for the scheduler
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* scheduler-policy overrides scheduler *string* rate pir *(number | keyword)*
Tree	pir
Description	This command specifies the PIR. When the **rate** command is executed, a valid PIR setting must be explicitly defined. Any other value results in an error without modifying the current PIR rate.
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy name
Context	**configure** port *string* ethernet access egress queue-group *reference* instance-id *number* scheduler-policy policy-name *reference*

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Tree	policy-name
Reference	**configure** qos scheduler-policy *string*
Introduced	16.0.R1
Platforms	All

virtual-port [vport-name] *string*

Synopsis	Enter the **virtual-port** list instance
Context	**configure** port *string* ethernet access egress virtual-port *string*
Tree	virtual-port
Introduced	16.0.R4
Platforms	All

[**vport-name**] *string*

Synopsis	Vport scheduling node name
Context	**configure** port *string* ethernet access egress virtual-port *string*
Tree	virtual-port
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

aggregate-rate

Synopsis	Enter the **aggregate-rate** context
Context	**configure** port *string* ethernet access egress virtual-port *string* aggregate-rate
Tree	aggregate-rate
Introduced	16.0.R4
Platforms	All

limit-unused-bandwidth *boolean*

Synopsis	Control unused bandwidth

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Context	**configure** port *string* ethernet access egress virtual-port *string* aggregate-rate limit-unused-bandwidth *boolean*
Tree	limit-unused-bandwidth
Default	false
Introduced	16.0.R4
Platforms	All

rate *(number | keyword)*

Synopsis	Enforced aggregate rate for the queue
Context	**configure** port *string* ethernet access egress virtual-port *string* aggregate-rate rate *(number | keyword)*
Tree	rate
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** port *string* ethernet access egress virtual-port *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

host-match

Synopsis	Enter the **host-match** context
Context	**configure** port *string* ethernet access egress virtual-port *string* host-match
Tree	host-match
Introduced	16.0.R4

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Platforms	All

int-dest-id [destination-string] *string*

Synopsis	Add a list entry for **int-dest-id**
Context	**configure** port *string* ethernet access egress virtual-port *string* host-match int-dest-id *string*
Tree	int-dest-id
Introduced	16.0.R4
Platforms	All

[**destination-string**] *string*

Synopsis	Host match destination ID
Context	**configure** port *string* ethernet access egress virtual-port *string* host-match int-dest-id *string*
Tree	int-dest-id
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

hw-agg-shaper-scheduler-policy *reference*

Synopsis	Hardware aggregate shaper scheduler policy to apply
Context	**configure** port *string* ethernet access egress virtual-port *string* hw-agg-shaper-scheduler-policy *reference*
Tree	hw-agg-shaper-scheduler-policy
Reference	**configure** qos hw-agg-shaper-scheduler-policy *string*
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

lag-per-link-hash

Synopsis	Enter the **lag-per-link-hash** context
Context	**configure** port *string* ethernet access egress virtual-port *string* lag-per-link-hash

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Tree	lag-per-link-hash
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

class *number*

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	**configure** port *string* ethernet access egress virtual-port *string* lag-per-link-hash class *number*
Tree	class
Range	1 to 3
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

weight *number*

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	**configure** port *string* ethernet access egress virtual-port *string* lag-per-link-hash weight *number*
Tree	weight
Range	1 to 1024
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

monitor-hw-agg-shaper-scheduler *boolean*

Synopsis	Enable monitoring hardware aggregate shaper scheduler
Context	**configure** port *string* ethernet access egress virtual-port *string* monitor-hw-agg-shaper-scheduler *boolean*
Tree	monitor-hw-agg-shaper-scheduler
Description	When configured to **true**, enables congestion monitoring of the hardware aggregate shaper scheduler on the specified vport.
Default	false
Introduced	21.7.R1

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Platforms	7750 SR-1, 7750 SR-s

monitor-port-scheduler *boolean*

Synopsis	Enable congestion monitoring on egress port scheduler
Context	**configure** port *string* ethernet access egress virtual-port *string* monitor-port-scheduler *boolean*
Tree	monitor-port-scheduler
Description	The command enables congestion monitoring on an EPS that is applied to a Vport. Congestion monitoring must be further configured under the port-scheduler CLI hierarchy. Once the congestion monitoring is in effect, the offered rate (incoming traffic) is compared to the configured port-scheduler congestion threshold. The results of these measurements are stored as the number of samples representing the number of times the offered rates exceeded the configured congestion threshold since the last clearing of the stats. Therefore, the results represent the number of times that the port-scheduler that is applied to a Vport was congested since the last reset of the stats using a **clear** command.
Default	false
Introduced	16.0.R4
Platforms	All

multicast-hqos-adjustment *boolean*

Synopsis	Apply HQoS Adjustment (egress rate modification)
Context	**configure** port *string* ethernet access egress virtual-port *string* multicast-hqos-adjustment *boolean*
Tree	multicast-hqos-adjustment
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

port-scheduler-policy *reference*

Synopsis	Port scheduler policy name
Context	**configure** port *string* ethernet access egress virtual-port *string* port-scheduler-policy *reference*
Tree	port-scheduler-policy
Reference	**configure** qos port-scheduler-policy *string*

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Introduced	16.0.R4
Platforms	All

scheduler-policy

Synopsis	Enter the **scheduler-policy** context
Context	**configure** port *string* ethernet access egress virtual-port *string* scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R4
Platforms	All

policy-name *reference*

Synopsis	Egress scheduler policy
Context	**configure** port *string* ethernet access egress virtual-port *string* scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos scheduler-policy *string*
Introduced	22.2.R1
Platforms	All

ingress

Synopsis	Enter the **ingress** context
Context	**configure** port *string* ethernet access ingress
Tree	ingress
Description	Commands in this context configure Ethernet access ingress port commands.
Introduced	16.0.R1
Platforms	All

queue-group [queue-group-name] *reference*

Synopsis	Enter the **queue-group** list instance
Context	**configure** port *string* ethernet access ingress queue-group *reference*
Tree	queue-group

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Description Commands in this context create an ingress queue group on the Ethernet port. Queue groups created on access ports are used as an alternative queue destination for SAPs.

Queue groups can be created on both access and network oriented ports. When the port is in access mode, the queue groups must be created within the port access node. Access ingress queue groups can only be used by ingress SAP forwarding classes and only a single ingress queue group per port is supported. When the queue group is created in an ingress port context, the queue group name must be an existing ingress queue group template. Two ingress queue groups with the same name cannot be created on the same port.

When creating a queue group, the system will attempt to allocate queue resources based on the queues defined in the queue group template. If the appropriate queue resources do not currently exist, the queue group will not be created. Ingress port queue groups do not support shared-queuing or multipoint shared queuing behavior.

A port queue group cannot be removed from the port when a forwarding class is currently redirected to the group. All forwarding class redirections must first be removed prior to removing the queue group.

Introduced 16.0.R1

Platforms All

[**queue-group-name**] *reference*

Synopsis Queue group name

Context **configure** port *string* ethernet access ingress queue-group *reference*

Tree queue-group

Description This command specifies the queue group name. The specified queue group name must exist as an ingress or egress queue group template depending on the ingress or egress context of the port queue group. Only a single queue group may be created on an ingress port.

Reference **configure** qos queue-group-templates ingress queue-group *string*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

accounting-policy *reference*

Synopsis Accounting policy for the Ethernet port

Context **configure** port *string* ethernet access ingress queue-group *reference* accounting-policy *reference*

Tree accounting-policy

Reference **configure** log accounting-policy *number*

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Introduced	16.0.R1
Platforms	All

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	**configure** port *string* ethernet access ingress queue-group *reference* collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** port *string* ethernet access ingress queue-group *reference* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

queue-overrides

Synopsis	Enter the **queue-overrides** context
Context	**configure** port *string* ethernet access ingress queue-group *reference* queue-overrides
Tree	queue-overrides
Description	Commands in this context define queue command overrides for each queue within the queue group.
Introduced	16.0.R1
Platforms	All

queue [queue-id] *reference*

Synopsis	Enter the **queue** list instance

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Context	**configure** port *string* ethernet access ingress queue-group *reference* queue-overrides queue *reference*
Tree	queue
Description	Commands in this context associate a queue for use in a queue group template. The template queue is created on each queue group object that is created with the queue group template name. Each queue is identified within the template by a queue ID number. The template ensures that all queue groups created with the template's name have the same queue IDs, providing a uniform structure for the forwarding class redirection commands in the SAP egress QoS policies. The queue commands can be individually changed for each queue in each queue group using per queue overrides.
Introduced	16.0.R1
Platforms	All

[**queue-id**] *reference*

Synopsis	Queue ID for the queue group template
Context	**configure** port *string* ethernet access ingress queue-group *reference* queue-overrides queue *reference*
Tree	queue
Reference	**configure** qos queue-group-templates ingress queue-group *string* queue *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** port *string* ethernet access ingress queue-group *reference* queue-overrides queue *reference* adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	**configure** port *string* ethernet access ingress queue-group *reference* queue-overrides queue *reference* adaptation-rule cir *keyword*

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Tree	cir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	**configure** port *string* ethernet access ingress queue-group *reference* queue-overrides queue *reference* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

cbs *(number | keyword)*

Synopsis	CBS for the template queue
Context	**configure** port *string* ethernet access ingress queue-group *reference* queue-overrides queue *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the **drop-tail** context
Context	**configure** port *string* ethernet access ingress queue-group *reference* queue-overrides queue *reference* drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

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low

Synopsis	Enter the **low** context
Context	**configure** port *string* ethernet access ingress queue-group *reference* queue-overrides queue *reference* drop-tail low
Tree	low
Description	Commands in this context configure the queue low drop tail commands. The low drop tail defines the queue depth beyond which out-of-profile packets are accepted into the queue and discarded.
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs *(number | keyword)*

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	**configure** port *string* ethernet access ingress queue-group *reference* queue-overrides queue *reference* drop-tail low percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Description	This command overrides the low queue drop tail as a percentage reduction from the MBS of the queue. For example, if a queue has an MBS of 600 kbytes and this percentage is configured to be 30% for the low drop tail, the low drop tail is set to 420 kbytes and the out-of-profile packets are not accepted into the queue if its depth is greater than this value, and is therefore discarded.
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

mbs *(number | keyword)*

Synopsis	MBS for the template queue
Context	**configure** port *string* ethernet access ingress queue-group *reference* queue-overrides queue *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto

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Introduced	16.0.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the **monitor-queue-depth** context
Context	**configure** port *string* ethernet access ingress queue-group *reference* queue-overrides queue *reference* monitor-queue-depth
Tree	monitor-queue-depth
Introduced	21.7.R1
Platforms	All

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	**configure** port *string* ethernet access ingress queue-group *reference* queue-overrides queue *reference* monitor-queue-depth fast-polling *boolean*
Tree	fast-polling
Default	false
Introduced	21.7.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** port *string* ethernet access ingress queue-group *reference* queue-overrides queue *reference* rate
Tree	rate
Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	CIR for the queue
Context	**configure** port *string* ethernet access ingress queue-group *reference* queue-overrides queue *reference* rate cir *(number | keyword)*
Tree	cir

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Description This command specifies the administrative CIR used by the queue. When the **rate** command is executed, a CIR setting is optional. Fractional values are not allowed and must be given as a positive integer.

The CIR defines the rate at which the system prioritizes the queue over other queues competing for the same bandwidth. In-profile then out-of-profile packets are preferentially queued by the system at egress and at subsequent next hop nodes where the packet can traverse. To be properly handled throughout the network, the packets must be marked accordingly for profiling at each hop.

The CIR can be used by the queue's parent **cir-level** and **cir-weight** commands to define the amount of bandwidth considered to be committed for the child queue during bandwidth allocation by the parent scheduler.

Range 0 to 2000000000

Units kilobps

Options max

Introduced 16.0.R1

Platforms All

pir *(number | keyword)*

Synopsis PIR for the queue

Context **configure** port *string* ethernet access ingress queue-group *reference* queue-overrides queue *reference* rate pir *(number | keyword)*

Tree pir

Description This command specifies the administrative PIR used by the queue. When the **rate** command is executed, a valid PIR setting must be explicitly defined. Fractional values are not allowed and must be given as a positive integer. The actual PIR rate is dependent on the queue's **adaptation-rule** commands and the actual hardware where the queue is provisioned.

The PIR defines the maximum rate that the queue can transmit packets out an egress interface (for SAP egress queues). Defining a PIR does not necessarily guarantee that the queue can transmit at the intended rate. The actual rate sustained by the queue can be limited by oversubscription factors or available egress bandwidth.

Range 1 to 2000000000

Units kilobps

Options max

Introduced 16.0.R1

Platforms All

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scheduler-policy

Synopsis	Enter the **scheduler-policy** context
Context	**configure** port *string* ethernet access ingress queue-group *reference* scheduler-policy
Tree	scheduler-policy
Description	Commands in this context configure a scheduler policy for the ingress queue group.
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the **overrides** context
Context	**configure** port *string* ethernet access ingress queue-group *reference* scheduler-policy overrides
Tree	overrides
Description	Commands in this context specify the set of attributes specifying values specific to the given queue-group instance.
Introduced	16.0.R1
Platforms	All

scheduler [scheduler-name] *string*

Synopsis	Enter the **scheduler** list instance
Context	**configure** port *string* ethernet access ingress queue-group *reference* scheduler-policy overrides scheduler *string*
Tree	scheduler
Description	Commands in this context are used to override specific attributes of the specified scheduler name. A scheduler defines bandwidth controls that limit each child (other schedulers and queues) associated with the scheduler. Scheduler objects are created within the hierarchical tiers of the policy. It is assumed that each scheduler created has queues or other schedulers defined as child associations. The scheduler can be a child which takes bandwidth from a scheduler in a higher tier. A total of 32 schedulers can be created within a single scheduler policy with no restriction on the distribution between the tiers. The scheduler name must exist in the applied scheduler policy.
Introduced	16.0.R1
Platforms	All

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[**scheduler-name**] *string*

Synopsis	Scheduler name
Context	**configure** port *string* ethernet access ingress queue-group *reference* scheduler-policy overrides scheduler *string*
Tree	scheduler
Description	This command specifies the scheduler name. Valid names consist of any string composed of printable, 7-bit ASCII characters. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

parent

Synopsis	Enter the **parent** context
Context	**configure** port *string* ethernet access ingress queue-group *reference* scheduler-policy overrides scheduler *string* parent
Tree	parent
Description	Commands in this context are used to override the scheduler's parent weight and CIR weight. The weights apply to the associated level or CIR level configured in the applied scheduler policy. The override weights are ignored if the scheduler does not have a parent command configured in the scheduler policy. This allows the parent of the scheduler to be removed from the scheduler policy without having to remove all of the queue group overrides. If the parent scheduler does not exist, causing the configured scheduler to be fostered on an egress port scheduler, then the override weights are ignored.
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	CIR that overrides the parent
Context	**configure** port *string* ethernet access ingress queue-group *reference* scheduler-policy overrides scheduler *string* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1

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Platforms All

weight *number*

Synopsis PIR that overrides the parent

Context **configure** port *string* ethernet access ingress queue-group *reference* scheduler-policy overrides scheduler *string* parent weight *number*

Tree weight

Range 0 to 100

Introduced 16.0.R1

Platforms All

rate

Synopsis Enter the **rate** context

Context **configure** port *string* ethernet access ingress queue-group *reference* scheduler-policy overrides scheduler *string* rate

Tree rate

Description Commands in this context override specific attributes of the specified scheduler rate. The actual operating rate of the scheduler is limited by bandwidth constraints other than its maximum rate. The scheduler's parent scheduler may not have the available bandwidth to meet the scheduler's needs. The bandwidth available to the parent scheduler could be allocated to other child schedulers or the child queues on the parent scheduler may be based on a higher priority. The children of the scheduler may not need the maximum rate available to the scheduler due to an insufficient offered load or limits to their own maximum rates.

Introduced 16.0.R1

Platforms All

cir *(number | keyword)*

Synopsis CIR for the scheduler

Context **configure** port *string* ethernet access ingress queue-group *reference* scheduler-policy overrides scheduler *string* rate cir *(number | keyword)*

Tree cir

Description This command specifies the CIR. When a parent is associated with the scheduler, this command provides the amount of bandwidth to be considered during the parent scheduler's within-cir distribution phase. When the **rate** command is executed, a valid PIR setting must be explicitly defined before specifying the CIR. If the CIR is set to **max**, the CIR rate is set to infinity.

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The **sum** keyword specifies that the CIR be used as the summed CIR values of the children schedulers, policers, or queues.

Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	PIR for the scheduler
Context	**configure** port *string* ethernet access ingress queue-group *reference* scheduler-policy overrides scheduler *string* rate pir *(number | keyword)*
Tree	pir
Description	This command specifies the PIR. When the **rate** command is executed, a valid PIR setting must be explicitly defined. Any other value results in an error without modifying the current PIR rate.
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy name
Context	**configure** port *string* ethernet access ingress queue-group *reference* scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos scheduler-policy *string*
Introduced	16.0.R1
Platforms	All

accounting-policy *reference*

Synopsis	Accounting policy for the Ethernet port

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Context	**configure** port *string* ethernet accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R1
Platforms	All

autonegotiate *keyword*

Synopsis	Speed and duplex autonegotiation on the Ethernet port
Context	**configure** port *string* ethernet autonegotiate *keyword*
Tree	autonegotiate
Description	This command enables speed and duplex autonegotiation on Fast Ethernet ports and enables far-end fault indicator support on Gb ports. When autonegotiation is enabled on a port, the link attempts to automatically negotiate the link **speed** and **duplex** commands. If autonegotiation is enabled, the configured **duplex** and **speed** commands are ignored. When autonegotiation is disabled on a port, the port does not attempt to autonegotiate and will only operate at the **speed** and **duplex** command settings configured for the port. Note that disabling autonegotiation on Gb ports is not allowed as the IEEE 802.3 specification for Gb Ethernet requires autonegotiation be enabled for far end fault indication. It is required for autonegotiation to be limited for ports in a LAG to guarantee a specific port speed.
Options	true, false, limited
Introduced	16.0.R1
Platforms	All

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	**configure** port *string* ethernet collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

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crc-monitor

Synopsis	Enter the **crc-monitor** context
Context	**configure** port *string* ethernet crc-monitor
Tree	crc-monitor
Description	Commands in this context configure Ethernet Cyclic Redundancy Check (CRC) monitoring.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

signal-degrade

Synopsis	Enter the **signal-degrade** context
Context	**configure** port *string* ethernet crc-monitor signal-degrade
Tree	signal-degrade
Description	Commands in this context specify the error rate at which to declare the Signal Degrade (SD) condition on an Ethernet interface. The value represents M*10E-N, which is the ratio of errored frames over the total frames received over W seconds of the sliding window. The CRC errors on the interface are sampled once per second.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *number*

Synopsis	SD multiplier
Context	**configure** port *string* ethernet crc-monitor signal-degrade multiplier *number*
Tree	multiplier
Range	1 to 9
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

threshold *number*

Synopsis	SD threshold
Context	**configure** port *string* ethernet crc-monitor signal-degrade threshold *number*
Tree	threshold

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Range	1 to 9
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

signal-failure

Synopsis	Enter the **signal-failure** context
Context	**configure** port *string* ethernet crc-monitor signal-failure
Tree	signal-failure
Description	Commands in this context specify the error rate at which to declare the Signal Fail (SF) condition on an Ethernet interface. The value represents M*10E-N errored frames over total frames received over W seconds of the sliding window. The CRC errors on the interface are sampled once per second.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *number*

Synopsis	SF multiplier
Context	**configure** port *string* ethernet crc-monitor signal-failure multiplier *number*
Tree	multiplier
Range	1 to 9
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

threshold *number*

Synopsis	SF threshold
Context	**configure** port *string* ethernet crc-monitor signal-failure threshold *number*
Tree	threshold
Range	1 to 9
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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window-size *number*

Synopsis	Sliding window size over which errors are measured
Context	**configure** port *string* ethernet crc-monitor window-size *number*
Tree	window-size
Description	This command specifies the sliding window size over which the Ethernet frames are sampled to detect SF or SD conditions. The command is used jointly with the **signal-failure** and the **signal-degrade** commands to configure the sliding window size.
Range	5 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dampening

Synopsis	Enter the **dampening** context
Context	**configure** port *string* ethernet dampening
Tree	dampening
Description	Commands in this context configure Exponential Port Dampening (EPD) for the Ethernet port.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of exponential port dampening
Context	**configure** port *string* ethernet dampening admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

half-life *number*

Synopsis	Half-life decay time

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Context	**configure** port *string* ethernet dampening half-life *number*
Tree	half-life
Description	This command specifies the time that must pass before penalties decay to one-half the initial amount. The half-life and maximum suppression time values must be set at the same time and the ratio of the maximum suppression time and half-life must be less than or equal to 49 and greater than or equal to one.
Range	1 to 2000
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

max-suppress-time *number*

Synopsis	Maximum suppression time
Context	**configure** port *string* ethernet dampening max-suppress-time *number*
Tree	max-suppress-time
Description	This command specifies the maximum suppression time, which is the time it can take after the physical link comes up before the worst case accumulated penalties have decayed to the reuse threshold. The maximum penalty is derived from the maximum suppression time, half life, and reuse threshold, using the following equation: maximum penalty = (reuse threshold) 2 expo:(maximum suppression time/half life) The half life and maximum suppression time values must be set at the same time and the ratio of the maximum suppression time and half life must be less than or equal to 49 and greater than or equal to one.
Range	1 to 43200
Units	seconds
Default	20
Introduced	16.0.R1
Platforms	All

reuse-threshold *number*

Synopsis	Threshold which port-up state is no longer suppressed
Context	**configure** port *string* ethernet dampening reuse-threshold *number*
Tree	reuse-threshold
Description	This command specifies the threshold at which the port-up state is no longer suppressed, after the port has been in a suppressed state and the accumulated

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	penalties decay drops below this threshold. The reuse threshold value must be less than the suppress threshold value.
Range	1 to 20000
Units	penalties
Default	1000
Introduced	16.0.R1
Platforms	All

suppress-threshold *number*

Synopsis	Threshold at which the port-up state is suppressed
Context	**configure** port *string* ethernet dampening suppress-threshold *number*
Tree	suppress-threshold
Description	This command specifies the threshold at which the port-up state is suppressed until the accumulated penalties drop below the reuse threshold. The reuse threshold value must be less than the suppress threshold value.
Range	1 to 20000
Units	penalties
Default	2000
Introduced	16.0.R1
Platforms	All

discard-rx-pause-frames *boolean*

Synopsis	Discard received pause frames
Context	**configure** port *string* ethernet discard-rx-pause-frames *boolean*
Tree	discard-rx-pause-frames
Description	When configured to **true**, the router discards received pause frames. Pause frames are used for local link flow control. When configured to **false**, pause frames are processed upon reception and the transmit side of the receiving port pauses in its transmissions.
Default	false
Introduced	20.10.R1
Platforms	All

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dot1q-etype *string*

Synopsis	Ethertype expected if port encapsulation type is dot1q
Context	**configure** port *string* ethernet dot1q-etype *string*
Tree	dot1q-etype
Description	This command specifies the Ethertype expected when the port encapsulation type is dot1q. Dot1q encapsulation is supported only on Ethernet interfaces.
Default	33024
Introduced	16.0.R1
Platforms	All

dot1x

Synopsis	Enter the **dot1x** context
Context	**configure** port *string* ethernet dot1x
Tree	dot1x
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of dot1x packet extraction to CPM
Context	**configure** port *string* ethernet dot1x admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	21.10.R1
Platforms	All

macsec

Synopsis	Enter the **macsec** context
Context	**configure** port *string* ethernet dot1x macsec
Tree	macsec
Description	Commands in this context configure Media Access Control Security (MACsec) under the port.

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Introduced	16.0.R1
Platforms	All

exclude-mac-policy *reference*

Synopsis	MAC policy excluded from MACsec encryption
Context	**configure** port *string* ethernet dot1x macsec exclude-mac-policy *reference*
Tree	exclude-mac-policy
Reference	**configure** macsec mac-policy *number*
Introduced	16.0.R5
Platforms	All

exclude-protocol

Synopsis	Enter the **exclude-protocol** context
Context	**configure** port *string* ethernet dot1x macsec exclude-protocol
Tree	exclude-protocol
Introduced	16.0.R1
Platforms	All

cdp *boolean*

Synopsis	Disable MACsec for all packets on the link for CDP
Context	**configure** port *string* ethernet dot1x macsec exclude-protocol cdp *boolean*
Tree	cdp
Default	false
Introduced	16.0.R1
Platforms	All

eapol-start *boolean*

Synopsis	Disable MACsec for all packets on the link for EAPOL
Context	**configure** port *string* ethernet dot1x macsec exclude-protocol eapol-start *boolean*
Tree	eapol-start
Default	false

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Introduced	16.0.R1
Platforms	All

efm-oam *boolean*

Synopsis	Disable MACsec for all packets on the link for EFM-OAM
Context	**configure** port *string* ethernet dot1x macsec exclude-protocol efm-oam *boolean*
Tree	efm-oam
Default	false
Introduced	16.0.R1
Platforms	All

eth-cfm *boolean*

Synopsis	Disable MACsec for all packets on the link for ETH-CFM
Context	**configure** port *string* ethernet dot1x macsec exclude-protocol eth-cfm *boolean*
Tree	eth-cfm
Default	false
Introduced	16.0.R1
Platforms	All

lacp *boolean*

Synopsis	Disable MACsec for all packets on the link for LACP
Context	**configure** port *string* ethernet dot1x macsec exclude-protocol lacp *boolean*
Tree	lacp
Default	false
Introduced	16.0.R1
Platforms	All

lldp *boolean*

Synopsis	Disable MACsec for all packets on the link for LLDP
Context	**configure** port *string* ethernet dot1x macsec exclude-protocol lldp *boolean*
Tree	lldp

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Default	false
Introduced	16.0.R1
Platforms	All

ptp *boolean*

Synopsis	Disable MACsec for all packets on the link for PTP
Context	**configure** port *string* ethernet dot1x macsec exclude-protocol ptp *boolean*
Tree	ptp
Default	false
Introduced	19.5.R1
Platforms	All

ubfd *boolean*

Synopsis	Disable MACsec for all packets on the link for uBFD
Context	**configure** port *string* ethernet dot1x macsec exclude-protocol ubfd *boolean*
Tree	ubfd
Default	false
Introduced	19.5.R1
Platforms	All

rx-must-be-encrypted *boolean*

Synopsis	Drop all port traffic that is not MACsec-secured
Context	**configure** port *string* ethernet dot1x macsec rx-must-be-encrypted *boolean*
Tree	rx-must-be-encrypted
Default	false
Introduced	16.0.R1
Platforms	All

sub-port [sub-port-id] *number*

Synopsis	Enter the **sub-port** list instance
Context	**configure** port *string* ethernet dot1x macsec sub-port *number*

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Tree	sub-port
Introduced	16.0.R1
Platforms	All

[**sub-port-id**] *number*

Synopsis	Sub-port ID
Context	**configure** port *string* ethernet dot1x macsec sub-port *number*
Tree	sub-port
Range	1 to 1023
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MACsec on the port
Context	**configure** port *string* ethernet dot1x macsec sub-port *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

ca-name *reference*

Synopsis	Connectivity association linked to the MACsec sub-port
Context	**configure** port *string* ethernet dot1x macsec sub-port *number* ca-name *reference*
Tree	ca-name
Reference	**configure** macsec connectivity-association *string*
Introduced	16.0.R1
Platforms	All

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eapol-destination-address *string*

Synopsis	EAPOL destination MAC address
Context	**configure** port *string* ethernet dot1x macsec sub-port *number* eapol-destination-address *string*
Tree	eapol-destination-address
Introduced	16.0.R1
Platforms	All

encap-match

Synopsis	Enter the **encap-match** context
Context	**configure** port *string* ethernet dot1x macsec sub-port *number* encap-match
Tree	encap-match
Introduced	19.5.R1
Platforms	All

all-match *boolean*

Synopsis	Match and encrypt all traffic patterns
Context	**configure** port *string* ethernet dot1x macsec sub-port *number* encap-match all-match *boolean*
Tree	all-match
Default	true
Notes	The following elements are part of a choice: **all-match**, **double-tag**, **single-tag**, or **untagged**.
Introduced	19.5.R1
Platforms	All

double-tag *string*

Synopsis	QinQ double tag traffic pattern to match
Context	**configure** port *string* ethernet dot1x macsec sub-port *number* encap-match double-tag *string*
Tree	double-tag
String Length	1 to 11

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Notes	The following elements are part of a choice: **all-match**, **double-tag**, **single-tag**, or **untagged**.
Introduced	19.5.R1
Platforms	All

single-tag *string*

Synopsis	Dot1q single tag traffic pattern to match
Context	**configure** port *string* ethernet dot1x macsec sub-port *number* encap-match single-tag *string*
Tree	single-tag
String Length	1 to 11
Notes	The following elements are part of a choice: **all-match**, **double-tag**, **single-tag**, or **untagged**.
Introduced	19.5.R1
Platforms	All

untagged *boolean*

Synopsis	Match and encrypt untagged traffic only
Context	**configure** port *string* ethernet dot1x macsec sub-port *number* encap-match untagged *boolean*
Tree	untagged
Notes	The following elements are part of a choice: **all-match**, **double-tag**, **single-tag**, or **untagged**.
Introduced	19.5.R1
Platforms	All

max-peers *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of peers supported on the port
Context	**configure** port *string* ethernet dot1x macsec sub-port *number* max-peers *number*
Tree	max-peers

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Range	1 to 32
Introduced	16.0.R1
Platforms	All

max-authentication-requests *number*

Synopsis	Maximum number of RADIUS retries
Context	**configure** port *string* ethernet dot1x max-authentication-requests *number*
Tree	max-authentication-requests
Range	1 to 10
Default	2
Introduced	16.0.R1
Platforms	All

per-host-authentication

Synopsis	Enter the **per-host-authentication** context
Context	**configure** port *string* ethernet dot1x per-host-authentication
Tree	per-host-authentication
Introduced	20.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of per-host authentication
Context	**configure** port *string* ethernet dot1x per-host-authentication admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.2.R1
Platforms	All

allowed-source-macs

Synopsis	Enter the **allowed-source-macs** context

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Context	**configure** port *string* ethernet dot1x per-host-authentication allowed-source-macs
Tree	allowed-source-macs
Introduced	20.7.R1
Platforms	All

mac-address [mac] *string*

Synopsis	Add a list entry for **mac-address**
Context	**configure** port *string* ethernet dot1x per-host-authentication allowed-source-macs mac-address *string*
Tree	mac-address
Introduced	20.7.R1
Platforms	All

[**mac**] *string*

Synopsis	Source MAC address of a host selected for authentication
Context	**configure** port *string* ethernet dot1x per-host-authentication allowed-source-macs mac-address *string*
Tree	mac-address
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

authenticator-init *boolean*

Synopsis	Initiate per-host authentication
Context	**configure** port *string* ethernet dot1x per-host-authentication authenticator-init *boolean*
Tree	authenticator-init
Default	true
Introduced	21.2.R1
Platforms	All

port-control *keyword*

Synopsis	802.1x authentication mode

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Context	**configure** port *string* ethernet dot1x port-control *keyword*
Tree	port-control
Options	force-unauthorized, auto, force-authorized
Default	force-authorized
Introduced	16.0.R1
Platforms	All

quiet-period *number*

Synopsis	Time between two sessions when no EAPOL frames are sent
Context	**configure** port *string* ethernet dot1x quiet-period *number*
Tree	quiet-period
Range	1 to 3600
Units	seconds
Default	60
Introduced	16.0.R1
Platforms	All

radius-policy *reference*

Synopsis	RADIUS policy used for 802.1x authentication
Context	**configure** port *string* ethernet dot1x radius-policy *reference*
Tree	radius-policy
Reference	**configure** system security dot1x radius-policy *string*
Introduced	16.0.R1
Platforms	All

radius-server-policy *reference*

Synopsis	RADIUS server policy name
Context	**configure** port *string* ethernet dot1x radius-server-policy *reference*
Tree	radius-server-policy
Reference	**configure** aaa radius server-policy *string*
Notes	The following elements are part of a choice: **radius-server-policy** or (**radius-server-policy-acct** and **radius-server-policy-auth**).

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Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-server-policy-acct *reference*

Synopsis	RADIUS server policy name for accounting
Context	**configure** port *string* ethernet dot1x radius-server-policy-acct *reference*
Tree	radius-server-policy-acct
Reference	**configure** aaa radius server-policy *string*
Notes	The following elements are part of a choice: **radius-server-policy** or (**radius-server-policy-acct** and **radius-server-policy-auth**).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-server-policy-auth *reference*

Synopsis	RADIUS server policy name for authentication
Context	**configure** port *string* ethernet dot1x radius-server-policy-auth *reference*
Tree	radius-server-policy-auth
Reference	**configure** aaa radius server-policy *string*
Notes	The following elements are part of a choice: **radius-server-policy** or (**radius-server-policy-acct** and **radius-server-policy-auth**).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

re-authentication

Synopsis	Enable the **re-authentication** context
Context	**configure** port *string* ethernet dot1x re-authentication
Tree	re-authentication
Introduced	16.0.R1
Platforms	All

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period *number*

Synopsis	Delay before re-authentication is performed
Context	**configure** port *string* ethernet dot1x re-authentication period *number*
Tree	period
Range	1 to 9000
Units	seconds
Default	3600
Introduced	16.0.R1
Platforms	All

server-timeout *number*

Synopsis	Wait time for a response from the RADIUS server
Context	**configure** port *string* ethernet dot1x server-timeout *number*
Tree	server-timeout
Range	1 to 300
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

supplicant-timeout *number*

Synopsis	Wait time for a response to EAPOL messages
Context	**configure** port *string* ethernet dot1x supplicant-timeout *number*
Tree	supplicant-timeout
Range	1 to 300
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

transmit-period *number*

Synopsis	Time after which a new EAPOL request message is sent

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Context	**configure** port *string* ethernet dot1x transmit-period *number*
Tree	transmit-period
Range	1 to 3600
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

tunnel-dot1q *boolean*

Synopsis	Enable dot1x tunneling for 802.1q tagged packets
Context	**configure** port *string* ethernet dot1x tunnel-dot1q *boolean*
Tree	tunnel-dot1q
Default	true
Introduced	21.2.R1
Platforms	All

tunnel-qinq *boolean*

Synopsis	Enable dot1x tunneling for QinQ tagged packets
Context	**configure** port *string* ethernet dot1x tunnel-qinq *boolean*
Tree	tunnel-qinq
Default	true
Introduced	21.2.R1
Platforms	All

tunneling *boolean*

Synopsis	Allow tunneling of untagged 802.1x frames
Context	**configure** port *string* ethernet dot1x tunneling *boolean*
Tree	tunneling
Default	false
Introduced	16.0.R1
Platforms	All

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down-on-internal-error

Synopsis	Enable the **down-on-internal-error** context
Context	**configure** port *string* ethernet down-on-internal-error
Tree	down-on-internal-error
Introduced	16.0.R1
Platforms	All

tx-laser *keyword*

Synopsis	Remote laser state on internal MAC transmit error
Context	**configure** port *string* ethernet down-on-internal-error tx-laser *keyword*
Tree	tx-laser
Options	off, on
Default	on
Introduced	16.0.R1
Platforms	All

down-when-looped

Synopsis	Enter the **down-when-looped** context
Context	**configure** port *string* ethernet down-when-looped
Tree	down-when-looped
Description	Commands in this context configure Ethernet loop detection.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Ethernet loop detection
Context	**configure** port *string* ethernet down-when-looped admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1

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Platforms	All

keep-alive *number*

Synopsis	Time interval between keep-alive PDUs
Context	**configure** port *string* ethernet down-when-looped keep-alive *number*
Tree	keep-alive
Range	1 to 120
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

retry-timeout *number*

Synopsis	Wait time before re-enabling port after loop detection
Context	**configure** port *string* ethernet down-when-looped retry-timeout *number*
Tree	retry-timeout
Range	0 | 10 to 160
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	All

use-broadcast-address *boolean*

Synopsis	Use broadcast MAC address for destination MAC address
Context	**configure** port *string* ethernet down-when-looped use-broadcast-address *boolean*
Tree	use-broadcast-address
Default	false
Introduced	16.0.R1
Platforms	All

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duplex *keyword*

Synopsis	Duplex type for the fast Ethernet port
Context	**configure** port *string* ethernet duplex *keyword*
Tree	duplex
Description	This command configures the duplex of a Fast Ethernet port when autonegotiation is disabled. This command setting is ignored if autonegotiation is enabled for the port.
Options	full, half
Introduced	16.0.R1
Platforms	All

efm-oam

Synopsis	Enter the **efm-oam** context
Context	**configure** port *string* ethernet efm-oam
Tree	efm-oam
Introduced	16.0.R1
Platforms	All

accept-remote-loopback *boolean*

Synopsis	Enable reactions to loopback control OAMPDUs from peers
Context	**configure** port *string* ethernet efm-oam accept-remote-loopback *boolean*
Tree	accept-remote-loopback
Default	false
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EFM OAM operation
Context	**configure** port *string* ethernet efm-oam admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable

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Introduced	16.0.R1
Platforms	All

discovery

Synopsis	Enter the **discovery** context
Context	**configure** port *string* ethernet efm-oam discovery
Tree	discovery
Introduced	16.0.R1
Platforms	All

advertise-capabilities

Synopsis	Enter the **advertise-capabilities** context
Context	**configure** port *string* ethernet efm-oam discovery advertise-capabilities
Tree	advertise-capabilities
Description	Commands in this context specify settings that enable the advertisement of specific capabilities.
Introduced	16.0.R1
Platforms	All

link-monitoring *boolean*

Synopsis	Advertise link monitoring capabilities to peer
Context	**configure** port *string* ethernet efm-oam discovery advertise-capabilities link-monitoring *boolean*
Tree	link-monitoring
Description	When configured to **true**, the link monitoring capability is advertised to the peer through the EFM-OAM protocol. When configured to **false**, the router suppresses the advertisement of capabilities to a remote peer.
Default	true
Introduced	16.0.R1
Platforms	All

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dying-gasp-tx-on-reset *boolean*

Synopsis	Enable generation of the Information OAMPDU off-cycle
Context	**configure** port *string* ethernet efm-oam dying-gasp-tx-on-reset *boolean*
Tree	dying-gasp-tx-on-reset
Description	When configured to **true**, this command enables the generation of the Information OAMPDU off-cycle when the soft reset notification is received by the EFM application. The local port state remains under the control of the soft reset application and does not change based on the EFM function. If the port is operationally up, then the local node will continue to consider the port as available for service data and forwarding. If the upstream node requires a notification to route around the local node undergoing the soft reset, then a notification must be sent to those nodes. This is a disruptive function. When both the **grace-tx** and **dying-gasp-tx-on-reset** commands are active on the same port, the **grace-tx** command takes precedence when a soft reset is invoked if the peer vendor OUI being received is 00:16:4D or the configured **grace-vendor-oui** value. When configured to **false**, the generation of the Information OAMPDU off-cycle is disabled.
Default	true
Introduced	16.0.R1
Platforms	All

grace-tx *boolean*

Synopsis	Enable the sending of Grace TLV for EFM-OAM
Context	**configure** port *string* ethernet efm-oam grace-tx *boolean*
Tree	grace-tx
Description	When configured to **true**, the system sends the Nokia Vendor specific Grace TLV in the information PDU after an ISSU or a soft reset. The Grace TLV informs a remote peer to ignore the negotiated interval and multiplier and instead use the new timeout interval. By default, the command is disabled at the system level and enabled at the port level. Both the system and port level must be enabled to support grace on a specific port. When configured to **true**, the EFM-OAM protocol does not enter a non-operational state when both nodes acknowledge the grace function. This feature minimizes service interruption by giving the restarting router time to become operationally and administratively up within the grace period. The peer receiving the Grace TLV must be able to parse and process the vendor-specific messaging. Do not configure grace if the Nokia Vendor Specific Grace TLV is not supported on the remote peer. When configured to **false**, the Nokia Vendor Specific Grace TLV is not sent.
Introduced	16.0.R1
Platforms	All

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grace-vendor-oui *string*

Synopsis	Peer vendor OUI to support grace function
Context	**configure** port *string* ethernet efm-oam grace-vendor-oui *string*
Tree	grace-vendor-oui
Default	00:16:4D
Introduced	16.0.R1
Platforms	All

hold-time *number*

Synopsis	Wait time before protocol returns to operational state
Context	**configure** port *string* ethernet efm-oam hold-time *number*
Tree	hold-time
Range	1 to 50
Units	seconds
Introduced	16.0.R1
Platforms	All

ignore-efm-state *boolean*

Synopsis	Suppress port state changes for EFM-OAM faults
Context	**configure** port *string* ethernet efm-oam ignore-efm-state *boolean*
Tree	ignore-efm-state
Description	When configured to **true**, the ETH-OAM protocol does not impact the state of the port when there is a failure in the protocol state machine (discovery, configuration, timeout, loops, and so on). There is only a protocol warning message on the port. When configured to **false**, the port state is affected by any existing EFM-OAM protocol fault condition.
Default	false
Introduced	16.0.R1
Platforms	All

link-monitoring

Synopsis	Enter the **link-monitoring** context

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Context	**configure** port *string* ethernet efm-oam link-monitoring
Tree	link-monitoring
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of link monitoring on the port
Context	**configure** port *string* ethernet efm-oam link-monitoring admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

errored-frame

Synopsis	Enter the **errored-frame** context
Context	**configure** port *string* ethernet efm-oam link-monitoring errored-frame
Tree	errored-frame
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of link monitoring on the port
Context	**configure** port *string* ethernet efm-oam link-monitoring errored-frame admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

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event-notification *boolean*

Synopsis	Transmit Event Notification OAMPDU with link event TLV
Context	**configure** port *string* ethernet efm-oam link-monitoring errored-frame event-notification *boolean*
Tree	event-notification
Default	true
Introduced	16.0.R4
Platforms	All

sd-threshold *number*

Synopsis	SD threshold
Context	**configure** port *string* ethernet efm-oam link-monitoring errored-frame sd-threshold *number*
Tree	sd-threshold
Range	1 to 1000000
Introduced	16.0.R4
Platforms	All

sf-threshold *number*

Synopsis	SF threshold
Context	**configure** port *string* ethernet efm-oam link-monitoring errored-frame sf-threshold *number*
Tree	sf-threshold
Range	1 to 1000000
Default	1
Introduced	16.0.R4
Platforms	All

window *number*

Synopsis	Window size
Context	**configure** port *string* ethernet efm-oam link-monitoring errored-frame window *number*
Tree	window
Range	10 to 600

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Units	deciseconds
Default	10
Introduced	16.0.R4
Platforms	All

errored-frame-period

Synopsis	Enter the **errored-frame-period** context
Context	**configure** port *string* ethernet efm-oam link-monitoring errored-frame-period
Tree	errored-frame-period
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of link monitoring on the port
Context	**configure** port *string* ethernet efm-oam link-monitoring errored-frame-period admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

event-notification *boolean*

Synopsis	Transmit Event Notification OAMPDU with link event TLV
Context	**configure** port *string* ethernet efm-oam link-monitoring errored-frame-period event-notification *boolean*
Tree	event-notification
Default	true
Introduced	16.0.R4
Platforms	All

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sd-threshold *number*

Synopsis	SD threshold
Context	**configure** port *string* ethernet efm-oam link-monitoring errored-frame-period sd-threshold *number*
Tree	sd-threshold
Range	1 to 1000000
Introduced	16.0.R4
Platforms	All

sf-threshold *number*

Synopsis	SF threshold
Context	**configure** port *string* ethernet efm-oam link-monitoring errored-frame-period sf-threshold *number*
Tree	sf-threshold
Range	1 to 1000000
Default	1
Introduced	16.0.R4
Platforms	All

window *number*

Synopsis	Window size
Context	**configure** port *string* ethernet efm-oam link-monitoring errored-frame-period window *number*
Tree	window
Range	1 to 4294967295
Units	packets
Default	1488095
Introduced	16.0.R4
Platforms	All

errored-frame-seconds

Synopsis	Enter the **errored-frame-seconds** context
Context	**configure** port *string* ethernet efm-oam link-monitoring errored-frame-seconds

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Tree	errored-frame-seconds
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of link monitoring on the port
Context	**configure** port *string* ethernet efm-oam link-monitoring errored-frame-seconds admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

event-notification *boolean*

Synopsis	Transmit Event Notification OAMPDU with link event TLV
Context	**configure** port *string* ethernet efm-oam link-monitoring errored-frame-seconds event-notification *boolean*
Tree	event-notification
Default	true
Introduced	16.0.R4
Platforms	All

sd-threshold *number*

Synopsis	SD threshold
Context	**configure** port *string* ethernet efm-oam link-monitoring errored-frame-seconds sd-threshold *number*
Tree	sd-threshold
Range	1 to 900
Introduced	16.0.R4
Platforms	All

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sf-threshold *number*

Synopsis	SF threshold
Context	**configure** port *string* ethernet efm-oam link-monitoring errored-frame-seconds sf-threshold *number*
Tree	sf-threshold
Range	1 to 900
Default	1
Introduced	16.0.R4
Platforms	All

window *number*

Synopsis	Window size
Context	**configure** port *string* ethernet efm-oam link-monitoring errored-frame-seconds window *number*
Tree	window
Range	100 to 9000
Units	deciseconds
Default	600
Introduced	16.0.R4
Platforms	All

errored-symbols

Synopsis	Enter the **errored-symbols** context
Context	**configure** port *string* ethernet efm-oam link-monitoring errored-symbols
Tree	errored-symbols
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of link monitoring on the port
Context	**configure** port *string* ethernet efm-oam link-monitoring errored-symbols admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

event-notification *boolean*

Synopsis	Transmit Event Notification OAMPDU with link event TLV
Context	**configure** port *string* ethernet efm-oam link-monitoring errored-symbols event-notification *boolean*
Tree	event-notification
Default	true
Introduced	16.0.R4
Platforms	All

sd-threshold *number*

Synopsis	SD threshold
Context	**configure** port *string* ethernet efm-oam link-monitoring errored-symbols sd-threshold *number*
Tree	sd-threshold
Range	1 to 1000000
Introduced	16.0.R4
Platforms	All

sf-threshold *number*

Synopsis	SF threshold
Context	**configure** port *string* ethernet efm-oam link-monitoring errored-symbols sf-threshold *number*
Tree	sf-threshold
Range	1 to 1000000
Default	1
Introduced	16.0.R4
Platforms	All

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window *number*

Synopsis	Window size
Context	**configure** port *string* ethernet efm-oam link-monitoring errored-symbols window *number*
Tree	window
Range	10 to 600
Units	deciseconds
Default	10
Introduced	16.0.R4
Platforms	All

local-sf-action

Synopsis	Enter the **local-sf-action** context
Context	**configure** port *string* ethernet efm-oam link-monitoring local-sf-action
Tree	local-sf-action
Introduced	16.0.R4
Platforms	All

event-notification-burst *number*

Synopsis	Number of OAMPDUs to send when SF threshold is reached
Context	**configure** port *string* ethernet efm-oam link-monitoring local-sf-action event-notification-burst *number*
Tree	event-notification-burst
Range	1 to 5
Units	packets
Default	1
Introduced	16.0.R4
Platforms	All

info-notification

Synopsis	Enter the **info-notification** context
Context	**configure** port *string* ethernet efm-oam link-monitoring local-sf-action info-notification

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Tree	info-notification
Introduced	16.0.R4
Platforms	All

critical-event *boolean*

Synopsis	Set critical event flag when SF threshold is reached
Context	**configure** port *string* ethernet efm-oam link-monitoring local-sf-action info-notification critical-event *boolean*
Tree	critical-event
Default	false
Introduced	16.0.R4
Platforms	All

dying-gasp *boolean*

Synopsis	Set dying gasp flag when SF threshold is reached
Context	**configure** port *string* ethernet efm-oam link-monitoring local-sf-action info-notification dying-gasp *boolean*
Tree	dying-gasp
Default	false
Introduced	16.0.R4
Platforms	All

local-port-action *keyword*

Synopsis	Local port action when SF threshold is reached
Context	**configure** port *string* ethernet efm-oam link-monitoring local-sf-action local-port-action *keyword*
Tree	local-port-action
Options	log-only, port-out-of-service
Default	port-out-of-service
Introduced	16.0.R4
Platforms	All

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mode *keyword*

Synopsis	Mode of OAM operation for the Ethernet port
Context	**configure** port *string* ethernet efm-oam mode *keyword*
Tree	mode
Options	passive, active
Default	active
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Multiplier for the transmit interval of OAMPDUs
Context	**configure** port *string* ethernet efm-oam multiplier *number*
Tree	multiplier
Range	2 to 5
Default	5
Introduced	16.0.R1
Platforms	All

peer-rdi-rx

Synopsis	Enter the **peer-rdi-rx** context
Context	**configure** port *string* ethernet efm-oam peer-rdi-rx
Tree	peer-rdi-rx
Introduced	16.0.R1
Platforms	All

critical-event *keyword*

Synopsis	Action taken upon receipt of critical event flag
Context	**configure** port *string* ethernet efm-oam peer-rdi-rx critical-event *keyword*
Tree	critical-event
Options	log-only, port-out-of-service
Default	port-out-of-service
Introduced	16.0.R1

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Platforms	All

dying-gasp *keyword*

Synopsis	Action taken upon receipt of dying gasp flag
Context	**configure** port *string* ethernet efm-oam peer-rdi-rx dying-gasp *keyword*
Tree	dying-gasp
Options	log-only, port-out-of-service
Default	port-out-of-service
Introduced	16.0.R1
Platforms	All

event-notification *keyword*

Synopsis	Action taken upon receipt of event TLVs
Context	**configure** port *string* ethernet efm-oam peer-rdi-rx event-notification *keyword*
Tree	event-notification
Options	log-only, port-out-of-service
Default	log-only
Introduced	16.0.R1
Platforms	All

link-fault *keyword*

Synopsis	Action taken upon receipt of link fault flag
Context	**configure** port *string* ethernet efm-oam peer-rdi-rx link-fault *keyword*
Tree	link-fault
Options	log-only, port-out-of-service
Default	port-out-of-service
Introduced	16.0.R1
Platforms	All

transmit-interval *number*

Synopsis	Transmit interval of OAMPDUs

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Context	**configure** port *string* ethernet efm-oam transmit-interval *number*
Tree	transmit-interval
Range	1 to 600
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	All

trigger-fault *keyword*

Synopsis	Flag setting in the information OAMPDU
Context	**configure** port *string* ethernet efm-oam trigger-fault *keyword*
Tree	trigger-fault
Options	dying-gasp, critical-event
Introduced	16.0.R1
Platforms	All

tunneling *boolean*

Synopsis	Enable EFM-OAM PDU tunneling
Context	**configure** port *string* ethernet efm-oam tunneling *boolean*
Tree	tunneling
Default	false
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** port *string* ethernet egress
Tree	egress
Introduced	16.0.R1
Platforms	All

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eth-bn-rate-changes *boolean*

Synopsis	Allow rate changes in ETH-BN messages on port-based MEP
Context	**configure** port *string* ethernet egress eth-bn-rate-changes *boolean*
Tree	eth-bn-rate-changes
Description	When configured to **true**, this command allows rate changes received in ETH-BN messages on a port-based MEP to update the egress rate used on the port. This command is not supported for all MDA types. When configured to **false**, rate changes in ETH-BN messages are denied.
Default	false
Introduced	16.0.R1
Platforms	All

hs-port-pool-policy *reference*

Synopsis	HS port pool policy
Context	**configure** port *string* ethernet egress hs-port-pool-policy *reference*
Tree	hs-port-pool-policy
Reference	**configure** qos hs-port-pool-policy *string*
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-scheduler-policy

Synopsis	Enter the **hs-scheduler-policy** context
Context	**configure** port *string* ethernet egress hs-scheduler-policy
Tree	hs-scheduler-policy
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

overrides

Synopsis	Enable the **overrides** context
Context	**configure** port *string* ethernet egress hs-scheduler-policy overrides
Tree	overrides
Introduced	19.10.R1

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Platforms	7750 SR-7/12/12e

group [group-id] *number*

Synopsis	Enter the **group** list instance
Context	**configure** port *string* ethernet egress hs-scheduler-policy overrides group *number*
Tree	group
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

[**group-id**] *number*

Synopsis	Group ID
Context	**configure** port *string* ethernet egress hs-scheduler-policy overrides group *number*
Tree	group
Range	1
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

rate *(number | keyword)*

Synopsis	Maximum rate
Context	**configure** port *string* ethernet egress hs-scheduler-policy overrides group *number* rate *(number | keyword)*
Tree	rate
Range	1 to 100000
Units	megabps
Options	max
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

max-rate *(number | keyword)*

Synopsis	Maximum frame-based bandwidth limit

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Context	**configure** port *string* ethernet egress hs-scheduler-policy overrides max-rate *(number | keyword)*
Tree	max-rate
Range	1 to 100000
Units	megabps
Options	max
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

scheduling-class [class-number] *number*

Synopsis	Enter the **scheduling-class** list instance
Context	**configure** port *string* ethernet egress hs-scheduler-policy overrides scheduling-class *number*
Tree	scheduling-class
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

[**class-number**] *number*

Synopsis	Scheduling class value
Context	**configure** port *string* ethernet egress hs-scheduler-policy overrides scheduling-class *number*
Tree	scheduling-class
Range	1 to 6
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

rate *(number | keyword)*

Synopsis	Maximum frame-based bandwidth limit
Context	**configure** port *string* ethernet egress hs-scheduler-policy overrides scheduling-class *number* rate *(number | keyword)*
Tree	rate
Range	1 to 100000

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Units	megabps
Options	max
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

weight *number*

Synopsis	Weight of the scheduling class within the group
Context	**configure** port *string* ethernet egress hs-scheduler-policy overrides scheduling-class *number* weight *number*
Tree	weight
Range	1 to 127
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

policy-name *reference*

Synopsis	HS scheduler policy name
Context	**configure** port *string* ethernet egress hs-scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos hs-scheduler-policy *string*
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-secondary-shaper [secondary-shaper-name] *string*

Synopsis	Enter the **hs-secondary-shaper** list instance
Context	**configure** port *string* ethernet egress hs-secondary-shaper *string*
Tree	hs-secondary-shaper
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

[**secondary-shaper-name**] *string*

Synopsis	Secondary shaper name

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Context	**configure** port *string* ethernet egress hs-secondary-shaper *string*
Tree	hs-secondary-shaper
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

aggregate

Synopsis	Enter the **aggregate** context
Context	**configure** port *string* ethernet egress hs-secondary-shaper *string* aggregate
Tree	aggregate
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

low-burst-max-class *number*

Synopsis	Highest scheduling class mapped to the low burst limit
Context	**configure** port *string* ethernet egress hs-secondary-shaper *string* aggregate low-burst-max-class *number*
Tree	low-burst-max-class
Range	1 to 6
Default	6
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

rate *(number | keyword)*

Synopsis	Rate allowed for the HS secondary shaper aggregate
Context	**configure** port *string* ethernet egress hs-secondary-shaper *string* aggregate rate *(number | keyword)*
Tree	rate
Range	1 to 100000000
Units	kilobps
Options	max

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Default	max
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

class [class-number] *number*

Synopsis	Enter the **class** list instance
Context	**configure** port *string* ethernet egress hs-secondary-shaper *string* class *number*
Tree	class
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

[**class-number**] *number*

Synopsis	HS secondary shaper class ID
Context	**configure** port *string* ethernet egress hs-secondary-shaper *string* class *number*
Tree	class
Range	1 to 6
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

rate *(number | keyword)*

Synopsis	Rate allowed for the HS secondary shaper class
Context	**configure** port *string* ethernet egress hs-secondary-shaper *string* class *number* rate *(number | keyword)*
Tree	rate
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

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description *string*

Synopsis	Text description
Context	**configure** port *string* ethernet egress hs-secondary-shaper *string* description *string*
Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

hw-agg-shaper-scheduler

Synopsis	Enter the **hw-agg-shaper-scheduler** context
Context	**configure** port *string* ethernet egress hw-agg-shaper-scheduler
Tree	hw-agg-shaper-scheduler
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

monitor *boolean*

Synopsis	Allow monitoring of the HW aggregate shaper scheduler
Context	**configure** port *string* ethernet egress hw-agg-shaper-scheduler monitor *boolean*
Tree	monitor
Default	false
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

policy-name *reference*

Synopsis	Name of HW aggregate shaper scheduler policy
Context	**configure** port *string* ethernet egress hw-agg-shaper-scheduler policy-name *reference*
Tree	policy-name
Reference	**configure** qos hw-agg-shaper-scheduler-policy *string*
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

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monitor-port-scheduler *boolean*

Synopsis	Enable monitoring of egress scheduler
Context	**configure** port *string* ethernet egress monitor-port-scheduler *boolean*
Tree	monitor-port-scheduler
Default	false
Introduced	16.0.R1
Platforms	All

port-scheduler-policy

Synopsis	Enter the **port-scheduler-policy** context
Context	**configure** port *string* ethernet egress port-scheduler-policy
Tree	port-scheduler-policy
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enable the **overrides** context
Context	**configure** port *string* ethernet egress port-scheduler-policy overrides
Tree	overrides
Description	Commands in this context configure egress scheduler overrides.
Introduced	16.0.R4
Platforms	All

level [priority-level] *number*

Synopsis	Enter the **level** list instance
Context	**configure** port *string* ethernet egress port-scheduler-policy overrides level *number*
Tree	level
Introduced	16.0.R4
Platforms	All

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[**priority-level**] *number*

Synopsis	Port priority level to be overridden
Context	**configure** port *string* ethernet egress port-scheduler-policy overrides level *number*
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** port *string* ethernet egress port-scheduler-policy overrides level *number* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R4
Platforms	All

cir *decimal-number*

Synopsis	CIR for the port scheduler policy
Context	**configure** port *string* ethernet egress port-scheduler-policy overrides level *number* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Units	percent
Introduced	16.0.R4
Platforms	All

pir *decimal-number*

Synopsis	PIR for the the port scheduler policy
Context	**configure** port *string* ethernet egress port-scheduler-policy overrides level *number* percent-rate pir *decimal-number*
Tree	pir

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Range	0.01 to 100.00
Units	percent
Introduced	16.0.R4
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** port *string* ethernet egress port-scheduler-policy overrides level *number* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R4
Platforms	All

cir *(number | keyword)*

Synopsis	CIR
Context	**configure** port *string* ethernet egress port-scheduler-policy overrides level *number* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R4
Platforms	All

pir *(number | keyword)*

Synopsis	PIR
Context	**configure** port *string* ethernet egress port-scheduler-policy overrides level *number* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max

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Introduced	16.0.R4
Platforms	All

max-rate

Synopsis	Enter the **max-rate** context
Context	**configure** port *string* ethernet egress port-scheduler-policy overrides max-rate
Tree	max-rate
Description	Commands in this context override the **max-rate** command found in the port scheduler policy associated with the port. When a maximum rate is defined at the port or channel level, the port scheduler's policy **max-rate** command is ignored.
Introduced	16.0.R4
Platforms	All

percent-rate *decimal-number*

Synopsis	PIR rate
Context	**configure** port *string* ethernet egress port-scheduler-policy overrides max-rate percent-rate *decimal-number*
Tree	percent-rate
Range	0.01 to 100
Units	percent
Default	100
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R4
Platforms	All

rate *(number | keyword)*

Synopsis	PIR rate
Context	**configure** port *string* ethernet egress port-scheduler-policy overrides max-rate rate *(number | keyword)*
Tree	rate
Range	1 to 6400000000
Units	kilobps
Options	max

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Default	max
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R4
Platforms	All

policy-name *reference*

Synopsis	Egress scheduler policy name
Context	**configure** port *string* ethernet egress port-scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos port-scheduler-policy *string*
Introduced	16.0.R1
Platforms	All

rate *number*

Synopsis	Rate of egress traffic
Context	**configure** port *string* ethernet egress rate *number*
Tree	rate
Description	This command configures the rate of traffic leaving the network. An event log is generated each time the egress rate is modified unless the port is part of a LAG. This command is not supported for all MDA types.
Max. Range	-2147483648 to 2147483647
Units	kilobps
Introduced	16.0.R1
Platforms	All

elmi

Synopsis	Enter the **elmi** context
Context	**configure** port *string* ethernet elmi
Tree	elmi
Introduced	16.0.R4
Platforms	All

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mode *keyword*

Synopsis	Ethernet LMI mode
Context	**configure** port *string* ethernet elmi mode *keyword*
Tree	mode
Options	uni-n
Introduced	16.0.R4
Platforms	All

n393 *number*

Synopsis	Monitored count of consecutive errors
Context	**configure** port *string* ethernet elmi n393 *number*
Tree	n393
Range	2 to 10
Default	4
Introduced	16.0.R4
Platforms	All

t391 *number*

Synopsis	Polling timer for UNI-C
Context	**configure** port *string* ethernet elmi t391 *number*
Tree	t391
Range	5 to 30
Units	seconds
Default	10
Introduced	16.0.R4
Platforms	All

t392 *number*

Synopsis	Polling verification timer for UNI-N
Context	**configure** port *string* ethernet elmi t392 *number*
Tree	t392

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Range	5 to 30
Units	seconds
Default	15
Introduced	16.0.R4
Platforms	All

encap-type *keyword*

Synopsis	Encapsulation method for the Ethernet port
Context	**configure** port *string* ethernet encap-type *keyword*
Tree	encap-type
Options	null, dot1q, qinq
Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the **eth-cfm** context
Context	**configure** port *string* ethernet eth-cfm
Tree	eth-cfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*

Synopsis	Enter the **mep** list instance
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name

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Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string* association *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais

Synopsis	Enable the **ais** context
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais
Tree	ais
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

client-meg-level *number*

Synopsis	Client MEG level for AIS message generation
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais client-meg-level *number*
Tree	client-meg-level
Range	1 to 7
Max. Instances	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interface-support *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais interface-support *boolean*
Tree	interface-support
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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interval *number*

Synopsis	Transmission interval for AIS messages
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais interval *number*
Tree	interval
Range	1 | 60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais low-priority-defect *keyword*
Tree	low-priority-defect
Options	all-def, mac-rem-err-xcon
Default	all-def
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Priority of the AIS messages generated by the node
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais priority *number*
Tree	priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the **alarm-notification** context

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Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification
Tree	alarm-notification
Description	Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm. Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-alarm-time *number*
Tree	fng-alarm-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-reset-time *number*
Tree	fng-reset-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis	Generate CCM messages

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Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm *boolean*
Tree	ccm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-ltm-priority *number*
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-padding-size *number*
Tree	ccm-padding-size
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU. This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through **configure eth-cfm domain association ccm-interval)** is less than 1 second.
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-tlv-ignore *keyword*

Synopsis	TLV to ignore on reception

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Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-tlv-ignore *keyword*
Tree	ccm-tlv-ignore
Description	This command configures the receiving MEP to ignore the specified TLVs in the CCM PDU. The ignored TLVs are reported as absent and have no impact on the MEP state machine. When unconfigured, the MEP processes all the recognized TLVs.
Options	interface-status, port-status
Max. Instances	2
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* collect-lmm-stats *boolean*
Tree	collect-lmm-stats
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

csf

Synopsis	Enable the **csf** context
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* csf
Tree	csf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* csf multiplier *decimal-number*

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Tree	multiplier
Range	0.0 | 2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-bn

Synopsis	Enter the **eth-bn** context
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-bn
Tree	eth-bn
Description	Commands in this context configure Ethernet Bandwidth Notification (ETH-BN) message handling.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

receive *boolean*

Synopsis	Enable the reception and processing of ETH-BN messages
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-bn receive *boolean*
Tree	receive
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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rx-update-pacing *number*

Synopsis	Pace of messages to and from ETH-CFM to QoS subsystems
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-bn rx-update-pacing *number*
Tree	rx-update-pacing
Range	1 to 600
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the **eth-test** context
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the **oam eth-cfm eth-test** command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test bit-error-threshold *number*
Tree	bit-error-threshold
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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test-pattern

Synopsis	Enter the **test-pattern** context
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern crc-tlv *boolean*
Tree	crc-tlv
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern pattern *keyword*
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

facility-fault *boolean*

Synopsis	Allow the facility MEP to generate a network action

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Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* facility-fault *boolean*
Tree	facility-fault
Description	When configured to **true**, the system facility MEP responds to a fault with a network-actionable function instead of just reporting the defect condition. When configured to **false**, the system monitors transmissions and reports fault conditions.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the **grace** context
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the **eth-ed** context
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed max-rx-defect-window *number*

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Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed priority *number*
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed rx-eth-ed *boolean*
Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed tx-eth-ed *boolean*
Tree	tx-eth-ed
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis	Enter the **eth-vsm-grace** context
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace rx-eth-vsm-grace *boolean*
Tree	rx-eth-vsm-grace
Description	When configured to **true**, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to **false**, the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace tx-eth-vsm-grace *boolean*
Tree	tx-eth-vsm-grace
Description	When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards. The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers.

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The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* low-priority-defect *keyword*
Tree	low-priority-defect
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MEP
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* mac-address *string*
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* one-way-delay-threshold *number*
Tree	one-way-delay-threshold

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Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vlan *(number | keyword)*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outer VLAN ID of the tunnel
Context	**configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* vlan *(number | keyword)*
Tree	vlan
Range	1 to 4094
Options	none
Default	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

hold-time

Synopsis	Enter the **hold-time** context
Context	**configure** port *string* ethernet hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	All

down *number*

Synopsis	Delay after interface goes from up state to down state
Context	**configure** port *string* ethernet hold-time down *number*
Tree	down
Description	This command specifies the delay to notify the upper layers after an interface transitions from an up state to a down state.

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When an interface transitions from an up state to a down state, it is immediately advertised to the rest of the system if the down interval is zero, but if the down interval is greater than zero, interface down transitions are not advertised to upper layers until the down interval has expired.

Range	1 to 3600000
Introduced	16.0.R1
Platforms	All

units *keyword*

Synopsis	Hold time units
Context	**configure** port *string* ethernet hold-time units *keyword*
Tree	units
Options	seconds, centiseconds
Default	seconds
Introduced	16.0.R1
Platforms	All

up *number*

Synopsis	Delay after interface goes from down state to up state
Context	**configure** port *string* ethernet hold-time up *number*
Tree	up
Description	This command specifies the delay to notify the upper layers after an interface transitions from a down state to an up state. When an interface transitions from a down state to an up state, it is immediately advertised as up to the rest of the system if the up interval is zero, but if the up interval is greater than zero, up transitions are not advertised until the up interval has expired.
Range	1 to 3600000
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the **ingress** context
Context	**configure** port *string* ethernet ingress
Tree	ingress

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Introduced	16.0.R1
Platforms	All

rate *number*

Synopsis	Maximum ingress bandwidth
Context	**configure** port *string* ethernet ingress rate *number*
Tree	rate
Max. Range	-2147483648 to 2147483647
Units	megabps
Introduced	16.0.R1
Platforms	All

lacp-tunnel *boolean*

Synopsis	Enable LACP packet tunneling for the Ethernet port
Context	**configure** port *string* ethernet lacp-tunnel *boolean*
Tree	lacp-tunnel
Default	false
Introduced	16.0.R1
Platforms	All

lldp

Synopsis	Enter the **lldp** context
Context	**configure** port *string* ethernet lldp
Tree	lldp
Description	Commands in this context configure the Link Layer Discovery Protocol (LLDP) on the port.
Introduced	16.0.R1
Platforms	All

dest-mac [mac-type] *keyword*

Synopsis	Enter the **dest-mac** list instance

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Context	**configure** port *string* ethernet lldp dest-mac *keyword*
Tree	dest-mac
Description	Commands in this context configure destination MAC address commands.
Introduced	16.0.R1
Platforms	All

[**mac-type**] *keyword*

Synopsis	Destination MAC address type
Context	**configure** port *string* ethernet lldp dest-mac *keyword*
Tree	dest-mac
Options	nearest-bridge, nearest-non-tpmr, nearest-customer
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

notification *boolean*

Synopsis	Enable LLDP notifications
Context	**configure** port *string* ethernet lldp dest-mac *keyword* notification *boolean*
Tree	notification
Default	false
Introduced	16.0.R1
Platforms	All

port-id-subtype *keyword*

Synopsis	Port ID TLV encoding method for transmission to peer
Context	**configure** port *string* ethernet lldp dest-mac *keyword* port-id-subtype *keyword*
Tree	port-id-subtype
Options	tx-if-alias, tx-if-name, tx-local
Default	tx-local
Introduced	16.0.R1
Platforms	All

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receive *boolean*

Synopsis	Enable LLDP agent to receive but not transmit frames
Context	**configure** port *string* ethernet lldp dest-mac *keyword* receive *boolean*
Tree	receive
Default	false
Introduced	16.0.R1
Platforms	All

transmit *boolean*

Synopsis	Enable the LLDP agent to transmit frames
Context	**configure** port *string* ethernet lldp dest-mac *keyword* transmit *boolean*
Tree	transmit
Default	false
Introduced	16.0.R1
Platforms	All

tunnel-nearest-bridge *boolean*

Synopsis	Allow received LLDP packets to be tunneled
Context	**configure** port *string* ethernet lldp dest-mac *keyword* tunnel-nearest-bridge *boolean*
Tree	tunnel-nearest-bridge
Default	false
Introduced	16.0.R1
Platforms	All

tx-mgmt-address [mgmt-address-system-type] *keyword*

Synopsis	Enter the **tx-mgmt-address** list instance
Context	**configure** port *string* ethernet lldp dest-mac *keyword* tx-mgmt-address *keyword*
Tree	tx-mgmt-address
Introduced	16.0.R1
Platforms	All

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[**mgmt-address-system-type**] *keyword*

Synopsis	Management address to transmit
Context	**configure** port *string* ethernet lldp dest-mac *keyword* tx-mgmt-address *keyword*
Tree	tx-mgmt-address
Options	oob, system, system-ipv6, oob-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of transmitting management address
Context	**configure** port *string* ethernet lldp dest-mac *keyword* tx-mgmt-address *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

tx-tlvs

Synopsis	Enter the **tx-tlvs** context
Context	**configure** port *string* ethernet lldp dest-mac *keyword* tx-tlvs
Tree	tx-tlvs
Introduced	16.0.R1
Platforms	All

port-desc *boolean*

Synopsis	Transmit port description TLVs
Context	**configure** port *string* ethernet lldp dest-mac *keyword* tx-tlvs port-desc *boolean*
Tree	port-desc
Default	false

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Introduced	16.0.R1
Platforms	All

sys-cap *boolean*

Synopsis	Transmit system capabilities TLVs
Context	**configure** port *string* ethernet lldp dest-mac *keyword* tx-tlvs sys-cap *boolean*
Tree	sys-cap
Default	false
Introduced	16.0.R1
Platforms	All

sys-desc *boolean*

Synopsis	Transmit system description TLVs
Context	**configure** port *string* ethernet lldp dest-mac *keyword* tx-tlvs sys-desc *boolean*
Tree	sys-desc
Default	false
Introduced	16.0.R1
Platforms	All

sys-name *boolean*

Synopsis	Transmit system name TLVs
Context	**configure** port *string* ethernet lldp dest-mac *keyword* tx-tlvs sys-name *boolean*
Tree	sys-name
Default	false
Introduced	16.0.R1
Platforms	All

load-balancing-algorithm *keyword*

Synopsis	Load balancing algorithm for the Ethernet port
Context	**configure** port *string* ethernet load-balancing-algorithm *keyword*
Tree	load-balancing-algorithm

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Options	default, include-l4, exclude-l4
Introduced	16.0.R1
Platforms	All

mac-address *string*

Synopsis	MAC address of the Ethernet port
Context	**configure** port *string* ethernet mac-address *string*
Tree	mac-address
Description	This command specifies the MAC address of the Ethernet port. Allowed values are any non-broadcast, non-multicast MAC, and non-IEEE reserved MAC addresses. The default value indicates that an operation MAC address is to be assigned from the chassis MAC address pool.
Default	00:00:00:00:00:00
Introduced	16.0.R1
Platforms	All

min-frame-length *number*

Synopsis	Minimum transmitted frame length
Context	**configure** port *string* ethernet min-frame-length *number*
Tree	min-frame-length
Description	This command configures the minimum transmitted frame length. The option 72 is only supported on FP4 and newer generations of XMA, MDA-e-XP, and MDA-s.
Range	64 | 68 | 72
Units	bytes
Default	64
Introduced	16.0.R1
Platforms	All

mode *keyword*

Synopsis	Operation mode for the Ethernet port
Context	**configure** port *string* ethernet mode *keyword*
Tree	mode

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Options	access, network, hybrid
Introduced	16.0.R1
Platforms	All

mtu *number*

Synopsis	Maximum payload MTU size for the Ethernet port
Context	**configure** port *string* ethernet mtu *number*
Tree	mtu
Description	This command configures the maximum payload MTU size for the Ethernet port. This command indirectly defines the largest physical packet the port can transmit or the far-end Ethernet port can receive. Packets that cannot be fragmented at egress and exceed the MTU size are discarded. The MTU size includes the destination MAC address, source MAC address, the Ethertype or length field, and the complete Ethernet payload. This value does not include the preamble, start of frame delimiter, or the trailing CRC.
Range	512 to 9800
Units	bytes
Introduced	16.0.R1
Platforms	All

network

Synopsis	Enter the **network** context
Context	**configure** port *string* ethernet network
Tree	network
Introduced	16.0.R1
Platforms	All

accounting-policy *reference*

Synopsis	Accounting policy that applies to the network port
Context	**configure** port *string* ethernet network accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R1

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Platforms	All

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	**configure** port *string* ethernet network collect-stats *boolean*
Tree	collect-stats
Description	When configured to **true**, this command enables the collection of accounting and statistical data for the network interface. When applying accounting policies, by default the data is collected in the appropriate records and written to the designated billing file. When configured to **false**, the statistics are still accumulated by the XCM or IOM cards. However, the CPU does not obtain the results and write them to the billing file.
Default	false
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** port *string* ethernet network egress
Tree	egress
Introduced	16.0.R1
Platforms	All

port-queues

Synopsis	Enter the **port-queues** context
Context	**configure** port *string* ethernet network egress port-queues
Tree	port-queues
Introduced	20.10.R1
Platforms	All

overrides

Synopsis	Enter the **overrides** context
Context	**configure** port *string* ethernet network egress port-queues overrides

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Tree	overrides
Description	Commands in this context configure Ethernet network egress port queue override parameters.
Introduced	20.10.R1
Platforms	All

queue [queue-id] *number*

Synopsis	Enter the **queue** list instance
Context	**configure** port *string* ethernet network egress port-queues overrides queue *number*
Tree	queue
Description	Commands in this context configure an Ethernet network queue.
Introduced	20.10.R1
Platforms	All

[**queue-id**] *number*

Synopsis	Queue ID
Context	**configure** port *string* ethernet network egress port-queues overrides queue *number*
Tree	queue
Range	1 to 16
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the **monitor-queue-depth** context
Context	**configure** port *string* ethernet network egress port-queues overrides queue *number* monitor-queue-depth
Tree	monitor-queue-depth
Introduced	20.10.R1
Platforms	All

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fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	**configure** port *string* ethernet network egress port-queues overrides queue *number* monitor-queue-depth fast-polling *boolean*
Tree	fast-polling
Description	When configured to **true**, this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth. When configured to **false**, fast queue polling is not enabled.
Default	false
Introduced	20.10.R1
Platforms	All

violation-threshold *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	**configure** port *string* ethernet network egress port-queues overrides queue *number* monitor-queue-depth violation-threshold *decimal-number*
Tree	violation-threshold
Description	This command specifies threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

queue-group [queue-group-name] *reference* instance-id *number*

Synopsis	Enter the **queue-group** list instance
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number*
Tree	queue-group
Introduced	16.0.R1
Platforms	All

[**queue-group-name**] *reference*

Synopsis	Queue group name

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Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number*
Tree	queue-group
Reference	**configure** qos queue-group-templates egress queue-group *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

instance-id *number*

Synopsis	Instance ID for the egress queue group
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number*
Tree	queue-group
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

accounting-policy *reference*

Synopsis	Accounting policy for the Ethernet port
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R1
Platforms	All

aggregate-rate

Synopsis	Enter the **aggregate-rate** context
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* aggregate-rate
Tree	aggregate-rate
Introduced	16.0.R1

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Platforms	All

limit-unused-bandwidth *boolean*

Synopsis	Control unused bandwidth
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* aggregate-rate limit-unused-bandwidth *boolean*
Tree	limit-unused-bandwidth
Default	false
Introduced	16.0.R1
Platforms	All

queue-frame-based-accounting *boolean*

Synopsis	Enable frame-based accounting on policers and queues
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* aggregate-rate queue-frame-based-accounting *boolean*
Tree	queue-frame-based-accounting
Default	false
Introduced	16.0.R1
Platforms	All

rate *(number | keyword)*

Synopsis	Aggregate rate for all queues
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* aggregate-rate rate *(number | keyword)*
Tree	rate
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

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collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

hs-turbo *boolean*

Synopsis	Enable HS turbo queues for higher throughput
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* hs-turbo *boolean*
Tree	hs-turbo
Description	When configured to **true**, this command enables HS turbo queues that allow the corresponding HSQ queue group queues to achieve a higher throughput. This command is not applicable to 10G ports and is ignored when it is configured under a queue group instance on a 10G port. When configured to **false**, HS turbo queues are disabled.
Default	false
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

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policer-control-policy *reference*

Synopsis	Policer control policy for the QoS egress queue group
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* policer-control-policy *reference*
Tree	policer-control-policy
Reference	**configure** qos policer-control-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue-overrides

Synopsis	Enter the **queue-overrides** context
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides
Tree	queue-overrides
Description	Commands in this context define queue command overrides for each queue within the queue group.
Introduced	16.0.R1
Platforms	All

queue [queue-id] *reference*

Synopsis	Enter the **queue** list instance
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference*
Tree	queue
Introduced	16.0.R1
Platforms	All

[**queue-id**] *reference*

Synopsis	Queue ID
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference*
Tree	queue
Reference	**configure** qos queue-group-templates egress queue-group *string* queue *number*

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference* adaptation-rule
Tree	adaptation-rule
Description	Commands in this context specify the method used by the system to derive the operational CIR and PIR settings when the queue is provisioned in hardware. For the CIR and PIR commands individually, the system attempts to find the best operational rate depending on the defined constraint. Commands in this context are ignored for egress HSQ queue group queues that are attached to an HS WRR group within an associated HS attachment policy. In this case, the configuration of the adaptation rule is performed under the **hs-wrr-group** command within the egress queue group template.
Introduced	16.0.R1
Platforms	All

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference* adaptation-rule cir *keyword*
Tree	cir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest

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Introduced	16.0.R1
Platforms	All

cbs *(number | keyword)*

Synopsis	CBS for the template queue
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the **drop-tail** context
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference* drop-tail
Tree	drop-tail
Description	Commands in this context configure queue drop tail commands.
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the **low** context
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference* drop-tail low
Tree	low
Description	Commands in this context configure the queue low drop tail commands. The low drop tail defines the queue depth beyond which the out-of-profile packets are not accepted into the queue and discarded.
Introduced	16.0.R1
Platforms	All

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percent-reduction-from-mbs *(number | keyword)*

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference* drop-tail low percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Description	This command overrides the low queue drop tail as a percentage reduction from the MBS of the queue. For example, if a queue has an MBS of 600 kbytes and this percentage is configured to be 30% for the low drop tail, the low drop tail is set to 420 kbytes and the out-of-profile packets are not accepted into the queue if its depth is greater than this value, and is therefore discarded.
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

mbs *(number | keyword)*

Synopsis	MBS for the template queue
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the **monitor-queue-depth** context
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference* monitor-queue-depth
Tree	monitor-queue-depth
Introduced	20.10.R1
Platforms	All

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fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference* monitor-queue-depth fast-polling *boolean*
Tree	fast-polling
Description	When configured to **true**, this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth. When configured to **false**, fast queue polling is not enabled.
Default	false
Introduced	20.10.R1
Platforms	All

violation-threshold *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference* monitor-queue-depth violation-threshold *decimal-number*
Tree	violation-threshold
Description	This command specifies threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference* percent-rate
Tree	percent-rate
Description	Commands in this context specify percent rates. This command is ignored for egress HSQ queue group queues, which are attached to an HS WRR group within an associated HS attachment policy. In this case, the configuration of the percent rate is performed under the **hs-wrr-group** command within the egress queue group template.

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Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

cir *decimal-number*

Synopsis	CIR for the queue
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	PIR for the queue
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference* rate
Tree	rate
Description	Commands in this context specify the administrative PIR and CIR for the queue. Defining a PIR does not necessarily guarantee that the queue can transmit at the intended rate. The actual rate sustained by the queue can be limited by oversubscription factors or available egress bandwidth.

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This command can be executed at anytime, altering the PIR and CIR rates for all queues created through the association of the SAP egress QoS policy with the queue ID.

This command is ignored for egress HSQ queue group queues, which are attached to an HS WRR group within an associated HS attachment policy. In this case, the configuration of the rate is performed under the **hs-wrr-group** command within the egress queue group template.

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 16.0.R1

Platforms All

cir *(number | keyword)*

Synopsis CIR for the queue

Context **configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference* rate cir *(number | keyword)*

Tree cir

Description This command specifies the administrative CIR used by the queue. When the **rate** command is executed, a CIR setting is optional. Fractional values are not allowed and must be given as a positive integer.

The CIR defines the rate at which the system prioritizes the queue over other queues competing for the same bandwidth. In-profile then out-of-profile packets are preferentially queued by the system at egress and at subsequent next hop nodes where the packet can traverse. To be properly handled throughout the network, the packets must be marked accordingly for profiling at each hop.

The CIR can be used by the queue's parent **cir-level** and **cir-weight** commands to define the amount of bandwidth considered to be committed for the child queue during bandwidth allocation by the parent scheduler.

Range 0 to 2000000000

Units kilobps

Options max

Introduced 16.0.R1

Platforms All

pir *(number | keyword)*

Synopsis PIR for the queue

Context **configure** port *string* ethernet network egress queue-group *reference* instance-id *number* queue-overrides queue *reference* rate pir *(number | keyword)*

Tree pir

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Description	This command specifies the administrative PIR used by the queue. When the **rate** command is executed, a valid PIR setting must be explicitly defined. Fractional values are not allowed and must be given as a positive integer. The actual PIR rate is dependent on the queue's **adaptation-rule** commands and the actual hardware where the queue is provisioned. The PIR defines the maximum rate that the queue can transmit packets out an egress interface (for SAP egress queues). Defining a PIR does not necessarily guarantee that the queue can transmit at the intended rate. The actual rate sustained by the queue can be limited by oversubscription factors or available egress bandwidth.
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

scheduler-policy

Synopsis	Enter the **scheduler-policy** context
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy for the QoS egress queue group
Context	**configure** port *string* ethernet network egress queue-group *reference* instance-id *number* scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos scheduler-policy *string*
Introduced	22.2.R1
Platforms	All

queue-policy *reference*

Synopsis	Network queue policy
Context	**configure** port *string* ethernet network egress queue-policy *reference*

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Tree	queue-policy
Reference	**configure** qos network-queue *string*
Introduced	16.0.R1
Platforms	All

pbb-etype *string*

Synopsis	Ethertype for PBB encapsulation
Context	**configure** port *string* ethernet pbb-etype *string*
Tree	pbb-etype
Default	35047
Introduced	16.0.R1
Platforms	All

ptp-asymmetry *number*

Synopsis	PTP asymmetry delay on the Ethernet port
Context	**configure** port *string* ethernet ptp-asymmetry *number*
Tree	ptp-asymmetry
Description	This command configures the PTP asymmetry delay on the Ethernet port. This command is used to correct known asymmetry as part of time of day or phase recovery using PTP packets on both local and downstream PTP clocks.
Max. Range	-2147483648 to 2147483647
Units	nanoseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

qinq-etype *string*

Synopsis	Ethertype for QinQ encapsulation
Context	**configure** port *string* ethernet qinq-etype *string*
Tree	qinq-etype
Default	33024
Introduced	16.0.R1
Platforms	All

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report-alarm

Synopsis	Enter the **report-alarm** context
Context	**configure** port *string* ethernet report-alarm
Tree	report-alarm
Description	Commands in this context specify the settings for alarm generation and alarm clear notifications for the port. **Note:** For some DWDM transceivers, if the **configure port dwdm coherent rx-los-reaction squelch** command is disabled, the signal-fail and no-am-lock alarm conditions are not reported when the media side of the transceiver has an RX LOS condition.
Introduced	16.0.R1
Platforms	All

alignment-marker-not-locked *boolean*

Synopsis	Report 40G/100G PCS Alignment Marker Loss of Lock
Context	**configure** port *string* ethernet report-alarm alignment-marker-not-locked *boolean*
Tree	alignment-marker-not-locked
Description	When configured to **true**, Alignment Marker Loss of Lock alarms are reported for this port.
Introduced	16.0.R2
Platforms	All

block-not-locked *boolean*

Synopsis	Report 40G/100G PCS Lanes Not Block Locked
Context	**configure** port *string* ethernet report-alarm block-not-locked *boolean*
Tree	block-not-locked
Introduced	16.0.R2
Platforms	All

duplicate-lane *boolean*

Synopsis	Report 40G/100G PCS Duplicate Lane Marker alarm
Context	**configure** port *string* ethernet report-alarm duplicate-lane *boolean*
Tree	duplicate-lane

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Introduced	16.0.R1
Platforms	All

frame-not-locked *boolean*

Synopsis	Report "not locked on the Ethernet framing sequence"
Context	**configure** port *string* ethernet report-alarm frame-not-locked *boolean*
Tree	frame-not-locked
Introduced	16.0.R2
Platforms	All

high-ber *boolean*

Synopsis	Report High Bit Error Rate
Context	**configure** port *string* ethernet report-alarm high-ber *boolean*
Tree	high-ber
Introduced	16.0.R1
Platforms	All

local *boolean*

Synopsis	Report local faults
Context	**configure** port *string* ethernet report-alarm local *boolean*
Tree	local
Introduced	16.0.R1
Platforms	All

remote *boolean*

Synopsis	Report remote faults
Context	**configure** port *string* ethernet report-alarm remote *boolean*
Tree	remote
Introduced	16.0.R1
Platforms	All

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signal-fail *boolean*

Synopsis	Report Ethernet signal lost alarm
Context	**configure** port *string* ethernet report-alarm signal-fail *boolean*
Tree	signal-fail
Introduced	16.0.R1
Platforms	All

rs-fec-mode *keyword*

Synopsis	RS-FEC mode on the Ethernet port
Context	**configure** port *string* ethernet rs-fec-mode *keyword*
Tree	rs-fec-mode
Description	This command specifies the RS-FEC (Reed-Solomon Forward Error Correction) mode on the Ethernet port. See "Forward Error Correction" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR Interface Configuration Guide* for more information about FEC settings.
Options	cl91-514-528, cl74, cl108
Introduced	16.0.R1
Platforms	All

single-fiber *boolean*

Synopsis	Enable packet gathering from a single fiber port
Context	**configure** port *string* ethernet single-fiber *boolean*
Tree	single-fiber
Description	When configured to **true**, this command enables packet gathering and redirection of IP packets from a single fiber (Rx) port of the Ethernet or SONET/SDH interface and redistributes packets to other interfaces through static routes or policy-based forwarding. Traffic is no longer transmitted out of the port. When configured to **false**, packet gathering is disabled.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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speed *number*

Synopsis	Ethernet port speed
Context	**configure** port *string* ethernet speed *number*
Tree	speed
Description	This command configures the port speed for ports that support multiple speeds. This applies to the following: • Fast Ethernet when autonegotiation is not enabled • 10/100/1000 Mb/s Ethernet when autonegotiation is not enabled • 10/1G ports supporting 10G SFP+ or 1G SFP • 40/100G ports supporting QSFP28s on non connector-based MDAs If autonegotiation is enabled for the port, this command setting is ignored. Speed cannot be configured for ports that are part of a LAG.
Range	10 | 100 | 1000 | 10000 | 25000 | 40000 | 50000 | 100000
Units	megabps
Introduced	16.0.R1
Platforms	All

ssm

Synopsis	Enter the **ssm** context
Context	**configure** port *string* ethernet ssm
Tree	ssm
Description	Commands in this context configure the Ethernet Synchronization Messaging Channel (ESMC) for the Ethernet port. The ESMC carries the Synchronization Status Message (SSM) code representing the quality level of the source of the frequency of the central clock of the node.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the ESMC for the Ethernet port
Context	**configure** port *string* ethernet ssm admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable

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Introduced	16.0.R1
Platforms	All

code-type *keyword*

Synopsis	Encoding of synchronization status messages
Context	**configure** port *string* ethernet ssm code-type *keyword*
Tree	code-type
Options	sonet, sdh
Default	sdh
Introduced	16.0.R1
Platforms	All

esmc-tunnel *boolean*

Synopsis	Tunnel ESMC frames in Epipe or VPLS services
Context	**configure** port *string* ethernet ssm esmc-tunnel *boolean*
Tree	esmc-tunnel
Description	When configured to **true**, ESMC frames that are received into the Ethernet port can be tunneled in an Epipe or VPLS service. This is not recommended because it breaks the concepts inherent in Synchronous Ethernet, however it is required for compliance to MEF 6.1.1 EPL Option 2. When configured to **false**, ESMC frames are extracted upon reception by the port and are not tunneled through the service.
Default	false
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-dus *boolean*

Synopsis	Force QL value transmitted be set to QL-DNU or QL-DUS
Context	**configure** port *string* ethernet ssm tx-dus *boolean*
Tree	tx-dus
Introduced	16.0.R1
Platforms	All

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symbol-monitor

Synopsis	Enter the **symbol-monitor** context
Context	**configure** port *string* ethernet symbol-monitor
Tree	symbol-monitor
Description	Commands in this context configure Ethernet symbol monitoring. Support for symbol monitoring is hardware dependent. An error message indicating that the port setting cannot be modified is presented when attempting to enable the feature or configure the individual commands on unsupported hardware.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of symbol monitoring on the port
Context	**configure** port *string* ethernet symbol-monitor admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

signal-degrade

Synopsis	Enter the **signal-degrade** context
Context	**configure** port *string* ethernet symbol-monitor signal-degrade
Tree	signal-degrade
Description	Commands in this context specify the error rate at which to declare the SD condition on an Ethernet interface. The value represents M*10E-N, which is the ratio of errored frames over the total frames received over the sliding window interval. The symbol errors on the interface are sampled once per second.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *number*

Synopsis	SD multiplier used to scale the symbol error ratio
Context	**configure** port *string* ethernet symbol-monitor signal-degrade multiplier *number*

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Tree	multiplier
Range	1 to 9
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

threshold *number*

Synopsis	SD threshold for symbol errors
Context	**configure** port *string* ethernet symbol-monitor signal-degrade threshold *number*
Tree	threshold
Range	1 to 9
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

signal-failure

Synopsis	Enter the **signal-failure** context
Context	**configure** port *string* ethernet symbol-monitor signal-failure
Tree	signal-failure
Description	Commands in this context specify the error rate at which to declare the SF condition on an Ethernet interface. The value represents M*10E-N, which is the ratio of errored frames over the total frames received over the sliding window interval. The symbol errors on the interface are sampled once per second.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *number*

Synopsis	SF multiplier used to scale the symbol error ratio
Context	**configure** port *string* ethernet symbol-monitor signal-failure multiplier *number*
Tree	multiplier
Range	1 to 9
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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threshold *number*

Synopsis	SF threshold for symbol errors
Context	**configure** port *string* ethernet symbol-monitor signal-failure threshold *number*
Tree	threshold
Range	1 to 9
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

window-size *number*

Synopsis	Sliding window size over which errors are measured
Context	**configure** port *string* ethernet symbol-monitor window-size *number*
Tree	window-size
Description	This command specifies the sliding window size over which the symbols are sampled to detect SF or SD conditions.
Range	5 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

util-stats-interval *number*

Synopsis	Interval to calculate utilization statistics
Context	**configure** port *string* ethernet util-stats-interval *number*
Tree	util-stats-interval
Description	This command configures the interval used to calculate the utilization statistics. Port utilization statistics are only available for physical Ethernet ports on a host system. These statistics are not available for the following: • Ethernet ports on an Ethernet satellite • Ethernet ports on a VSR • PXC ports • vsm-cca-xp ports
Range	30 to 600

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Units	seconds
Default	300
Introduced	16.0.R1
Platforms	All

xgig *keyword*

Synopsis	Ethernet port mode
Context	**configure** port *string* ethernet xgig *keyword*
Tree	xgig
Description	This command configures a 10 Gb/s interface to be in LAN or WAN mode. When configuring the port to be in WAN mode, certain SONET/SDH commands can be changed to reflect the SONET/SDH requirements for the port. When configuring the port to be in LAN mode, all SONET/SDH commands are pre-determined and not configurable.
Options	lan, wan
Introduced	16.0.R1
Platforms	All

gnss

Synopsis	Enter the **gnss** context
Context	**configure** port *string* gnss
Tree	gnss
Description	Commands in this context configure GNSS port attributes.
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

antenna-cable-delay *number*

Synopsis	Signal delay resulting from GNSS antenna cable length
Context	**configure** port *string* gnss antenna-cable-delay *number*
Tree	antenna-cable-delay
Description	This command configures the expected signal delay resulting from the length of the GNSS antenna cable.

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	Note: 7750 SR FP5 GNSS platforms support a value range of 0 to 1000.
Range	0 to 32767
Units	nanoseconds
Default	0
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

constellation

Synopsis	Enter the **constellation** context
Context	**configure** port *string* gnss constellation
Tree	constellation
Description	Commands in this context configure the GNSS systems that are used by the GNSS receiver.
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

galileo *boolean*

Synopsis	Enable GNSS receiver to use GALILEO constellation type
Context	**configure** port *string* gnss constellation galileo *boolean*
Tree	galileo
Description	When configured to **true**, this command enables the use of the European Galileo GNSS system.
Default	false
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

glonass *boolean*

Synopsis	Enable GNSS receiver to use GLONASS constellation type
Context	**configure** port *string* gnss constellation glonass *boolean*
Tree	glonass

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Description	When configured to **true**, the system enables the use of the Russian GLONASS GNSS system. **Note**: The **glonass** command is currently not supported.
Default	false
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

gps *boolean*

Synopsis	Enable GNSS receiver to use GPS constellation type
Context	**configure** port *string* gnss constellation gps *boolean*
Tree	gps
Description	When configured to **true**, this command enables the use of the American GPS GNSS system. When configured to **false**, this command disables the use of the American GPS GNSS system.
Default	true
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

elevation-mask-angle *number*

Synopsis	Minimum elevation mask angle
Context	**configure** port *string* gnss elevation-mask-angle *number*
Tree	elevation-mask-angle
Description	This command configures the elevation mask angle, which provides a method of filtering satellites used by the system. Satellites with low elevation may provide degraded accuracy because of the long signal path through the atmosphere. Signals from satellites below the configured minimum satellite elevation are not used. Nokia does not recommend configuring an elevation mask angle below 10.
Range	0 to 89
Units	degrees angle
Default	10
Introduced	22.10.R1

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Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

hybrid-buffer-allocation

Synopsis	Enter the **hybrid-buffer-allocation** context
Context	**configure** port *string* hybrid-buffer-allocation
Tree	hybrid-buffer-allocation
Introduced	16.0.R1
Platforms	All

egress-weight

Synopsis	Enter the **egress-weight** context
Context	**configure** port *string* hybrid-buffer-allocation egress-weight
Tree	egress-weight
Introduced	16.0.R1
Platforms	All

access *number*

Synopsis	Access weight for the hybrid port
Context	**configure** port *string* hybrid-buffer-allocation egress-weight access *number*
Tree	access
Range	0 to 100
Default	50
Introduced	16.0.R1
Platforms	All

network *number*

Synopsis	Access weight for the hybrid port
Context	**configure** port *string* hybrid-buffer-allocation egress-weight network *number*
Tree	network
Range	0 to 100
Default	50

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Introduced	16.0.R1
Platforms	All

ingress-weight

Synopsis	Enter the **ingress-weight** context
Context	**configure** port *string* hybrid-buffer-allocation ingress-weight
Tree	ingress-weight
Introduced	16.0.R1
Platforms	All

access *number*

Synopsis	Access weight for the hybrid port
Context	**configure** port *string* hybrid-buffer-allocation ingress-weight access *number*
Tree	access
Range	0 to 100
Default	50
Introduced	16.0.R1
Platforms	All

network *number*

Synopsis	Access weight for the hybrid port
Context	**configure** port *string* hybrid-buffer-allocation ingress-weight network *number*
Tree	network
Range	0 to 100
Default	50
Introduced	16.0.R1
Platforms	All

modify-buffer-allocation

Synopsis	Enter the **modify-buffer-allocation** context
Context	**configure** port *string* modify-buffer-allocation

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Tree	modify-buffer-allocation
Description	Commands in this context to configure ingress and egress percentage of rate commands. These commands only apply to physical ports (for example, it does not work on APS or similar logical ports). The percentage of rate commands are used to define a percentage value that affects the amount of buffers used by ingress and egress port managed buffer space.
Introduced	16.0.R1
Platforms	All

percentage-of-rate

Synopsis	Enter the **percentage-of-rate** context
Context	**configure** port *string* modify-buffer-allocation percentage-of-rate
Tree	percentage-of-rate
Description	Commands in this context increase or decrease the active bandwidth associated with the egress or ingress port that affects the amount of egress or ingress buffer space managed by the port. Changing a ports active bandwidth using the commands in this context are an effective means of artificially lowering the buffers managed by one egress or ingress port and giving them to the other egress or ingress ports on the same MDA.
Introduced	16.0.R1
Platforms	All

egress *number*

Synopsis	Egress rate percentage
Context	**configure** port *string* modify-buffer-allocation percentage-of-rate egress *number*
Tree	egress
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

ingress *number*

Synopsis	Ingress rate percentage
Context	**configure** port *string* modify-buffer-allocation percentage-of-rate ingress *number*
Tree	ingress
Range	1 to 1000

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Default	100
Introduced	16.0.R1
Platforms	All

monitor-agg-egress-queue-stats *boolean*

Synopsis	Monitor aggregate queue statistics
Context	**configure** port *string* monitor-agg-egress-queue-stats *boolean*
Tree	monitor-agg-egress-queue-stats
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

monitor-oper-group *reference*

Synopsis	Operational group to monitor
Context	**configure** port *string* monitor-oper-group *reference*
Tree	monitor-oper-group
Description	This command configures the operational group to monitor the operational group state. The state of the operational group affects the state of this port. When the operational group is inactive, the state of the port goes down and powers off the port to signal to the CE that the connected port is not available.
Reference	**configure** service oper-group *string*
Introduced	22.7.R1
Platforms	All

network

Synopsis	Enter the **network** context
Context	**configure** port *string* network
Tree	network
Introduced	16.0.R1
Platforms	All

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egress

Synopsis	Enter the **egress** context
Context	**configure** port *string* network egress
Tree	egress
Introduced	16.0.R1
Platforms	All

pool [name] *string*

Synopsis	Enter the **pool** list instance
Context	**configure** port *string* network egress pool *string*
Tree	pool
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	Pool name
Context	**configure** port *string* network egress pool *string*
Tree	pool
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

amber-alarm-threshold *number*

Synopsis	Threshold for the amber alarm on oversubscription
Context	**configure** port *string* network egress pool *string* amber-alarm-threshold *number*
Tree	amber-alarm-threshold
Range	1 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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red-alarm-threshold *number*

Synopsis	Threshold for the red alarm on oversubscription
Context	**configure** port *string* network egress pool *string* red-alarm-threshold *number*
Tree	red-alarm-threshold
Range	1 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

resv-cbs

Synopsis	Enter the **resv-cbs** context
Context	**configure** port *string* network egress pool *string* resv-cbs
Tree	resv-cbs
Introduced	16.0.R1
Platforms	All

amber-alarm-action

Synopsis	Enter the **amber-alarm-action** context
Context	**configure** port *string* network egress pool *string* resv-cbs amber-alarm-action
Tree	amber-alarm-action
Introduced	16.0.R1
Platforms	All

max *number*

Synopsis	Maximum percentage for reserved CBS of the pool
Context	**configure** port *string* network egress pool *string* resv-cbs amber-alarm-action max *number*
Tree	max
Description	This command specifies the maximum percentage for the reserved CBS of the pool. The maximum reserved CBS must not be less than the value of the reserved CBS. To enable adaptive CBS sizing the **max**, **step**, and **cbs** commands must be configured. The **cbs** command must also be configured to a percentage other than the default value.

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When unconfigured, CBS adaptive sizing is not enabled.

Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

step *number*

Synopsis	Step-size percentage for reserved CBS of the pool
Context	**configure** port *string* network egress pool *string* resv-cbs amber-alarm-action step *number*
Tree	step
Description	This command specifies the step-size percentage for the reserved CBS of the pool. To enable adaptive CBS sizing the **max**, **step**, and **cbs** commands must be configured. The **cbs** command must also be configured to a percentage other than the default value. When unconfigured, CBS adaptive sizing is not enabled.
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

cbs *(number | keyword)*

Synopsis	Percentage of the pool buffer space reserved for CBS
Context	**configure** port *string* network egress pool *string* resv-cbs cbs *(number | keyword)*
Tree	cbs
Range	0 to 100
Units	percent
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

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slope-policy *reference*

Synopsis	Policy for the RED slope and TAF values
Context	**configure** port *string* network egress pool *string* slope-policy *reference*
Tree	slope-policy
Reference	**configure** qos slope-policy *string*
Introduced	16.0.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group ID
Context	**configure** port *string* oper-group *reference*
Tree	oper-group
Reference	**configure** service oper-group *string*
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

otu

Synopsis	Enable the **otu** context
Context	**configure** port *string* otu
Tree	otu
Introduced	16.0.R1
Platforms	All

async-mapping *boolean*

Synopsis	Allow asynchoronous mapping of the payload inside OTU
Context	**configure** port *string* otu async-mapping *boolean*
Tree	async-mapping
Introduced	16.0.R1
Platforms	All

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fec *keyword*

Synopsis	Forwarding Error Correction (FEC) encapsulation on port
Context	**configure** port *string* otu fec *keyword*
Tree	fec
Options	none, g709, enhanced
Introduced	16.0.R1
Platforms	All

fine-granularity-ber

Synopsis	Enter the **fine-granularity-ber** context
Context	**configure** port *string* otu fine-granularity-ber
Tree	fine-granularity-ber
Introduced	16.0.R1
Platforms	All

signal-degrade

Synopsis	Enter the **signal-degrade** context
Context	**configure** port *string* otu fine-granularity-ber signal-degrade
Tree	signal-degrade
Introduced	16.0.R1
Platforms	All

clear

Synopsis	Enter the **clear** context
Context	**configure** port *string* otu fine-granularity-ber signal-degrade clear
Tree	clear
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Multiplier of the SD clear threshold

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Context	**configure** port *string* otu fine-granularity-ber signal-degrade clear multiplier *number*
Tree	multiplier
Range	10 to 99
Default	10
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	SD clear threshold
Context	**configure** port *string* otu fine-granularity-ber signal-degrade clear threshold *number*
Tree	threshold
Range	3 to 10
Default	8
Introduced	16.0.R1
Platforms	All

raise

Synopsis	Enter the **raise** context
Context	**configure** port *string* otu fine-granularity-ber signal-degrade raise
Tree	raise
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Multiplier of the SD raise threshold
Context	**configure** port *string* otu fine-granularity-ber signal-degrade raise multiplier *number*
Tree	multiplier
Range	10 to 99
Default	10
Introduced	16.0.R1
Platforms	All

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threshold *number*

Synopsis	SD raise threshold
Context	**configure** port *string* otu fine-granularity-ber signal-degrade raise threshold *number*
Tree	threshold
Range	3 to 9
Default	7
Introduced	16.0.R1
Platforms	All

signal-failure

Synopsis	Enter the **signal-failure** context
Context	**configure** port *string* otu fine-granularity-ber signal-failure
Tree	signal-failure
Introduced	16.0.R1
Platforms	All

clear

Synopsis	Enter the **clear** context
Context	**configure** port *string* otu fine-granularity-ber signal-failure clear
Tree	clear
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Threshold for the Multiplier of SD clear
Context	**configure** port *string* otu fine-granularity-ber signal-failure clear multiplier *number*
Tree	multiplier
Range	10 to 99
Default	10
Introduced	16.0.R1
Platforms	All

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threshold *number*

Synopsis	Threshold for the Multiplier of SD clear
Context	**configure** port *string* otu fine-granularity-ber signal-failure clear threshold *number*
Tree	threshold
Range	3 to 9
Default	6
Introduced	16.0.R1
Platforms	All

raise

Synopsis	Enter the **raise** context
Context	**configure** port *string* otu fine-granularity-ber signal-failure raise
Tree	raise
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	SF raise threshold
Context	**configure** port *string* otu fine-granularity-ber signal-failure raise multiplier *number*
Tree	multiplier
Range	10 to 99
Default	10
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	SF raise threshold
Context	**configure** port *string* otu fine-granularity-ber signal-failure raise threshold *number*
Tree	threshold
Range	3 to 8
Default	5

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Introduced	16.0.R1
Platforms	All

otu2-lan-data-rate *keyword*

Synopsis	Data rate for 10GE LAN OTU2 on the port
Context	**configure** port *string* otu otu2-lan-data-rate *keyword*
Tree	otu2-lan-data-rate
Units	gigabps
Options	11.049, 11.096
Introduced	16.0.R1
Platforms	All

path-monitoring

Synopsis	Enter the **path-monitoring** context
Context	**configure** port *string* otu path-monitoring
Tree	path-monitoring
Introduced	16.0.R4
Platforms	All

trail-trace-identifier

Synopsis	Enter the **trail-trace-identifier** context
Context	**configure** port *string* otu path-monitoring trail-trace-identifier
Tree	trail-trace-identifier
Introduced	16.0.R4
Platforms	All

expected

Synopsis	Enter the **expected** context
Context	**configure** port *string* otu path-monitoring trail-trace-identifier expected
Tree	expected
Introduced	16.0.R4

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Platforms	All

auto-generated

Synopsis	Use the system generated TTI
Context	**configure** port *string* otu path-monitoring trail-trace-identifier expected auto-generated
Tree	auto-generated
Notes	The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.
Introduced	16.0.R4
Platforms	All

bytes *string*

Synopsis	TTI as a sequence of bytes
Context	**configure** port *string* otu path-monitoring trail-trace-identifier expected bytes *string*
Tree	bytes
String Length	0 to 192
Notes	The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.
Introduced	16.0.R4
Platforms	All

string *string*

Synopsis	TTI as a sequence of printable ASCII
Context	**configure** port *string* otu path-monitoring trail-trace-identifier expected string *string*
Tree	string
String Length	0 to 64
Notes	The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.
Introduced	16.0.R4
Platforms	All

mismatch-reaction *keyword*

Synopsis	Reaction to a mismatched TTI

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Context	**configure** port *string* otu path-monitoring trail-trace-identifier mismatch-reaction *keyword*
Tree	mismatch-reaction
Options	squelch-rx
Introduced	16.0.R4
Platforms	All

transmit

Synopsis	Enter the **transmit** context
Context	**configure** port *string* otu path-monitoring trail-trace-identifier transmit
Tree	transmit
Introduced	16.0.R4
Platforms	All

auto-generated

Synopsis	Use the system generated TTI
Context	**configure** port *string* otu path-monitoring trail-trace-identifier transmit auto-generated
Tree	auto-generated
Notes	The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.
Introduced	16.0.R4
Platforms	All

bytes *string*

Synopsis	TTI as a sequence of bytes
Context	**configure** port *string* otu path-monitoring trail-trace-identifier transmit bytes *string*
Tree	bytes
String Length	0 to 192
Notes	The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.
Introduced	16.0.R4
Platforms	All

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string *string*

Synopsis	TTI as a sequence of printable ASCII
Context	**configure** port *string* otu path-monitoring trail-trace-identifier transmit string *string*
Tree	string
String Length	0 to 64
Notes	The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.
Introduced	16.0.R4
Platforms	All

payload-structure-identifier

Synopsis	Enter the **payload-structure-identifier** context
Context	**configure** port *string* otu payload-structure-identifier
Tree	payload-structure-identifier
Introduced	16.0.R4
Platforms	All

payload

Synopsis	Enter the **payload** context
Context	**configure** port *string* otu payload-structure-identifier payload
Tree	payload
Introduced	16.0.R4
Platforms	All

expected *keyword*

Synopsis	Configure the port's PSI payload expected parameters.
Context	**configure** port *string* otu payload-structure-identifier payload expected *keyword*
Tree	expected
Options	auto, experimental, asynchronous-cbr, bit-synchronous-cbr, atm, gfp, vcat, gmp, bit-stream-octet, bit-stream-non-octet, odu-mux, reserved-80, reserved-81, reserved-82, reserved-83, reserved-84, reserved-85, reserved-86, reserved-87, reserved-88, reserved-89, reserved-8a, reserved-8b, reserved-8c, reserved-8d, reserved-8e, reserved-8f, null-test, prbs-test
Default	auto

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Introduced	16.0.R4
Platforms	All

mismatch-reaction *keyword*

Synopsis	Reaction to a mismatched payload
Context	**configure** port *string* otu payload-structure-identifier payload mismatch-reaction *keyword*
Tree	mismatch-reaction
Options	squelch-rx
Introduced	16.0.R4
Platforms	All

transmit *keyword*

Synopsis	Transmit payload type
Context	**configure** port *string* otu payload-structure-identifier payload transmit *keyword*
Tree	transmit
Options	auto, experimental, asynchronous-cbr, bit-synchronous-cbr, atm, gfp, vcat, gmp, bit-stream-octet, bit-stream-non-octet, odu-mux, reserved-80, reserved-81, reserved-82, reserved-83, reserved-84, reserved-85, reserved-86, reserved-87, reserved-88, reserved-89, reserved-8a, reserved-8b, reserved-8c, reserved-8d, reserved-8e, reserved-8f, null-test, prbs-test
Default	auto
Introduced	16.0.R4
Platforms	All

report-alarm

Synopsis	Enter the **report-alarm** context
Context	**configure** port *string* otu report-alarm
Tree	report-alarm
Introduced	16.0.R1
Platforms	All

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fec-fail *boolean*

Synopsis	Report FEC mode mismatch alarm
Context	**configure** port *string* otu report-alarm fec-fail *boolean*
Tree	fec-fail
Default	false
Introduced	16.0.R1
Platforms	All

fec-sd *boolean*

Synopsis	Report Signal Degrade alarm
Context	**configure** port *string* otu report-alarm fec-sd *boolean*
Tree	fec-sd
Default	false
Introduced	16.0.R1
Platforms	All

fec-sf *boolean*

Synopsis	Report Signal Fail alarm
Context	**configure** port *string* otu report-alarm fec-sf *boolean*
Tree	fec-sf
Default	true
Introduced	16.0.R1
Platforms	All

fec-uncorr *boolean*

Synopsis	Report one or more Uncorrectable FEC errors alarm
Context	**configure** port *string* otu report-alarm fec-uncorr *boolean*
Tree	fec-uncorr
Default	false
Introduced	16.0.R1
Platforms	All

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loc *boolean*

Synopsis	Report OTU alarm for loss of clock
Context	**configure** port *string* otu report-alarm loc *boolean*
Tree	loc
Default	true
Introduced	16.0.R1
Platforms	All

lof *boolean*

Synopsis	Report alarm for the loss of OTU framing
Context	**configure** port *string* otu report-alarm lof *boolean*
Tree	lof
Default	true
Introduced	16.0.R1
Platforms	All

lom *boolean*

Synopsis	Report alarm for the loss of multi-frame
Context	**configure** port *string* otu report-alarm lom *boolean*
Tree	lom
Default	true
Introduced	16.0.R1
Platforms	All

los *boolean*

Synopsis	Report alarm for the loss of signal transitions on data
Context	**configure** port *string* otu report-alarm los *boolean*
Tree	los
Default	true
Introduced	16.0.R1
Platforms	All

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odu-ais *boolean*

Synopsis	Report ODU Alarm Indication Signal alarm
Context	**configure** port *string* otu report-alarm odu-ais *boolean*
Tree	odu-ais
Default	false
Introduced	16.0.R1
Platforms	All

odu-bdi *boolean*

Synopsis	Report PM Backward Defect Indication alarm
Context	**configure** port *string* otu report-alarm odu-bdi *boolean*
Tree	odu-bdi
Default	false
Introduced	16.0.R1
Platforms	All

odu-lck *boolean*

Synopsis	Report ODU Locked alarm
Context	**configure** port *string* otu report-alarm odu-lck *boolean*
Tree	odu-lck
Default	false
Introduced	16.0.R1
Platforms	All

odu-oci *boolean*

Synopsis	Report ODU Open Connection Indication alarm
Context	**configure** port *string* otu report-alarm odu-oci *boolean*
Tree	odu-oci
Default	false
Introduced	16.0.R1
Platforms	All

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odu-tim *boolean*

Synopsis	Report PM Trace ID Mismatch alarm
Context	**configure** port *string* otu report-alarm odu-tim *boolean*
Tree	odu-tim
Default	false
Introduced	16.0.R1
Platforms	All

opu-plm *boolean*

Synopsis	Report PSI Payload Type Mismatch alarm
Context	**configure** port *string* otu report-alarm opu-plm *boolean*
Tree	opu-plm
Default	false
Introduced	16.0.R1
Platforms	All

otu-ais *boolean*

Synopsis	Report OTU Alarm Indication Signal alarm
Context	**configure** port *string* otu report-alarm otu-ais *boolean*
Tree	otu-ais
Default	false
Introduced	16.0.R1
Platforms	All

otu-bdi *boolean*

Synopsis	Report SM Backward Defect Indication alarm
Context	**configure** port *string* otu report-alarm otu-bdi *boolean*
Tree	otu-bdi
Default	true
Introduced	16.0.R1
Platforms	All

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otu-ber-sd *boolean*

Synopsis	Report SM Signal Degrade alarm
Context	**configure** port *string* otu report-alarm otu-ber-sd *boolean*
Tree	otu-ber-sd
Default	false
Introduced	16.0.R1
Platforms	All

otu-ber-sf *boolean*

Synopsis	Report SM Signal Fail alarm
Context	**configure** port *string* otu report-alarm otu-ber-sf *boolean*
Tree	otu-ber-sf
Default	true
Introduced	16.0.R1
Platforms	All

otu-biae *boolean*

Synopsis	Report SM Backward Incoming Alignment Error alarm
Context	**configure** port *string* otu report-alarm otu-biae *boolean*
Tree	otu-biae
Default	false
Introduced	16.0.R1
Platforms	All

otu-iae *boolean*

Synopsis	Report SM Incoming Alignment Error alarm
Context	**configure** port *string* otu report-alarm otu-iae *boolean*
Tree	otu-iae
Default	false
Introduced	16.0.R1
Platforms	All

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otu-tim *boolean*

Synopsis	Report SM Trace ID Mismatch alarm
Context	**configure** port *string* otu report-alarm otu-tim *boolean*
Tree	otu-tim
Default	false
Introduced	16.0.R1
Platforms	All

sd-threshold *number*

Synopsis	Error rate at which to declare signal degrade condition
Context	**configure** port *string* otu sd-threshold *number*
Tree	sd-threshold
Range	5 to 9
Default	7
Introduced	16.0.R1
Platforms	All

section-monitoring

Synopsis	Enter the **section-monitoring** context
Context	**configure** port *string* otu section-monitoring
Tree	section-monitoring
Introduced	16.0.R4
Platforms	All

trail-trace-identifier

Synopsis	Enter the **trail-trace-identifier** context
Context	**configure** port *string* otu section-monitoring trail-trace-identifier
Tree	trail-trace-identifier
Introduced	16.0.R4
Platforms	All

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expected

Synopsis	Enter the **expected** context
Context	**configure** port *string* otu section-monitoring trail-trace-identifier expected
Tree	expected
Introduced	16.0.R4
Platforms	All

auto-generated

Synopsis	Use the system generated TTI
Context	**configure** port *string* otu section-monitoring trail-trace-identifier expected auto-generated
Tree	auto-generated
Notes	The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.
Introduced	16.0.R4
Platforms	All

bytes *string*

Synopsis	TTI as a sequence of bytes
Context	**configure** port *string* otu section-monitoring trail-trace-identifier expected bytes *string*
Tree	bytes
String Length	0 to 192
Notes	The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.
Introduced	16.0.R4
Platforms	All

string *string*

Synopsis	TTI as a sequence of printable ASCII
Context	**configure** port *string* otu section-monitoring trail-trace-identifier expected string *string*
Tree	string
String Length	0 to 64
Notes	The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.

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Introduced	16.0.R4
Platforms	All

mismatch-reaction *keyword*

Synopsis	Reaction to a mismatched TTI
Context	**configure** port *string* otu section-monitoring trail-trace-identifier mismatch-reaction *keyword*
Tree	mismatch-reaction
Options	squelch-rx
Introduced	16.0.R4
Platforms	All

transmit

Synopsis	Enter the **transmit** context
Context	**configure** port *string* otu section-monitoring trail-trace-identifier transmit
Tree	transmit
Introduced	16.0.R4
Platforms	All

auto-generated

Synopsis	Use the system generated TTI
Context	**configure** port *string* otu section-monitoring trail-trace-identifier transmit auto-generated
Tree	auto-generated
Notes	The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.
Introduced	16.0.R4
Platforms	All

bytes *string*

Synopsis	TTI as a sequence of bytes
Context	**configure** port *string* otu section-monitoring trail-trace-identifier transmit bytes *string*
Tree	bytes

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String Length	0 to 192
Notes	The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.
Introduced	16.0.R4
Platforms	All

string *string*

Synopsis	TTI as a sequence of printable ASCII
Context	**configure** port *string* otu section-monitoring trail-trace-identifier transmit string *string*
Tree	string
String Length	0 to 64
Notes	The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.
Introduced	16.0.R4
Platforms	All

sf-sd-method *keyword*

Synopsis	Method used to determine the SF and SD alarms
Context	**configure** port *string* otu sf-sd-method *keyword*
Tree	sf-sd-method
Options	fec, bip8
Default	fec
Introduced	16.0.R1
Platforms	All

sf-threshold *number*

Synopsis	Error rate at which to declare signal fail condition
Context	**configure** port *string* otu sf-threshold *number*
Tree	sf-threshold
Range	3 to 6
Default	5
Introduced	16.0.R1
Platforms	All

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sonet-sdh

Synopsis	Enter the **sonet-sdh** context
Context	**configure** port *string* sonet-sdh
Tree	sonet-sdh
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

clock-source *keyword*

Synopsis	Clock used for transmitted data
Context	**configure** port *string* sonet-sdh clock-source *keyword*
Tree	clock-source
Options	loop-timed, node-timed
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

framing *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SONET or SDH framing
Context	**configure** port *string* sonet-sdh framing *keyword*
Tree	framing
Options	sonet, sdh
Default	sonet
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

group [group-index] *string*

Synopsis	Enter the **group** list instance
Context	**configure** port *string* sonet-sdh group *string*
Tree	group

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Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**group-index**] *string*

Synopsis	Components making up the specified SONET/SDH path
Context	**configure** port *string* sonet-sdh group *string*
Tree	group
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

payload *keyword*

Synopsis	SONET/SDH group payload
Context	**configure** port *string* sonet-sdh group *string* payload *keyword*
Tree	payload
Options	vt15, vt2, tu3
Default	tu3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

hold-time

Synopsis	Enter the **hold-time** context
Context	**configure** port *string* sonet-sdh hold-time
Tree	hold-time
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

down *number*

Synopsis	Hold timer for link down event dampening
Context	**configure** port *string* sonet-sdh hold-time down *number*
Tree	down

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Range	0 to 100
Units	deciseconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

up *number*

Synopsis	Hold timer for link up event dampening
Context	**configure** port *string* sonet-sdh hold-time up *number*
Tree	up
Range	0 to 100
Units	deciseconds
Default	5
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

loopback *keyword*

Synopsis	Loopback to activate on SONET port
Context	**configure** port *string* sonet-sdh loopback *keyword*
Tree	loopback
Options	line, internal
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

path [path-index] *string*

Synopsis	Enter the **path** list instance
Context	**configure** port *string* sonet-sdh path *string*
Tree	path
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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[**path-index**] *string*

Synopsis	SONET/SDH path index
Context	**configure** port *string* sonet-sdh path *string*
Tree	path
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the SONET/SDH path
Context	**configure** port *string* sonet-sdh path *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc *number*

Synopsis	Cyclic redundancy check
Context	**configure** port *string* sonet-sdh path *string* crc *number*
Tree	crc
Range	16 | 32
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** port *string* sonet-sdh path *string* description *string*
Tree	description
String Length	1 to 160
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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egress

Synopsis	Enter the **egress** context
Context	**configure** port *string* sonet-sdh path *string* egress
Tree	egress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-scheduler-policy

Synopsis	Enter the **port-scheduler-policy** context
Context	**configure** port *string* sonet-sdh path *string* egress port-scheduler-policy
Tree	port-scheduler-policy
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

overrides

Synopsis	Enable the **overrides** context
Context	**configure** port *string* sonet-sdh path *string* egress port-scheduler-policy overrides
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

level [priority-level] *number*

Synopsis	Enter the **level** list instance
Context	**configure** port *string* sonet-sdh path *string* egress port-scheduler-policy overrides level *number*
Tree	level
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**priority-level**] *number*

Synopsis	Port priority levels override

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Context	**configure** port *string* sonet-sdh path *string* egress port-scheduler-policy overrides level *number*
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** port *string* sonet-sdh path *string* egress port-scheduler-policy overrides level *number* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir *decimal-number*

Synopsis	CIR for the priority level
Context	**configure** port *string* sonet-sdh path *string* egress port-scheduler-policy overrides level *number* percent-rate cir *decimal-number*
Tree	cir
Range	0 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pir *decimal-number*

Synopsis	PIR for the priority level
Context	**configure** port *string* sonet-sdh path *string* egress port-scheduler-policy overrides level *number* percent-rate pir *decimal-number*
Tree	pir

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Range	0.01 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rate

Synopsis	Enter the **rate** context
Context	**configure** port *string* sonet-sdh path *string* egress port-scheduler-policy overrides level *number* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir *(number | keyword)*

Synopsis	CIR for the priority level
Context	**configure** port *string* sonet-sdh path *string* egress port-scheduler-policy overrides level *number* rate cir *(number | keyword)*
Tree	cir
Range	0 to 3200000000
Units	kilobps
Options	sum, max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pir *(number | keyword)*

Synopsis	PIR for the priority level
Context	**configure** port *string* sonet-sdh path *string* egress port-scheduler-policy overrides level *number* rate pir *(number | keyword)*
Tree	pir
Range	1 to 3200000000

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Units	kilobps
Options	max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rate

Synopsis	Enter the **max-rate** context
Context	**configure** port *string* sonet-sdh path *string* egress port-scheduler-policy overrides max-rate
Tree	max-rate
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

percent-rate *decimal-number*

Synopsis	PIR
Context	**configure** port *string* sonet-sdh path *string* egress port-scheduler-policy overrides max-rate percent-rate *decimal-number*
Tree	percent-rate
Range	0.01 to 100
Units	percent
Default	100
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rate *(number | keyword)*

Synopsis	PIR
Context	**configure** port *string* sonet-sdh path *string* egress port-scheduler-policy overrides max-rate rate *(number | keyword)*
Tree	rate
Range	1 to 3200000000
Units	kilobps

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Options	max
Default	max
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policy-name *reference*

Synopsis	Port egress scheduler policy name
Context	**configure** port *string* sonet-sdh path *string* egress port-scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos port-scheduler-policy *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

load-balancing-algorithm *keyword*

Synopsis	Load balancing algorithm
Context	**configure** port *string* sonet-sdh path *string* load-balancing-algorithm *keyword*
Tree	load-balancing-algorithm
Options	default, include-l4, exclude-l4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address for the SONET/SDH path
Context	**configure** port *string* sonet-sdh path *string* mac-address *string*
Tree	mac-address
Default	00:00:00:00:00:00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Operation port mode for the SONET/SDH path
Context	**configure** port *string* sonet-sdh path *string* mode *keyword*
Tree	mode
Options	access, network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mtu *number*

Synopsis	Maximum payload MTU size
Context	**configure** port *string* sonet-sdh path *string* mtu *number*
Tree	mtu
Range	512 to 9208
Units	bytes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

network

Synopsis	Enter the **network** context
Context	**configure** port *string* sonet-sdh path *string* network
Tree	network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

accounting-policy *reference*

Synopsis	Accounting policy
Context	**configure** port *string* sonet-sdh path *string* network accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*

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Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	**configure** port *string* sonet-sdh path *string* network collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

queue-policy *reference*

Synopsis	Queue policy on the SONET/SDH network path
Context	**configure** port *string* sonet-sdh path *string* network queue-policy *reference*
Tree	queue-policy
Reference	**configure** qos network-queue *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

payload *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SONET/SDH path payload
Context	**configure** port *string* sonet-sdh path *string* payload *keyword*
Tree	payload
Options	sts3, tug3, vt15, vt2, ds3, e3, ds1, e1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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report-alarm

Synopsis	Enter the **report-alarm** context
Context	**configure** port *string* sonet-sdh path *string* report-alarm
Tree	report-alarm
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pais *boolean*

Synopsis	Report path alarm indication signal errors
Context	**configure** port *string* sonet-sdh path *string* report-alarm pais *boolean*
Tree	pais
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

plcd *boolean*

Synopsis	Report path loss of code group delineation errors
Context	**configure** port *string* sonet-sdh path *string* report-alarm plcd *boolean*
Tree	plcd
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

plop *boolean*

Synopsis	Report path loss of pointer errors as a trap
Context	**configure** port *string* sonet-sdh path *string* report-alarm plop *boolean*
Tree	plop
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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pplm *boolean*

Synopsis	Report a path payload mismatch trap
Context	**configure** port *string* sonet-sdh path *string* report-alarm pplm *boolean*
Tree	pplm
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

prdi *boolean*

Synopsis	Report path remote defect indication errors
Context	**configure** port *string* sonet-sdh path *string* report-alarm prdi *boolean*
Tree	prdi
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

prei *boolean*

Synopsis	Report a path error condition as a result of b3 error
Context	**configure** port *string* sonet-sdh path *string* report-alarm prei *boolean*
Tree	prei
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

puneq *boolean*

Synopsis	Report path unequipped errors
Context	**configure** port *string* sonet-sdh path *string* report-alarm puneq *boolean*
Tree	puneq
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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scramble *boolean*

Synopsis	Enable SONET/SDH payload scrambling
Context	**configure** port *string* sonet-sdh path *string* scramble *boolean*
Tree	scramble
Description	When configured to **true**, the SONET/SDH frame carries randomized patterns of 1s and 0s, which prevents continuous strings of all 1s or all 0s. This meets the needs of physical layer protocols that rely on sufficient transitions between 1s and 0s to maintain clocking. When configured to **false**, the strings of all 1s or all 0s are continuous.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

signal-label *string*

Synopsis	C2 byte value that communicates the payload type
Context	**configure** port *string* sonet-sdh path *string* signal-label *string*
Tree	signal-label
String Length	1 to 4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

trace-string *(keyword | string)*

Synopsis	J1 path-trace string that identifies the circuit
Context	**configure** port *string* sonet-sdh path *string* trace-string *(keyword | string)*
Tree	trace-string
String Length	0 to 62
Options	zeros
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

report-alarm

Synopsis	Enter the **report-alarm** context
Context	**configure** port *string* sonet-sdh report-alarm

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Tree	report-alarm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lais *boolean*

Synopsis	Report Line Indication Signal Errors alarm
Context	**configure** port *string* sonet-sdh report-alarm lais *boolean*
Tree	lais
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lb2er-sd *boolean*

Synopsis	Report line and section alarms for SONET/SDH ports
Context	**configure** port *string* sonet-sdh report-alarm lb2er-sd *boolean*
Tree	lb2er-sd
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lb2er-sf *boolean*

Synopsis	Report alarm line signal failure BER errors
Context	**configure** port *string* sonet-sdh report-alarm lb2er-sf *boolean*
Tree	lb2er-sf
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

loc *boolean*

Synopsis	Report alarm for a loss of clock
Context	**configure** port *string* sonet-sdh report-alarm loc *boolean*

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Tree	loc
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lrdi *boolean*

Synopsis	Report Line Remote Defect Indication Errors alarm
Context	**configure** port *string* sonet-sdh report-alarm lrdi *boolean*
Tree	lrdi
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lrei *boolean*

Synopsis	Report alarm for a line error condition
Context	**configure** port *string* sonet-sdh report-alarm lrei *boolean*
Tree	lrei
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

slof *boolean*

Synopsis	Report alarm for section loss of frame errors
Context	**configure** port *string* sonet-sdh report-alarm slof *boolean*
Tree	slof
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

slos *boolean*

Synopsis	Report alarm for section loss of signal error on send

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Context	**configure** port *string* sonet-sdh report-alarm slos *boolean*
Tree	slos
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ss1f *boolean*

Synopsis	Report alarm for section synchronization failure
Context	**configure** port *string* sonet-sdh report-alarm ss1f *boolean*
Tree	ss1f
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sd-threshold *number*

Synopsis	Threshold for line signal failure BER
Context	**configure** port *string* sonet-sdh sd-threshold *number*
Tree	sd-threshold
Range	3 to 9
Default	6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

section-trace

Synopsis	Enter the **section-trace** context
Context	**configure** port *string* sonet-sdh section-trace
Tree	section-trace
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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byte *string*

Synopsis	Section trace bytes in the SONET section header
Context	**configure** port *string* sonet-sdh section-trace byte *string*
Tree	byte
String Length	1 to 4
Default	1
Notes	The following elements are part of a choice: **byte**, **increment-z0**, or **string**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

increment-z0

Synopsis	Configure incrementing STM ID instead of a static value
Context	**configure** port *string* sonet-sdh section-trace increment-z0
Tree	increment-z0
Notes	The following elements are part of a choice: **byte**, **increment-z0**, or **string**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

string *string*

Synopsis	Text string that identifies the section
Context	**configure** port *string* sonet-sdh section-trace string *string*
Tree	string
String Length	0 to 16
Notes	The following elements are part of a choice: **byte**, **increment-z0**, or **string**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sf-threshold *number*

Synopsis	Threshold for line signal failure BER
Context	**configure** port *string* sonet-sdh sf-threshold *number*
Tree	sf-threshold

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Range	3 to 6
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

single-fiber *boolean*

Synopsis	Allow packet gathering and redirection from single port
Context	**configure** port *string* sonet-sdh single-fiber *boolean*
Tree	single-fiber
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

speed *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SONET/SDH port speed
Context	**configure** port *string* sonet-sdh speed *keyword*
Tree	speed
Options	oc3, oc12, oc48, oc192, oc768, oc1
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

suppress-low-order-alarms *boolean*

Synopsis	Suppress low order alarms
Context	**configure** port *string* sonet-sdh suppress-low-order-alarms *boolean*
Tree	suppress-low-order-alarms
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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tx-dus *boolean*

Synopsis	Force the QL value to be set to QL-DUS/QL-DNU
Context	**configure** port *string* sonet-sdh tx-dus *boolean*
Tree	tx-dus
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tdm

Synopsis	Enter the **tdm** context
Context	**configure** port *string* tdm
Tree	tdm
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

buildout *keyword*

Synopsis	Line buildout for physical DS1/DS3 ports
Context	**configure** port *string* tdm buildout *keyword*
Tree	buildout
Options	short, long
Default	short
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ds1 [ds1-index] *string*

Synopsis	Enter the **ds1** list instance
Context	**configure** port *string* tdm ds1 *string*
Tree	ds1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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[**ds1-index**] *string*

Synopsis	DS-1 channel ID
Context	**configure** port *string* tdm ds1 *string*
Tree	ds1
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

admin-state *keyword*

Synopsis	Administrative state of the DS1 channel
Context	**configure** port *string* tdm ds1 *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ber-threshold

Synopsis	Enter the **ber-threshold** context
Context	**configure** port *string* tdm ds1 *string* ber-threshold
Tree	ber-threshold
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

signal-degrade *number*

Synopsis	BER signal degredation threshold
Context	**configure** port *string* tdm ds1 *string* ber-threshold signal-degrade *number*
Tree	signal-degrade
Range	1 | 5 | 10 | 50 | 100
Default	5
Introduced	20.10.R1

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Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

signal-failure *number*

Synopsis	BER signal failure threshold
Context	**configure** port *string* tdm ds1 *string* ber-threshold signal-failure *number*
Tree	signal-failure
Range	1 | 5 | 10 | 50 | 100
Default	50
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

channel-group [ds0-index] *number*

Synopsis	Enter the **channel-group** list instance
Context	**configure** port *string* tdm ds1 *string* channel-group *number*
Tree	channel-group
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[**ds0-index**] *number*

Synopsis	Channel group ID
Context	**configure** port *string* tdm ds1 *string* channel-group *number*
Tree	channel-group
Range	1 to 24
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

admin-state *keyword*

Synopsis	Administrative state of the DS1 channel group
Context	**configure** port *string* tdm ds1 *string* channel-group *number* admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

description *string*

Synopsis	Text description
Context	**configure** port *string* tdm ds1 *string* channel-group *number* description *string*
Tree	description
String Length	1 to 160
Default	DS0GRP
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

egress

Synopsis	Enter the **egress** context
Context	**configure** port *string* tdm ds1 *string* channel-group *number* egress
Tree	egress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

port-scheduler-policy

Synopsis	Enter the **port-scheduler-policy** context
Context	**configure** port *string* tdm ds1 *string* channel-group *number* egress port-scheduler-policy
Tree	port-scheduler-policy
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

overrides

Synopsis	Enable the **overrides** context
Context	**configure** port *string* tdm ds1 *string* channel-group *number* egress port-scheduler-policy overrides

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Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

level [priority-level] *number*

Synopsis	Enter the **level** list instance
Context	**configure** port *string* tdm ds1 *string* channel-group *number* egress port-scheduler-policy overrides level *number*
Tree	level
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[**priority-level**] *number*

Synopsis	Port priority levels override
Context	**configure** port *string* tdm ds1 *string* channel-group *number* egress port-scheduler-policy overrides level *number*
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** port *string* tdm ds1 *string* channel-group *number* egress port-scheduler-policy overrides level *number* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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cir *decimal-number*

Synopsis	CIR for the priority level
Context	**configure** port *string* tdm ds1 *string* channel-group *number* egress port-scheduler-policy overrides level *number* percent-rate cir *decimal-number*
Tree	cir
Range	0 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pir *decimal-number*

Synopsis	PIR for the priority level
Context	**configure** port *string* tdm ds1 *string* channel-group *number* egress port-scheduler-policy overrides level *number* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rate

Synopsis	Enter the **rate** context
Context	**configure** port *string* tdm ds1 *string* channel-group *number* egress port-scheduler-policy overrides level *number* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

cir *(number | keyword)*

Synopsis	CIR for the priority level

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Context	**configure** port *string* tdm ds1 *string* channel-group *number* egress port-scheduler-policy overrides level *number* rate cir *(number | keyword)*
Tree	cir
Range	0 to 3200000000
Units	kilobps
Options	sum, max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pir *(number | keyword)*

Synopsis	PIR for the priority level
Context	**configure** port *string* tdm ds1 *string* channel-group *number* egress port-scheduler-policy overrides level *number* rate pir *(number | keyword)*
Tree	pir
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

max-rate

Synopsis	Enter the **max-rate** context
Context	**configure** port *string* tdm ds1 *string* channel-group *number* egress port-scheduler-policy overrides max-rate
Tree	max-rate
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

percent-rate *decimal-number*

Synopsis	PIR

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Context	**configure** port *string* tdm ds1 *string* channel-group *number* egress port-scheduler-policy overrides max-rate percent-rate *decimal-number*
Tree	percent-rate
Range	0.01 to 100
Units	percent
Default	100
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rate *(number | keyword)*

Synopsis	PIR
Context	**configure** port *string* tdm ds1 *string* channel-group *number* egress port-scheduler-policy overrides max-rate rate *(number | keyword)*
Tree	rate
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

policy-name *reference*

Synopsis	Port egress scheduler policy name
Context	**configure** port *string* tdm ds1 *string* channel-group *number* egress port-scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos port-scheduler-policy *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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encap-type *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Encapsulation method
Context	**configure** port *string* tdm ds1 *string* channel-group *number* encap-type *keyword*
Tree	encap-type
Options	cem
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

idle-payload-fill

Synopsis	Enter the **idle-payload-fill** context
Context	**configure** port *string* tdm ds1 *string* channel-group *number* idle-payload-fill
Tree	idle-payload-fill
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

all-ones

Synopsis	Define the 8 bit value to be transmitted as 11111111
Context	**configure** port *string* tdm ds1 *string* channel-group *number* idle-payload-fill all-ones
Tree	all-ones
Notes	The following elements are part of a choice: **all-ones** or **pattern**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pattern *number*

Synopsis	User-defined pattern to be transmitted
Context	**configure** port *string* tdm ds1 *string* channel-group *number* idle-payload-fill pattern *number*
Tree	pattern
Range	0 to 255

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Notes	The following elements are part of a choice: **all-ones** or **pattern**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

idle-signal-fill

Synopsis	Enter the **idle-signal-fill** context
Context	**configure** port *string* tdm ds1 *string* channel-group *number* idle-signal-fill
Tree	idle-signal-fill
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

all-ones

Synopsis	Define the 8-bit value to be transmitted as 11111111
Context	**configure** port *string* tdm ds1 *string* channel-group *number* idle-signal-fill all-ones
Tree	all-ones
Notes	The following elements are part of a choice: **all-ones** or **pattern**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pattern *number*

Synopsis	User-defined pattern to be transmitted
Context	**configure** port *string* tdm ds1 *string* channel-group *number* idle-signal-fill pattern *number*
Tree	pattern
Range	0 to 15
Notes	The following elements are part of a choice: **all-ones** or **pattern**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

load-balancing-algorithm *keyword*

Synopsis	Load balancing algorithm to be used on the port

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Context	**configure** port *string* tdm ds1 *string* channel-group *number* load-balancing-algorithm *keyword*
Tree	load-balancing-algorithm
Options	default, include-l4, exclude-l4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mac-address *string*

Synopsis	MAC address for the port
Context	**configure** port *string* tdm ds1 *string* channel-group *number* mac-address *string*
Tree	mac-address
Default	00:00:00:00:00:00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Operation mode for the TDM channel group
Context	**configure** port *string* tdm ds1 *string* channel-group *number* mode *keyword*
Tree	mode
Options	access, network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mtu *number*

Synopsis	Maximum payload MTU size for the port
Context	**configure** port *string* tdm ds1 *string* channel-group *number* mtu *number*
Tree	mtu
Range	512 to 9208
Units	bytes

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Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

network

Synopsis	Enter the **network** context
Context	**configure** port *string* tdm ds1 *string* channel-group *number* network
Tree	network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

accounting-policy *reference*

Synopsis	Accounting policy
Context	**configure** port *string* tdm ds1 *string* channel-group *number* network accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	**configure** port *string* tdm ds1 *string* channel-group *number* network collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

queue-policy *reference*

Synopsis	Queue policy on the TDM DS0 network channel group
Context	**configure** port *string* tdm ds1 *string* channel-group *number* network queue-policy *reference*

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Tree	queue-policy
Reference	**configure** qos network-queue *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

speed *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Speed of the DS0 channels in the channel group
Context	**configure** port *string* tdm ds1 *string* channel-group *number* speed *number*
Tree	speed
Range	56 | 64
Default	64
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

timeslot *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Timeslot for the channel group
Context	**configure** port *string* tdm ds1 *string* channel-group *number* timeslot *number*
Tree	timeslot
Range	1 to 24
Max. Instances	24
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

clock-source *keyword*

Synopsis	Clock for data transmission

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Context	**configure** port *string* tdm ds1 *string* clock-source *keyword*
Tree	clock-source
Options	loop-timed, node-timed, adaptive, differential
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

framing *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Framing for the DS1 channel
Context	**configure** port *string* tdm ds1 *string* framing *keyword*
Tree	framing
Options	extended-super-frame, super-frame, ds1-unframed
Default	extended-super-frame
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

loopback *keyword*

Synopsis	Loopback mode for the port
Context	**configure** port *string* tdm ds1 *string* loopback *keyword*
Tree	loopback
Options	line, internal, fdl-ansi, fdl-bellcore, payload-ansi, inband-ansi, inband-bellcore
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

remote-loop-respond *boolean*

Synopsis	Respond to requests for remote loopbacks
Context	**configure** port *string* tdm ds1 *string* remote-loop-respond *boolean*
Tree	remote-loop-respond
Default	false
Introduced	20.10.R1

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Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

report-alarm

Synopsis	Enter the **report-alarm** context
Context	**configure** port *string* tdm ds1 *string* report-alarm
Tree	report-alarm
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ais *boolean*

Synopsis	Report alarm indication signal errors
Context	**configure** port *string* tdm ds1 *string* report-alarm ais *boolean*
Tree	ais
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ber-sd *boolean*

Synopsis	Report the BER that specifies signal degradation
Context	**configure** port *string* tdm ds1 *string* report-alarm ber-sd *boolean*
Tree	ber-sd
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ber-sf *boolean*

Synopsis	Report the BER that species signal failure
Context	**configure** port *string* tdm ds1 *string* report-alarm ber-sf *boolean*
Tree	ber-sf
Default	false
Introduced	20.10.R1

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Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

looped *boolean*

Synopsis	Report looped packet errors
Context	**configure** port *string* tdm ds1 *string* report-alarm looped *boolean*
Tree	looped
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

los *boolean*

Synopsis	Report loss of signal errors
Context	**configure** port *string* tdm ds1 *string* report-alarm los *boolean*
Tree	los
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

oof *boolean*

Synopsis	Report out-of-frame errors
Context	**configure** port *string* tdm ds1 *string* report-alarm oof *boolean*
Tree	oof
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rai *boolean*

Synopsis	Report resource availability indicator events
Context	**configure** port *string* tdm ds1 *string* report-alarm rai *boolean*
Tree	rai
Default	false

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Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

signal-mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Signal mode on the channel
Context	**configure** port *string* tdm ds1 *string* signal-mode *keyword*
Tree	signal-mode
Options	channel-associated-signaling
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ds3 [ds3-index] *string*

Synopsis	Enter the **ds3** list instance
Context	**configure** port *string* tdm ds3 *string*
Tree	ds3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[**ds3-index**] *string*

Synopsis	TDM DS3 index
Context	**configure** port *string* tdm ds3 *string*
Tree	ds3
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

admin-state *keyword*

Synopsis	Administrative state of the DS3 port

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Context	**configure** port *string* tdm ds3 *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

channelized *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Channelization of the DS3
Context	**configure** port *string* tdm ds3 *string* channelized *keyword*
Tree	channelized
Options	ds1, e1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

clock-source *keyword*

Synopsis	Clock for data transmission
Context	**configure** port *string* tdm ds3 *string* clock-source *keyword*
Tree	clock-source
Options	loop-timed, node-timed
Default	node-timed
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

crc *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Precision of the cyclic redundancy check (CRC)

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Context	**configure** port *string* tdm ds3 *string* crc *number*
Tree	crc
Range	16 | 32
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

description *string*

Synopsis	Text description
Context	**configure** port *string* tdm ds3 *string* description *string*
Tree	description
String Length	1 to 160
Default	DS3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

egress

Synopsis	Enter the **egress** context
Context	**configure** port *string* tdm ds3 *string* egress
Tree	egress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

port-scheduler-policy

Synopsis	Enter the **port-scheduler-policy** context
Context	**configure** port *string* tdm ds3 *string* egress port-scheduler-policy
Tree	port-scheduler-policy
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

overrides

Synopsis	Enable the **overrides** context

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Context	**configure** port *string* tdm ds3 *string* egress port-scheduler-policy overrides
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

level [priority-level] *number*

Synopsis	Enter the **level** list instance
Context	**configure** port *string* tdm ds3 *string* egress port-scheduler-policy overrides level *number*
Tree	level
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[**priority-level**] *number*

Synopsis	Port priority levels override
Context	**configure** port *string* tdm ds3 *string* egress port-scheduler-policy overrides level *number*
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** port *string* tdm ds3 *string* egress port-scheduler-policy overrides level *number* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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cir *decimal-number*

Synopsis	CIR for the priority level
Context	**configure** port *string* tdm ds3 *string* egress port-scheduler-policy overrides level *number* percent-rate cir *decimal-number*
Tree	cir
Range	0 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pir *decimal-number*

Synopsis	PIR for the priority level
Context	**configure** port *string* tdm ds3 *string* egress port-scheduler-policy overrides level *number* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rate

Synopsis	Enter the **rate** context
Context	**configure** port *string* tdm ds3 *string* egress port-scheduler-policy overrides level *number* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

cir *(number | keyword)*

Synopsis	CIR for the priority level

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Context	**configure** port *string* tdm ds3 *string* egress port-scheduler-policy overrides level *number* rate cir *(number | keyword)*
Tree	cir
Range	0 to 3200000000
Units	kilobps
Options	sum, max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pir *(number | keyword)*

Synopsis	PIR for the priority level
Context	**configure** port *string* tdm ds3 *string* egress port-scheduler-policy overrides level *number* rate pir *(number | keyword)*
Tree	pir
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

max-rate

Synopsis	Enter the **max-rate** context
Context	**configure** port *string* tdm ds3 *string* egress port-scheduler-policy overrides max-rate
Tree	max-rate
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

percent-rate *decimal-number*

Synopsis	PIR
Context	**configure** port *string* tdm ds3 *string* egress port-scheduler-policy overrides max-rate percent-rate *decimal-number*

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Tree	percent-rate
Range	0.01 to 100
Units	percent
Default	100
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rate *(number | keyword)*

Synopsis	PIR
Context	**configure** port *string* tdm ds3 *string* egress port-scheduler-policy overrides max-rate rate *(number | keyword)*
Tree	rate
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

policy-name *reference*

Synopsis	Port egress scheduler policy name
Context	**configure** port *string* tdm ds3 *string* egress port-scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos port-scheduler-policy *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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encap-type *keyword*

WARNING:
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Synopsis	Encapsulation method
Context	**configure** port *string* tdm ds3 *string* encap-type *keyword*
Tree	encap-type
Options	cem
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

feac-loop-respond *boolean*

Synopsis	Enable DS-3 interface to respond to remote loop signals
Context	**configure** port *string* tdm ds3 *string* feac-loop-respond *boolean*
Tree	feac-loop-respond
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

framing *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Framing for the DS3 channel
Context	**configure** port *string* tdm ds3 *string* framing *keyword*
Tree	framing
Options	c-bit, m23, ds3-unframed
Default	c-bit
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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idle-cycle-flag *keyword*

Synopsis	Value transmitted during idle cycles
Context	**configure** port *string* tdm ds3 *string* idle-cycle-flag *keyword*
Tree	idle-cycle-flag
Options	flags, ones
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

load-balancing-algorithm *keyword*

Synopsis	Load balancing algorithm to be used on the port
Context	**configure** port *string* tdm ds3 *string* load-balancing-algorithm *keyword*
Tree	load-balancing-algorithm
Options	default, include-l4, exclude-l4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

loopback *keyword*

Synopsis	Loopback mode on the channel
Context	**configure** port *string* tdm ds3 *string* loopback *keyword*
Tree	loopback
Options	line, internal, remote
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mac-address *string*

Synopsis	MAC address for the port
Context	**configure** port *string* tdm ds3 *string* mac-address *string*
Tree	mac-address
Default	00:00:00:00:00:00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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maintenance-data-link

Synopsis	Enter the **maintenance-data-link** context
Context	**configure** port *string* tdm ds3 *string* maintenance-data-link
Tree	maintenance-data-link
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

equipment-id-code *string*

Synopsis	Equipment ID Code (EIC) of the MDL
Context	**configure** port *string* tdm ds3 *string* maintenance-data-link equipment-id-code *string*
Tree	equipment-id-code
String Length	0 to 10
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

facility-id-code *string*

Synopsis	Facility ID Code sent in the MDL Path message
Context	**configure** port *string* tdm ds3 *string* maintenance-data-link facility-id-code *string*
Tree	facility-id-code
String Length	0 to 38
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

frame-id-code *string*

Synopsis	Frame ID Code (FIC) of the MDL
Context	**configure** port *string* tdm ds3 *string* maintenance-data-link frame-id-code *string*
Tree	frame-id-code
String Length	0 to 10
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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generator-string *string*

Synopsis	Generator number string sent in MDL test signal message
Context	**configure** port *string* tdm ds3 *string* maintenance-data-link generator-string *string*
Tree	generator-string
String Length	0 to 38
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

location-id-code *string*

Synopsis	Location ID Code (LIC) of the MDL
Context	**configure** port *string* tdm ds3 *string* maintenance-data-link location-id-code *string*
Tree	location-id-code
String Length	0 to 11
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

port-string *string*

Synopsis	Port number string sent in the MDL idle signal message
Context	**configure** port *string* tdm ds3 *string* maintenance-data-link port-string *string*
Tree	port-string
String Length	0 to 38
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

transmit-message-type

Synopsis	Enter the **transmit-message-type** context
Context	**configure** port *string* tdm ds3 *string* maintenance-data-link transmit-message-type
Tree	transmit-message-type
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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idle-signal *boolean*

Synopsis	Enable transmission of MDL idle signal messages
Context	**configure** port *string* tdm ds3 *string* maintenance-data-link transmit-message-type idle-signal *boolean*
Tree	idle-signal
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

path *boolean*

Synopsis	Enabletransmission of MDL path messages
Context	**configure** port *string* tdm ds3 *string* maintenance-data-link transmit-message-type path *boolean*
Tree	path
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

test-signal *boolean*

Synopsis	Enable transmission of MDL test signal messages
Context	**configure** port *string* tdm ds3 *string* maintenance-data-link transmit-message-type test-signal *boolean*
Tree	test-signal
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

unit-id-code *string*

Synopsis	Unit ID Code (UIC) of the MDL
Context	**configure** port *string* tdm ds3 *string* maintenance-data-link unit-id-code *string*
Tree	unit-id-code
String Length	0 to 6

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Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Operation mode
Context	**configure** port *string* tdm ds3 *string* mode *keyword*
Tree	mode
Options	access, network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mtu *number*

Synopsis	Maximum payload MTU size for the port
Context	**configure** port *string* tdm ds3 *string* mtu *number*
Tree	mtu
Range	512 to 9208
Units	bytes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

network

Synopsis	Enter the **network** context
Context	**configure** port *string* tdm ds3 *string* network
Tree	network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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accounting-policy *reference*

Synopsis	Accounting policy
Context	**configure** port *string* tdm ds3 *string* network accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	**configure** port *string* tdm ds3 *string* network collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

queue-policy *reference*

Synopsis	Queue policy on the TDM DS3 network channel
Context	**configure** port *string* tdm ds3 *string* network queue-policy *reference*
Tree	queue-policy
Reference	**configure** qos network-queue *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

report-alarm

Synopsis	Enter the **report-alarm** context
Context	**configure** port *string* tdm ds3 *string* report-alarm
Tree	report-alarm
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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ais *boolean*

Synopsis	Report alarm indication signal errors
Context	**configure** port *string* tdm ds3 *string* report-alarm ais *boolean*
Tree	ais
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

looped *boolean*

Synopsis	Report looped packet errors
Context	**configure** port *string* tdm ds3 *string* report-alarm looped *boolean*
Tree	looped
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

los *boolean*

Synopsis	Report loss of signal errors
Context	**configure** port *string* tdm ds3 *string* report-alarm los *boolean*
Tree	los
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

oof *boolean*

Synopsis	Report out-of-frame errors
Context	**configure** port *string* tdm ds3 *string* report-alarm oof *boolean*
Tree	oof
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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rai *boolean*

Synopsis	Report resource availability indicator events
Context	**configure** port *string* tdm ds3 *string* report-alarm rai *boolean*
Tree	rai
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

scramble *boolean*

Synopsis	Enable TDM DS3 payload scrambling
Context	**configure** port *string* tdm ds3 *string* scramble *boolean*
Tree	scramble
Description	When configured to **true**, the TDM DS3 frame carries randomized patterns of 1s and 0s, which prevents continuous strings of all 1s or all 0s. This meets the needs of physical layer protocols that rely on sufficient transitions between 1s and 0s to maintain clocking. When configured to **false**, the strings of all 1s or all 0s are continuous.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

subrate

Synopsis	Enter the **subrate** context
Context	**configure** port *string* tdm ds3 *string* subrate
Tree	subrate
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

csu-mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Channel Service Unit (CSU) compatibility mode

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Context	**configure** port *string* tdm ds3 *string* subrate csu-mode *keyword*
Tree	csu-mode
Options	digital-link, larscom
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rate-step *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Subrate for the associated DS3
Context	**configure** port *string* tdm ds3 *string* subrate rate-step *number*
Tree	rate-step
Range	0 to 147
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

e1 [e1-index] *string*

Synopsis	Enter the **e1** list instance
Context	**configure** port *string* tdm e1 *string*
Tree	e1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[**e1-index**] *string*

Synopsis	E-1 channel
Context	**configure** port *string* tdm e1 *string*
Tree	e1
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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admin-state *keyword*

Synopsis	Administrative state of the E1 channel
Context	**configure** port *string* tdm e1 *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ber-threshold

Synopsis	Enter the **ber-threshold** context
Context	**configure** port *string* tdm e1 *string* ber-threshold
Tree	ber-threshold
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

signal-degrade *number*

Synopsis	BER signal degredation threshold
Context	**configure** port *string* tdm e1 *string* ber-threshold signal-degrade *number*
Tree	signal-degrade
Range	1 | 5 | 10 | 50 | 100
Default	5
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

signal-failure *number*

Synopsis	BER signal failure threshold
Context	**configure** port *string* tdm e1 *string* ber-threshold signal-failure *number*
Tree	signal-failure
Range	1 | 5 | 10 | 50 | 100
Default	50

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Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

channel-group [ds0-index] *number*

Synopsis	Enter the **channel-group** list instance
Context	**configure** port *string* tdm e1 *string* channel-group *number*
Tree	channel-group
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[**ds0-index**] *number*

Synopsis	DS0 channel group in a channelized DS1 or E1 circuit
Context	**configure** port *string* tdm e1 *string* channel-group *number*
Tree	channel-group
Range	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

admin-state *keyword*

Synopsis	Administrative state of the E1 channel group
Context	**configure** port *string* tdm e1 *string* channel-group *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

description *string*

Synopsis	Text description
Context	**configure** port *string* tdm e1 *string* channel-group *number* description *string*

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Tree	description
String Length	1 to 160
Default	DS0GRP
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

egress

Synopsis	Enter the **egress** context
Context	**configure** port *string* tdm e1 *string* channel-group *number* egress
Tree	egress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

port-scheduler-policy

Synopsis	Enter the **port-scheduler-policy** context
Context	**configure** port *string* tdm e1 *string* channel-group *number* egress port-scheduler-policy
Tree	port-scheduler-policy
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

overrides

Synopsis	Enable the **overrides** context
Context	**configure** port *string* tdm e1 *string* channel-group *number* egress port-scheduler-policy overrides
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

level [priority-level] *number*

Synopsis	Enter the **level** list instance
Context	**configure** port *string* tdm e1 *string* channel-group *number* egress port-scheduler-policy overrides level *number*

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Tree	level
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[**priority-level**] *number*

Synopsis	Port priority levels override
Context	**configure** port *string* tdm e1 *string* channel-group *number* egress port-scheduler-policy overrides level *number*
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** port *string* tdm e1 *string* channel-group *number* egress port-scheduler-policy overrides level *number* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

cir *decimal-number*

Synopsis	CIR for the priority level
Context	**configure** port *string* tdm e1 *string* channel-group *number* egress port-scheduler-policy overrides level *number* percent-rate cir *decimal-number*
Tree	cir
Range	0 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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pir *decimal-number*

Synopsis	PIR for the priority level
Context	**configure** port *string* tdm e1 *string* channel-group *number* egress port-scheduler-policy overrides level *number* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rate

Synopsis	Enter the **rate** context
Context	**configure** port *string* tdm e1 *string* channel-group *number* egress port-scheduler-policy overrides level *number* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

cir *(number | keyword)*

Synopsis	CIR for the priority level
Context	**configure** port *string* tdm e1 *string* channel-group *number* egress port-scheduler-policy overrides level *number* rate cir *(number | keyword)*
Tree	cir
Range	0 to 3200000000
Units	kilobps
Options	sum, max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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pir *(number | keyword)*

Synopsis	PIR for the priority level
Context	**configure** port *string* tdm e1 *string* channel-group *number* egress port-scheduler-policy overrides level *number* rate pir *(number | keyword)*
Tree	pir
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

max-rate

Synopsis	Enter the **max-rate** context
Context	**configure** port *string* tdm e1 *string* channel-group *number* egress port-scheduler-policy overrides max-rate
Tree	max-rate
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

percent-rate *decimal-number*

Synopsis	PIR
Context	**configure** port *string* tdm e1 *string* channel-group *number* egress port-scheduler-policy overrides max-rate percent-rate *decimal-number*
Tree	percent-rate
Range	0.01 to 100
Units	percent
Default	100
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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rate *(number | keyword)*

Synopsis	PIR
Context	**configure** port *string* tdm e1 *string* channel-group *number* egress port-scheduler-policy overrides max-rate rate *(number | keyword)*
Tree	rate
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

policy-name *reference*

Synopsis	Port egress scheduler policy name
Context	**configure** port *string* tdm e1 *string* channel-group *number* egress port-scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos port-scheduler-policy *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

encap-type *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Encapsulation method used on a port, path, or channel
Context	**configure** port *string* tdm e1 *string* channel-group *number* encap-type *keyword*
Tree	encap-type
Options	cem
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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idle-payload-fill

Synopsis	Enter the **idle-payload-fill** context
Context	**configure** port *string* tdm e1 *string* channel-group *number* idle-payload-fill
Tree	idle-payload-fill
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

all-ones

Synopsis	Define the 8 bit value to be transmitted as 11111111
Context	**configure** port *string* tdm e1 *string* channel-group *number* idle-payload-fill all-ones
Tree	all-ones
Notes	The following elements are part of a choice: **all-ones** or **pattern**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pattern *number*

Synopsis	User-defined pattern to be transmitted
Context	**configure** port *string* tdm e1 *string* channel-group *number* idle-payload-fill pattern *number*
Tree	pattern
Range	0 to 255
Notes	The following elements are part of a choice: **all-ones** or **pattern**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

idle-signal-fill

Synopsis	Enter the **idle-signal-fill** context
Context	**configure** port *string* tdm e1 *string* channel-group *number* idle-signal-fill
Tree	idle-signal-fill
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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all-ones

Synopsis	Define the 8-bit value to be transmitted as 11111111
Context	**configure** port *string* tdm e1 *string* channel-group *number* idle-signal-fill all-ones
Tree	all-ones
Notes	The following elements are part of a choice: **all-ones** or **pattern**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pattern *number*

Synopsis	User-defined pattern to be transmitted
Context	**configure** port *string* tdm e1 *string* channel-group *number* idle-signal-fill pattern *number*
Tree	pattern
Range	0 to 15
Notes	The following elements are part of a choice: **all-ones** or **pattern**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

load-balancing-algorithm *keyword*

Synopsis	Load balancing algorithm to be used on this port
Context	**configure** port *string* tdm e1 *string* channel-group *number* load-balancing-algorithm *keyword*
Tree	load-balancing-algorithm
Options	default, include-l4, exclude-l4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mac-address *string*

Synopsis	MAC address for the port
Context	**configure** port *string* tdm e1 *string* channel-group *number* mac-address *string*
Tree	mac-address
Default	00:00:00:00:00:00

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Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Operation mode
Context	**configure** port *string* tdm e1 *string* channel-group *number* mode *keyword*
Tree	mode
Options	access, network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mtu *number*

Synopsis	Maximum payload MTU
Context	**configure** port *string* tdm e1 *string* channel-group *number* mtu *number*
Tree	mtu
Range	512 to 9208
Units	bytes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

network

Synopsis	Enter the **network** context
Context	**configure** port *string* tdm e1 *string* channel-group *number* network
Tree	network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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accounting-policy *reference*

Synopsis	Accounting policy
Context	**configure** port *string* tdm e1 *string* channel-group *number* network accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	**configure** port *string* tdm e1 *string* channel-group *number* network collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

queue-policy *reference*

Synopsis	Network queue policy on TDM E0 network channel group
Context	**configure** port *string* tdm e1 *string* channel-group *number* network queue-policy *reference*
Tree	queue-policy
Reference	**configure** qos network-queue *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

speed *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Speed of the E0 channels in this channel group
Context	**configure** port *string* tdm e1 *string* channel-group *number* speed *number*

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Tree	speed
Range	56 | 64
Default	64
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

timeslot *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure timeslot for this channel group.
Context	**configure** port *string* tdm e1 *string* channel-group *number* timeslot *number*
Tree	timeslot
Range	1 to 32
Max. Instances	32
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

clock-source *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clock for data transmission
Context	**configure** port *string* tdm e1 *string* clock-source *keyword*
Tree	clock-source
Options	loop-timed, node-timed, adaptive, differential
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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framing *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Framing on the E1 channel
Context	**configure** port *string* tdm e1 *string* framing *keyword*
Tree	framing
Options	no-crc-g704, g704, e1-unframed
Default	g704
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

loopback *keyword*

Synopsis	Loopback mode
Context	**configure** port *string* tdm e1 *string* loopback *keyword*
Tree	loopback
Options	line, internal
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

national-bits

Synopsis	Enter the **national-bits** context
Context	**configure** port *string* tdm e1 *string* national-bits
Tree	national-bits
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

sa4 *boolean*

Synopsis	Enable bit Sa4
Context	**configure** port *string* tdm e1 *string* national-bits sa4 *boolean*
Tree	sa4
Default	false

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Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

sa5 *boolean*

Synopsis	Enable bit Sa5
Context	**configure** port *string* tdm e1 *string* national-bits sa5 *boolean*
Tree	sa5
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

sa6 *boolean*

Synopsis	Enable bit Sa6
Context	**configure** port *string* tdm e1 *string* national-bits sa6 *boolean*
Tree	sa6
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

sa7 *boolean*

Synopsis	Enable bit Sa7
Context	**configure** port *string* tdm e1 *string* national-bits sa7 *boolean*
Tree	sa7
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

sa8 *boolean*

Synopsis	Enable bit Sa8
Context	**configure** port *string* tdm e1 *string* national-bits sa8 *boolean*
Tree	sa8

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Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

report-alarm

Synopsis	Enter the **report-alarm** context
Context	**configure** port *string* tdm e1 *string* report-alarm
Tree	report-alarm
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ais *boolean*

Synopsis	Report alarm indication signal errors
Context	**configure** port *string* tdm e1 *string* report-alarm ais *boolean*
Tree	ais
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ber-sd *boolean*

Synopsis	Enable/disable ber-sd alarm.
Context	**configure** port *string* tdm e1 *string* report-alarm ber-sd *boolean*
Tree	ber-sd
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ber-sf *boolean*

Synopsis	Enable/disable ber-sf alarm.
Context	**configure** port *string* tdm e1 *string* report-alarm ber-sf *boolean*
Tree	ber-sf

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Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

looped *boolean*

Synopsis	Report looped packet errors
Context	**configure** port *string* tdm e1 *string* report-alarm looped *boolean*
Tree	looped
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

los *boolean*

Synopsis	Report loss of signal errors
Context	**configure** port *string* tdm e1 *string* report-alarm los *boolean*
Tree	los
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

oof *boolean*

Synopsis	Report out-of-frame errors
Context	**configure** port *string* tdm e1 *string* report-alarm oof *boolean*
Tree	oof
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rai *boolean*

Synopsis	Report resource availability indicator events
Context	**configure** port *string* tdm e1 *string* report-alarm rai *boolean*

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Tree	rai
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

signal-mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Signal mode on the channel
Context	**configure** port *string* tdm e1 *string* signal-mode *keyword*
Tree	signal-mode
Options	channel-associated-signaling
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

e3 [e3-index] *string*

Synopsis	Enter the **e3** list instance
Context	**configure** port *string* tdm e3 *string*
Tree	e3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[**e3-index**] *string*

Synopsis	Components making up the SONET/SDH Path
Context	**configure** port *string* tdm e3 *string*
Tree	e3
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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admin-state *keyword*

Synopsis	Administrative state of the E3 channel
Context	**configure** port *string* tdm e3 *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

clock-source *keyword*

Synopsis	Clock for data transmission
Context	**configure** port *string* tdm e3 *string* clock-source *keyword*
Tree	clock-source
Options	loop-timed, node-timed
Default	node-timed
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

crc *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Precision of the CRC
Context	**configure** port *string* tdm e3 *string* crc *number*
Tree	crc
Range	16 | 32
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

description *string*

Synopsis	Text description
Context	**configure** port *string* tdm e3 *string* description *string*

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Tree	description
String Length	1 to 160
Default	E3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

egress

Synopsis	Enter the **egress** context
Context	**configure** port *string* tdm e3 *string* egress
Tree	egress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

port-scheduler-policy

Synopsis	Enter the **port-scheduler-policy** context
Context	**configure** port *string* tdm e3 *string* egress port-scheduler-policy
Tree	port-scheduler-policy
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

overrides

Synopsis	Enable the **overrides** context
Context	**configure** port *string* tdm e3 *string* egress port-scheduler-policy overrides
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

level [priority-level] *number*

Synopsis	Enter the **level** list instance
Context	**configure** port *string* tdm e3 *string* egress port-scheduler-policy overrides level *number*
Tree	level

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Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[**priority-level**] *number*

Synopsis	Port priority levels override
Context	**configure** port *string* tdm e3 *string* egress port-scheduler-policy overrides level *number*
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** port *string* tdm e3 *string* egress port-scheduler-policy overrides level *number* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

cir *decimal-number*

Synopsis	CIR for the priority level
Context	**configure** port *string* tdm e3 *string* egress port-scheduler-policy overrides level *number* percent-rate cir *decimal-number*
Tree	cir
Range	0 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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pir *decimal-number*

Synopsis	PIR for the priority level
Context	**configure** port *string* tdm e3 *string* egress port-scheduler-policy overrides level *number* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rate

Synopsis	Enter the **rate** context
Context	**configure** port *string* tdm e3 *string* egress port-scheduler-policy overrides level *number* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

cir *(number | keyword)*

Synopsis	CIR for the priority level
Context	**configure** port *string* tdm e3 *string* egress port-scheduler-policy overrides level *number* rate cir *(number | keyword)*
Tree	cir
Range	0 to 3200000000
Units	kilobps
Options	sum, max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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pir *(number | keyword)*

Synopsis	PIR for the priority level
Context	**configure** port *string* tdm e3 *string* egress port-scheduler-policy overrides level *number* rate pir *(number | keyword)*
Tree	pir
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

max-rate

Synopsis	Enter the **max-rate** context
Context	**configure** port *string* tdm e3 *string* egress port-scheduler-policy overrides max-rate
Tree	max-rate
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

percent-rate *decimal-number*

Synopsis	PIR
Context	**configure** port *string* tdm e3 *string* egress port-scheduler-policy overrides max-rate percent-rate *decimal-number*
Tree	percent-rate
Range	0.01 to 100
Units	percent
Default	100
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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rate *(number | keyword)*

Synopsis	PIR
Context	**configure** port *string* tdm e3 *string* egress port-scheduler-policy overrides max-rate rate *(number | keyword)*
Tree	rate
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

policy-name *reference*

Synopsis	Port egress scheduler policy name
Context	**configure** port *string* tdm e3 *string* egress port-scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos port-scheduler-policy *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

encap-type *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Encapsulation method used on a port, path, or channel
Context	**configure** port *string* tdm e3 *string* encap-type *keyword*
Tree	encap-type
Options	cem
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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framing *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Framing for the E3 channel
Context	**configure** port *string* tdm e3 *string* framing *keyword*
Tree	framing
Options	g751, g832, e3-unframed
Default	g751
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

idle-cycle-flag *keyword*

Synopsis	Value transmitted by channel group during idle cycle
Context	**configure** port *string* tdm e3 *string* idle-cycle-flag *keyword*
Tree	idle-cycle-flag
Options	flags, ones
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

load-balancing-algorithm *keyword*

Synopsis	Load balancing algorithm to be used on this port
Context	**configure** port *string* tdm e3 *string* load-balancing-algorithm *keyword*
Tree	load-balancing-algorithm
Options	default, include-l4, exclude-l4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

loopback *keyword*

Synopsis	Loopback mode
Context	**configure** port *string* tdm e3 *string* loopback *keyword*
Tree	loopback

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Options	line, internal
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mac-address *string*

Synopsis	MAC address for the port
Context	**configure** port *string* tdm e3 *string* mac-address *string*
Tree	mac-address
Default	00:00:00:00:00:00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Operation mode
Context	**configure** port *string* tdm e3 *string* mode *keyword*
Tree	mode
Options	access, network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mtu *number*

Synopsis	Maximum payload MTU size
Context	**configure** port *string* tdm e3 *string* mtu *number*
Tree	mtu
Range	512 to 9208
Units	bytes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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network

Synopsis	Enter the **network** context
Context	**configure** port *string* tdm e3 *string* network
Tree	network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

accounting-policy *reference*

Synopsis	Accounting policy
Context	**configure** port *string* tdm e3 *string* network accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	**configure** port *string* tdm e3 *string* network collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

queue-policy *reference*

Synopsis	Queue policy on the TDM E3 network channel
Context	**configure** port *string* tdm e3 *string* network queue-policy *reference*
Tree	queue-policy
Reference	**configure** qos network-queue *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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report-alarm

Synopsis	Enter the **report-alarm** context
Context	**configure** port *string* tdm e3 *string* report-alarm
Tree	report-alarm
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ais *boolean*

Synopsis	Report alarm indication signal errors
Context	**configure** port *string* tdm e3 *string* report-alarm ais *boolean*
Tree	ais
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

looped *boolean*

Synopsis	Report looped packet errors
Context	**configure** port *string* tdm e3 *string* report-alarm looped *boolean*
Tree	looped
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

los *boolean*

Synopsis	Report loss of signal errors
Context	**configure** port *string* tdm e3 *string* report-alarm los *boolean*
Tree	los
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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oof *boolean*

Synopsis	Report out-of-frame errors
Context	**configure** port *string* tdm e3 *string* report-alarm oof *boolean*
Tree	oof
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rai *boolean*

Synopsis	Report resource availability indicator events
Context	**configure** port *string* tdm e3 *string* report-alarm rai *boolean*
Tree	rai
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

scramble *boolean*

Synopsis	Enable TDM E3 payload scrambling
Context	**configure** port *string* tdm e3 *string* scramble *boolean*
Tree	scramble
Description	When configured to **true**, the TDM E3 frame carries randomized patterns of 1s and 0s, which prevents continuous strings of all 1s or all 0s. This meets the needs of physical layer protocols that rely on sufficient transitions between 1s and 0s to maintain clocking. When configured to **false**, the strings of all 1s or all 0s are continuous.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

hold-time

Synopsis	Enter the **hold-time** context
Context	**configure** port *string* tdm hold-time
Tree	hold-time
Introduced	19.5.R1

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Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

down *number*

Synopsis	Hold timer for link down event dampening
Context	**configure** port *string* tdm hold-time down *number*
Tree	down
Range	0 to 100
Default	5
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

up *number*

Synopsis	Hold timer for link up event dampening
Context	**configure** port *string* tdm hold-time up *number*
Tree	up
Range	1 to 100
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

transceiver

Synopsis	Enter the **transceiver** context
Context	**configure** port *string* transceiver
Tree	transceiver
Introduced	16.0.R4
Platforms	All

digital-coherent-optics *boolean*

Synopsis	Enable digital coherent optics module for transceiver
Context	**configure** port *string* transceiver digital-coherent-optics *boolean*
Tree	digital-coherent-optics
Default	false

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Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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3.33 port-policy commands

```
configure
   -  port-policy string
      -  apply-groups reference
      -  apply-groups-exclude reference
      -  description string
      -  egress-port-scheduler-policy reference
```


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3.33.1 port-policy command descriptions

port-policy [name] *string*

Synopsis	Enter the **port-policy** list instance
Context	**configure** port-policy *string*
Tree	port-policy
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Port policy name
Context	**configure** port-policy *string*
Tree	port-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** port-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

egress-port-scheduler-policy *reference*

Synopsis	Policy for egress port scheduler
Context	**configure** port-policy *string* egress-port-scheduler-policy *reference*

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Tree	egress-port-scheduler-policy
Reference	**configure** qos port-scheduler-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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3.34 port-xc commands

```
configure
   -  port-xc
      -  apply-groups reference
      -  apply-groups-exclude reference
      -  pxc number
         -  admin-state keyword
         -  apply-groups reference
         -  apply-groups-exclude reference
         -  description string
         -  port-id reference
```


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3.34.1 port-xc command descriptions

port-xc

Synopsis	Enter the **port-xc** context
Context	**configure** port-xc
Tree	port-xc
Description	Commands in this context configure port cross-connect (PXC) functionality.
Introduced	16.0.R1
Platforms	All

pxc [pxc-id] *number*

Synopsis	Enter the **pxc** list instance
Context	**configure** port-xc pxc *number*
Tree	pxc
Description	Commands in this context configure port cross-connect (PXC) information.
Introduced	16.0.R1
Platforms	All

[**pxc-id**] *number*

Synopsis	PXC ID
Context	**configure** port-xc pxc *number*
Tree	pxc
Range	1 to 256
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the PXC
Context	**configure** port-xc pxc *number* admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** port-xc pxc *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

port-id *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PXC port ID
Context	**configure** port-xc pxc *number* port-id *reference*
Tree	port-id
Reference	**configure** port *string*
Introduced	16.0.R1
Platforms	All

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3.35 pw-port commands

```
configure
   –  pw-port number
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  description string
      –  dot1q-etype string
      –  encap-type keyword
      –  epipe reference
         –  admin-state keyword
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  down-on-peer-tldp-pw-status-faults boolean
         –  egress
            –  shaper
               –  intermediate-destination-id string
               –  virtual-port string
         –  fpe-id reference
         –  monitor-oper-group reference
         –  oper-up-on-mh-standby boolean
      –  oper-group reference
      –  qinq-etype string
      –  sdp reference
         –  admin-state keyword
         –  adv-service-mtu number
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  control-word boolean
         –  egress
            –  shaper
               –  intermediate-destination-id string
               –  pw-sap-secondary-shaper string
               –  virtual-port string
            –  vc-label number
         –  entropy-label boolean
         –  ingress
            –  vc-label number
         –  monitor-oper-group reference
         –  vc-id number
         –  vc-type keyword
         –  vlan-vc-tag number
```


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3.35.1 pw-port command descriptions

pw-port [pw-port-id] *number*

Synopsis	Enter the **pw-port** list instance
Context	**configure** pw-port *number*
Tree	pw-port
Introduced	16.0.R4
Platforms	All

[**pw-port-id**] *number*

Synopsis	Pseudowire port ID
Context	**configure** pw-port *number*
Tree	pw-port
Range	1 to 32767
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** pw-port *number* description *string*
Tree	description
String Length	1 to 255
Default	PW Port
Introduced	16.0.R4
Platforms	All

dot1q-etype *string*

Synopsis	Dot1q Ethertype on the PW port
Context	**configure** pw-port *number* dot1q-etype *string*
Tree	dot1q-etype

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Default	33024
Introduced	16.0.R4
Platforms	All

encap-type *keyword*

Synopsis	Encap type of the pseudo-wire port
Context	**configure** pw-port *number* encap-type *keyword*
Tree	encap-type
Options	dot1q, qinq
Default	dot1q
Introduced	16.0.R4
Platforms	All

epipe [service-name] *reference*

Synopsis	Enter the **epipe** list instance
Context	**configure** pw-port *number* epipe *reference*
Tree	epipe
Max. Instances	1
Notes	The following elements are part of a choice: **epipe** or **sdp**.
Introduced	16.0.R4
Platforms	All

[**service-name**] *reference*

Synopsis	Administrative service name
Context	**configure** pw-port *number* epipe *reference*
Tree	epipe
Reference	**configure** service epipe *string*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the pseudowire port
Context	**configure** pw-port *number* epipe *reference* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

down-on-peer-tldp-pw-status-faults *boolean*

Synopsis	Force PW port to go down for certain PW status bits
Context	**configure** pw-port *number* epipe *reference* down-on-peer-tldp-pw-status-faults *boolean*
Tree	down-on-peer-tldp-pw-status-faults
Description	When configured to **true**, the router causes the PW port configured on an Epipe to go locally operationally down if any of the following status bits are received on a mate spoke SDP across an FPE: • 0x00000001 - Pseudowire Not Forwarding • 0x00000002 - Local Attachment Circuit (ingress) Receive Fault • 0x00000004 - Local Attachment Circuit (egress) Transmit Fault • 0x00000008 - Local PSN-facing PW (ingress) Receive Fault • 0x00000010 - Local PSN-facing PW (egress) Transmit Fault When configured to **false**, the mate PW status fault bits are not taken into account in the operational state of the PW port.
Default	false
Introduced	22.2.R1
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** pw-port *number* epipe *reference* egress
Tree	egress
Introduced	16.0.R4
Platforms	All

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shaper

Synopsis	Enter the **shaper** context
Context	**configure** pw-port *number* epipe *reference* egress shaper
Tree	shaper
Introduced	16.0.R4
Platforms	All

intermediate-destination-id *string*

Synopsis	Intermediate destination ID for ESM PW SAPs
Context	**configure** pw-port *number* epipe *reference* egress shaper intermediate-destination-id *string*
Tree	intermediate-destination-id
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

virtual-port *string*

Synopsis	Virtual port name of the egress shaper
Context	**configure** pw-port *number* epipe *reference* egress shaper virtual-port *string*
Tree	virtual-port
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

fpe-id *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Forwarding Path Extension ID
Context	**configure** pw-port *number* epipe *reference* fpe-id *reference*
Tree	fpe-id

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Reference	**configure** fwd-path-ext fpe *number*
Introduced	16.0.R4
Platforms	All

monitor-oper-group *reference*

Synopsis	Name of the operational group to monitor
Context	**configure** pw-port *number* epipe *reference* monitor-oper-group *reference*
Tree	monitor-oper-group
Reference	**configure** service oper-group *string*
Introduced	16.0.R4
Platforms	All

oper-up-on-mh-standby *boolean*

Synopsis	Sets PW port to operationally up on MH standby
Context	**configure** pw-port *number* epipe *reference* oper-up-on-mh-standby *boolean*
Tree	oper-up-on-mh-standby
Description	When configured to **true,** this command allows the PW port to remain operationally up on the non-DF PE and all the PW SAPs contained in the PW port. The PW port status shows operationally up status with a flag MH Standby. When configured to **false**, this command causes the PW port to remain operationally down on the non-DF PE and all the PW SAPs contained in the PW port.
Default	false
Introduced	22.2.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group ID
Context	**configure** pw-port *number* oper-group *reference*
Tree	oper-group
Reference	**configure** service oper-group *string*
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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qinq-etype *string*

Synopsis	QinQ Ethertype encapsulation on the PW port
Context	**configure** pw-port *number* qinq-etype *string*
Tree	qinq-etype
Default	33024
Introduced	16.0.R4
Platforms	All

sdp [sdp-id] *reference*

Synopsis	Enter the **sdp** list instance
Context	**configure** pw-port *number* sdp *reference*
Tree	sdp
Max. Instances	1
Notes	The following elements are part of a choice: **epipe** or **sdp**.
Introduced	16.0.R4
Platforms	All

[**sdp-id**] *reference*

Synopsis	SDP ID
Context	**configure** pw-port *number* sdp *reference*
Tree	sdp
Reference	**configure** service sdp *number*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the pseudowire port
Context	**configure** pw-port *number* sdp *reference* admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

adv-service-mtu *number*

Synopsis	Service MTU size to be used
Context	**configure** pw-port *number* sdp *reference* adv-service-mtu *number*
Tree	adv-service-mtu
Range	0 to 9782
Units	bytes
Introduced	21.7.R1
Platforms	All

control-word *boolean*

Synopsis	Allow control word bit setting in the label message
Context	**configure** pw-port *number* sdp *reference* control-word *boolean*
Tree	control-word
Default	false
Introduced	19.10.R1
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** pw-port *number* sdp *reference* egress
Tree	egress
Introduced	16.0.R4
Platforms	All

shaper

Synopsis	Enter the **shaper** context

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Context	**configure** pw-port *number* sdp *reference* egress shaper
Tree	shaper
Introduced	16.0.R4
Platforms	All

intermediate-destination-id *string*

Synopsis	Intermediate destination ID applicable to ESM PW SAPs
Context	**configure** pw-port *number* sdp *reference* egress shaper intermediate-destination-id *string*
Tree	intermediate-destination-id
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

pw-sap-secondary-shaper *string*

Synopsis	Secondary shaper applicable to PW SAPs
Context	**configure** pw-port *number* sdp *reference* egress shaper pw-sap-secondary-shaper *string*
Tree	pw-sap-secondary-shaper
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

virtual-port *string*

Synopsis	Virtual port applicable to all PW SAPs
Context	**configure** pw-port *number* sdp *reference* egress shaper virtual-port *string*
Tree	virtual-port
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

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vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress VC label representing the PW port
Context	**configure** pw-port *number* sdp *reference* egress vc-label *number*
Tree	vc-label
Range	16 to 1048575
Introduced	16.0.R4
Platforms	All

entropy-label *boolean*

Synopsis	Enable entropy level insertion on the PW port
Context	**configure** pw-port *number* sdp *reference* entropy-label *boolean*
Tree	entropy-label
Description	When configured to **true**, the entropy label and ELI are inserted in packets for which at least one LSP in the stack for the far-end of the tunnel used by the service has advertised entropy label capability. • For RSVP or SR-TE tunnels, the **entropy-label** command must be set to **true** under the **configure router mpls** or **configure router mpls lsp** context. • For SR-ISIS, SR-OSPF, or SR-TE tunnels, the **override-tunnel-elc** command must be set to **true** under the **configure router isis entropy-label** or **configure router ospf entropy-label** context. • For LDP tunnels, the **entropy-label-capability** command must be set to **true** under the **configure router ldp** context. When configured to **false**, entropy label insertion on the PW port is not allowed. The entropy label is only applicable to PW ports bound to a static port; it is not applicable to ports using an FPE.
Default	false
Introduced	21.5.R1
Platforms	All

ingress

Synopsis	Enter the **ingress** context
Context	**configure** pw-port *number* sdp *reference* ingress

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Tree	ingress
Introduced	16.0.R4
Platforms	All

vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress VC label representing the PW-port
Context	**configure** pw-port *number* sdp *reference* ingress vc-label *number*
Tree	vc-label
Range	1 to 1048575
Introduced	16.0.R4
Platforms	All

monitor-oper-group *reference*

Synopsis	Name of the operational group to monitor
Context	**configure** pw-port *number* sdp *reference* monitor-oper-group *reference*
Tree	monitor-oper-group
Reference	**configure** service oper-group *string*
Introduced	16.0.R4
Platforms	All

vc-id *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Virtual Circuit ID signaled to the peer
Context	**configure** pw-port *number* sdp *reference* vc-id *number*
Tree	vc-id
Range	1 to 4294967295

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Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

vc-type *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Forwarding mode for the PW-port
Context	**configure** pw-port *number* sdp *reference* vc-type *keyword*
Tree	vc-type
Options	ether, vlan
Default	ether
Introduced	16.0.R4
Platforms	All

vlan-vc-tag *number*

Synopsis	VLAN VC tag
Context	**configure** pw-port *number* sdp *reference* vlan-vc-tag *number*
Tree	vlan-vc-tag
Range	0 to 4094
Introduced	16.0.R4
Platforms	All

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3.36 python commands

```
configure
   –  python
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  python-policy string
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  cache
            –  admin-state keyword
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  entry-size number
            –  max-entries number
            –  max-entry-lifetime number
            –  mcs-peer
               –  apply-groups reference
               –  apply-groups-exclude reference
               –  ip-address reference
               –  sync-tag string
            –  minimum-lifetimes
               –  high-availability number
               –  multi-chassis-redundancy number
               –  persistence number
            –  persistence boolean
         –  description string
         –  dhcp keyword direction keyword
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  script reference
         –  dhcp6 keyword direction keyword
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  script reference
         –  diameter keyword direction keyword
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  script reference
         –  gtpv1-c keyword direction keyword
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  script reference
         –  gtpv2-c keyword direction keyword
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  script reference
         –  nat-group reference
         –  pfcp keyword direction keyword
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  script reference
         –  pppoe keyword direction keyword
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  script reference
         –  radius keyword direction keyword
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  script reference
         –  syslog
```


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configure python python-policy syslog apply-groups

```
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  script reference
         –  wlan-gw-group reference
      –  python-script string
         –  action-on-fail keyword
         –  admin-state keyword
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  description string
         –  protection
            –  hmac-sha256 string
         –  run-as-user string
         –  urls string
         –  version keyword
```


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3.36.1 python command descriptions

python

Synopsis	Enter the **python** context
Context	**configure** python
Tree	python
Introduced	16.0.R1
Platforms	All

python-policy [name] *string*

Synopsis	Enter the **python-policy** list instance
Context	**configure** python python-policy *string*
Tree	python-policy
Max. Instances	64
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	Python policy name
Context	**configure** python python-policy *string*
Tree	python-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

cache

Synopsis	Enable the **cache** context
Context	**configure** python python-policy *string* cache
Tree	cache

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Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the Python cache
Context	**configure** python python-policy *string* cache admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

entry-size *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum data structure size for Python cache entry
Context	**configure** python python-policy *string* cache entry-size *number*
Tree	entry-size
Range	32 to 2048
Units	bytes
Default	256
Introduced	16.0.R1
Platforms	All

max-entries *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of Python cache entries to be stored
Context	**configure** python python-policy *string* cache max-entries *number*
Tree	max-entries

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Range	1 to 1000000
Default	128000
Introduced	16.0.R1
Platforms	All

max-entry-lifetime *number*

Synopsis	Maximum lifetime for each Python cache entry
Context	**configure** python python-policy *string* cache max-entry-lifetime *number*
Tree	max-entry-lifetime
Range	1 to 604800
Units	seconds
Default	86400
Introduced	16.0.R1
Platforms	All

mcs-peer

Synopsis	Enable the **mcs-peer** context
Context	**configure** python python-policy *string* cache mcs-peer
Tree	mcs-peer
Introduced	16.0.R1
Platforms	All

ip-address *reference*

Synopsis	IP address of the MCS peer
Context	**configure** python python-policy *string* cache mcs-peer ip-address *reference*
Tree	ip-address
Reference	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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sync-tag *string*

Synopsis	Tag to synchronize the cached entries in the policy
Context	**configure** python python-policy *string* cache mcs-peer sync-tag *string*
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

minimum-lifetimes

Synopsis	Enter the **minimum-lifetimes** context
Context	**configure** python python-policy *string* cache minimum-lifetimes
Tree	minimum-lifetimes
Introduced	16.0.R1
Platforms	All

high-availability *number*

Synopsis	Minimum lifetime of a cache entry to be synced with CPM
Context	**configure** python python-policy *string* cache minimum-lifetimes high-availability *number*
Tree	high-availability
Range	1 to 600
Units	seconds
Introduced	16.0.R1
Platforms	All

multi-chassis-redundancy *number*

Synopsis	Minimum lifetime for synchronization with the MCS peer
Context	**configure** python python-policy *string* cache minimum-lifetimes multi-chassis-redundancy *number*
Tree	multi-chassis-redundancy
Range	1 to 600

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Units	seconds
Introduced	16.0.R1
Platforms	All

persistence *number*

Synopsis	Minimum lifetime for cache entry to be made persistent
Context	**configure** python python-policy *string* cache minimum-lifetimes persistence *number*
Tree	persistence
Range	1 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

persistence *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow persistence for cached entries
Context	**configure** python python-policy *string* cache persistence *boolean*
Tree	persistence
Default	false
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** python python-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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dhcp [message-type] *keyword* direction *keyword*

Synopsis	Enter the **dhcp** list instance
Context	**configure** python python-policy *string* dhcp *keyword* direction *keyword*
Tree	dhcp
Introduced	16.0.R1
Platforms	All

[**message-type**] *keyword*

Synopsis	DHCP message type
Context	**configure** python python-policy *string* dhcp *keyword* direction *keyword*
Tree	dhcp
Options	discover, offer, request, decline, ack, nak, release, inform, force-renew, lease-query, lease-unassigned, lease-unknown, lease-active
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

direction *keyword*

Synopsis	Event that is either incoming or outgoing
Context	**configure** python python-policy *string* dhcp *keyword* direction *keyword*
Tree	dhcp
Options	ingress, egress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

script *reference*

Synopsis	Python script to handle the message
Context	**configure** python python-policy *string* dhcp *keyword* direction *keyword* script *reference*
Tree	script
Reference	**configure** python python-script *string*

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

dhcp6 [message-type] *keyword* direction *keyword*

Synopsis	Enter the **dhcp6** list instance
Context	**configure** python python-policy *string* dhcp6 *keyword* direction *keyword*
Tree	dhcp6
Introduced	16.0.R1
Platforms	All

[**message-type**] *keyword*

Synopsis	DHCPv6 message type
Context	**configure** python python-policy *string* dhcp6 *keyword* direction *keyword*
Tree	dhcp6
Options	solicit, advertise, request, confirm, renew, rebind, reply, release, decline, reconfigure, info-request, relay-forward, relay-reply
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

direction *keyword*

Synopsis	Event that is either incoming or outgoing
Context	**configure** python python-policy *string* dhcp6 *keyword* direction *keyword*
Tree	dhcp6
Options	ingress, egress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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script *reference*

Synopsis	Python script to handle the message
Context	**configure** python python-policy *string* dhcp6 *keyword* direction *keyword* script *reference*
Tree	script
Reference	**configure** python python-script *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

diameter [message-type] *keyword* direction *keyword*

Synopsis	Enter the **diameter** list instance
Context	**configure** python python-policy *string* diameter *keyword* direction *keyword*
Tree	diameter
Introduced	16.0.R1
Platforms	All

[**message-type**] *keyword*

Synopsis	Diameter message type
Context	**configure** python python-policy *string* diameter *keyword* direction *keyword*
Tree	diameter
Options	ccr, cca, rar, raa, cer, cea, dwr, dwa, dpr, dpa, asr, asa, aar, aaa
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

direction *keyword*

Synopsis	Event that is either incoming or outgoing
Context	**configure** python python-policy *string* diameter *keyword* direction *keyword*
Tree	diameter
Options	ingress, egress
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	All

script *reference*

Synopsis	Python script to handle the message
Context	**configure** python python-policy *string* diameter *keyword* direction *keyword* script *reference*
Tree	script
Reference	**configure** python python-script *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

gtpv1-c [message-type] *keyword* direction *keyword*

Synopsis	Enter the **gtpv1-c** list instance
Context	**configure** python python-policy *string* gtpv1-c *keyword* direction *keyword*
Tree	gtpv1-c
Introduced	16.0.R1
Platforms	All

[**message-type**] *keyword*

Synopsis	GTPv1-C message type
Context	**configure** python python-policy *string* gtpv1-c *keyword* direction *keyword*
Tree	gtpv1-c
Options	echo-request, echo-response, version-not-supported, create-pdp-context-request, create-pdp-context-response, delete-pdp-context-request, delete-pdp-context-response, error-indication, end-marker
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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direction *keyword*

Synopsis	Event that is either incoming or outgoing
Context	**configure** python python-policy *string* gtpv1-c *keyword* direction *keyword*
Tree	gtpv1-c
Options	ingress, egress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

script *reference*

Synopsis	Python script to handle the message
Context	**configure** python python-policy *string* gtpv1-c *keyword* direction *keyword* script *reference*
Tree	script
Reference	**configure** python python-script *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

gtpv2-c [message-type] *keyword* direction *keyword*

Synopsis	Enter the **gtpv2-c** list instance
Context	**configure** python python-policy *string* gtpv2-c *keyword* direction *keyword*
Tree	gtpv2-c
Introduced	16.0.R1
Platforms	All

[**message-type**] *keyword*

Synopsis	GTPv2-C message type
Context	**configure** python python-policy *string* gtpv2-c *keyword* direction *keyword*
Tree	gtpv2-c
Options	echo-request, echo-response, version-not-supported, create-session-request, create-session-response, modify-bearer-request, modify-bearer-response, delete-session-request, delete-session-response, delete-bearer-request,

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	delete-bearer-response, release-access-bearers-request, release-access-bearers-response, downlink-data-notification, downlink-data-notification-ack, change-notification-request, change-notification-response, stop-paging-indication
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

direction *keyword*

Synopsis	Event that is either incoming or outgoing
Context	**configure** python python-policy *string* gtpv2-c *keyword* direction *keyword*
Tree	gtpv2-c
Options	ingress, egress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

script *reference*

Synopsis	Python script to handle the message
Context	**configure** python python-policy *string* gtpv2-c *keyword* direction *keyword* script *reference*
Tree	script
Reference	**configure** python python-script *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

nat-group *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT ISA group for this Python policy
Context	**configure** python python-policy *string* nat-group *reference*

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Tree	nat-group
Reference	**configure** isa nat-group *number*
Notes	The following elements are part of a choice: **nat-group** or **wlan-gw-group**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

pfcp [message-type] *keyword* direction *keyword*

Synopsis	Enter the **pfcp** list instance
Context	**configure** python python-policy *string* pfcp *keyword* direction *keyword*
Tree	pfcp
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**message-type**] *keyword*

Synopsis	Message type applied to the script
Context	**configure** python python-policy *string* pfcp *keyword* direction *keyword*
Tree	pfcp
Options	heartbeat-request, heartbeat-response, association-setup-request, association-setup-response, association-update-request, association-update-response, association-release-request, association-release-response, node-report-request, node-report-response, session-estab-request, session-estab-response, session-mod-request, session-mod-response, session-del-request, session-del-response, session-report-request, session-report-response
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Event that is either incoming or outgoing
Context	**configure** python python-policy *string* pfcp *keyword* direction *keyword*
Tree	pfcp
Options	ingress, egress
Notes	This element is part of a list key.

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Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

script *reference*

Synopsis	Python script to handle the message
Context	**configure** python python-policy *string* pfcp *keyword* direction *keyword* script *reference*
Tree	script
Reference	**configure** python python-script *string*
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe [message-type] *keyword* direction *keyword*

Synopsis	Enter the **pppoe** list instance
Context	**configure** python python-policy *string* pppoe *keyword* direction *keyword*
Tree	pppoe
Introduced	16.0.R1
Platforms	All

[**message-type**] *keyword*

Synopsis	PPPoE message type
Context	**configure** python python-policy *string* pppoe *keyword* direction *keyword*
Tree	pppoe
Options	session-lcp, session-pap, session-chap, session-ipcp, session-ip6cp, pado, padi, padr, pads, padt
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

direction *keyword*

Synopsis	Event that is either incoming or outgoing

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Context	**configure** python python-policy *string* pppoe *keyword* direction *keyword*
Tree	pppoe
Options	ingress, egress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

script *reference*

Synopsis	Python script to handle the message
Context	**configure** python python-policy *string* pppoe *keyword* direction *keyword* script *reference*
Tree	script
Reference	**configure** python python-script *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

radius [message-type] *keyword* direction *keyword*

Synopsis	Enter the **radius** list instance
Context	**configure** python python-policy *string* radius *keyword* direction *keyword*
Tree	radius
Introduced	16.0.R1
Platforms	All

[**message-type**] *keyword*

Synopsis	RADIUS message type
Context	**configure** python python-policy *string* radius *keyword* direction *keyword*
Tree	radius
Options	access-request, access-accept, access-reject, accounting-request, accounting-response, access-challenge, disconnect-request, change-of-authorization-request
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

direction *keyword*

Synopsis	Event that is either incoming or outgoing
Context	**configure** python python-policy *string* radius *keyword* direction *keyword*
Tree	radius
Options	ingress, egress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

script *reference*

Synopsis	Python script to handle the message
Context	**configure** python python-policy *string* radius *keyword* direction *keyword* script *reference*
Tree	script
Reference	**configure** python python-script *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

syslog

Synopsis	Enable the **syslog** context
Context	**configure** python python-policy *string* syslog
Tree	syslog
Introduced	16.0.R1
Platforms	All

script *reference*

Synopsis	Python script name for outgoing syslog messages
Context	**configure** python python-policy *string* syslog script *reference*
Tree	script

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Reference	**configure** python python-script *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

wlan-gw-group *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	WLAN ISA group for this Python policy
Context	**configure** python python-policy *string* wlan-gw-group *reference*
Tree	wlan-gw-group
Reference	**configure** isa wlan-gw-group *number*
Notes	The following elements are part of a choice: **nat-group** or **wlan-gw-group**.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

python-script [name] *string*

Synopsis	Enter the **python-script** list instance
Context	**configure** python python-script *string*
Tree	python-script
Max. Instances	256
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	Python script policy name
Context	**configure** python python-script *string*
Tree	python-script
String Length	1 to 32
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	All

action-on-fail *keyword*

Synopsis	Action taken when the Python execution fails
Context	**configure** python python-script *string* action-on-fail *keyword*
Tree	action-on-fail
Options	passthrough, drop
Default	drop
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the Python script
Context	**configure** python python-script *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** python python-script *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

protection

Synopsis	Enter the **protection** context

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Context	**configure** python python-script *string* protection
Tree	protection
Introduced	16.0.R1
Platforms	All

hmac-sha256 *string*

Synopsis	Hash value to include as first line in Python script
Context	**configure** python python-script *string* protection hmac-sha256 *string*
Tree	hmac-sha256
String Length	1 to 199
Introduced	16.0.R1
Platforms	All

run-as-user *string*

Synopsis	User authenticated for scripts
Context	**configure** python python-script *string* run-as-user *string*
Tree	run-as-user
Description	This command configures a user that is different from the current user of the session. Script authentication, authorization, accounting, and any activity within the script, is run as the specified user. If this command is not configured, the current user of the session is used.
String Length	1 to 32
Introduced	22.10.R1
Platforms	All

urls *string*

Synopsis	Script location in URL format
Context	**configure** python python-script *string* urls *string*
Tree	urls
String Length	1 to 180
Max. Instances	3
Notes	This element is ordered by the user.

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Introduced	16.0.R4
Platforms	All

version *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Python version the script is written for
Context	**configure** python python-script *string* version *keyword*
Tree	version
Options	python2, python3
Default	python2
Introduced	21.2.R1
Platforms	All

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3.37 qos commands

```
configure
   - qos
      - adv-config-policy string
         - apply-groups reference
         - apply-groups-exclude reference
         - child-control
            - bandwidth-distribution
               - above-offered-allowance
                  - delta-consumed-agg-rate
                     - percent decimal-number
                  - delta-consumed-higher-tier-rate
                     - percent decimal-number
                  - unconsumed-agg-rate
                     - percent decimal-number
                  - unconsumed-higher-tier-rate
                     - percent decimal-number
               - above-offered-cap
                  - percent decimal-number
                  - rate (number | keyword)
               - enqueue-on-pir-zero boolean
               - granularity
                  - percent decimal-number
                  - rate number
               - internal-scheduler-weight-mode keyword
               - limit-pir-zero-drain boolean
               - lub-init-min-pir boolean
            - offered-measurement
               - add
                  - active-min-only boolean
                  - min-only boolean
                  - percent decimal-number
                  - rate number
               - fast-start boolean
               - fast-stop boolean
               - granularity
                  - percent decimal-number
                  - rate number
               - hold-time
                  - active-min-only boolean
                  - high-rate number
               - max-decrement
                  - percent decimal-number
                  - rate number
               - sample-interval number
               - time-average-factor
                  - dec-only boolean
                  - weighting-factor number
         - description string
      - apply-groups reference
      - apply-groups-exclude reference
      - fp-resource-policy string
         - aggregate-shapers
            - auto-creation boolean
            - hw-agg-shapers
               - saps boolean
               - subscribers boolean
            - queue-sets
               - default-size
                  - queue-groups (number | keyword)
```


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configure qos fp-resource-policy aggregate-shapers queue-sets default-size saps

```
                  - saps (number | keyword)
                  - subscribers (number | keyword)
               - size number
                  - allocation-weight number
                  - apply-groups reference
                  - apply-groups-exclude reference
            - reserved-non-shaper-queues number
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - ports
            - hqos-mode keyword
         - queues
            - ingress-percent-of-total decimal-number
      - hs-attachment-policy string
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - low-burst-max-class number
         - queue number
            - apply-groups reference
            - apply-groups-exclude reference
            - sched-class number
            - unattached
            - wrr-group number
         - wrr-group number
            - apply-groups reference
            - apply-groups-exclude reference
            - sched-class number
            - unattached
      - hs-pool-policy string
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - mid-tier
            - mid-pool number
               - allocation-percent decimal-number
               - apply-groups reference
               - apply-groups-exclude reference
               - parent-root-pool
                  - none
                  - pool-id reference
               - port-bw-oversubscription-factor number
               - slope-policy reference
         - root-tier
            - root-pool number
               - allocation-weight number
               - apply-groups reference
               - apply-groups-exclude reference
               - slope-policy reference
         - system-reserve decimal-number
      - hs-port-pool-policy string
         - alt-port-class-pools
            - class-pool number
               - allocation
                  - explicit-percent decimal-number
                  - port-bw-weight number
               - apply-groups reference
               - apply-groups-exclude reference
               - parent-mid-pool
                  - none
                  - pool-id number
               - slope-policy reference
         - apply-groups reference
```


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configure qos hs-port-pool-policy apply-groups-exclude

```
        - apply-groups-exclude reference
        - description string
        - std-port-class-pools
          - class-pool number
            - allocation
              - explicit-percent decimal-number
              - port-bw-weight number
            - apply-groups reference
            - apply-groups-exclude reference
            - parent-mid-pool
              - none
              - pool-id number
            - slope-policy reference
      - hs-scheduler-policy string
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
        - group number
          - apply-groups reference
          - apply-groups-exclude reference
          - rate (number | keyword)
        - max-rate (number | keyword)
        - scheduling-class number
          - apply-groups reference
          - apply-groups-exclude reference
          - group
            - group-id number
            - weight number
          - rate (number | keyword)
      - hw-agg-shaper-scheduler-policy string
        - apply-groups reference
        - apply-groups-exclude reference
        - congestion-threshold number
        - description string
        - group string
        - max-percent-rate decimal-number
        - max-rate (number | keyword)
        - monitor-threshold number
        - sched-class number
          - apply-groups reference
          - apply-groups-exclude reference
          - group reference
          - weight number
      - match-list
        - ip-prefix-list string
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - prefix string
        - ipv6-prefix-list string
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - prefix string
        - port-list string
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - port number
          - range number end number
      - md-auto-id
        - qos-policy-id-range
          - apply-groups reference
          - apply-groups-exclude reference
```


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configure qos md-auto-id qos-policy-id-range end

```
            - end number
            - start number
      - network string
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - egress
            - dscp keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - fc keyword
               - profile keyword
            - fc keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - de-mark
                  - force number
               - dot1p-in-profile number
               - dot1p-out-profile number
               - dscp-in-profile keyword
               - dscp-out-profile keyword
               - lsp-exp-in-profile number
               - lsp-exp-out-profile number
               - port-redirect-group
                  - policer number
                  - queue number
            - ip-criteria
               - entry number
                  - action
                     - fc keyword
                     - port-redirect-group
                        - policer number
                        - queue number
                     - profile keyword
                     - type keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - description string
                  - match
                     - dscp keyword
                     - dst-ip
                        - address (ipv4-prefix-with-host-bits | ipv4-address)
                        - mask string
                     - dst-port
                        - eq number
                        - gt number
                        - lt number
                        - port-list reference
                        - range
                           - end number
                           - start number
                     - fragment keyword
                     - icmp-type number
                     - protocol (number | keyword)
                     - src-ip
                        - address (ipv4-prefix-with-host-bits | ipv4-address)
                        - mask string
                     - src-port
                        - eq number
                        - gt number
                        - lt number
                        - port-list reference
                        - range
                           - end number
```


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configure qos network egress ip-criteria entry match src-port range start

```
                        - start number
            - ipv6-criteria
              - entry number
                - action
                  - fc keyword
                  - port-redirect-group
                    - policer number
                    - queue number
                  - profile keyword
                  - type keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - description string
                - match
                  - dscp keyword
                  - dst-ip
                    - address (ipv6-prefix-with-host-bits | ipv6-address)
                    - mask string
                  - dst-port
                    - eq number
                    - gt number
                    - lt number
                    - port-list reference
                    - range
                      - end number
                      - start number
                  - fragment keyword
                  - icmp-type number
                  - next-header (number | keyword)
                  - src-ip
                    - address (ipv6-prefix-with-host-bits | ipv6-address)
                    - mask string
                  - src-port
                    - eq number
                    - gt number
                    - lt number
                    - port-list reference
                    - range
                      - end number
                      - start number
            - prec number
              - apply-groups reference
              - apply-groups-exclude reference
              - fc keyword
              - profile keyword
            - remark-trusted
              - force-egress-marking boolean
          - ingress
            - default-action
              - fc keyword
              - profile keyword
            - dot1p number
              - apply-groups reference
              - apply-groups-exclude reference
              - fc keyword
              - profile keyword
            - dscp keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - fc keyword
              - profile keyword
            - fc keyword
              - apply-groups reference
              - apply-groups-exclude reference
```


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```
            - fp-redirect-group
              - broadcast-policer number
              - multicast-policer number
              - policer number
              - unknown-policer number
        - ip-criteria
          - entry number
            - action
              - fc keyword
              - profile keyword
              - type keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - match
              - dscp keyword
              - dst-ip
                - address (ipv4-prefix-with-host-bits | ipv4-address)
                - ip-prefix-list reference
                - mask string
              - dst-port
                - eq number
                - gt number
                - lt number
                - port-list reference
                - range
                  - end number
                  - start number
              - fragment keyword
              - protocol (number | keyword)
              - src-ip
                - address (ipv4-prefix-with-host-bits | ipv4-address)
                - ip-prefix-list reference
                - mask string
              - src-port
                - eq number
                - gt number
                - lt number
                - port-list reference
                - range
                  - end number
                  - start number
        - ipv6-criteria
          - entry number
            - action
              - fc keyword
              - profile keyword
              - type keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - match
              - dscp keyword
              - dst-ip
                - address (ipv6-prefix-with-host-bits | ipv6-address)
                - ipv6-prefix-list reference
                - mask string
              - dst-port
                - eq number
                - gt number
                - lt number
                - port-list reference
                - range
                  - end number
```


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configure qos network ingress ipv6-criteria entry match dst-port range start

```
                        -  start number
                  -  fragment keyword
                  -  next-header (number | keyword)
                  -  src-ip
                     -  address (ipv6-prefix-with-host-bits | ipv6-address)
                     -  ipv6-prefix-list reference
                     -  mask string
                  -  src-port
                     -  eq number
                     -  gt number
                     -  lt number
                     -  port-list reference
                     -  range
                        -  end number
                        -  start number
         -  ler-use-dscp boolean
         -  lsp-exp number
            -  apply-groups reference
            -  apply-groups-exclude reference
            -  fc keyword
            -  profile keyword
      -  policy-id number
      -  scope keyword
   -  network-queue string
      -  apply-groups reference
      -  apply-groups-exclude reference
      -  description string
      -  fc keyword
         -  apply-groups reference
         -  apply-groups-exclude reference
         -  multicast-queue reference
         -  queue reference
      -  hs-attachment-policy reference
      -  hs-wrr-group number
         -  adaptation-rule
            -  pir keyword
         -  apply-groups reference
         -  apply-groups-exclude reference
         -  hs-class-weight number
         -  rate number
      -  queue number
         -  adaptation-rule
            -  cir keyword
            -  fir keyword
            -  pir keyword
         -  apply-groups reference
         -  apply-groups-exclude reference
         -  avg-frame-overhead decimal-number
         -  cbs decimal-number
         -  drop-tail
            -  low
               -  percent-reduction-from-mbs (number | keyword)
         -  hs-alt-port-class-pool boolean
         -  hs-class-weight number
         -  hs-mbs decimal-number
         -  hs-wred-queue
            -  policy reference
         -  hs-wrr-weight number
         -  mbs decimal-number
         -  multipoint boolean
         -  port-parent
            -  cir-level number
            -  cir-weight number
            -  level number
```


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configure qos network-queue queue port-parent weight

```
            - weight number
         - queue-type keyword
         - rate
            - cir number
            - fir number
            - pir number
   - policer-control-policy string
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - root
         - max-percent-rate decimal-number
         - max-rate (number | keyword)
         - priority-mbs-thresholds
            - min-thresh-separation (number | keyword)
            - priority number
               - apply-groups reference
               - apply-groups-exclude reference
               - fixed-mbs boolean
               - mbs-contribution (number | keyword)
         - profile-preferred boolean
      - tier number
         - apply-groups reference
         - apply-groups-exclude reference
         - arbiter string
            - apply-groups reference
            - apply-groups-exclude reference
            - arbiter-parent
               - arbiter-name string
               - level number
               - weight number
            - description string
            - percent-rate decimal-number
            - rate (number | keyword)
            - reference-rate keyword
   - port-scheduler-policy string
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - dist-lag-rate-shared boolean
      - group string
         - apply-groups reference
         - apply-groups-exclude reference
         - monitor-threshold number
         - percent-rate
            - cir decimal-number
            - pir decimal-number
         - rate
            - cir (number | keyword)
            - pir (number | keyword)
      - hqos-algorithm keyword
      - level number
         - apply-groups reference
         - apply-groups-exclude reference
         - group reference
         - monitor-threshold number
         - percent-rate
            - cir decimal-number
            - pir decimal-number
         - rate
            - cir (number | keyword)
            - pir (number | keyword)
         - weight number
      - max-percent-rate decimal-number
```


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```
        - max-rate (number | keyword)
        - monitor-threshold number
        - orphan-overrides
          - cir-level number
          - cir-weight number
          - level number
          - weight number
    - post-policer-mapping string
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
        - fc keyword profile keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - maps-to
            - fc keyword
            - profile keyword
    - queue-group-redirect-list string
        - apply-groups reference
        - apply-groups-exclude reference
        - match number
          - apply-groups reference
          - apply-groups-exclude reference
          - instance number
        - type keyword
    - queue-group-templates
        - apply-groups reference
        - apply-groups-exclude reference
        - egress
          - apply-groups reference
          - apply-groups-exclude reference
          - queue-group string
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - fc keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - queue
                - none
                - queue-id reference
            - hs-attachment-policy reference
            - hs-wrr-group number
              - adaptation-rule
                - pir keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - hs-class-weight number
              - percent-rate decimal-number
              - rate (number | keyword)
            - policer number
              - adaptation-rule
                - cir keyword
                - pir keyword
              - adv-config-policy reference
              - apply-groups reference
              - apply-groups-exclude reference
              - arbiter-parent
                - arbiter-name string
                - level number
                - weight number
              - cbs (number | keyword)
              - description string
              - exceed-pir boolean
```


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configure qos queue-group-templates egress queue-group policer high-prio-only

```
                - high-prio-only (number | keyword)
                - mbs (number | keyword)
                - packet-byte-offset number
                - percent-rate
                  - cir decimal-number
                  - pir decimal-number
                  - reference-rate keyword
                - profile-capped boolean
                - rate
                  - cir (number | keyword)
                  - pir (number | keyword)
                - stat-mode keyword
            - queue number
                - adaptation-rule
                  - cir keyword
                  - pir keyword
                - adv-config-policy reference
                - apply-groups reference
                - apply-groups-exclude reference
                - burst-limit (number | keyword)
                - cbs (number | keyword)
                - drop-tail
                  - exceed
                    - percent-reduction-from-mbs (number | keyword)
                  - high
                    - percent-reduction-from-mbs (number | keyword)
                  - highplus
                    - percent-reduction-from-mbs (number | keyword)
                  - low
                    - percent-reduction-from-mbs (number | keyword)
                - dynamic-mbs boolean
                - hs-alt-port-class-pool boolean
                - hs-class-weight number
                - hs-wred-queue
                  - policy reference
                - hs-wrr-weight number
                - mbs (number | keyword)
                - packet-byte-offset number
                - percent-rate
                  - cir decimal-number
                  - pir decimal-number
                  - reference-rate keyword
                - port-parent
                  - cir-level number
                  - cir-weight number
                  - level number
                  - weight number
                - queue-delay number
                - queue-type keyword
                - rate
                  - cir (number | keyword)
                  - pir (number | keyword)
                - scheduler-parent
                  - cir-level number
                  - cir-weight number
                  - level number
                  - scheduler-name string
                  - weight number
                - wred-queue
                  - mode keyword
                  - policy reference
                  - usage keyword
            - queues-hqos-manageable boolean
        - ingress
```


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configure qos queue-group-templates ingress apply-groups

```
            - apply-groups reference
            - apply-groups-exclude reference
            - queue-group string
              - apply-groups reference
              - apply-groups-exclude reference
              - description string
              - policer number
                - adaptation-rule
                  - cir keyword
                  - pir keyword
                - adv-config-policy reference
                - apply-groups reference
                - apply-groups-exclude reference
                - arbiter-parent
                  - arbiter-name string
                  - level number
                  - weight number
                - cbs (number | keyword)
                - description string
                - high-prio-only (number | keyword)
                - mbs (number | keyword)
                - packet-byte-offset number
                - percent-rate
                  - cir decimal-number
                  - pir decimal-number
                - profile-capped boolean
                - rate
                  - cir (number | keyword)
                  - pir (number | keyword)
                - stat-mode keyword
              - queue number
                - adaptation-rule
                  - cir keyword
                  - fir keyword
                  - pir keyword
                - adv-config-policy reference
                - apply-groups reference
                - apply-groups-exclude reference
                - burst-limit (number | keyword)
                - cbs (number | keyword)
                - cir-non-profiling boolean
                - drop-tail
                  - low
                    - percent-reduction-from-mbs (number | keyword)
                - mbs (number | keyword)
                - multipoint boolean
                - packet-byte-offset number
                - percent-rate
                  - cir decimal-number
                  - fir decimal-number
                  - pir decimal-number
                  - police
                  - reference-rate keyword
                - queue-mode keyword
                - queue-type keyword
                - rate
                  - cir (number | keyword)
                  - fir (number | keyword)
                  - pir (number | keyword)
                  - police
                - scheduler-parent
                  - cir-level number
                  - cir-weight number
                  - level number
```


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configure qos queue-group-templates ingress queue-group queue scheduler-parent scheduler-name

```
                    - scheduler-name string
                    - weight number
      - sap-egress string
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - dot1p number
            - apply-groups reference
            - apply-groups-exclude reference
            - fc keyword
            - profile keyword
         - dscp keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - fc keyword
            - profile keyword
         - ethernet-ctag boolean
         - fc keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - de-mark
               - force number
            - de-mark-inner
               - force number
            - de-mark-outer
               - force number
            - dot1p
               - exceed-profile number
               - in-profile number
               - out-profile number
            - dot1p-inner
               - exceed-profile number
               - in-profile number
               - out-profile number
            - dot1p-outer
               - exceed-profile number
               - in-profile number
               - out-profile number
            - dscp
               - exceed-profile keyword
               - in-profile keyword
               - out-profile keyword
            - policer reference
            - port-redirect-group-queue
               - queue number
            - prec
               - exceed-profile number
               - in-profile number
               - out-profile number
            - queue reference
            - queue-group-queue
               - instance number
               - queue reference
               - queue-group-name reference
         - hs-attachment-policy reference
         - hs-wrr-group number
            - adaptation-rule
               - pir keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - hs-class-weight number
            - percent-rate decimal-number
            - rate (number | keyword)
         - ip-criteria
```


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```
            –  entry number
               –  action
                  –  fc keyword
                  –  policer reference
                  –  port-redirect-group-queue boolean
                  –  profile keyword
                  –  queue number
                  –  type keyword
                  –  use-fc-mapped-queue boolean
               –  apply-groups reference
               –  apply-groups-exclude reference
               –  description string
               –  match
                  –  dscp keyword
                  –  dst-ip
                     –  address (ipv4-prefix-with-host-bits | ipv4-address)
                     –  ip-prefix-list reference
                     –  mask string
                  –  dst-port
                     –  eq number
                     –  gt number
                     –  lt number
                     –  range
                        –  end number
                        –  start number
                  –  fragment keyword
                  –  protocol (number | keyword)
                  –  src-ip
                     –  address (ipv4-prefix-with-host-bits | ipv4-address)
                     –  ip-prefix-list reference
                     –  mask string
                  –  src-port
                     –  eq number
                     –  gt number
                     –  lt number
                     –  range
                        –  end number
                        –  start number
         –  ipv6-criteria
            –  entry number
               –  action
                  –  fc keyword
                  –  policer reference
                  –  port-redirect-group-queue boolean
                  –  profile keyword
                  –  queue number
                  –  type keyword
                  –  use-fc-mapped-queue boolean
               –  apply-groups reference
               –  apply-groups-exclude reference
               –  description string
               –  match
                  –  dscp keyword
                  –  dst-ip
                     –  address (ipv6-prefix-with-host-bits | ipv6-address)
                     –  ipv6-prefix-list reference
                     –  mask string
                  –  dst-port
                     –  eq number
                     –  gt number
                     –  lt number
                     –  range
                        –  end number
                        –  start number
```


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configure qos sap-egress ipv6-criteria entry match next-header

```
                  - next-header (number | keyword)
                  - src-ip
                     - address (ipv6-prefix-with-host-bits | ipv6-address)
                     - ipv6-prefix-list reference
                     - mask string
                  - src-port
                     - eq number
                     - gt number
                     - lt number
                     - range
                        - end number
                        - start number
         - parent-location keyword
         - policer number
            - adaptation-rule
               - cir keyword
               - pir keyword
            - adv-config-policy reference
            - apply-groups reference
            - apply-groups-exclude reference
            - arbiter-parent
               - arbiter-name string
               - level number
               - weight number
            - cbs (number | keyword)
            - description string
            - dscp-prec-remarking boolean
            - exceed-pir boolean
            - high-prio-only (number | keyword)
            - mbs (number | keyword)
            - packet-byte-offset number
            - percent-rate
               - cir decimal-number
               - pir decimal-number
               - reference-rate keyword
            - port-parent
               - cir-level number
               - cir-weight number
               - level number
               - weight number
            - profile-capped boolean
            - profile-out-preserve boolean
            - rate
               - cir (number | keyword)
               - pir (number | keyword)
            - scheduler-parent
               - cir-level number
               - cir-weight number
               - level number
               - scheduler-name string
               - weight number
            - stat-mode keyword
         - policers-hqos-manageable boolean
         - policy-id number
         - post-policer-mapping reference
         - prec number
            - apply-groups reference
            - apply-groups-exclude reference
            - fc keyword
            - profile keyword
         - queue number
            - adaptation-rule
               - cir keyword
               - pir keyword
```


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```
            - adv-config-policy reference
            - agg-shaper-weight number
            - apply-groups reference
            - apply-groups-exclude reference
            - avg-frame-overhead decimal-number
            - burst-limit (number | keyword)
            - cbs (number | keyword)
            - drop-tail
              - exceed
                - percent-reduction-from-mbs (number | keyword)
              - high
                - percent-reduction-from-mbs (number | keyword)
              - highplus
                - percent-reduction-from-mbs (number | keyword)
              - low
                - percent-reduction-from-mbs (number | keyword)
            - fir-burst-limit (number | keyword)
            - hs-alt-port-class-pool boolean
            - hs-class-weight number
            - hs-wred-queue
              - policy reference
            - hs-wrr-weight number
            - maximum-data-transmission (number | keyword)
            - mbs (number | keyword)
            - packet-byte-offset number
            - percent-rate
              - cir decimal-number
              - pir decimal-number
              - reference-rate keyword
            - port-parent
              - cir-level number
              - cir-weight number
              - level number
              - weight number
            - queue-type keyword
            - rate
              - cir (number | keyword)
              - pir (number | keyword)
            - sched-class (number | keyword)
            - scheduler-parent
              - cir-level number
              - cir-weight number
              - level number
              - scheduler-name string
              - weight number
            - wred-queue
              - mode keyword
              - policy reference
              - usage keyword
        - sched-class-elevation
            - sched-class number
              - apply-groups reference
              - apply-groups-exclude reference
              - weight number
        - scope keyword
        - subscriber-mgmt
            - dynamic-policer
              - arbiter-parent
                - arbiter-name string
                - level number
                - weight number
              - cbs (number | keyword)
              - mbs (number | keyword)
              - packet-byte-offset number
```


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configure qos sap-egress subscriber-mgmt dynamic-policer policer-id-range

```
                - policer-id-range
                  - end number
                  - start number
                - stat-mode keyword
            - dynamic-queue
                - cbs (number | keyword)
                - mbs (number | keyword)
                - packet-byte-offset number
                - port-parent
                  - cir-level number
                  - cir-weight number
                  - level number
                  - weight number
                - queue-id-range
                  - end number
                  - start number
                - scheduler-parent
                  - cir-level number
                  - cir-weight number
                  - level number
                  - scheduler-name string
                  - weight number
            - pcc-rule-entry
                - range
                  - end number
                  - start number
        - use-policer-result-marking-dot1p-inner boolean
    - sap-ingress string
        - apply-groups reference
        - apply-groups-exclude reference
        - default-fc string
        - default-priority keyword
        - description string
        - dot1p number
            - apply-groups reference
            - apply-groups-exclude reference
            - fc string
            - priority keyword
        - dscp keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - fc string
            - priority keyword
        - fc string
            - apply-groups reference
            - apply-groups-exclude reference
            - broadcast-policer number
            - broadcast-queue reference
            - broadcast-queue-group-queue
                - queue reference
                - queue-group-name reference
            - de-1-out-profile boolean
            - egress-fc keyword
            - fp-redirect-group-broadcast-policer
            - fp-redirect-group-multicast-policer
            - fp-redirect-group-policer
            - fp-redirect-group-unknown-policer
            - in-remark
                - dscp keyword
                - prec number
            - multicast-policer number
            - multicast-queue reference
            - multicast-queue-group-queue
                - queue reference
```


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configure qos sap-ingress fc multicast-queue-group-queue queue-group-name

```
            - queue-group-name reference
         - out-remark
            - dscp keyword
            - prec number
         - policer number
         - profile keyword
         - queue reference
         - queue-group-queue
            - queue reference
            - queue-group-name reference
         - unknown-policer number
         - unknown-queue reference
         - unknown-queue-group-queue
            - queue reference
            - queue-group-name reference
      - ip-criteria
         - entry number
            - action
               - fc string
               - policer reference
               - priority keyword
               - type keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - match
               - dscp keyword
               - dst-ip
                  - address (ipv4-prefix-with-host-bits | ipv4-address)
                  - ip-prefix-list reference
                  - mask string
               - dst-port
                  - eq number
                  - gt number
                  - lt number
                  - range
                     - end number
                     - start number
               - fragment keyword
               - protocol (number | keyword)
               - src-ip
                  - address (ipv4-prefix-with-host-bits | ipv4-address)
                  - ip-prefix-list reference
                  - mask string
               - src-port
                  - eq number
                  - gt number
                  - lt number
                  - range
                     - end number
                     - start number
               - vxlan-vni
                  - eq number
                  - range
                     - end number
                     - start number
            - tag number
         - type keyword
      - ipv6-criteria
         - entry number
            - action
               - fc string
               - policer reference
               - priority keyword
```


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configure qos sap-ingress ipv6-criteria entry action type

```
                - type keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - match
                - dscp keyword
                - dst-ip
                    - address (ipv6-prefix-with-host-bits | ipv6-address)
                    - ipv6-prefix-list reference
                    - mask string
                - dst-port
                    - eq number
                    - gt number
                    - lt number
                    - range
                        - end number
                        - start number
                - fragment keyword
                - next-header (number | keyword)
                - src-ip
                    - address (ipv6-prefix-with-host-bits | ipv6-address)
                    - ipv6-prefix-list reference
                    - mask string
                - src-port
                    - eq number
                    - gt number
                    - lt number
                    - range
                        - end number
                        - start number
                - vxlan-vni
                    - eq number
                    - range
                        - end number
                        - start number
            - tag number
        - type keyword
    - lsp-exp number
        - apply-groups reference
        - apply-groups-exclude reference
        - fc string
        - priority keyword
    - mac-criteria
        - entry number
            - action
                - fc string
                - policer reference
                - priority keyword
                - type keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - match
                - dot1p
                    - mask number
                    - priority number
                - dst-mac
                    - address string
                    - mask string
                - etype string
                - frame-type keyword
                - inner-tag
                    - mask number
                    - vlan number
```


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configure qos sap-ingress mac-criteria entry match llc-dsap

```
                  - llc-dsap
                     - dsap number
                     - mask number
                  - llc-ssap
                     - mask number
                     - ssap number
                  - outer-tag
                     - mask number
                     - vlan number
                  - snap-oui keyword
                  - snap-pid number
                  - src-mac
                     - address string
                     - mask string
            - type keyword
         - policer number
            - adaptation-rule
               - cir keyword
               - pir keyword
            - adv-config-policy reference
            - apply-groups reference
            - apply-groups-exclude reference
            - arbiter-parent
               - arbiter-name string
               - level number
               - weight number
            - cbs (number | keyword)
            - description string
            - high-prio-only (number | keyword)
            - mbs (number | keyword)
            - packet-byte-offset number
            - percent-rate
               - cir decimal-number
               - pir decimal-number
               - reference-rate keyword
            - profile-capped boolean
            - rate
               - cir (number | keyword)
               - pir (number | keyword)
            - scheduler-parent
               - cir-level number
               - cir-weight number
               - level number
               - scheduler-name string
               - weight number
            - stat-mode keyword
         - policers-hqos-manageable boolean
         - policy-id number
         - prec number
            - apply-groups reference
            - apply-groups-exclude reference
            - fc string
            - priority keyword
         - queue number
            - adaptation-rule
               - cir keyword
               - fir keyword
               - pir keyword
            - adv-config-policy reference
            - apply-groups reference
            - apply-groups-exclude reference
            - burst-limit (number | keyword)
            - cbs (number | keyword)
            - cir-non-profiling boolean
```


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```
            - drop-tail
              - low
                - percent-reduction-from-mbs (number | keyword)
            - mbs (number | keyword)
            - multipoint boolean
            - packet-byte-offset number
            - percent-rate
              - cir decimal-number
              - fir decimal-number
              - pir decimal-number
              - police
              - reference-rate keyword
            - queue-mode keyword
            - queue-type keyword
            - rate
              - cir (number | keyword)
              - fir (number | keyword)
              - pir (number | keyword)
              - police
            - scheduler-parent
              - cir-level number
              - cir-weight number
              - level number
              - scheduler-name string
              - weight number
        - scope keyword
        - subscriber-mgmt
            - dynamic-policer
              - arbiter-parent
                - arbiter-name string
                - level number
                - weight number
              - cbs (number | keyword)
              - mbs (number | keyword)
              - packet-byte-offset number
              - policer-id-range
                - end number
                - start number
              - stat-mode keyword
            - pcc-rule-entry
              - range
                - end number
                - start number
    - scheduler-policy string
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
        - frame-based-accounting boolean
        - tier number
            - apply-groups reference
            - apply-groups-exclude reference
            - parent-location keyword
            - scheduler string
              - apply-groups reference
              - apply-groups-exclude reference
              - description string
              - limit-unused-bandwidth boolean
              - percent-rate
                - cir (keyword | decimal-number)
                - pir decimal-number
                - reference-rate keyword
              - port-parent
                - cir-level number
                - cir-weight number
```


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configure qos scheduler-policy tier scheduler port-parent level

```
                  - level number
                  - weight number
               - rate
                  - cir (number | keyword)
                  - pir (number | keyword)
               - scheduler-parent
                  - cir-level number
                  - cir-weight number
                  - level number
                  - scheduler-name string
                  - weight number
      - shared-queue string
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - fc keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - broadcast-queue number
            - multicast-queue number
            - queue number
            - unknown-queue number
         - queue number
            - apply-groups reference
            - apply-groups-exclude reference
            - cbs number
            - drop-tail
               - low
                  - percent-reduction-from-mbs (number | keyword)
            - mbs number
            - multipoint boolean
            - queue-type keyword
            - rate
               - cir number
               - fir number
               - pir number
      - slope-policy string
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - exceed-slope
            - admin-state keyword
            - max-avg number
            - max-prob number
            - start-avg number
         - high-slope
            - admin-state keyword
            - max-avg number
            - max-prob number
            - start-avg number
         - highplus-slope
            - admin-state keyword
            - max-avg number
            - max-prob number
            - start-avg number
         - low-slope
            - admin-state keyword
            - max-avg number
            - max-prob number
            - start-avg number
         - time-average-factor number
```


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3.37.1 qos command descriptions

qos

Synopsis	Enter the **qos** context
Context	**configure** qos
Tree	qos
Introduced	16.0.R1
Platforms	All

adv-config-policy [adv-config-policy-name] *string*

Synopsis	Enter the **adv-config-policy** list instance
Context	**configure** qos adv-config-policy *string*
Tree	adv-config-policy
Max. Instances	255
Introduced	16.0.R1
Platforms	All

[**adv-config-policy-name**] *string*

Synopsis	Advanced QoS policy name
Context	**configure** qos adv-config-policy *string*
Tree	adv-config-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

child-control

Synopsis	Enter the **child-control** context
Context	**configure** qos adv-config-policy *string* child-control
Tree	child-control

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Introduced	16.0.R1
Platforms	All

bandwidth-distribution

Synopsis	Enter the **bandwidth-distribution** context
Context	**configure** qos adv-config-policy *string* child-control bandwidth-distribution
Tree	bandwidth-distribution
Introduced	16.0.R1
Platforms	All

above-offered-allowance

Synopsis	Enter the **above-offered-allowance** context
Context	**configure** qos adv-config-policy *string* child-control bandwidth-distribution above-offered-allowance
Tree	above-offered-allowance
Description	Commands in this context control the child's above offered allowance bandwidth. The configuration is only applicable when the port scheduler is configured to use the **above-offered-allowance-control** algorithm (specified via the **configure qos port-scheduler-policy hqos-algorithm** command).
Introduced	19.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

delta-consumed-agg-rate

Synopsis	Enter the **delta-consumed-agg-rate** context
Context	**configure** qos adv-config-policy *string* child-control bandwidth-distribution above-offered-allowance delta-consumed-agg-rate
Tree	delta-consumed-agg-rate
Introduced	19.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

percent *decimal-number*

Synopsis	Percentage of the delta consumed aggregate rate

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Context	**configure** qos adv-config-policy *string* child-control bandwidth-distribution above-offered-allowance delta-consumed-agg-rate percent *decimal-number*
Tree	percent
Description	This command configures the percentage of the delta (from the beginning to the end of the current H-QoS below CIR or above CIR pass) of the aggregate rate consumed by other members that can be given to a queue at the end of an H-QoS below CIR pass and above CIR pass. This command is only applicable when the port scheduler is configured to use the **above-offered-allowance-control** algorithm; otherwise it is ignored.
Range	0.00 to 100.00
Default	20.00
Introduced	19.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

delta-consumed-higher-tier-rate

Synopsis	Enter the **delta-consumed-higher-tier-rate** context
Context	**configure** qos adv-config-policy *string* child-control bandwidth-distribution above-offered-allowance delta-consumed-higher-tier-rate
Tree	delta-consumed-higher-tier-rate
Introduced	19.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

percent *decimal-number*

Synopsis	Percentage of the delta consumed higher-tier rate
Context	**configure** qos adv-config-policy *string* child-control bandwidth-distribution above-offered-allowance delta-consumed-higher-tier-rate percent *decimal-number*
Tree	percent
Description	This command configures the percentage of the delta (from the beginning to the end of the current H-QoS below CIR or above CIR pass) of the higher-tier rate consumed by its other members that can be given to a queue at the end of an H-QoS below CIR pass and above CIR pass. Higher tier refers to the Vport aggregate rate and port scheduler level, group, and maximum rates. This command is only applicable when the port scheduler is configured to use the **above-offered-allowance-control** algorithm; otherwise it is ignored.
Range	0.00 to 100.00
Default	5.00
Introduced	19.10.R2

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

unconsumed-agg-rate

Synopsis	Enter the **unconsumed-agg-rate** context
Context	**configure** qos adv-config-policy *string* child-control bandwidth-distribution above-offered-allowance unconsumed-agg-rate
Tree	unconsumed-agg-rate
Introduced	19.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

percent *decimal-number*

Synopsis	Percentage of the unconsumed aggregate rate
Context	**configure** qos adv-config-policy *string* child-control bandwidth-distribution above-offered-allowance unconsumed-agg-rate percent *decimal-number*
Tree	percent
Description	This command configures the percentage of the unconsumed aggregate rate that can be given to a queue at the end of an H-QoS below CIR pass and above CIR pass. This command is only applicable when the port scheduler is configured to use the **above-offered-allowance-control** algorithm; otherwise it is ignored.
Range	0.00 to 100.00
Default	100.00
Introduced	19.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

unconsumed-higher-tier-rate

Synopsis	Enter the **unconsumed-higher-tier-rate** context
Context	**configure** qos adv-config-policy *string* child-control bandwidth-distribution above-offered-allowance unconsumed-higher-tier-rate
Tree	unconsumed-higher-tier-rate
Introduced	19.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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percent *decimal-number*

Synopsis	Percentage of the unconsumed higher-tier rate
Context	**configure** qos adv-config-policy *string* child-control bandwidth-distribution above-offered-allowance unconsumed-higher-tier-rate percent *decimal-number*
Tree	percent
Description	This command configures the percentage of the unconsumed higher tier rate that can be given to a queue at the end of an H-QoS below CIR pass and above CIR pass. Higher tier refers to the Vport aggregate rate and port scheduler level, group, and maximum rates. This command is only applicable when the port scheduler is configured to use the **above-offered-allowance-control** algorithm; otherwise it is ignored.
Range	0.00 to 100.00
Default	100.00
Introduced	19.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

above-offered-cap

Synopsis	Enter the **above-offered-cap** context
Context	**configure** qos adv-config-policy *string* child-control bandwidth-distribution above-offered-cap
Tree	above-offered-cap
Introduced	16.0.R1
Platforms	All

percent *decimal-number*

Synopsis	Percentage of PIR used as the fair share increase limit
Context	**configure** qos adv-config-policy *string* child-control bandwidth-distribution above-offered-cap percent *decimal-number*
Tree	percent
Range	0.00 to 100.00
Notes	The following elements are part of a choice: **percent** or **rate**.
Introduced	16.0.R1
Platforms	All

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rate *(number | keyword)*

Synopsis	Explicit rate as the fair share increase limit
Context	**configure** qos adv-config-policy *string* child-control bandwidth-distribution above-offered-cap rate *(number | keyword)*
Tree	rate
Range	0 to 100000000
Options	max
Notes	The following elements are part of a choice: **percent** or **rate**.
Introduced	16.0.R1
Platforms	All

enqueue-on-pir-zero *boolean*

Synopsis	Queue packets when bandwidth distribution set to zero
Context	**configure** qos adv-config-policy *string* child-control bandwidth-distribution enqueue-on-pir-zero *boolean*
Tree	enqueue-on-pir-zero
Default	false
Introduced	16.0.R1
Platforms	All

granularity

Synopsis	Enter the **granularity** context
Context	**configure** qos adv-config-policy *string* child-control bandwidth-distribution granularity
Tree	granularity
Introduced	16.0.R1
Platforms	All

percent *decimal-number*

Synopsis	Rounding percentage value for administrative PIR
Context	**configure** qos adv-config-policy *string* child-control bandwidth-distribution granularity percent *decimal-number*
Tree	percent
Range	0.00 to 100.00

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Notes	The following elements are part of a choice: **percent** or **rate**.
Introduced	16.0.R1
Platforms	All

rate *number*

Synopsis	Rounding rate step value
Context	**configure** qos adv-config-policy *string* child-control bandwidth-distribution granularity rate *number*
Tree	rate
Range	0 to 100000000
Notes	The following elements are part of a choice: **percent** or **rate**.
Introduced	16.0.R1
Platforms	All

internal-scheduler-weight-mode *keyword*

Synopsis	Weight mode applied to this advanced QoS policy
Context	**configure** qos adv-config-policy *string* child-control bandwidth-distribution internal-scheduler-weight-mode *keyword*
Tree	internal-scheduler-weight-mode
Options	auto, force-equal, offered-load, capped-offered-load
Introduced	16.0.R1
Platforms	All

limit-pir-zero-drain *boolean*

Synopsis	Throttle draining when operational PIR set to zero
Context	**configure** qos adv-config-policy *string* child-control bandwidth-distribution limit-pir-zero-drain *boolean*
Tree	limit-pir-zero-drain
Default	false
Introduced	16.0.R1
Platforms	All

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lub-init-min-pir *boolean*

Synopsis	Apply minimal PIR for new queues when LUB is enabled
Context	**configure** qos adv-config-policy *string* child-control bandwidth-distribution lub-init-min-pir *boolean*
Tree	lub-init-min-pir
Default	false
Introduced	16.0.R1
Platforms	All

offered-measurement

Synopsis	Enter the **offered-measurement** context
Context	**configure** qos adv-config-policy *string* child-control offered-measurement
Tree	offered-measurement
Introduced	16.0.R1
Platforms	All

add

Synopsis	Enter the **add** context
Context	**configure** qos adv-config-policy *string* child-control offered-measurement add
Tree	add
Introduced	16.0.R1
Platforms	All

active-min-only *boolean*

Synopsis	Use minimum offered rate for active queues or policers
Context	**configure** qos adv-config-policy *string* child-control offered-measurement add active-min-only *boolean*
Tree	active-min-only
Default	false
Introduced	16.0.R1
Platforms	All

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min-only *boolean*

Synopsis	Use increase in operational PIR as minimum offered rate
Context	**configure** qos adv-config-policy *string* child-control offered-measurement add min-only *boolean*
Tree	min-only
Default	false
Introduced	16.0.R1
Platforms	All

percent *decimal-number*

Synopsis	Percentage of child PIR to add to offered rate
Context	**configure** qos adv-config-policy *string* child-control offered-measurement add percent *decimal-number*
Tree	percent
Range	0.00 to 100.00
Notes	The following elements are part of a choice: **percent** or **rate**.
Introduced	16.0.R1
Platforms	All

rate *number*

Synopsis	Rate value to add to child's offered rate
Context	**configure** qos adv-config-policy *string* child-control offered-measurement add rate *number*
Tree	rate
Range	0 to 100000000
Notes	The following elements are part of a choice: **percent** or **rate**.
Introduced	16.0.R1
Platforms	All

fast-start *boolean*

Synopsis	Allow fast detection of initial bandwidth
Context	**configure** qos adv-config-policy *string* child-control offered-measurement fast-start *boolean*

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Tree	fast-start
Default	false
Introduced	16.0.R1
Platforms	All

fast-stop *boolean*

Synopsis	Allow fast detection of lack of offered rate
Context	**configure** qos adv-config-policy *string* child-control offered-measurement fast-stop *boolean*
Tree	fast-stop
Default	false
Introduced	16.0.R1
Platforms	All

granularity

Synopsis	Enter the **granularity** context
Context	**configure** qos adv-config-policy *string* child-control offered-measurement granularity
Tree	granularity
Introduced	16.0.R1
Platforms	All

percent *decimal-number*

Synopsis	Percentage of PIR used as threshold sensitivity to offered rate change
Context	**configure** qos adv-config-policy *string* child-control offered-measurement granularity percent *decimal-number*
Tree	percent
Range	0.00 to 100.00
Notes	The following elements are part of a choice: **percent** or **rate**.
Introduced	16.0.R1
Platforms	All

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rate *number*

Synopsis	Rate as child's offered rate change sensitivity value
Context	**configure** qos adv-config-policy *string* child-control offered-measurement granularity rate *number*
Tree	rate
Range	0 to 100000000
Notes	The following elements are part of a choice: **percent** or **rate**.
Introduced	16.0.R1
Platforms	All

hold-time

Synopsis	Enter the **hold-time** context
Context	**configure** qos adv-config-policy *string* child-control offered-measurement hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	All

active-min-only *boolean*

Synopsis	Use minimum offered rate for active queues or policers
Context	**configure** qos adv-config-policy *string* child-control offered-measurement hold-time active-min-only *boolean*
Tree	active-min-only
Default	false
Introduced	16.0.R1
Platforms	All

high-rate *number*

Synopsis	Time to maintain current offered rate
Context	**configure** qos adv-config-policy *string* child-control offered-measurement hold-time high-rate *number*
Tree	high-rate
Range	0 to 60
Default	0

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Introduced	16.0.R1
Platforms	All

max-decrement

Synopsis	Enter the **max-decrement** context
Context	**configure** qos adv-config-policy *string* child-control offered-measurement max-decrement
Tree	max-decrement
Introduced	16.0.R1
Platforms	All

percent *decimal-number*

Synopsis	percentage as decrement limit to offered rate change
Context	**configure** qos adv-config-policy *string* child-control offered-measurement max-decrement percent *decimal-number*
Tree	percent
Range	0.00 to 100.00
Notes	The following elements are part of a choice: **percent** or **rate**.
Introduced	16.0.R1
Platforms	All

rate *number*

Synopsis	Value to use as decrement limit to offered rate change
Context	**configure** qos adv-config-policy *string* child-control offered-measurement max-decrement rate *number*
Tree	rate
Range	0 to 100000000
Notes	The following elements are part of a choice: **percent** or **rate**.
Introduced	16.0.R1
Platforms	All

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sample-interval *number*

Synopsis	Interval for sampling the child's offered rate
Context	**configure** qos adv-config-policy *string* child-control offered-measurement sample-interval *number*
Tree	sample-interval
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

time-average-factor

Synopsis	Enter the **time-average-factor** context
Context	**configure** qos adv-config-policy *string* child-control offered-measurement time-average-factor
Tree	time-average-factor
Introduced	16.0.R1
Platforms	All

dec-only *boolean*

Synopsis	Apply time adjustment when the offered rate decreases
Context	**configure** qos adv-config-policy *string* child-control offered-measurement time-average-factor dec-only *boolean*
Tree	dec-only
Default	false
Introduced	16.0.R1
Platforms	All

weighting-factor *number*

Synopsis	New offered rate with a sample of the previous offered rate
Context	**configure** qos adv-config-policy *string* child-control offered-measurement time-average-factor weighting-factor *number*
Tree	weighting-factor
Range	0 to 64

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Default	0
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** qos adv-config-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

fp-resource-policy [fp-resource-policy-name] *string*

Synopsis	Enter the **fp-resource-policy** list instance
Context	**configure** qos fp-resource-policy *string*
Tree	fp-resource-policy
Max. Instances	15
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

[**fp-resource-policy-name**] *string*

Synopsis	FP resource policy name
Context	**configure** qos fp-resource-policy *string*
Tree	fp-resource-policy
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

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aggregate-shapers

Synopsis	Enter the **aggregate-shapers** context
Context	**configure** qos fp-resource-policy *string* aggregate-shapers
Tree	aggregate-shapers
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

auto-creation *boolean*

WARNING:
Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Enables auto-creation of hardware aggregate shapers
Context	**configure** qos fp-resource-policy *string* aggregate-shapers auto-creation *boolean*
Tree	auto-creation
Description	When configured to **true**, enables the auto-creation of hardware aggregate shapers on the specified FP. After enabling, the corresponding FP is rebooted.
Default	false
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

hw-agg-shapers

Synopsis	Enter the **hw-agg-shapers** context
Context	**configure** qos fp-resource-policy *string* aggregate-shapers hw-agg-shapers
Tree	hw-agg-shapers
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

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saps *boolean*

WARNING:
Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Enable hardware aggregate shapers for SAPs
Context	**configure** qos fp-resource-policy *string* aggregate-shapers hw-agg-shapers saps *boolean*
Tree	saps
Default	false
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

subscribers *boolean*

WARNING:
Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Enable hardware aggregate shapers for subscribers
Context	**configure** qos fp-resource-policy *string* aggregate-shapers hw-agg-shapers subscribers *boolean*
Tree	subscribers
Default	false
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

queue-sets

Synopsis	Enter the **queue-sets** context
Context	**configure** qos fp-resource-policy *string* aggregate-shapers queue-sets
Tree	queue-sets
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

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default-size

Synopsis	Enter the **default-size** context
Context	**configure** qos fp-resource-policy *string* aggregate-shapers queue-sets default-size
Tree	default-size
Description	Commands in this context configure the default queue-set size for individual object types.
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

queue-groups *(number | keyword)*

Synopsis	Default size of queue-groups
Context	**configure** qos fp-resource-policy *string* aggregate-shapers queue-sets default-size queue-groups *(number | keyword)*
Tree	queue-groups
Range	2 to 8
Options	non-shaper-queues
Default	8
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

saps *(number | keyword)*

Synopsis	Default queue-set size for SAPs
Context	**configure** qos fp-resource-policy *string* aggregate-shapers queue-sets default-size saps *(number | keyword)*
Tree	saps
Description	This command configures the default queue-set size for SAPs. When the **non-shaper-queues** keyword is configured, SAPs do not use hardware aggregate shapers on FPs where the specified FP resource policy is applied.
Range	2 to 8
Options	non-shaper-queues
Default	8
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

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subscribers *(number | keyword)*

Synopsis	Default queue-set size for subscribers
Context	**configure** qos fp-resource-policy *string* aggregate-shapers queue-sets default-size subscribers *(number | keyword)*
Tree	subscribers
Description	This command configures the default queue-set size for subscribers. When the **non-shaper-queues** keyword is configured, SAPs do not use hardware aggregate shapers on FPs where the specified FP resource policy is applied.
Range	2 to 8
Options	non-shaper-queues
Default	8
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

size [qset-size] *number*

Synopsis	Enter the **size** list instance
Context	**configure** qos fp-resource-policy *string* aggregate-shapers queue-sets size *number*
Tree	size
Description	Commands in this context configure parameters for the specified queue-set size.
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

[**qset-size**] *number*

Synopsis	Size of the queue-sets
Context	**configure** qos fp-resource-policy *string* aggregate-shapers queue-sets size *number*
Tree	size
Range	2 to 8
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

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allocation-weight *number*

Synopsis	Allocation weight of the queue-set size
Context	**configure** qos fp-resource-policy *string* aggregate-shapers queue-sets size *number* allocation-weight *number*
Tree	allocation-weight
Description	This command configures the allocation weight for the specified queue-set size. The available queue-sets are distributed based on the allocation weight among different queue-set sizes.
Range	0 to 100
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

reserved-non-shaper-queues *number*

Synopsis	Number of queues reserved for non-shaper queues
Context	**configure** qos fp-resource-policy *string* aggregate-shapers reserved-non-shaper-queues *number*
Tree	reserved-non-shaper-queues
Description	This command configures the number of egress queues that will not be used by hardware aggregate shapers.
Range	2048 to 262144
Default	8192
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

description *string*

Synopsis	Text description
Context	**configure** qos fp-resource-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

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ports

Synopsis	Enter the **ports** context
Context	**configure** qos fp-resource-policy *string* ports
Tree	ports
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

hqos-mode *keyword*

WARNING:
Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Default HQOS mode of the port
Context	**configure** qos fp-resource-policy *string* ports hqos-mode *keyword*
Tree	hqos-mode
Options	port-scheduler, hw-agg-shaping
Default	port-scheduler
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

queues

Synopsis	Enter the **queues** context
Context	**configure** qos fp-resource-policy *string* queues
Tree	queues
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

ingress-percent-of-total *decimal-number*

WARNING:
Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

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Synopsis	Percentage of total ingress queues allocated
Context	**configure** qos fp-resource-policy *string* queues ingress-percent-of-total *decimal-number*
Tree	ingress-percent-of-total
Description	This command configures the percentage of the total number of queues on the FP on which the policy is applied that are allocated to ingress, with the remainder allocated to egress. The ingress and egress buffer pool sizes are not affected by the queue allocation. The allocation is performed in sets of 8192 queues, with a minimum of 8192 queues at ingress and 8192 queues at egress. If the percentage configured results in the queue allocation not being a multiple of 8192, the number of queues at ingress is rounded down to the next 8192 boundary, and consequently the number of queues at egress is rounded up to the next 8192 boundary, both while respecting the minimum at ingress and egress. If the FP resource policy is applied to any FP and the updated allocation is not achievable with the current ingress or egress queue consumption on any of the related FPs, the command fails. The configuration of this command (which includes removing the configuration) causes the router to immediately reset the associated cards, XIOMs and MDAs on all FPs on which the FP resource policy is applied, except on the 7750 SR-1, where the configuration must be saved and the router rebooted, immediately after committing the configuration transaction.
Range	4.00 to 97.00
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

hs-attachment-policy [name] *string*

Synopsis	Enter the **hs-attachment-policy** list instance
Context	**configure** qos hs-attachment-policy *string*
Tree	hs-attachment-policy
Max. Instances	31
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[**name**] *string*

Synopsis	HS attachment policy name
Context	**configure** qos hs-attachment-policy *string*
Tree	hs-attachment-policy

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String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

description *string*

Synopsis	Text description
Context	**configure** qos hs-attachment-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

low-burst-max-class *number*

Synopsis	Low priority burst threshold
Context	**configure** qos hs-attachment-policy *string* low-burst-max-class *number*
Tree	low-burst-max-class
Range	1 to 6
Default	6
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

queue [queue-id] *number*

Synopsis	Enter the **queue** list instance
Context	**configure** qos hs-attachment-policy *string* queue *number*
Tree	queue
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[**queue-id**] *number*

Synopsis	Queue identifier for the HS attachment policy

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Context	**configure** qos hs-attachment-policy *string* queue *number*
Tree	queue
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

sched-class *number*

Synopsis	Scheduling class associated with the queue
Context	**configure** qos hs-attachment-policy *string* queue *number* sched-class *number*
Tree	sched-class
Range	1 to 6
Notes	The following elements are part of a choice: **sched-class**, **unattached**, or **wrr-group**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

unattached

Synopsis	Do not attach queue to scheduling class or WRR group
Context	**configure** qos hs-attachment-policy *string* queue *number* unattached
Tree	unattached
Notes	The following elements are part of a choice: **sched-class**, **unattached**, or **wrr-group**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

wrr-group *number*

Synopsis	WRR group attached to the queue
Context	**configure** qos hs-attachment-policy *string* queue *number* wrr-group *number*
Tree	wrr-group
Range	1 to 2
Notes	The following elements are part of a choice: **sched-class**, **unattached**, or **wrr-group**.
Introduced	16.0.R1

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Platforms	7750 SR-7/12/12e

wrr-group [wrr-group-id] *number*

Synopsis	Enter the **wrr-group** list instance
Context	**configure** qos hs-attachment-policy *string* wrr-group *number*
Tree	wrr-group
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[**wrr-group-id**] *number*

Synopsis	WRR group ID for the HS attachment policy
Context	**configure** qos hs-attachment-policy *string* wrr-group *number*
Tree	wrr-group
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

sched-class *number*

Synopsis	Scheduling class associated with the WRR group
Context	**configure** qos hs-attachment-policy *string* wrr-group *number* sched-class *number*
Tree	sched-class
Range	1 to 6
Notes	The following elements are part of a choice: **sched-class** or **unattached**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

unattached

Synopsis	Do not attach group ID to scheduling class or WRR group
Context	**configure** qos hs-attachment-policy *string* wrr-group *number* unattached
Tree	unattached

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Notes	The following elements are part of a choice: **sched-class** or **unattached**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-pool-policy [name] *string*

Synopsis	Enter the **hs-pool-policy** list instance
Context	**configure** qos hs-pool-policy *string*
Tree	hs-pool-policy
Max. Instances	63
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[**name**] *string*

Synopsis	HS pool policy name
Context	**configure** qos hs-pool-policy *string*
Tree	hs-pool-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

description *string*

Synopsis	Text description
Context	**configure** qos hs-pool-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

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mid-tier

Synopsis	Enter the **mid-tier** context
Context	**configure** qos hs-pool-policy *string* mid-tier
Tree	mid-tier
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

mid-pool [mid-pool-id] *number*

Synopsis	Enter the **mid-pool** list instance
Context	**configure** qos hs-pool-policy *string* mid-tier mid-pool *number*
Tree	mid-pool
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[**mid-pool-id**] *number*

Synopsis	Mid-pool identifier for the HS pool policy
Context	**configure** qos hs-pool-policy *string* mid-tier mid-pool *number*
Tree	mid-pool
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

allocation-percent *decimal-number*

Synopsis	Root pool size to derive the mid-pool size
Context	**configure** qos hs-pool-policy *string* mid-tier mid-pool *number* allocation-percent *decimal-number*
Tree	allocation-percent
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

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parent-root-pool

Synopsis	Enter the **parent-root-pool** context
Context	**configure** qos hs-pool-policy *string* mid-tier mid-pool *number* parent-root-pool
Tree	parent-root-pool
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

none

Synopsis	Assign no buffers to the mid-tier pool
Context	**configure** qos hs-pool-policy *string* mid-tier mid-pool *number* parent-root-pool none
Tree	none
Notes	The following elements are part of a choice: **none** or **pool-id**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

pool-id *reference*

Synopsis	Parent root pool to which the mid-pool is associated
Context	**configure** qos hs-pool-policy *string* mid-tier mid-pool *number* parent-root-pool pool-id *reference*
Tree	pool-id
Reference	**configure** qos hs-pool-policy *string* root-tier root-pool *number*
Notes	The following elements are part of a choice: **none** or **pool-id**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

port-bw-oversubscription-factor *number*

Synopsis	Over subscription factor for port-class pool sizes
Context	**configure** qos hs-pool-policy *string* mid-tier mid-pool *number* port-bw-oversubscription-factor *number*
Tree	port-bw-oversubscription-factor
Description	This command modifies the size of the mid-pool when calculating the port-class pool sizes based on port bandwidth ratios. The over subscription factor for a mid-pool can

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be modified at any time, causing the corresponding port-class pool dynamic sizes to be recalculated. A similar behavior can be obtained by increasing the mid-pool's allocation-percent of its parent root-pool. However, the major difference in using this command is that it provides larger port-class pools without allowing the mid-pool to use a higher number of buffers in the root pool.

Range	1 to 10
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

slope-policy *reference*

Synopsis	Slope policy to define high, low, and exceed slopes
Context	**configure** qos hs-pool-policy *string* mid-tier mid-pool *number* slope-policy *reference*
Tree	slope-policy
Reference	**configure** qos slope-policy *string*
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

root-tier

Synopsis	Enter the **root-tier** context
Context	**configure** qos hs-pool-policy *string* root-tier
Tree	root-tier
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

root-pool [root-pool-id] *number*

Synopsis	Enter the **root-pool** list instance
Context	**configure** qos hs-pool-policy *string* root-tier root-pool *number*
Tree	root-pool
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

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[**root-pool-id**] *number*

Synopsis	Root pool identifier for the HS pool policy
Context	**configure** qos hs-pool-policy *string* root-tier root-pool *number*
Tree	root-pool
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

allocation-weight *number*

Synopsis	Root pool allocation weight used to calculate pool size
Context	**configure** qos hs-pool-policy *string* root-tier root-pool *number* allocation-weight *number*
Tree	allocation-weight
Description	This command specifies the weight that is applied to the root pool and is divided by the sum of all root pool weights to derive the pool's buffer allocation factor. The amount of buffers remaining after the system-reserve percentage is applied is multiplied by the buffer allocation factor to derive the pool size. A root pool with an allocation weight set to “0” is considered inactive and is not allocated buffers. When a root pool’s allocation weight is modified, all root pools, mid-tier pools, and port class pool sizes are reevaluated and modified when necessary.
Range	0 to 100
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

slope-policy *reference*

Synopsis	Slope policy to define high, low, and exceed slopes
Context	**configure** qos hs-pool-policy *string* root-tier root-pool *number* slope-policy *reference*
Tree	slope-policy
Reference	**configure** qos slope-policy *string*
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

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system-reserve *decimal-number*

Synopsis	Percentage of buffers reserved for internal system use
Context	**configure** qos hs-pool-policy *string* system-reserve *decimal-number*
Tree	system-reserve
Range	1.00 to 30.00
Default	5.00
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-port-pool-policy [name] *string*

Synopsis	Enter the **hs-port-pool-policy** list instance
Context	**configure** qos hs-port-pool-policy *string*
Tree	hs-port-pool-policy
Max. Instances	2047
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[**name**] *string*

Synopsis	HS port pool policy name
Context	**configure** qos hs-port-pool-policy *string*
Tree	hs-port-pool-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

alt-port-class-pools

Synopsis	Enter the **alt-port-class-pools** context
Context	**configure** qos hs-port-pool-policy *string* alt-port-class-pools
Tree	alt-port-class-pools
Introduced	16.0.R1

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Platforms	7750 SR-7/12/12e

class-pool [alt-class-pool-id] *number*

Synopsis	Enter the **class-pool** list instance
Context	**configure** qos hs-port-pool-policy *string* alt-port-class-pools class-pool *number*
Tree	class-pool
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[**alt-class-pool-id**] *number*

Synopsis	Class pool ID
Context	**configure** qos hs-port-pool-policy *string* alt-port-class-pools class-pool *number*
Tree	class-pool
Range	1 to 6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

allocation

Synopsis	Enter the **allocation** context
Context	**configure** qos hs-port-pool-policy *string* alt-port-class-pools class-pool *number* allocation
Tree	allocation
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

explicit-percent *decimal-number*

Synopsis	Percentage of parent pool to be allocated
Context	**configure** qos hs-port-pool-policy *string* alt-port-class-pools class-pool *number* allocation explicit-percent *decimal-number*
Tree	explicit-percent
Range	0.01 to 100.00

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Notes	The following elements are part of a choice: **explicit-percent** or **port-bw-weight**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

port-bw-weight *number*

Synopsis	Port bandwidth weight to be allocated
Context	**configure** qos hs-port-pool-policy *string* alt-port-class-pools class-pool *number* allocation port-bw-weight *number*
Tree	port-bw-weight
Range	1 to 100
Default	1
Notes	The following elements are part of a choice: **explicit-percent** or **port-bw-weight**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

parent-mid-pool

Synopsis	Enter the **parent-mid-pool** context
Context	**configure** qos hs-port-pool-policy *string* alt-port-class-pools class-pool *number* parent-mid-pool
Tree	parent-mid-pool
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

none

Synopsis	Deactivate the port-class pool; pool size is zero
Context	**configure** qos hs-port-pool-policy *string* alt-port-class-pools class-pool *number* parent-mid-pool none
Tree	none
Notes	The following elements are part of a choice: **none** or **pool-id**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

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pool-id *number*

Synopsis	Mid-pool ID associated with the port-class pool
Context	**configure** qos hs-port-pool-policy *string* alt-port-class-pools class-pool *number* parent-mid-pool pool-id *number*
Tree	pool-id
Range	1 to 16
Notes	The following elements are part of a choice: **none** or **pool-id**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

slope-policy *reference*

Synopsis	Slope policy to define high, low, and exceed slopes
Context	**configure** qos hs-port-pool-policy *string* alt-port-class-pools class-pool *number* slope-policy *reference*
Tree	slope-policy
Reference	**configure** qos slope-policy *string*
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

description *string*

Synopsis	Text description
Context	**configure** qos hs-port-pool-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

std-port-class-pools

Synopsis	Enter the **std-port-class-pools** context
Context	**configure** qos hs-port-pool-policy *string* std-port-class-pools
Tree	std-port-class-pools
Introduced	16.0.R1

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Platforms	7750 SR-7/12/12e

class-pool [std-class-pool-id] *number*

Synopsis	Enter the **class-pool** list instance
Context	**configure** qos hs-port-pool-policy *string* std-port-class-pools class-pool *number*
Tree	class-pool
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[**std-class-pool-id**] *number*

Synopsis	Class pool ID
Context	**configure** qos hs-port-pool-policy *string* std-port-class-pools class-pool *number*
Tree	class-pool
Range	1 to 6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

allocation

Synopsis	Enter the **allocation** context
Context	**configure** qos hs-port-pool-policy *string* std-port-class-pools class-pool *number* allocation
Tree	allocation
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

explicit-percent *decimal-number*

Synopsis	Percentage of parent pool to be allocated
Context	**configure** qos hs-port-pool-policy *string* std-port-class-pools class-pool *number* allocation explicit-percent *decimal-number*
Tree	explicit-percent
Range	0.01 to 100.00

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Notes	The following elements are part of a choice: **explicit-percent** or **port-bw-weight**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

port-bw-weight *number*

Synopsis	Port bandwidth weight to be allocated
Context	**configure** qos hs-port-pool-policy *string* std-port-class-pools class-pool *number* allocation port-bw-weight *number*
Tree	port-bw-weight
Range	1 to 100
Default	1
Notes	The following elements are part of a choice: **explicit-percent** or **port-bw-weight**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

parent-mid-pool

Synopsis	Enter the **parent-mid-pool** context
Context	**configure** qos hs-port-pool-policy *string* std-port-class-pools class-pool *number* parent-mid-pool
Tree	parent-mid-pool
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

none

Synopsis	Deactivate the port-class pool; pool size is zero
Context	**configure** qos hs-port-pool-policy *string* std-port-class-pools class-pool *number* parent-mid-pool none
Tree	none
Notes	The following elements are part of a choice: **none** or **pool-id**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

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pool-id *number*

Synopsis	Mid-pool ID associated with the port-class pool
Context	**configure** qos hs-port-pool-policy *string* std-port-class-pools class-pool *number* parent-mid-pool pool-id *number*
Tree	pool-id
Range	1 to 16
Notes	The following elements are part of a choice: **none** or **pool-id**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

slope-policy *reference*

Synopsis	Slope policy to define high, low, and exceed slopes
Context	**configure** qos hs-port-pool-policy *string* std-port-class-pools class-pool *number* slope-policy *reference*
Tree	slope-policy
Reference	**configure** qos slope-policy *string*
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-scheduler-policy [name] *string*

Synopsis	Enter the **hs-scheduler-policy** list instance
Context	**configure** qos hs-scheduler-policy *string*
Tree	hs-scheduler-policy
Max. Instances	127
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[**name**] *string*

Synopsis	HS scheduler policy name
Context	**configure** qos hs-scheduler-policy *string*
Tree	hs-scheduler-policy
String Length	1 to 32

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

description *string*

Synopsis	Text description
Context	**configure** qos hs-scheduler-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

group [group-id] *number*

Synopsis	Enter the **group** list instance
Context	**configure** qos hs-scheduler-policy *string* group *number*
Tree	group
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[**group-id**] *number*

Synopsis	Group ID for the HS scheduler policy
Context	**configure** qos hs-scheduler-policy *string* group *number*
Tree	group
Range	1
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

rate *(number | keyword)*

Synopsis	Group maximum rate
Context	**configure** qos hs-scheduler-policy *string* group *number* rate *(number | keyword)*

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Tree	rate
Range	1 to 100000
Units	megabps
Options	max
Default	max
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

max-rate *(number | keyword)*

Synopsis	Maximum frame-based bandwidth limit for the policy
Context	**configure** qos hs-scheduler-policy *string* max-rate *(number | keyword)*
Tree	max-rate
Range	1 to 100000
Options	max
Default	max
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

scheduling-class [class-id] *number*

Synopsis	Enter the **scheduling-class** list instance
Context	**configure** qos hs-scheduler-policy *string* scheduling-class *number*
Tree	scheduling-class
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[**class-id**] *number*

Synopsis	Scheduling class for the HS scheduler policy
Context	**configure** qos hs-scheduler-policy *string* scheduling-class *number*
Tree	scheduling-class
Range	1 to 6
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	7750 SR-7/12/12e

group

Synopsis	Enable the **group** context
Context	**configure** qos hs-scheduler-policy *string* scheduling-class *number* group
Tree	group
Notes	The following elements are part of a choice: **group** or **rate**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

group-id *number*

Synopsis	Associated group associated with this scheduling class
Context	**configure** qos hs-scheduler-policy *string* scheduling-class *number* group group-id *number*
Tree	group-id
Range	1
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

weight *number*

Synopsis	Weight associated with this scheduling class
Context	**configure** qos hs-scheduler-policy *string* scheduling-class *number* group weight *number*
Tree	weight
Range	1 to 127
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

rate *(number | keyword)*

Synopsis	Maximum frame-based bandwidth limit

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Context	**configure** qos hs-scheduler-policy *string* scheduling-class *number* rate *(number | keyword)*
Tree	rate
Range	1 to 100000
Units	kilobps
Options	max
Default	max
Notes	The following elements are part of a choice: **group** or **rate**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hw-agg-shaper-scheduler-policy [name] *string*

Synopsis	Enter the **hw-agg-shaper-scheduler-policy** list instance
Context	**configure** qos hw-agg-shaper-scheduler-policy *string*
Tree	hw-agg-shaper-scheduler-policy
Description	Commands in this context configure the attributes of a hardware aggregate shaper scheduler policy.
Max. Instances	127
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

[**name**] *string*

Synopsis	Name of the hardware aggregate shaper scheduler policy
Context	**configure** qos hw-agg-shaper-scheduler-policy *string*
Tree	hw-agg-shaper-scheduler-policy
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

congestion-threshold *number*

Synopsis	Congestion threshold of the scheduler

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Context	**configure** qos hw-agg-shaper-scheduler-policy *string* congestion-threshold *number*
Tree	congestion-threshold
Description	This command configures the congestion threshold for the hardware aggregate shaper scheduler policy, which, if exceeded, triggers the hardware aggregate scheduler algorithm. The value is expressed as a percentage of the scheduler rate.
Range	0 to 100
Default	90
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

description *string*

Synopsis	Text description
Context	**configure** qos hw-agg-shaper-scheduler-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

group [group-name] *string*

Synopsis	Add a list entry for **group**
Context	**configure** qos hw-agg-shaper-scheduler-policy *string* group *string*
Tree	group
Max. Instances	6
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

[**group-name**] *string*

Synopsis	Name of the HW aggregate shaper scheduler policy group
Context	**configure** qos hw-agg-shaper-scheduler-policy *string* group *string*
Tree	group
String Length	1 to 32
Notes	This element is part of a list key.

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Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

max-percent-rate *decimal-number*

Synopsis	Maximum frame-based bandwidth percentage
Context	**configure** qos hw-agg-shaper-scheduler-policy *string* max-percent-rate *decimal-number*
Tree	max-percent-rate
Description	This command configures the rate of the hardware aggregate shaper scheduler expressed as a percentage of the port rate.
Range	0.01 to 100.00
Notes	The following elements are part of a choice: **max-percent-rate** or **max-rate**.
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

max-rate *(number | keyword)*

Synopsis	Maximum frame-based bandwidth limit
Context	**configure** qos hw-agg-shaper-scheduler-policy *string* max-rate *(number | keyword)*
Tree	max-rate
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Notes	The following elements are part of a choice: **max-percent-rate** or **max-rate**.
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

monitor-threshold *number*

Synopsis	Monitor threshold for the scheduler
Context	**configure** qos hw-agg-shaper-scheduler-policy *string* monitor-threshold *number*
Tree	monitor-threshold
Description	This command configures the monitor threshold for the hardware aggregate shaper scheduler policy, which is used for egress scheduler monitoring. The value is expressed

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	as a percentage of the scheduler rate, which is considered as a limit for determining congestion.
Range	0 to 100
Default	0
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

sched-class [class-id] *number*

Synopsis	Enter the **sched-class** list instance
Context	**configure** qos hw-agg-shaper-scheduler-policy *string* sched-class *number*
Tree	sched-class
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

[**class-id**] *number*

Synopsis	Scheduling class ID for the scheduler policy
Context	**configure** qos hw-agg-shaper-scheduler-policy *string* sched-class *number*
Tree	sched-class
Range	1 to 6
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

group *reference*

Synopsis	Group associated with the scheduling class
Context	**configure** qos hw-agg-shaper-scheduler-policy *string* sched-class *number* group *reference*
Tree	group
Description	This command assigns the specified scheduling class to a group within a hardware aggregate shaper scheduler policy.
Reference	**configure** qos hw-agg-shaper-scheduler-policy *string* group *string*
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

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weight *number*

Synopsis	Weight associated with the scheduling class
Context	**configure** qos hw-agg-shaper-scheduler-policy *string* sched-class *number* weight *number*
Tree	weight
Range	1 to 8
Default	1
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

match-list

Synopsis	Enter the **match-list** context
Context	**configure** qos match-list
Tree	match-list
Introduced	16.0.R1
Platforms	All

ip-prefix-list [prefix-list-name] *string*

Synopsis	Enter the **ip-prefix-list** list instance
Context	**configure** qos match-list ip-prefix-list *string*
Tree	ip-prefix-list
Max. Instances	512
Introduced	16.0.R1
Platforms	All

[**prefix-list-name**] *string*

Synopsis	IP prefix list name
Context	**configure** qos match-list ip-prefix-list *string*
Tree	ip-prefix-list
String Length	1 to 32
Notes	This element is part of a list key.

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Introduced	16.0.R3
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** qos match-list ip-prefix-list *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

prefix [ip-prefix] *string*

Synopsis	Add a list entry for **prefix**
Context	**configure** qos match-list ip-prefix-list *string* prefix *string*
Tree	prefix
Max. Instances	256
Introduced	16.0.R1
Platforms	All

[**ip-prefix**] *string*

Synopsis	IPv4 address prefix
Context	**configure** qos match-list ip-prefix-list *string* prefix *string*
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

ipv6-prefix-list [prefix-list-name] *string*

Synopsis	Enter the **ipv6-prefix-list** list instance
Context	**configure** qos match-list ipv6-prefix-list *string*

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Tree	ipv6-prefix-list
Max. Instances	128
Introduced	16.0.R4
Platforms	All

[**prefix-list-name**] *string*

Synopsis	IP prefix list name
Context	**configure** qos match-list ipv6-prefix-list *string*
Tree	ipv6-prefix-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** qos match-list ipv6-prefix-list *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

prefix [ipv6-prefix] *string*

Synopsis	Add a list entry for **prefix**
Context	**configure** qos match-list ipv6-prefix-list *string* prefix *string*
Tree	prefix
Max. Instances	128
Introduced	16.0.R4
Platforms	All

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[**ipv6-prefix**] *string*

Synopsis	Ipv6 address prefix
Context	**configure** qos match-list ipv6-prefix-list *string* prefix *string*
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

port-list [port-list-name] *string*

Synopsis	Enter the **port-list** list instance
Context	**configure** qos match-list port-list *string*
Tree	port-list
Max. Instances	16
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**port-list-name**] *string*

Synopsis	Port list name
Context	**configure** qos match-list port-list *string*
Tree	port-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** qos match-list port-list *string* description *string*
Tree	description
String Length	1 to 80
Introduced	20.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port [value] *number*

Synopsis	Add a list entry for **port**
Context	**configure** qos match-list port-list *string* port *number*
Tree	port
Description	Commands in this context specify ports for a port match list.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**value**] *number*

Synopsis	Port number
Context	**configure** qos match-list port-list *string* port *number*
Tree	port
Range	0 to 65535
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range [start] *number* end *number*

Synopsis	Add a list entry for **range**
Context	**configure** qos match-list port-list *string* range *number* end *number*
Tree	range
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**start**] *number*

Synopsis	Lower bound for the port range
Context	**configure** qos match-list port-list *string* range *number* end *number*
Tree	range
Range	0 to 65534

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Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

end *number*

Synopsis	Upper bound for the port range
Context	**configure** qos match-list port-list *string* range *number* end *number*
Tree	range
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-auto-id

Synopsis	Enter the **md-auto-id** context
Context	**configure** qos md-auto-id
Tree	md-auto-id
Introduced	16.0.R1
Platforms	All

qos-policy-id-range

Synopsis	Enable the **qos-policy-id-range** context
Context	**configure** qos md-auto-id qos-policy-id-range
Tree	qos-policy-id-range
Introduced	16.0.R1
Platforms	All

end *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

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Synopsis	Upper bound of the ID range
Context	**configure** qos md-auto-id qos-policy-id-range end *number*
Tree	end
Range	2 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the ID range
Context	**configure** qos md-auto-id qos-policy-id-range start *number*
Tree	start
Range	2 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

network [network-policy-name] *string*

Synopsis	Enter the **network** list instance
Context	**configure** qos network *string*
Tree	network
Max. Instances	255
Introduced	16.0.R1
Platforms	All

[**network-policy-name**] *string*

Synopsis	QoS network policy name
Context	**configure** qos network *string*

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Tree	network
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** qos network *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** qos network *string* egress
Tree	egress
Introduced	16.0.R1
Platforms	All

dscp [dscp-name] *keyword*

Synopsis	Enter the **dscp** list instance
Context	**configure** qos network *string* egress dscp *keyword*
Tree	dscp
Introduced	16.0.R1
Platforms	All

[**dscp-name**] *keyword*

Synopsis	DSCP name to perform reclassification actions
Context	**configure** qos network *string* egress dscp *keyword*

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Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	**configure** qos network *string* egress dscp *keyword* fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

profile *keyword*

Synopsis	Default profile to use for the ingressing traffic
Context	**configure** qos network *string* egress dscp *keyword* profile *keyword*
Tree	profile
Options	in, out, exceed, inplus
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

fc [fc-name] *keyword*

Synopsis	Enter the **fc** list instance
Context	**configure** qos network *string* egress fc *keyword*
Tree	fc
Introduced	16.0.R1

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Platforms	All

[**fc-name**] *keyword*

Synopsis	Forwarding class name
Context	**configure** qos network *string* egress fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

de-mark

Synopsis	Enable the **de-mark** context
Context	**configure** qos network *string* egress fc *keyword* de-mark
Tree	de-mark
Introduced	16.0.R1
Platforms	All

force *number*

Synopsis	DE value
Context	**configure** qos network *string* egress fc *keyword* de-mark force *number*
Tree	force
Range	0 to 1
Introduced	16.0.R1
Platforms	All

dot1p-in-profile *number*

Synopsis	Dot1p marking for in-profile marking
Context	**configure** qos network *string* egress fc *keyword* dot1p-in-profile *number*
Tree	dot1p-in-profile
Range	0 to 7

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Introduced	16.0.R1
Platforms	All

dot1p-out-profile *number*

Synopsis	Dot1p marking for out-of-profile marking
Context	**configure** qos network *string* egress fc *keyword* dot1p-out-profile *number*
Tree	dot1p-out-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

dscp-in-profile *keyword*

Synopsis	DSCP marking for in-profile marking
Context	**configure** qos network *string* egress fc *keyword* dscp-in-profile *keyword*
Tree	dscp-in-profile
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dscp-out-profile *keyword*

Synopsis	DSCP marking for out-of-profile marking
Context	**configure** qos network *string* egress fc *keyword* dscp-out-profile *keyword*
Tree	dscp-out-profile
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

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lsp-exp-in-profile *number*

Synopsis	LSP-EXP marking for in-profile marking
Context	**configure** qos network *string* egress fc *keyword* lsp-exp-in-profile *number*
Tree	lsp-exp-in-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

lsp-exp-out-profile *number*

Synopsis	LSP-EXP marking for out-of-profile marking
Context	**configure** qos network *string* egress fc *keyword* lsp-exp-out-profile *number*
Tree	lsp-exp-out-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

port-redirect-group

Synopsis	Enter the **port-redirect-group** context
Context	**configure** qos network *string* egress fc *keyword* port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	All

policer *number*

Synopsis	Policer to be used
Context	**configure** qos network *string* egress fc *keyword* port-redirect-group policer *number*
Tree	policer
Range	1 to 16
Introduced	16.0.R1
Platforms	All

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queue *number*

Synopsis	Queue to be used
Context	**configure** qos network *string* egress fc *keyword* port-redirect-group queue *number*
Tree	queue
Range	1 to 8
Introduced	16.0.R1
Platforms	All

ip-criteria

Synopsis	Enter the **ip-criteria** context
Context	**configure** qos network *string* egress ip-criteria
Tree	ip-criteria
Introduced	16.0.R1
Platforms	All

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** qos network *string* egress ip-criteria entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**entry-id**] *number*

Synopsis	Entry ID for match criterion and corresponding action
Context	**configure** qos network *string* egress ip-criteria entry *number*
Tree	entry
Description	This command uniquely identifies a match criterion and the corresponding action. Nokia recommends that multiple entries be given entry IDs in staggered increments. This allows users to insert a new entry in an existing policy without requiring renumbering all of the existing entries.
Range	1 to 65535

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enter the **action** context
Context	**configure** qos network *string* egress ip-criteria entry *number* action
Tree	action
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	**configure** qos network *string* egress ip-criteria entry *number* action fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

port-redirect-group

Synopsis	Enter the **port-redirect-group** context
Context	**configure** qos network *string* egress ip-criteria entry *number* action port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policer *number*

Synopsis	Policer ID to be used for the matched traffic
Context	**configure** qos network *string* egress ip-criteria entry *number* action port-redirect-group policer *number*
Tree	policer

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Range	1 to 16
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue *number*

Synopsis	Queue to be used for post-policed traffic
Context	**configure** qos network *string* egress ip-criteria entry *number* action port-redirect-group queue *number*
Tree	queue
Range	1 to 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile *keyword*

Synopsis	Profile reclassification action
Context	**configure** qos network *string* egress ip-criteria entry *number* action profile *keyword*
Tree	profile
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Action for criteria entry
Context	**configure** qos network *string* egress ip-criteria entry *number* action type *keyword*
Tree	type
Options	ignore-match, accept
Default	ignore-match
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description

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Context	**configure** qos network *string* egress ip-criteria entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the **match** context
Context	**configure** qos network *string* egress ip-criteria entry *number* match
Tree	match
Introduced	16.0.R1
Platforms	All

dscp *keyword*

Synopsis	DSCP value to match in the packet
Context	**configure** qos network *string* egress ip-criteria entry *number* match dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the **dst-ip** context
Context	**configure** qos network *string* egress ip-criteria entry *number* match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

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address *(ipv4-prefix-with-host-bits | ipv4-address)*

Synopsis	Destination IPv4 address to match
Context	**configure** qos network *string* egress ip-criteria entry *number* match dst-ip address *(ipv4-prefix-with-host-bits | ipv4-address)*
Tree	address
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	Subnet mask
Context	**configure** qos network *string* egress ip-criteria entry *number* match dst-ip mask *string*
Tree	mask
Introduced	16.0.R1
Platforms	All

dst-port

Synopsis	Enter the **dst-port** context
Context	**configure** qos network *string* egress ip-criteria entry *number* match dst-port
Tree	dst-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Value 'equal to' assigned as match condition
Context	**configure** qos network *string* egress ip-criteria entry *number* match dst-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

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gt *number*

Synopsis	Value 'greater than' assigned as match condition
Context	**configure** qos network *string* egress ip-criteria entry *number* match dst-port gt *number*
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Value 'less than' assigned as match condition
Context	**configure** qos network *string* egress ip-criteria entry *number* match dst-port lt *number*
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

port-list *reference*

Synopsis	Name of the port list as the match criterion
Context	**configure** qos network *string* egress ip-criteria entry *number* match dst-port port-list *reference*
Tree	port-list
Reference	**configure** qos match-list port-list *string*
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enter the **range** context
Context	**configure** qos network *string* egress ip-criteria entry *number* match dst-port range
Tree	range

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Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of port range to match
Context	**configure** qos network *string* egress ip-criteria entry *number* match dst-port range end *number*
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of port range to match
Context	**configure** qos network *string* egress ip-criteria entry *number* match dst-port range start *number*
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

fragment *keyword*

Synopsis	Fragmentation state as the match criterion
Context	**configure** qos network *string* egress ip-criteria entry *number* match fragment *keyword*
Tree	fragment
Description	This command configures fragmented or non-fragmented IP packets as a network QoS policy match criterion. When unconfigured, all packets match regardless of whether they are fragmented.
Options	false, true
Introduced	16.0.R1
Platforms	All

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icmp-type *number*

Synopsis	ICMP type in the ICMP header of IPv4 packet to match
Context	**configure** qos network *string* egress ip-criteria entry *number* match icmp-type *number*
Tree	icmp-type
Description	This command configures matching on the ICMP type field in the ICMP header of an IPv4 packet as a network QoS match criterion. An entry containing Layer 4 non-zero match criteria does not match non-initial (second, third, and so on) fragments of a fragmented packet because only the first fragment contains the Layer 4 information. Similarly, an entry containing a match criteria of zero may not match non-initial fragments when the Layer 4 header is not present in a packet fragment and other match criteria are also met.
Range	0 to 255
Introduced	16.0.R1
Platforms	All

protocol *(number | keyword)*

Synopsis	IP protocol to match
Context	**configure** qos network *string* egress ip-criteria entry *number* match protocol *(number | keyword)*
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

src-ip

Synopsis	Enter the **src-ip** context
Context	**configure** qos network *string* egress ip-criteria entry *number* match src-ip
Tree	src-ip
Introduced	16.0.R1
Platforms	All

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address *(ipv4-prefix-with-host-bits | ipv4-address)*

Synopsis	Source IPv4 address to match
Context	**configure** qos network *string* egress ip-criteria entry *number* match src-ip address *(ipv4-prefix-with-host-bits | ipv4-address)*
Tree	address
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	Subnet mask
Context	**configure** qos network *string* egress ip-criteria entry *number* match src-ip mask *string*
Tree	mask
Introduced	16.0.R1
Platforms	All

src-port

Synopsis	Enter the **src-port** context
Context	**configure** qos network *string* egress ip-criteria entry *number* match src-port
Tree	src-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Value 'equal to' assigned as match condition
Context	**configure** qos network *string* egress ip-criteria entry *number* match src-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

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gt *number*

Synopsis	Value 'greater than' assigned as match condition
Context	**configure** qos network *string* egress ip-criteria entry *number* match src-port gt *number*
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Value 'less than' assigned as match condition
Context	**configure** qos network *string* egress ip-criteria entry *number* match src-port lt *number*
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

port-list *reference*

Synopsis	Name of the port list as the match criterion
Context	**configure** qos network *string* egress ip-criteria entry *number* match src-port port-list *reference*
Tree	port-list
Reference	**configure** qos match-list port-list *string*
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enter the **range** context
Context	**configure** qos network *string* egress ip-criteria entry *number* match src-port range
Tree	range

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Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of port range to match
Context	**configure** qos network *string* egress ip-criteria entry *number* match src-port range end *number*
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of port range to match
Context	**configure** qos network *string* egress ip-criteria entry *number* match src-port range start *number*
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

ipv6-criteria

Synopsis	Enter the **ipv6-criteria** context
Context	**configure** qos network *string* egress ipv6-criteria
Tree	ipv6-criteria
Introduced	16.0.R1
Platforms	All

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** qos network *string* egress ipv6-criteria entry *number*

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Tree	entry
Introduced	16.0.R1
Platforms	All

[**entry-id**] *number*

Synopsis	Entry ID for match criterion and corresponding action
Context	**configure** qos network *string* egress ipv6-criteria entry *number*
Tree	entry
Description	This command uniquely identifies a match criterion and the corresponding action. Nokia recommends that multiple entries be given entry IDs in staggered increments. This allows users to insert a new entry in an existing policy without requiring renumbering all of the existing entries.
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enter the **action** context
Context	**configure** qos network *string* egress ipv6-criteria entry *number* action
Tree	action
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	**configure** qos network *string* egress ipv6-criteria entry *number* action fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

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port-redirect-group

Synopsis	Enter the **port-redirect-group** context
Context	**configure** qos network *string* egress ipv6-criteria entry *number* action port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policer *number*

Synopsis	Policer ID to be used for the matched traffic
Context	**configure** qos network *string* egress ipv6-criteria entry *number* action port-redirect-group policer *number*
Tree	policer
Range	1 to 16
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue *number*

Synopsis	Queue to be used for post-policed traffic
Context	**configure** qos network *string* egress ipv6-criteria entry *number* action port-redirect-group queue *number*
Tree	queue
Range	1 to 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile *keyword*

Synopsis	Profile reclassification action
Context	**configure** qos network *string* egress ipv6-criteria entry *number* action profile *keyword*
Tree	profile
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

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type *keyword*

Synopsis	Action for criteria entry
Context	**configure** qos network *string* egress ipv6-criteria entry *number* action type *keyword*
Tree	type
Options	ignore-match, accept
Default	ignore-match
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** qos network *string* egress ipv6-criteria entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the **match** context
Context	**configure** qos network *string* egress ipv6-criteria entry *number* match
Tree	match
Introduced	16.0.R1
Platforms	All

dscp *keyword*

Synopsis	DSCP value to match in the packet
Context	**configure** qos network *string* egress ipv6-criteria entry *number* match dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef,

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	cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the **dst-ip** context
Context	**configure** qos network *string* egress ipv6-criteria entry *number* match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

address *(ipv6-prefix-with-host-bits | ipv6-address)*

Synopsis	Destination IPv6 address to match
Context	**configure** qos network *string* egress ipv6-criteria entry *number* match dst-ip address *(ipv6-prefix-with-host-bits | ipv6-address)*
Tree	address
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	Address mask
Context	**configure** qos network *string* egress ipv6-criteria entry *number* match dst-ip mask *string*
Tree	mask
Introduced	16.0.R1
Platforms	All

dst-port

Synopsis	Enter the **dst-port** context
Context	**configure** qos network *string* egress ipv6-criteria entry *number* match dst-port
Tree	dst-port
Introduced	16.0.R1

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Platforms	All

eq *number*

Synopsis	Value 'equal to' assigned as match condition
Context	**configure** qos network *string* egress ipv6-criteria entry *number* match dst-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Value 'greater than' assigned as match condition
Context	**configure** qos network *string* egress ipv6-criteria entry *number* match dst-port gt *number*
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Value 'less than' assigned as match condition
Context	**configure** qos network *string* egress ipv6-criteria entry *number* match dst-port lt *number*
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

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port-list *reference*

Synopsis	Name of the port list as the match criterion
Context	**configure** qos network *string* egress ipv6-criteria entry *number* match dst-port port-list *reference*
Tree	port-list
Reference	**configure** qos match-list port-list *string*
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enter the **range** context
Context	**configure** qos network *string* egress ipv6-criteria entry *number* match dst-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of port range to match
Context	**configure** qos network *string* egress ipv6-criteria entry *number* match dst-port range end *number*
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of port range to match
Context	**configure** qos network *string* egress ipv6-criteria entry *number* match dst-port range start *number*
Tree	start

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Range	0 to 65535
Introduced	16.0.R1
Platforms	All

fragment *keyword*

Synopsis	Fragmentation state as the match criterion
Context	**configure** qos network *string* egress ipv6-criteria entry *number* match fragment *keyword*
Tree	fragment
Description	This command configures fragmented or non-fragmented IPv6 packets as a network QoS policy match criterion. When unconfigured, all packets match regardless of whether they are fragmented.
Options	false, true, first-only, non-first-only
Introduced	16.0.R1
Platforms	All

icmp-type *number*

Synopsis	ICMPv6 type in ICMPv6 header of IPv6 packet to match
Context	**configure** qos network *string* egress ipv6-criteria entry *number* match icmp-type *number*
Tree	icmp-type
Description	This command configures matching on the ICMPv6 type field in the ICMPv6 header of an IPv6 packet as a network QoS match criterion. An entry containing Layer 4 non-zero match criteria does not match non-initial (second, third, and so on) fragments of a fragmented packet because only the first fragment contains the Layer 4 information. Similarly, an entry containing a match criteria of zero may not match non-initial fragments when the Layer 4 header is not present in a packet fragment and other match criteria are also met.
Range	0 to 255
Introduced	16.0.R1
Platforms	All

next-header *(number | keyword)*

Synopsis	IP protocol to match
Context	**configure** qos network *string* egress ipv6-criteria entry *number* match next-header *(number | keyword)*

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Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

src-ip

Synopsis	Enter the **src-ip** context
Context	**configure** qos network *string* egress ipv6-criteria entry *number* match src-ip
Tree	src-ip
Introduced	16.0.R1
Platforms	All

address *(ipv6-prefix-with-host-bits | ipv6-address)*

Synopsis	Source IPv6 address to match
Context	**configure** qos network *string* egress ipv6-criteria entry *number* match src-ip address *(ipv6-prefix-with-host-bits | ipv6-address)*
Tree	address
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	Address mask
Context	**configure** qos network *string* egress ipv6-criteria entry *number* match src-ip mask *string*
Tree	mask
Introduced	16.0.R1
Platforms	All

src-port

Synopsis	Enter the **src-port** context

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Context	**configure** qos network *string* egress ipv6-criteria entry *number* match src-port
Tree	src-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Value 'equal to' assigned as match condition
Context	**configure** qos network *string* egress ipv6-criteria entry *number* match src-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Value 'greater than' assigned as match condition
Context	**configure** qos network *string* egress ipv6-criteria entry *number* match src-port gt *number*
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Value 'less than' assigned as match condition
Context	**configure** qos network *string* egress ipv6-criteria entry *number* match src-port lt *number*
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1

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Platforms	All

port-list *reference*

Synopsis	Name of the port list as the match criterion
Context	**configure** qos network *string* egress ipv6-criteria entry *number* match src-port port-list *reference*
Tree	port-list
Reference	**configure** qos match-list port-list *string*
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enter the **range** context
Context	**configure** qos network *string* egress ipv6-criteria entry *number* match src-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of port range to match
Context	**configure** qos network *string* egress ipv6-criteria entry *number* match src-port range end *number*
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of port range to match

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Context	**configure** qos network *string* egress ipv6-criteria entry *number* match src-port range start *number*
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

prec [prec-value] *number*

Synopsis	Enter the **prec** list instance
Context	**configure** qos network *string* egress prec *number*
Tree	prec
Introduced	16.0.R1
Platforms	All

[**prec-value**] *number*

Synopsis	Precedence value for which mapping is performed
Context	**configure** qos network *string* egress prec *number*
Tree	prec
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	**configure** qos network *string* egress prec *number* fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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profile *keyword*

Synopsis	Default profile to use for the ingressing traffic
Context	**configure** qos network *string* egress prec *number* profile *keyword*
Tree	profile
Options	in, out, exceed, inplus
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

remark-trusted

Synopsis	Enable the **remark-trusted** context
Context	**configure** qos network *string* egress remark-trusted
Tree	remark-trusted
Introduced	16.0.R1
Platforms	All

force-egress-marking *boolean*

Synopsis	Remark DSCP bits in the internal IP header
Context	**configure** qos network *string* egress remark-trusted force-egress-marking *boolean*
Tree	force-egress-marking
Default	false
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the **ingress** context
Context	**configure** qos network *string* ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

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default-action

Synopsis	Enter the **default-action** context
Context	**configure** qos network *string* ingress default-action
Tree	default-action
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class used when classifying ingress traffic
Context	**configure** qos network *string* ingress default-action fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	16.0.R1
Platforms	All

profile *keyword*

Synopsis	Default profile for the ingressing traffic
Context	**configure** qos network *string* ingress default-action profile *keyword*
Tree	profile
Options	in, out, exceed, inplus
Default	out
Introduced	16.0.R1
Platforms	All

dot1p [dot1p-value] *number*

Synopsis	Enter the **dot1p** list instance
Context	**configure** qos network *string* ingress dot1p *number*
Tree	dot1p
Introduced	16.0.R1
Platforms	All

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[**dot1p-value**] *number*

Synopsis	Dot1p value to match in the packet
Context	**configure** qos network *string* ingress dot1p *number*
Tree	dot1p
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	**configure** qos network *string* ingress dot1p *number* fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

profile *keyword*

Synopsis	Default profile to be used for the ingressing traffic
Context	**configure** qos network *string* ingress dot1p *number* profile *keyword*
Tree	profile
Options	in, out, de, exceed, inplus
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

dscp [dscp-name] *keyword*

Synopsis	Enter the **dscp** list instance
Context	**configure** qos network *string* ingress dscp *keyword*
Tree	dscp

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Introduced	16.0.R1
Platforms	All

[**dscp-name**] *keyword*

Synopsis	DSCP associated with the forwarding class
Context	**configure** qos network *string* ingress dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	**configure** qos network *string* ingress dscp *keyword* fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

profile *keyword*

Synopsis	Default profile to use for the ingressing traffic
Context	**configure** qos network *string* ingress dscp *keyword* profile *keyword*
Tree	profile
Options	in, out, exceed, inplus
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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fc [fc-name] *keyword*

Synopsis	Enter the **fc** list instance
Context	**configure** qos network *string* ingress fc *keyword*
Tree	fc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**fc-name**] *keyword*

Synopsis	Forwarding class name
Context	**configure** qos network *string* ingress fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

fp-redirect-group

Synopsis	Enter the **fp-redirect-group** context
Context	**configure** qos network *string* ingress fc *keyword* fp-redirect-group
Tree	fp-redirect-group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

broadcast-policer *number*

Synopsis	Policer to be used for broadcast traffic
Context	**configure** qos network *string* ingress fc *keyword* fp-redirect-group broadcast-policer *number*
Tree	broadcast-policer
Range	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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multicast-policer *number*

Synopsis	Policer to be used for multicast traffic
Context	**configure** qos network *string* ingress fc *keyword* fp-redirect-group multicast-policer *number*
Tree	multicast-policer
Range	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policer *number*

Synopsis	Policer to be used for unicast traffic
Context	**configure** qos network *string* ingress fc *keyword* fp-redirect-group policer *number*
Tree	policer
Range	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

unknown-policer *number*

Synopsis	Policer to be used for unknown traffic
Context	**configure** qos network *string* ingress fc *keyword* fp-redirect-group unknown-policer *number*
Tree	unknown-policer
Range	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

ip-criteria

Synopsis	Enter the **ip-criteria** context
Context	**configure** qos network *string* ingress ip-criteria
Tree	ip-criteria
Introduced	16.0.R1
Platforms	All

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entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** qos network *string* ingress ip-criteria entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**entry-id**] *number*

Synopsis	Network Ingress IP Criteria Entry Index
Context	**configure** qos network *string* ingress ip-criteria entry *number*
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enter the **action** context
Context	**configure** qos network *string* ingress ip-criteria entry *number* action
Tree	action
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	**configure** qos network *string* ingress ip-criteria entry *number* action fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

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profile *keyword*

Synopsis	Default profile for the matching traffic
Context	**configure** qos network *string* ingress ip-criteria entry *number* action profile *keyword*
Tree	profile
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Action for criteria entry
Context	**configure** qos network *string* ingress ip-criteria entry *number* action type *keyword*
Tree	type
Options	ignore-match, accept
Default	ignore-match
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** qos network *string* ingress ip-criteria entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the **match** context
Context	**configure** qos network *string* ingress ip-criteria entry *number* match
Tree	match
Introduced	16.0.R1
Platforms	All

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dscp *keyword*

Synopsis	DSCP to be used as network QoS policy match criterion
Context	**configure** qos network *string* ingress ip-criteria entry *number* match dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the **dst-ip** context
Context	**configure** qos network *string* ingress ip-criteria entry *number* match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

address *(ipv4-prefix-with-host-bits | ipv4-address)*

Synopsis	Destination IPv4 address for network QoS policy match
Context	**configure** qos network *string* ingress ip-criteria entry *number* match dst-ip address *(ipv4-prefix-with-host-bits | ipv4-address)*
Tree	address
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	All

ip-prefix-list *reference*

Synopsis	IPv4 prefix list containing IPv4 prefixes to match
Context	**configure** qos network *string* ingress ip-criteria entry *number* match dst-ip ip-prefix-list *reference*
Tree	ip-prefix-list

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Reference	**configure** qos match-list ip-prefix-list *string*
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R4
Platforms	All

mask *string*

Synopsis	IP address to match with source IP of the packet
Context	**configure** qos network *string* ingress ip-criteria entry *number* match dst-ip mask *string*
Tree	mask
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	All

dst-port

Synopsis	Enter the **dst-port** context
Context	**configure** qos network *string* ingress ip-criteria entry *number* match dst-port
Tree	dst-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Exact destination port as the match criterion
Context	**configure** qos network *string* ingress ip-criteria entry *number* match dst-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Greater than destination port value as match criterion

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Context	**configure** qos network *string* ingress ip-criteria entry *number* match dst-port gt *number*
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Less than destination port value as the match criterion
Context	**configure** qos network *string* ingress ip-criteria entry *number* match dst-port lt *number*
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

port-list *reference*

Synopsis	Port list used as match criterion
Context	**configure** qos network *string* ingress ip-criteria entry *number* match dst-port port-list *reference*
Tree	port-list
Description	This command assigns a port list to a matching criteria entry in the network QoS policy. Each entry can use only a single port list. Port lists and prefix lists are mutually exclusive.
Reference	**configure** qos match-list port-list *string*
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enter the **range** context
Context	**configure** qos network *string* ingress ip-criteria entry *number* match dst-port range

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Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of port range to match
Context	**configure** qos network *string* ingress ip-criteria entry *number* match dst-port range end *number*
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of port range to match
Context	**configure** qos network *string* ingress ip-criteria entry *number* match dst-port range start *number*
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

fragment *keyword*

Synopsis	Fragmentation state as the match criterion
Context	**configure** qos network *string* ingress ip-criteria entry *number* match fragment *keyword*
Tree	fragment
Options	false, true
Introduced	16.0.R1
Platforms	All

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protocol *(number | keyword)*

Synopsis	IP protocol to match
Context	**configure** qos network *string* ingress ip-criteria entry *number* match protocol *(number | keyword)*
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

src-ip

Synopsis	Enter the **src-ip** context
Context	**configure** qos network *string* ingress ip-criteria entry *number* match src-ip
Tree	src-ip
Introduced	16.0.R1
Platforms	All

address *(ipv4-prefix-with-host-bits | ipv4-address)*

Synopsis	Source IPv4 address for network QoS policy match
Context	**configure** qos network *string* ingress ip-criteria entry *number* match src-ip address *(ipv4-prefix-with-host-bits | ipv4-address)*
Tree	address
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	All

ip-prefix-list *reference*

Synopsis	IPv4 prefix list containing IPv4 prefixes to match
Context	**configure** qos network *string* ingress ip-criteria entry *number* match src-ip ip-prefix-list *reference*
Tree	ip-prefix-list

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Reference	**configure** qos match-list ip-prefix-list *string*
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R4
Platforms	All

mask *string*

Synopsis	IP address to match with source IP of the packet
Context	**configure** qos network *string* ingress ip-criteria entry *number* match src-ip mask *string*
Tree	mask
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	All

src-port

Synopsis	Enter the **src-port** context
Context	**configure** qos network *string* ingress ip-criteria entry *number* match src-port
Tree	src-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Exact source port as the match criterion
Context	**configure** qos network *string* ingress ip-criteria entry *number* match src-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Greater than source port value as match criterion

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Context	**configure** qos network *string* ingress ip-criteria entry *number* match src-port gt *number*
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Less than destination port value as the match criterion
Context	**configure** qos network *string* ingress ip-criteria entry *number* match src-port lt *number*
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

port-list *reference*

Synopsis	Port list used as match criterion
Context	**configure** qos network *string* ingress ip-criteria entry *number* match src-port port-list *reference*
Tree	port-list
Description	This command assigns a port list to a matching criteria entry in the network QoS policy. Each entry can use only a single port list. Port lists and prefix lists are mutually exclusive.
Reference	**configure** qos match-list port-list *string*
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enter the **range** context
Context	**configure** qos network *string* ingress ip-criteria entry *number* match src-port range

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Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of port range to match
Context	**configure** qos network *string* ingress ip-criteria entry *number* match src-port range end *number*
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of port range to match
Context	**configure** qos network *string* ingress ip-criteria entry *number* match src-port range start *number*
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

ipv6-criteria

Synopsis	Enter the **ipv6-criteria** context
Context	**configure** qos network *string* ingress ipv6-criteria
Tree	ipv6-criteria
Introduced	16.0.R1
Platforms	All

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance

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Context	**configure** qos network *string* ingress ipv6-criteria entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**entry-id**] *number*

Synopsis	Network Ingress IPv6 Criteria Entry Index
Context	**configure** qos network *string* ingress ipv6-criteria entry *number*
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enter the **action** context
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* action
Tree	action
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* action fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

profile *keyword*

Synopsis	Default profile for the matching traffic

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Context	**configure** qos network *string* ingress ipv6-criteria entry *number* action profile *keyword*
Tree	profile
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Action for criteria entry
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* action type *keyword*
Tree	type
Options	ignore-match, accept
Default	ignore-match
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the **match** context
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match
Tree	match
Introduced	16.0.R1
Platforms	All

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dscp *keyword*

Synopsis	DSCP value to match in the packet
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the **dst-ip** context
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

address *(ipv6-prefix-with-host-bits | ipv6-address)*

Synopsis	Destination IPv6 address for network QoS policy match
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match dst-ip address *(ipv6-prefix-with-host-bits | ipv6-address)*
Tree	address
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R1
Platforms	All

ipv6-prefix-list *reference*

Synopsis	IPv6 prefix list containing IPv6 prefixes to match
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match dst-ip ipv6-prefix-list *reference*
Tree	ipv6-prefix-list
Reference	**configure** qos match-list ipv6-prefix-list *string*

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Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R4
Platforms	All

mask *string*

Synopsis	IP address to match with source IP of the packet
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match dst-ip mask *string*
Tree	mask
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R1
Platforms	All

dst-port

Synopsis	Enter the **dst-port** context
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match dst-port
Tree	dst-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Exact destination port as the match criterion
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match dst-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Greater than destination port value as match criterion

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Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match dst-port gt *number*
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Less than destination port value as the match criterion
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match dst-port lt *number*
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

port-list *reference*

Synopsis	Port list used as match criterion
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match dst-port port-list *reference*
Tree	port-list
Description	This command assigns a port list to a matching criteria entry in the network QoS policy. Each entry can use only a single port list. Port lists and prefix lists are mutually exclusive.
Reference	**configure** qos match-list port-list *string*
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enter the **range** context

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Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match dst-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of port range to match
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match dst-port range end *number*
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of port range to match
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match dst-port range start *number*
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

fragment *keyword*

Synopsis	Fragmentation state as the match criterion
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match fragment *keyword*
Tree	fragment
Options	false, true, first-only, non-first-only
Introduced	16.0.R1
Platforms	All

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next-header *(number | keyword)*

Synopsis	IP protocol to match
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match next-header *(number | keyword)*
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

src-ip

Synopsis	Enter the **src-ip** context
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match src-ip
Tree	src-ip
Introduced	16.0.R1
Platforms	All

address *(ipv6-prefix-with-host-bits | ipv6-address)*

Synopsis	Source IPv6 address for network QoS policy match
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match src-ip address *(ipv6-prefix-with-host-bits | ipv6-address)*
Tree	address
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R1
Platforms	All

ipv6-prefix-list *reference*

Synopsis	IPv6 prefix list containing IPv6 prefixes to match
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match src-ip ipv6-prefix-list *reference*
Tree	ipv6-prefix-list

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Reference	**configure** qos match-list ipv6-prefix-list *string*
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R4
Platforms	All

mask *string*

Synopsis	IP address to match with source IP of the packet
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match src-ip mask *string*
Tree	mask
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R1
Platforms	All

src-port

Synopsis	Enter the **src-port** context
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match src-port
Tree	src-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Exact source port as the match criterion
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match src-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

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gt *number*

Synopsis	Greater than source port value as match criterion
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match src-port gt *number*
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Less than destination port value as the match criterion
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match src-port lt *number*
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

port-list *reference*

Synopsis	Port list used as match criterion
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match src-port port-list *reference*
Tree	port-list
Description	This command assigns a port list to a matching criteria entry in the network QoS policy. Each entry can use only a single port list. Port lists and prefix lists are mutually exclusive.
Reference	**configure** qos match-list port-list *string*
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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range

Synopsis	Enter the **range** context
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match src-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of port range to match
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match src-port range end *number*
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of port range to match
Context	**configure** qos network *string* ingress ipv6-criteria entry *number* match src-port range start *number*
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

ler-use-dscp *boolean*

Synopsis	Honor the DSCP markings instead of the LSP-EXP bits
Context	**configure** qos network *string* ingress ler-use-dscp *boolean*
Tree	ler-use-dscp
Default	false
Introduced	16.0.R1

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Platforms	All

lsp-exp [lsp-exp-value] *number*

Synopsis	Enter the **lsp-exp** list instance
Context	**configure** qos network *string* ingress lsp-exp *number*
Tree	lsp-exp
Introduced	16.0.R1
Platforms	All

[**lsp-exp-value**] *number*

Synopsis	LSP EXP value to associate with the forwarding class
Context	**configure** qos network *string* ingress lsp-exp *number*
Tree	lsp-exp
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	**configure** qos network *string* ingress lsp-exp *number* fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

profile *keyword*

Synopsis	Default profile to use for the ingressing traffic
Context	**configure** qos network *string* ingress lsp-exp *number* profile *keyword*
Tree	profile

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Options	in, out, exceed, inplus
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

policy-id *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	QoS network policy ID
Context	**configure** qos network *string* policy-id *number*
Tree	policy-id
Description	This command specifies the QoS network policy ID and uniquely identifies the policy on the router. Network **policy-id 1** exists as the default policy that is applied to all network interfaces by default. The network policy-id 1 cannot be modified or deleted. It defines the default DSCP-to-FC mapping and MPLS EXP-to-FC mapping for the ingress. For the egress, it defines forwarding classes that represent individual queues and the packet marking criteria. Network **policy-id 1** exists as the default policy that is applied to all network ports by default. This default policy cannot be modified or deleted. It defines the default DSCP-to-FC mapping and default unicast meters for ingress IP traffic. For the egress, it defines the forwarding class to dot1p and DSCP values and the packet marking criteria. If a new network policy is created (for instance, **policy-id 3**), only the default action and egress forwarding class parameters are identical to the default policy. A new network policy does not contain the default DSCP-to-FC and MPLS-EXP-to-FC mapping for network QoS policy of type **ip-interface** or the DSCP-to-FC mapping (for network QoS policy of type **port**). The default network policy can be copied to create a new network policy that includes the default ingress DSCP-to-FC and MPLS EXP-to-FC mapping (as appropriate).
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

scope *keyword*

Synopsis	Scope of the policy
Context	**configure** qos network *string* scope *keyword*

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Tree	scope
Options	exclusive, template
Default	template
Introduced	16.0.R1
Platforms	All

network-queue [network-queue-policy] *string*

Synopsis	Enter the **network-queue** list instance
Context	**configure** qos network-queue *string*
Tree	network-queue
Max. Instances	255
Introduced	16.0.R1
Platforms	All

[**network-queue-policy**] *string*

Synopsis	Name for network queue policy
Context	**configure** qos network-queue *string*
Tree	network-queue
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** qos network-queue *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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fc [fc-name] *keyword*

Synopsis	Enter the **fc** list instance
Context	**configure** qos network-queue *string* fc *keyword*
Tree	fc
Introduced	16.0.R1
Platforms	All

[**fc-name**] *keyword*

Synopsis	Forwarding class name
Context	**configure** qos network-queue *string* fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

multicast-queue *reference*

Synopsis	Multicast queue for packets in this forwarding class
Context	**configure** qos network-queue *string* fc *keyword* multicast-queue *reference*
Tree	multicast-queue
Reference	**configure** qos network-queue *string* queue *number*
Introduced	16.0.R1
Platforms	All

queue *reference*

Synopsis	Queue for packets in this forwarding class
Context	**configure** qos network-queue *string* fc *keyword* queue *reference*
Tree	queue
Reference	**configure** qos network-queue *string* queue *number*
Introduced	16.0.R1
Platforms	All

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hs-attachment-policy *reference*

Synopsis	HS attachment policy applied
Context	**configure** qos network-queue *string* hs-attachment-policy *reference*
Tree	hs-attachment-policy
Reference	**configure** qos hs-attachment-policy *string*
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-group [group-id] *number*

Synopsis	Enter the **hs-wrr-group** list instance
Context	**configure** qos network-queue *string* hs-wrr-group *number*
Tree	hs-wrr-group
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[**group-id**] *number*

Synopsis	HS WRR group identifier
Context	**configure** qos network-queue *string* hs-wrr-group *number*
Tree	hs-wrr-group
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** qos network-queue *string* hs-wrr-group *number* adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

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pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	**configure** qos network-queue *string* hs-wrr-group *number* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-class-weight *number*

Synopsis	Weight of scheduling class
Context	**configure** qos network-queue *string* hs-wrr-group *number* hs-class-weight *number*
Tree	hs-class-weight
Range	1 | 2 | 4 | 8
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

rate *number*

Synopsis	PIR rate
Context	**configure** qos network-queue *string* hs-wrr-group *number* rate *number*
Tree	rate
Range	1 to 100
Units	kilobps
Default	100
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

queue [queue-id] *number*

Synopsis	Enter the **queue** list instance
Context	**configure** qos network-queue *string* queue *number*

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Tree	queue
Introduced	16.0.R1
Platforms	All

[**queue-id**] *number*

Synopsis	Queue identifier
Context	**configure** qos network-queue *string* queue *number*
Tree	queue
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** qos network-queue *string* queue *number* adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	**configure** qos network-queue *string* queue *number* adaptation-rule cir *keyword*
Tree	cir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

fir *keyword*

Synopsis	Constraint used when deriving the operational FIR value

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Context	**configure** qos network-queue *string* queue *number* adaptation-rule fir *keyword*
Tree	fir
Options	max, min, closest
Default	closest
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	**configure** qos network-queue *string* queue *number* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

avg-frame-overhead *decimal-number*

Synopsis	Average packet-to-frame encapsulation overhead
Context	**configure** qos network-queue *string* queue *number* avg-frame-overhead *decimal-number*
Tree	avg-frame-overhead
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1
Platforms	All

cbs *decimal-number*

Synopsis	Reserved buffer space for the queue
Context	**configure** qos network-queue *string* queue *number* cbs *decimal-number*
Tree	cbs
Range	0.00 to 100.00
Units	centipercent

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Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the **drop-tail** context
Context	**configure** qos network-queue *string* queue *number* drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the **low** context
Context	**configure** qos network-queue *string* queue *number* drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs *(number | keyword)*

Synopsis	Low drop-tail percent from MBS that is reduced
Context	**configure** qos network-queue *string* queue *number* drop-tail low percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

hs-alt-port-class-pool *boolean*

Synopsis	Use HS alternate class port pool buffer for traffic
Context	**configure** qos network-queue *string* queue *number* hs-alt-port-class-pool *boolean*
Tree	hs-alt-port-class-pool

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Default	false
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-class-weight *number*

Synopsis	Scheduling class weight
Context	**configure** qos network-queue *string* queue *number* hs-class-weight *number*
Tree	hs-class-weight
Range	1 | 2 | 4 | 8
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-mbs *decimal-number*

Synopsis	Percentage of buffer space allowed for the HS queue
Context	**configure** qos network-queue *string* queue *number* hs-mbs *decimal-number*
Tree	hs-mbs
Range	0.00 to 100.00
Default	100.00
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wred-queue

Synopsis	Enter the **hs-wred-queue** context
Context	**configure** qos network-queue *string* queue *number* hs-wred-queue
Tree	hs-wred-queue
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policy *reference*

Synopsis	Slope policy name

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Context	**configure** qos network-queue *string* queue *number* hs-wred-queue policy *reference*
Tree	policy
Reference	**configure** qos slope-policy *string*
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-weight *number*

Synopsis	WRR weight with which queue parents into the scheduler
Context	**configure** qos network-queue *string* queue *number* hs-wrr-weight *number*
Tree	hs-wrr-weight
Range	1 to 127
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

mbs *decimal-number*

Synopsis	Percentage of buffer space allowed for the queue
Context	**configure** qos network-queue *string* queue *number* mbs *decimal-number*
Tree	mbs
Range	0.00 to 100.00
Units	centipercent
Introduced	16.0.R1
Platforms	All

multipoint *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Apply as a multicast queue
Context	**configure** qos network-queue *string* queue *number* multipoint *boolean*
Tree	multipoint
Introduced	16.0.R1

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Platforms	All

port-parent

Synopsis	Enable the **port-parent** context
Context	**configure** qos network-queue *string* queue *number* port-parent
Tree	port-parent
Introduced	16.0.R1
Platforms	All

cir-level *number*

Synopsis	Port priority to receive bandwidth for within-CIR pass
Context	**configure** qos network-queue *string* queue *number* port-parent cir-level *number*
Tree	cir-level
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight to receive bandwidth at the within-CIR level
Context	**configure** qos network-queue *string* queue *number* port-parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Port priority level for above-CIR behavior
Context	**configure** qos network-queue *string* queue *number* port-parent level *number*
Tree	level

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Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	**configure** qos network-queue *string* queue *number* port-parent weight *number*
Tree	weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

queue-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Priority that this queue receives from the hardware level schedulers
Context	**configure** qos network-queue *string* queue *number* queue-type *keyword*
Tree	queue-type
Options	expedited, auto-expedited, best-effort
Default	auto-expedited
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** qos network-queue *string* queue *number* rate
Tree	rate
Introduced	16.0.R1
Platforms	All

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cir *number*

Synopsis	CIR percentage rate
Context	**configure** qos network-queue *string* queue *number* rate cir *number*
Tree	cir
Range	0 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

fir *number*

Synopsis	FIR percentage
Context	**configure** qos network-queue *string* queue *number* rate fir *number*
Tree	fir
Description	This command defines an additional percentage at which the system prioritizes the queue over other queues competing for the same bandwidth above that used by the CIR percentage.
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

pir *number*

Synopsis	PIR percentage rate
Context	**configure** qos network-queue *string* queue *number* rate pir *number*
Tree	pir
Range	1 to 100
Units	percent
Default	100
Introduced	16.0.R1
Platforms	All

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policer-control-policy [policer-control-policy-name] *string*

Synopsis	Enter the **policer-control-policy** list instance
Context	**configure** qos policer-control-policy *string*
Tree	policer-control-policy
Max. Instances	2047
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**policer-control-policy-name**] *string*

Synopsis	Policer control policy name
Context	**configure** qos policer-control-policy *string*
Tree	policer-control-policy
Description	This command specifies the policer control policy name. Each policer control policy must be created with a unique policy name.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

description *string*

Synopsis	Text description
Context	**configure** qos policer-control-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

root

Synopsis	Enter the **root** context
Context	**configure** qos policer-control-policy *string* root
Tree	root

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-percent-rate *decimal-number*

Synopsis	Maximum rate of the arbiter
Context	**configure** qos policer-control-policy *string* root max-percent-rate *decimal-number*
Tree	max-percent-rate
Range	0.01 to 100.00
Notes	The following elements are part of a choice: **max-percent-rate** or **max-rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate *(number | keyword)*

Synopsis	Maximum frame-based bandwidth limit of the arbiter
Context	**configure** qos policer-control-policy *string* root max-rate *(number | keyword)*
Tree	max-rate
Range	1 to 6400000000
Options	max
Default	max
Notes	The following elements are part of a choice: **max-percent-rate** or **max-rate**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis	Enter the **priority-mbs-thresholds** context
Context	**configure** qos policer-control-policy *string* root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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min-thresh-separation *(number | keyword)*

Synopsis	Minimum separation between policer discard thresholds
Context	**configure** qos policer-control-policy *string* root priority-mbs-thresholds min-thresh-separation *(number | keyword)*
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [priority-level] *number*

Synopsis	Enter the **priority** list instance
Context	**configure** qos policer-control-policy *string* root priority-mbs-thresholds priority *number*
Tree	priority
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**priority-level**] *number*

Synopsis	Priority level
Context	**configure** qos policer-control-policy *string* root priority-mbs-thresholds priority *number*
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

fixed-mbs *boolean*

Synopsis	Consider cumulative buffer space to be fixed
Context	**configure** qos policer-control-policy *string* root priority-mbs-thresholds priority *number* fixed-mbs *boolean*

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Tree	fixed-mbs
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution *(number | keyword)*

Synopsis	Minimum amount of cumulative buffer space
Context	**configure** qos policer-control-policy *string* root priority-mbs-thresholds priority *number* mbs-contribution *(number | keyword)*
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile-preferred *boolean*

Synopsis	Provide a preference to consume PIR bucket tokens
Context	**configure** qos policer-control-policy *string* root profile-preferred *boolean*
Tree	profile-preferred
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

tier [tier-id] *number*

Synopsis	Enter the **tier** list instance
Context	**configure** qos policer-control-policy *string* tier *number*
Tree	tier
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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[**tier-id**] *number*

Synopsis	Tier for policer control policer arbiter
Context	**configure** qos policer-control-policy *string* tier *number*
Tree	tier
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

arbiter [arbiter-name] *string*

Synopsis	Enter the **arbiter** list instance
Context	**configure** qos policer-control-policy *string* tier *number* arbiter *string*
Tree	arbiter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**arbiter-name**] *string*

Synopsis	Arbiter name
Context	**configure** qos policer-control-policy *string* tier *number* arbiter *string*
Tree	arbiter
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

arbiter-parent

Synopsis	Enter the **arbiter-parent** context
Context	**configure** qos policer-control-policy *string* tier *number* arbiter *string* arbiter-parent
Tree	arbiter-parent
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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arbiter-name *string*

Synopsis	Arbiter name
Context	**configure** qos policer-control-policy *string* tier *number* arbiter *string* arbiter-parent arbiter-name *string*
Tree	arbiter-name
Description	This command specifies the arbiter name. In tier 1, the arbiter name is not allowed and only the system reversed name "root" is accepted. The specified arbiter name must exist within the policer control policy at tier 1 or the parent command fails. When a tiered arbiter is acting as a parent for another tiered arbiter, the parent arbiter cannot be removed from the policy. The child arbiter receives all bandwidth directly from its parent arbiter (that receives bandwidth from the root arbiter).
String Length	1 to 32
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

level *number*

Synopsis	Level the child arbiter uses on its parent
Context	**configure** qos policer-control-policy *string* tier *number* arbiter *string* arbiter-parent level *number*
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

weight *number*

Synopsis	Weight attribute at parent level applied to children
Context	**configure** qos policer-control-policy *string* tier *number* arbiter *string* arbiter-parent weight *number*
Tree	weight
Description	This command defines how multiple children at the same parent strict level compete when insufficient bandwidth exists on the parent for that level. Each child's weight is divided by the sum of the active children's weights and the result is multiplied by the available bandwidth. If a child cannot receive its entire weighted fair share of bandwidth due to a defined child rate limit, the remainder of its bandwidth is distributed between the other children based on their weights.

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Range	1 to 100
Default	1
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

description *string*

Synopsis	Text description
Context	**configure** qos policer-control-policy *string* tier *number* arbiter *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate *decimal-number*

Synopsis	Maximum rate of the arbiter
Context	**configure** qos policer-control-policy *string* tier *number* arbiter *string* percent-rate *decimal-number*
Tree	percent-rate
Range	0.01 to 100.00
Notes	The following elements are part of a choice: (**percent-rate** and **reference-rate**) or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate *(number | keyword)*

Synopsis	Maximum frame-based bandwidth limit
Context	**configure** qos policer-control-policy *string* tier *number* arbiter *string* rate *(number | keyword)*
Tree	rate
Range	1 to 6400000000
Options	max
Default	max
Notes	The following elements are part of a choice: (**percent-rate** and **reference-rate**) or **rate**.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

reference-rate *keyword*

Synopsis	Reference rate
Context	**configure** qos policer-control-policy *string* tier *number* arbiter *string* reference-rate *keyword*
Tree	reference-rate
Options	local-limit, reference-port-limit
Default	local-limit
Notes	The following elements are part of a choice: (**percent-rate** and **reference-rate**) or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

port-scheduler-policy [name] *string*

Synopsis	Enter the **port-scheduler-policy** list instance
Context	**configure** qos port-scheduler-policy *string*
Tree	port-scheduler-policy
Max. Instances	1023
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	Port scheduler policy name
Context	**configure** qos port-scheduler-policy *string*
Tree	port-scheduler-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** qos port-scheduler-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dist-lag-rate-shared *boolean*

Synopsis	Share rates when port is part of LAG in distribute mode
Context	**configure** qos port-scheduler-policy *string* dist-lag-rate-shared *boolean*
Tree	dist-lag-rate-shared
Default	false
Introduced	16.0.R1
Platforms	All

group [group-name] *string*

Synopsis	Enter the **group** list instance
Context	**configure** qos port-scheduler-policy *string* group *string*
Tree	group
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[**group-name**] *string*

Synopsis	Weighted scheduler group name
Context	**configure** qos port-scheduler-policy *string* group *string*
Tree	group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

monitor-threshold *number*

Synopsis	Congestion monitoring threshold
Context	**configure** qos port-scheduler-policy *string* group *string* monitor-threshold *number*
Tree	monitor-threshold
Description	This command defines the congestion monitoring threshold for the desired monitoring entity under the port scheduler for per aggregate port scheduler rate, per individual level, and per group that is aggregating multiple levels. The congestion threshold is specified as a percentage of the configured PIR for the entity for which congestion monitoring is desired. For example, if the configured PIR for level 1 is 100000 kb/s, and the monitoring threshold is set to 90%, an event where the offered rate is greater than 90,000 kb/s is recorded. This event is shown as part of the cumulative count of congestion threshold exceeds since the last clearing of the counters.
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** qos port-scheduler-policy *string* group *string* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

cir *decimal-number*

Synopsis	Administrative CIR percent
Context	**configure** qos port-scheduler-policy *string* group *string* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Default	100.00

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Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	Administrative PIR percent
Context	**configure** qos port-scheduler-policy *string* group *string* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** qos port-scheduler-policy *string* group *string* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	Administrative CIR
Context	**configure** qos port-scheduler-policy *string* group *string* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

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pir *(number | keyword)*

Synopsis	Administrative PIR
Context	**configure** qos port-scheduler-policy *string* group *string* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

hqos-algorithm *keyword*

Synopsis	Port scheduler H-QoS algorithm
Context	**configure** qos port-scheduler-policy *string* hqos-algorithm *keyword*
Tree	hqos-algorithm
Description	This command configures the port scheduler H-QoS algorithm used to calculate the operational rates for the children connected to the port scheduler.
Options	default, above-offered-allowance-control
Default	default
Introduced	19.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

level [level-id] *number*

Synopsis	Enter the **level** list instance
Context	**configure** qos port-scheduler-policy *string* level *number*
Tree	level
Introduced	16.0.R1
Platforms	All

[**level-id**] *number*

Synopsis	Priority level this port scheduler policy
Context	**configure** qos port-scheduler-policy *string* level *number*

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Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

group *reference*

Synopsis	Associated group
Context	**configure** qos port-scheduler-policy *string* level *number* group *reference*
Tree	group
Reference	**configure** qos port-scheduler-policy *string* group *string*
Introduced	16.0.R1
Platforms	All

monitor-threshold *number*

Synopsis	Monitoring threshold of the configured rate
Context	**configure** qos port-scheduler-policy *string* level *number* monitor-threshold *number*
Tree	monitor-threshold
Description	This command specifies the configured rate as a percentage. If the offered rate exceeds the configured threshold, a counter monitoring the threshold is increased.
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** qos port-scheduler-policy *string* level *number* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

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cir *decimal-number*

Synopsis	Administrative CIR percent
Context	**configure** qos port-scheduler-policy *string* level *number* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Default	100.00
Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	Administrative PIR percent
Context	**configure** qos port-scheduler-policy *string* level *number* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** qos port-scheduler-policy *string* level *number* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	Administrative CIR
Context	**configure** qos port-scheduler-policy *string* level *number* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000

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Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	Administrative PIR
Context	**configure** qos port-scheduler-policy *string* level *number* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight of the level in the weighted scheduler group
Context	**configure** qos port-scheduler-policy *string* level *number* weight *number*
Tree	weight
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	All

max-percent-rate *decimal-number*

Synopsis	Maximum frame-based bandwidth limit
Context	**configure** qos port-scheduler-policy *string* max-percent-rate *decimal-number*
Tree	max-percent-rate
Range	0.01 to 100.00
Notes	The following elements are part of a choice: **max-percent-rate** or **max-rate**.

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Introduced	16.0.R1
Platforms	All

max-rate *(number | keyword)*

Synopsis	Maximum frame-based bandwidth limit
Context	**configure** qos port-scheduler-policy *string* max-rate *(number | keyword)*
Tree	max-rate
Range	1 to 6400000000
Options	max
Default	max
Notes	The following elements are part of a choice: **max-percent-rate** or **max-rate**.
Introduced	16.0.R1
Platforms	All

monitor-threshold *number*

Synopsis	Congestion monitoring threshold
Context	**configure** qos port-scheduler-policy *string* monitor-threshold *number*
Tree	monitor-threshold
Description	This command defines the congestion monitoring threshold for the desired monitoring entity under the port-scheduler for per aggregate port scheduler rate, per individual level, and per group that is aggregating multiple levels. The congestion threshold is specified as a percentage of the configured PIR rate for the entity for which congestion monitoring is desired. For example, if the configured PIR rate for level 1 is 1000,000 kb/s, and the monitoring threshold is set to 90%, an event where the offered rate is >90,000 kb/s is recorded. This event is shown as part of the cumulative count of congestion threshold exceeds since the last clearing of the counters.
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

orphan-overrides

Synopsis	Enter the **orphan-overrides** context

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Context	**configure** qos port-scheduler-policy *string* orphan-overrides
Tree	orphan-overrides
Introduced	16.0.R1
Platforms	All

cir-level *number*

Synopsis	Port priority level for within-CIR orphan behavior
Context	**configure** qos port-scheduler-policy *string* orphan-overrides cir-level *number*
Tree	cir-level
Description	This command defines the port priority that the orphan queues and schedulers use to receive bandwidth for their within-CIR offered-load. If the **cir-weight** command is set to the default value, the orphan queues and schedulers do not receive bandwidth during the port scheduler's within-CIR pass and this command setting is ignored.
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight to use in the within-CIR port priority level
Context	**configure** qos port-scheduler-policy *string* orphan-overrides cir-weight *number*
Tree	cir-weight
Description	This command defines the weight the orphan queues and schedulers will use in the within-CIR port priority level. When this command is set to the default value, the orphan queues and schedulers do not receive bandwidth during the port scheduler's within-CIR pass and the **cir-level** command is ignored.
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Port priority level for above-CIR orphan behavior
Context	**configure** qos port-scheduler-policy *string* orphan-overrides level *number*

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Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight to use in the above-CIR port priority level
Context	**configure** qos port-scheduler-policy *string* orphan-overrides weight *number*
Tree	weight
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

post-policer-mapping [name] *string*

Synopsis	Enter the **post-policer-mapping** list instance
Context	**configure** qos post-policer-mapping *string*
Tree	post-policer-mapping
Max. Instances	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**name**] *string*

Synopsis	Post-policer mapping policy name
Context	**configure** qos post-policer-mapping *string*
Tree	post-policer-mapping
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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description *string*

Synopsis	Text description
Context	**configure** qos post-policer-mapping *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

fc [fc-name] *keyword* profile *keyword*

Synopsis	Enter the **fc** list instance
Context	**configure** qos post-policer-mapping *string* fc *keyword* profile *keyword*
Tree	fc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**fc-name**] *keyword*

Synopsis	Forwarding class remapping
Context	**configure** qos post-policer-mapping *string* fc *keyword* profile *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile *keyword*

Synopsis	Egress packet profile remapping
Context	**configure** qos post-policer-mapping *string* fc *keyword* profile *keyword*
Tree	fc
Options	in, out, exceed, inplus
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

maps-to

Synopsis	Enter the **maps-to** context
Context	**configure** qos post-policer-mapping *string* fc *keyword* profile *keyword* maps-to
Tree	maps-to
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

fc *keyword*

Synopsis	Forwarding class remapping
Context	**configure** qos post-policer-mapping *string* fc *keyword* profile *keyword* maps-to fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile *keyword*

Synopsis	Egress packet profile remapping
Context	**configure** qos post-policer-mapping *string* fc *keyword* profile *keyword* maps-to profile *keyword*
Tree	profile
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue-group-redirect-list [name] *string*

Synopsis	Enter the **queue-group-redirect-list** list instance
Context	**configure** qos queue-group-redirect-list *string*
Tree	queue-group-redirect-list

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Max. Instances	2047
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	Queue group redirect list name
Context	**configure** qos queue-group-redirect-list *string*
Tree	queue-group-redirect-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

match [field-value] *number*

Synopsis	Enter the **match** list instance
Context	**configure** qos queue-group-redirect-list *string* match *number*
Tree	match
Max. Instances	16
Introduced	16.0.R1
Platforms	All

[**field-value**] *number*

Synopsis	Field value in the ingress or egress packet to match
Context	**configure** qos queue-group-redirect-list *string* match *number*
Tree	match
Description	This command specifies the value of the field in the ingress or egress packet. When there is a match, the packet is redirected to the specified queue group instance. The field must be a valid VXLAN VNI.
Range	1 to 16777215
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

instance *number*

Synopsis	Queue group instance for traffic redirection
Context	**configure** qos queue-group-redirect-list *string* match *number* instance *number*
Tree	instance
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Type for queue-group redirect list
Context	**configure** qos queue-group-redirect-list *string* type *keyword*
Tree	type
Options	vxlan-vni
Default	vxlan-vni
Introduced	16.0.R1
Platforms	All

queue-group-templates

Synopsis	Enter the **queue-group-templates** context
Context	**configure** qos queue-group-templates
Tree	queue-group-templates
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** qos queue-group-templates egress
Tree	egress

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Introduced	16.0.R1
Platforms	All

queue-group [egress-queue-group-name] *string*

Synopsis	Enter the **queue-group** list instance
Context	**configure** qos queue-group-templates egress queue-group *string*
Tree	queue-group
Introduced	16.0.R1
Platforms	All

[**egress-queue-group-name**] *string*

Synopsis	Egress queue group template name
Context	**configure** qos queue-group-templates egress queue-group *string*
Tree	queue-group
Description	This command specifies the name of the egress queue group template. Each ingress queue group template must be uniquely named within the system. Multiple ingress queue group templates may not share the same name. An ingress and egress queue group template may share the same name.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** qos queue-group-templates egress queue-group *string* description *string*
Tree	description
String Length	0 to 80
Introduced	16.0.R1
Platforms	All

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fc [fc-name] *keyword*

Synopsis	Enter the **fc** list instance
Context	**configure** qos queue-group-templates egress queue-group *string* fc *keyword*
Tree	fc
Introduced	16.0.R1
Platforms	All

[**fc-name**] *keyword*

Synopsis	Forwarding class name
Context	**configure** qos queue-group-templates egress queue-group *string* fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

queue

Synopsis	Enter the **queue** context
Context	**configure** qos queue-group-templates egress queue-group *string* fc *keyword* queue
Tree	queue
Introduced	16.0.R1
Platforms	All

none

Synopsis	No mid-pool is associated with this parent-pool
Context	**configure** qos queue-group-templates egress queue-group *string* fc *keyword* queue none
Tree	none
Notes	The following elements are part of a choice: **none** or **queue-id**.
Introduced	16.0.R1
Platforms	All

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queue-id *reference*

Synopsis	Queue defined in forwarding class mapping
Context	**configure** qos queue-group-templates egress queue-group *string* fc *keyword* queue queue-id *reference*
Tree	queue-id
Reference	**configure** qos queue-group-templates egress queue-group *string* queue *number*
Notes	The following elements are part of a choice: **none** or **queue-id**.
Introduced	16.0.R1
Platforms	All

hs-attachment-policy *reference*

Synopsis	HS attachment policy applied
Context	**configure** qos queue-group-templates egress queue-group *string* hs-attachment-policy *reference*
Tree	hs-attachment-policy
Reference	**configure** qos hs-attachment-policy *string*
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-group [group-id] *number*

Synopsis	Enter the **hs-wrr-group** list instance
Context	**configure** qos queue-group-templates egress queue-group *string* hs-wrr-group *number*
Tree	hs-wrr-group
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[**group-id**] *number*

Synopsis	HS WRR group identifier
Context	**configure** qos queue-group-templates egress queue-group *string* hs-wrr-group *number*
Tree	hs-wrr-group
Range	1 to 2

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** qos queue-group-templates egress queue-group *string* hs-wrr-group *number* adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	**configure** qos queue-group-templates egress queue-group *string* hs-wrr-group *number* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-class-weight *number*

Synopsis	Weight of scheduling class
Context	**configure** qos queue-group-templates egress queue-group *string* hs-wrr-group *number* hs-class-weight *number*
Tree	hs-class-weight
Range	1 | 2 | 4 | 8
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

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percent-rate *decimal-number*

Synopsis	Administrative PIR percent
Context	**configure** qos queue-group-templates egress queue-group *string* hs-wrr-group *number* percent-rate *decimal-number*
Tree	percent-rate
Range	0.01 to 100.00
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

rate *(number | keyword)*

Synopsis	Administrative PIR
Context	**configure** qos queue-group-templates egress queue-group *string* hs-wrr-group *number* rate *(number | keyword)*
Tree	rate
Range	1 to 2000000000
Units	kilobps
Options	max
Default	max
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policer [policer-id] *number*

Synopsis	Enter the **policer** list instance
Context	**configure** qos queue-group-templates egress queue-group *string* policer *number*
Tree	policer
Description	Commands in this context configure a QoS egress queue-group policer.
Introduced	16.0.R1
Platforms	All

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[**policer-id**] *number*

Synopsis	Egress queue-group policer ID
Context	**configure** qos queue-group-templates egress queue-group *string* policer *number*
Tree	policer
Description	This command specifies the queue-group policer that will either be created or edited within the queue group template. For VSR, the queue group template may only have up to eight policers (numbered 1 through 8).
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** qos queue-group-templates egress queue-group *string* policer *number* adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	**configure** qos queue-group-templates egress queue-group *string* policer *number* adaptation-rule cir *keyword*
Tree	cir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value

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Context	**configure** qos queue-group-templates egress queue-group *string* policer *number* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

adv-config-policy *reference*

Synopsis	Advanced QoS policy name
Context	**configure** qos queue-group-templates egress queue-group *string* policer *number* adv-config-policy *reference*
Tree	adv-config-policy
Reference	**configure** qos adv-config-policy *string*
Introduced	16.0.R1
Platforms	All

arbiter-parent

Synopsis	Enter the **arbiter-parent** context
Context	**configure** qos queue-group-templates egress queue-group *string* policer *number* arbiter-parent
Tree	arbiter-parent
Introduced	16.0.R1
Platforms	All

arbiter-name *string*

Synopsis	Arbiter name
Context	**configure** qos queue-group-templates egress queue-group *string* policer *number* arbiter-parent arbiter-name *string*
Tree	arbiter-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

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level *number*

Synopsis	Priority level
Context	**configure** qos queue-group-templates egress queue-group *string* policer *number* arbiter-parent level *number*
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight in the priority level
Context	**configure** qos queue-group-templates egress queue-group *string* policer *number* arbiter-parent weight *number*
Tree	weight
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	All

cbs *(number | keyword)*

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	**configure** qos queue-group-templates egress queue-group *string* policer *number* cbs *(number | keyword)*
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** qos queue-group-templates egress queue-group *string* policer *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

exceed-pir *boolean*

Synopsis	Forward packets exceeding the PIR as exceed-profile
Context	**configure** qos queue-group-templates egress queue-group *string* policer *number* exceed-pir *boolean*
Tree	exceed-pir
Default	false
Introduced	16.0.R1
Platforms	All

high-prio-only *(number | keyword)*

Synopsis	Percentage of MBS reserved for high priority traffic
Context	**configure** qos queue-group-templates egress queue-group *string* policer *number* high-prio-only *(number | keyword)*
Tree	high-prio-only
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

mbs *(number | keyword)*

Synopsis	Maximum buffer size for the template queue
Context	**configure** qos queue-group-templates egress queue-group *string* policer *number* mbs *(number | keyword)*

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Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	**configure** qos queue-group-templates egress queue-group *string* policer *number* packet-byte-offset *number*
Tree	packet-byte-offset
Range	-64 to 31
Default	0
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** qos queue-group-templates egress queue-group *string* policer *number* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	All

cir *decimal-number*

Synopsis	Administrative CIR
Context	**configure** qos queue-group-templates egress queue-group *string* policer *number* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00

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Default	0.00
Introduced	20.10.R1
Platforms	All

pir *decimal-number*

Synopsis	Administrative PIR
Context	**configure** qos queue-group-templates egress queue-group *string* policer *number* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	All

reference-rate *keyword*

Synopsis	Reference rate
Context	**configure** qos queue-group-templates egress queue-group *string* policer *number* percent-rate reference-rate *keyword*
Tree	reference-rate
Options	local-limit, reference-port-limit
Default	local-limit
Introduced	20.10.R1
Platforms	All

profile-capped *boolean*

Synopsis	Enforce a limit on the profile
Context	**configure** qos queue-group-templates egress queue-group *string* policer *number* profile-capped *boolean*
Tree	profile-capped
Default	false
Introduced	16.0.R1
Platforms	All

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rate

Synopsis	Enter the **rate** context
Context	**configure** qos queue-group-templates egress queue-group *string* policer *number* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	Administrative CIR
Context	**configure** qos queue-group-templates egress queue-group *string* policer *number* rate cir *(number | keyword)*
Tree	cir
Range	0 to 2000000000
Units	kilobps
Options	max
Default	0
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	Administrative PIR
Context	**configure** qos queue-group-templates egress queue-group *string* policer *number* rate pir *(number | keyword)*
Tree	pir
Range	1 to 2000000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

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stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	**configure** qos queue-group-templates egress queue-group *string* policer *number* stat-mode *keyword*
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Default	minimal
Introduced	16.0.R1
Platforms	All

queue [queue-id] *number*

Synopsis	Enter the **queue** list instance
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number*
Tree	queue
Introduced	16.0.R1
Platforms	All

[**queue-id**] *number*

Synopsis	Egress Queue-Group queue identifier
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number*
Tree	queue
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* adaptation-rule
Tree	adaptation-rule

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Introduced	16.0.R1
Platforms	All

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* adaptation-rule cir *keyword*
Tree	cir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

adv-config-policy *reference*

Synopsis	Name of the advanced configuration policy
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* adv-config-policy *reference*
Tree	adv-config-policy
Reference	**configure** qos adv-config-policy *string*
Introduced	16.0.R1
Platforms	All

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burst-limit *(number | keyword)*

Synopsis	Explicit shaping burst size of a queue
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* burst-limit *(number | keyword)*
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

cbs *(number | keyword)*

Synopsis	Reserved buffer space for the queue
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* cbs *(number | keyword)*
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the **drop-tail** context
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

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exceed

Synopsis	Enter the **exceed** context
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* drop-tail exceed
Tree	exceed
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs *(number | keyword)*

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* drop-tail exceed percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

high

Synopsis	Enter the **high** context
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* drop-tail high
Tree	high
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs *(number | keyword)*

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* drop-tail high percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Range	0 to 100

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Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

highplus

Synopsis	Enter the **highplus** context
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* drop-tail highplus
Tree	highplus
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs *(number | keyword)*

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* drop-tail highplus percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the **low** context
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

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percent-reduction-from-mbs *(number | keyword)*

Synopsis	Low drop-tail percent from MBS that is reduced
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* drop-tail low percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

dynamic-mbs *boolean*

Synopsis	Allow MBS size modification to maintain maximum latency
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* dynamic-mbs *boolean*
Tree	dynamic-mbs
Default	false
Introduced	16.0.R1
Platforms	All

hs-alt-port-class-pool *boolean*

Synopsis	Use HS alternate class port pool buffer for traffic
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* hs-alt-port-class-pool *boolean*
Tree	hs-alt-port-class-pool
Default	false
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-class-weight *number*

Synopsis	Scheduling class weight
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* hs-class-weight *number*

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Tree	hs-class-weight
Range	1 | 2 | 4 | 8
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wred-queue

Synopsis	Enter the **hs-wred-queue** context
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* hs-wred-queue
Tree	hs-wred-queue
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policy *reference*

Synopsis	Slope policy name
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* hs-wred-queue policy *reference*
Tree	policy
Reference	**configure** qos slope-policy *string*
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-weight *number*

Synopsis	WRR weight with which queue parents into the scheduler
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* hs-wrr-weight *number*
Tree	hs-wrr-weight
Range	1 to 127
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

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mbs *(number | keyword)*

Synopsis	Buffer space allowed for the queue
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* mbs *(number | keyword)*
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

packet-byte-offset *number*

Synopsis	Packet byte offset for addition of policing information
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* packet-byte-offset *number*
Tree	packet-byte-offset
Range	-64 to 31
Default	0
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

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cir *decimal-number*

Synopsis	Administrative CIR percent
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	Administrative PIR percent
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

reference-rate *keyword*

Synopsis	Reference rate
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* percent-rate reference-rate *keyword*
Tree	reference-rate
Options	port-limit, local-limit, reference-port-limit
Default	port-limit
Introduced	20.10.R1
Platforms	All

port-parent

Synopsis	Enable the **port-parent** context
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* port-parent

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Tree	port-parent
Notes	The following elements are part of a choice: **port-parent** or **scheduler-parent**.
Introduced	16.0.R1
Platforms	All

cir-level *number*

Synopsis	Port priority to receive bandwidth for within-CIR pass
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* port-parent cir-level *number*
Tree	cir-level
Range	0 to 8
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* port-parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Port priority for bandwidth for above-CIR offered load
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* port-parent level *number*
Tree	level
Range	1 to 8
Introduced	16.0.R1
Platforms	All

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weight *number*

Synopsis	Weight used at above-CIR port priority level
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* port-parent weight *number*
Tree	weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

queue-delay *number*

Synopsis	Target queue delay for forwarding packets through queue
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* queue-delay *number*
Tree	queue-delay
Range	1 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

queue-type *keyword*

Synopsis	Method used to service queue from hardware perspective
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* queue-type *keyword*
Tree	queue-type
Options	expedited, best-effort
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* rate
Tree	rate

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Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	Administrative CIR
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* rate cir *(number | keyword)*
Tree	cir
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	Administrative PIR
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* rate pir *(number | keyword)*
Tree	pir
Range	1 to 2000000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

scheduler-parent

Synopsis	Enable the **scheduler-parent** context
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* scheduler-parent
Tree	scheduler-parent
Notes	The following elements are part of a choice: **port-parent** or **scheduler-parent**.

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Introduced	16.0.R1
Platforms	All

cir-level *number*

Synopsis	Level of priority while feeding to the parent
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* scheduler-parent cir-level *number*
Tree	cir-level
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* scheduler-parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level of priority while feeding to the parent
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* scheduler-parent level *number*
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

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scheduler-name *string*

Synopsis	Parent scheduler name
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* scheduler-parent scheduler-name *string*
Tree	scheduler-name
Description	This command associates a scheduler name to a queue. The scheduler name must have previously been defined within an existing scheduler policy and exist on each SAP the queue is created on. There are no checks performed to ensure that the scheduler name exists within an existing scheduler policy. Until the scheduler name exists on the egress SAP, the queue operates in an orphaned state.
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight used by the scheduler for feeding the queue
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* scheduler-parent weight *number*
Tree	weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

wred-queue

Synopsis	Enter the **wred-queue** context
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* wred-queue
Tree	wred-queue
Introduced	16.0.R1
Platforms	All

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mode *keyword*

Synopsis	Pool association to allow queue-specific WRED slopes
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* wred-queue mode *keyword*
Tree	mode
Options	native, pool-per-queue
Introduced	16.0.R1
Platforms	All

policy *reference*

Synopsis	Slope policy name
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* wred-queue policy *reference*
Tree	policy
Reference	**configure** qos slope-policy *string*
Introduced	16.0.R1
Platforms	All

usage *keyword*

Synopsis	Congestion control type
Context	**configure** qos queue-group-templates egress queue-group *string* queue *number* wred-queue usage *keyword*
Tree	usage
Options	auto, exceed-low
Introduced	16.0.R1
Platforms	All

queues-hqos-manageable *boolean*

Synopsis	Manage queues through the Hierarchical QoS process
Context	**configure** qos queue-group-templates egress queue-group *string* queues-hqos-manageable *boolean*
Tree	queues-hqos-manageable
Default	true

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, VSR

ingress

Synopsis	Enter the **ingress** context
Context	**configure** qos queue-group-templates ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

queue-group [ingress-queue-group-name] *string*

Synopsis	Enter the **queue-group** list instance
Context	**configure** qos queue-group-templates ingress queue-group *string*
Tree	queue-group
Introduced	16.0.R1
Platforms	All

[ingress-queue-group-name] *string*

Synopsis	Ingress queue group template name
Context	**configure** qos queue-group-templates ingress queue-group *string*
Tree	queue-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** qos queue-group-templates ingress queue-group *string* description *string*
Tree	description

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String Length	1 to 80
Introduced	16.0.R1
Platforms	All

policer [policer-id] *number*

Synopsis	Enter the **policer** list instance
Context	**configure** qos queue-group-templates ingress queue-group *string* policer *number*
Tree	policer
Introduced	16.0.R1
Platforms	All

[**policer-id**] *number*

Synopsis	Ingress Queue-Group Policer identifier
Context	**configure** qos queue-group-templates ingress queue-group *string* policer *number*
Tree	policer
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** qos queue-group-templates ingress queue-group *string* policer *number* adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	**configure** qos queue-group-templates ingress queue-group *string* policer *number* adaptation-rule cir *keyword*

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Tree	cir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	**configure** qos queue-group-templates ingress queue-group *string* policer *number* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

adv-config-policy *reference*

Synopsis	Advanced QoS policy name
Context	**configure** qos queue-group-templates ingress queue-group *string* policer *number* adv-config-policy *reference*
Tree	adv-config-policy
Reference	**configure** qos adv-config-policy *string*
Introduced	16.0.R1
Platforms	All

arbiter-parent

Synopsis	Enter the **arbiter-parent** context
Context	**configure** qos queue-group-templates ingress queue-group *string* policer *number* arbiter-parent
Tree	arbiter-parent
Introduced	16.0.R1
Platforms	All

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arbiter-name *string*

Synopsis	Arbiter name
Context	**configure** qos queue-group-templates ingress queue-group *string* policer *number* arbiter-parent arbiter-name *string*
Tree	arbiter-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level of priority while feeding to the parent
Context	**configure** qos queue-group-templates ingress queue-group *string* policer *number* arbiter-parent level *number*
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight used by the arbiter for feeding the policer
Context	**configure** qos queue-group-templates ingress queue-group *string* policer *number* arbiter-parent weight *number*
Tree	weight
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	All

cbs *(number | keyword)*

Synopsis	Exceed threshold of the CIR leaky bucket of the policer

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Context	**configure** qos queue-group-templates ingress queue-group *string* policer *number* cbs *(number | keyword)*
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** qos queue-group-templates ingress queue-group *string* policer *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

high-prio-only *(number | keyword)*

Synopsis	Percentage of MBS reserved for high priority traffic
Context	**configure** qos queue-group-templates ingress queue-group *string* policer *number* high-prio-only *(number | keyword)*
Tree	high-prio-only
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

mbs *(number | keyword)*

Synopsis	Maximum buffer size for the template queue

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Context	**configure** qos queue-group-templates ingress queue-group *string* policer *number* mbs *(number | keyword)*
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	**configure** qos queue-group-templates ingress queue-group *string* policer *number* packet-byte-offset *number*
Tree	packet-byte-offset
Range	-32 to 31
Default	0
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** qos queue-group-templates ingress queue-group *string* policer *number* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.2.R1
Platforms	All

cir *decimal-number*

Synopsis	Administrative CIR
Context	**configure** qos queue-group-templates ingress queue-group *string* policer *number* percent-rate cir *decimal-number*

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Tree	cir
Range	0.00 to 100.00
Default	0.00
Introduced	20.2.R1
Platforms	All

pir *decimal-number*

Synopsis	Administrative PIR
Context	**configure** qos queue-group-templates ingress queue-group *string* policer *number* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	20.2.R1
Platforms	All

profile-capped *boolean*

Synopsis	Enforce a limit on the profile
Context	**configure** qos queue-group-templates ingress queue-group *string* policer *number* profile-capped *boolean*
Tree	profile-capped
Default	false
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** qos queue-group-templates ingress queue-group *string* policer *number* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

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cir *(number | keyword)*

Synopsis	Administrative CIR
Context	**configure** qos queue-group-templates ingress queue-group *string* policer *number* rate cir *(number | keyword)*
Tree	cir
Range	0 to 2000000000
Units	kilobps
Options	max
Default	0
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	Administrative PIR
Context	**configure** qos queue-group-templates ingress queue-group *string* policer *number* rate pir *(number | keyword)*
Tree	pir
Range	1 to 2000000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	**configure** qos queue-group-templates ingress queue-group *string* policer *number* stat-mode *keyword*
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Default	minimal
Introduced	16.0.R1

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Platforms	All

queue [queue-id] *number*

Synopsis	Enter the **queue** list instance
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number*
Tree	queue
Introduced	16.0.R1
Platforms	All

[**queue-id**] *number*

Synopsis	Ingress Queue-Group Queue identifier
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number*
Tree	queue
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir *keyword*

Synopsis	Constraint for deriving operational CIR for the queue
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* adaptation-rule cir *keyword*
Tree	cir
Options	max, min, closest

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Default	closest
Introduced	16.0.R1
Platforms	All

fir *keyword*

Synopsis	Constraint for deriving operational FIR for the queue
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* adaptation-rule fir *keyword*
Tree	fir
Options	max, min, closest
Default	closest
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

pir *keyword*

Synopsis	Constraint for deriving operational FIR for the queue
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

adv-config-policy *reference*

Synopsis	Advanced QoS policy name
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* adv-config-policy *reference*
Tree	adv-config-policy
Reference	**configure** qos adv-config-policy *string*
Introduced	16.0.R1
Platforms	All

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burst-limit *(number | keyword)*

Synopsis	Explicit shaping burst size of a queue
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* burst-limit *(number | keyword)*
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

cbs *(number | keyword)*

Synopsis	Reserved buffer space for the queue
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* cbs *(number | keyword)*
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

cir-non-profiling *boolean*

Synopsis	Prevent profile modification of CIR dependent packet
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* cir-non-profiling *boolean*
Tree	cir-non-profiling
Description	When configured to **true**, the system prevents the modification of the profile of a packet-dependent queue rate compared to its configured CIR. The CIR continues to be used to affect the scheduling priority of a queue. This command is only supported on hardware that is FP4-based and later and is ignored when the related policy is applied to FP3-based hardware.

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This command should not be configured under an ingress queue group template queue associated with a LAG which spans FP4-based and later and FP3-based hardware as the resulting operation could be different depending on which hardware type the traffic ingresses.

Default	false
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

drop-tail

Synopsis	Enter the **drop-tail** context
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the **low** context
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs *(number | keyword)*

Synopsis	Low drop-tail percent from MBS that is reduced
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* drop-tail low percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

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mbs *(number | keyword)*

Synopsis	Maximum buffer space that is allowed for queue
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* mbs *(number | keyword)*
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

multipoint *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Create an ingress multipoint queue
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* multipoint *boolean*
Tree	multipoint
Default	false
Introduced	16.0.R1
Platforms	All

packet-byte-offset *number*

Synopsis	Packet size modification for queue accounting
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* packet-byte-offset *number*
Tree	packet-byte-offset
Range	-32 to 31
Default	0
Introduced	16.0.R1

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Platforms	All

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	All

cir *decimal-number*

Synopsis	Administrative CIR
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Default	0.00
Notes	The following elements are part of a choice: (**cir** and **fir**) or **police**.
Introduced	20.10.R1
Platforms	All

fir *decimal-number*

Synopsis	Administrative FIR
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* percent-rate fir *decimal-number*
Tree	fir
Range	0.00 to 100.00
Default	0.00
Notes	The following elements are part of a choice: (**cir** and **fir**) or **police**.
Introduced	20.10.R1
Platforms	All

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pir *decimal-number*

Synopsis	Administrative PIR
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	All

police

Synopsis	Drop out-of-profile traffic feeding into physical queue
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* percent-rate police
Tree	police
Notes	The following elements are part of a choice: (**cir** and **fir**) or **police**.
Introduced	20.10.R1
Platforms	All

reference-rate *keyword*

Synopsis	Reference rate
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* percent-rate reference-rate *keyword*
Tree	reference-rate
Options	port-limit, local-limit, reference-port-limit
Default	port-limit
Introduced	20.10.R1
Platforms	All

queue-mode *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

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Synopsis	Queue operational mode for explicitly profiled packets
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* queue-mode *keyword*
Tree	queue-mode
Options	priority, profile
Default	priority
Introduced	16.0.R1
Platforms	All

queue-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Priority that this queue receives from the hardware level schedulers
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* queue-type *keyword*
Tree	queue-type
Options	expedited, best-effort
Default	best-effort
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	Administrative CIR

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Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* rate cir *(number | keyword)*
Tree	cir
Range	0 to 2000000000
Units	kilobps
Options	max
Default	0
Notes	The following elements are part of a choice: (**cir** and **fir**) or **police**.
Introduced	16.0.R1
Platforms	All

fir *(number | keyword)*

Synopsis	Administrative FIR
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* rate fir *(number | keyword)*
Tree	fir
Range	0 to 2000000000
Units	kilobps
Options	max
Default	0
Notes	The following elements are part of a choice: (**cir** and **fir**) or **police**.
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

pir *(number | keyword)*

Synopsis	Administrative PIR
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* rate pir *(number | keyword)*
Tree	pir
Range	1 to 2000000000
Units	kilobps
Options	max
Default	max

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Introduced	16.0.R1
Platforms	All

police

Synopsis	Drop out-of-profile traffic feeding into queue instance
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* rate police
Tree	police
Notes	The following elements are part of a choice: (**cir** and **fir**) or **police**.
Introduced	16.0.R1
Platforms	All

scheduler-parent

Synopsis	Enter the **scheduler-parent** context
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* scheduler-parent
Tree	scheduler-parent
Introduced	16.0.R1
Platforms	All

cir-level *number*

Synopsis	Level of priority while feeding to the parent
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* scheduler-parent cir-level *number*
Tree	cir-level
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level

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Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* scheduler-parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level of priority while feeding to the parent
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* scheduler-parent level *number*
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

scheduler-name *string*

Synopsis	Scheduler name
Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* scheduler-parent scheduler-name *string*
Tree	scheduler-name
Description	This command associates a scheduler name to a queue. The scheduler name must have previously been defined within an existing scheduler policy and exist on each SAP the queue is created on. There are no checks performed to ensure that the scheduler name exists within an existing scheduler policy. Until the scheduler name exists on the egress SAP, the queue operates in an orphaned state.
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight used by the scheduler for feeding the queue

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Context	**configure** qos queue-group-templates ingress queue-group *string* queue *number* scheduler-parent weight *number*
Tree	weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

sap-egress [sap-egress-policy-name] *string*

Synopsis	Enter the **sap-egress** list instance
Context	**configure** qos sap-egress *string*
Tree	sap-egress
Introduced	16.0.R1
Platforms	All

[**sap-egress-policy-name**] *string*

Synopsis	Policy name
Context	**configure** qos sap-egress *string*
Tree	sap-egress
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** qos sap-egress *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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dot1p [dot1p-value] *number*

Synopsis	Enter the **dot1p** list instance
Context	**configure** qos sap-egress *string* dot1p *number*
Tree	dot1p
Introduced	16.0.R1
Platforms	All

[**dot1p-value**] *number*

Synopsis	Dot1p value to match in the packet
Context	**configure** qos sap-egress *string* dot1p *number*
Tree	dot1p
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	**configure** qos sap-egress *string* dot1p *number* fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

profile *keyword*

Synopsis	Default profile for the ingressing traffic
Context	**configure** qos sap-egress *string* dot1p *number* profile *keyword*
Tree	profile
Options	in, out, de, exceed, inplus
Introduced	16.0.R1
Platforms	All

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dscp [dscp-name] *keyword*

Synopsis	Enter the **dscp** list instance
Context	**configure** qos sap-egress *string* dscp *keyword*
Tree	dscp
Introduced	16.0.R1
Platforms	All

[**dscp-name**] *keyword*

Synopsis	DSCP name to perform reclassification actions
Context	**configure** qos sap-egress *string* dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	**configure** qos sap-egress *string* dscp *keyword* fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

profile *keyword*

Synopsis	Default profile for the ingressing traffic
Context	**configure** qos sap-egress *string* dscp *keyword* profile *keyword*
Tree	profile

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Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

ethernet-ctag *boolean*

Synopsis	Tag value for dot1p and DE (Drop-Eligible) that are used by all dot1-p entries
Context	**configure** qos sap-egress *string* ethernet-ctag *boolean*
Tree	ethernet-ctag
Default	false
Introduced	16.0.R1
Platforms	All

fc [fc-name] *keyword*

Synopsis	Enter the **fc** list instance
Context	**configure** qos sap-egress *string* fc *keyword*
Tree	fc
Introduced	16.0.R1
Platforms	All

[**fc-name**] *keyword*

Synopsis	Forwarding class
Context	**configure** qos sap-egress *string* fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

de-mark

Synopsis	Enable the **de-mark** context
Context	**configure** qos sap-egress *string* fc *keyword* de-mark

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Tree	de-mark
Introduced	16.0.R1
Platforms	All

force *number*

Synopsis	DE value
Context	**configure** qos sap-egress *string* fc *keyword* de-mark force *number*
Tree	force
Range	0 to 1
Introduced	16.0.R1
Platforms	All

de-mark-inner

Synopsis	Enable the **de-mark-inner** context
Context	**configure** qos sap-egress *string* fc *keyword* de-mark-inner
Tree	de-mark-inner
Introduced	16.0.R1
Platforms	All

force *number*

Synopsis	DE value to set in inner VLAN tag
Context	**configure** qos sap-egress *string* fc *keyword* de-mark-inner force *number*
Tree	force
Range	0 to 1
Introduced	16.0.R1
Platforms	All

de-mark-outer

Synopsis	Enable the **de-mark-outer** context
Context	**configure** qos sap-egress *string* fc *keyword* de-mark-outer
Tree	de-mark-outer

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Introduced	16.0.R1
Platforms	All

force *number*

Synopsis	DE value to set in outer VLAN tag
Context	**configure** qos sap-egress *string* fc *keyword* de-mark-outer force *number*
Tree	force
Range	0 to 1
Introduced	16.0.R1
Platforms	All

dot1p

Synopsis	Enter the **dot1p** context
Context	**configure** qos sap-egress *string* fc *keyword* dot1p
Tree	dot1p
Introduced	16.0.R1
Platforms	All

exceed-profile *number*

Synopsis	Dot1p value for exceed-profile frames
Context	**configure** qos sap-egress *string* fc *keyword* dot1p exceed-profile *number*
Tree	exceed-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

in-profile *number*

Synopsis	Dot1p value for in-profile frames
Context	**configure** qos sap-egress *string* fc *keyword* dot1p in-profile *number*
Tree	in-profile
Range	0 to 7

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Introduced	16.0.R1
Platforms	All

out-profile *number*

Synopsis	Dot1p value for out-of-profile frames
Context	**configure** qos sap-egress *string* fc *keyword* dot1p out-profile *number*
Tree	out-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

dot1p-inner

Synopsis	Enter the **dot1p-inner** context
Context	**configure** qos sap-egress *string* fc *keyword* dot1p-inner
Tree	dot1p-inner
Introduced	16.0.R1
Platforms	All

exceed-profile *number*

Synopsis	Inner Dot1p value for exceed-profile frames
Context	**configure** qos sap-egress *string* fc *keyword* dot1p-inner exceed-profile *number*
Tree	exceed-profile
Range	0 to 7
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

in-profile *number*

Synopsis	Inner Dot1p value for in-profile frames
Context	**configure** qos sap-egress *string* fc *keyword* dot1p-inner in-profile *number*
Tree	in-profile
Range	0 to 7

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Introduced	16.0.R1
Platforms	All

out-profile *number*

Synopsis	Inner Dot1p value for out-of-profile frames
Context	**configure** qos sap-egress *string* fc *keyword* dot1p-inner out-profile *number*
Tree	out-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

dot1p-outer

Synopsis	Enter the **dot1p-outer** context
Context	**configure** qos sap-egress *string* fc *keyword* dot1p-outer
Tree	dot1p-outer
Introduced	16.0.R1
Platforms	All

exceed-profile *number*

Synopsis	Outer Dot1p value for exceed-profile frames
Context	**configure** qos sap-egress *string* fc *keyword* dot1p-outer exceed-profile *number*
Tree	exceed-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

in-profile *number*

Synopsis	Outer Dot1p value for in-profile frames
Context	**configure** qos sap-egress *string* fc *keyword* dot1p-outer in-profile *number*
Tree	in-profile
Range	0 to 7

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Introduced	16.0.R1
Platforms	All

out-profile *number*

Synopsis	Outer Dot1p value for out-of-profile frames
Context	**configure** qos sap-egress *string* fc *keyword* dot1p-outer out-profile *number*
Tree	out-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

dscp

Synopsis	Enter the **dscp** context
Context	**configure** qos sap-egress *string* fc *keyword* dscp
Tree	dscp
Notes	The following elements are part of a choice: **dscp** or **prec**.
Introduced	16.0.R1
Platforms	All

exceed-profile *keyword*

Synopsis	DSCP name for exceed-profile frames
Context	**configure** qos sap-egress *string* fc *keyword* dscp exceed-profile *keyword*
Tree	exceed-profile
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

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in-profile *keyword*

Synopsis	DSCP name for in-profile frames
Context	**configure** qos sap-egress *string* fc *keyword* dscp in-profile *keyword*
Tree	in-profile
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

out-profile *keyword*

Synopsis	DSCP name for out-of-profile frames
Context	**configure** qos sap-egress *string* fc *keyword* dscp out-profile *keyword*
Tree	out-profile
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

policer *reference*

Synopsis	Policer to forward the traffic
Context	**configure** qos sap-egress *string* fc *keyword* policer *reference*
Tree	policer
Reference	**configure** qos sap-egress *string* policer *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

port-redirect-group-queue

Synopsis	Enable the **port-redirect-group-queue** context

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Context	**configure** qos sap-egress *string* fc *keyword* port-redirect-group-queue
Tree	port-redirect-group-queue
Notes	The following elements are part of a choice: **port-redirect-group-queue**, **queue**, or **queue-group-queue**.
Introduced	16.0.R1
Platforms	All

queue *number*

Synopsis	Queue to forward the traffic
Context	**configure** qos sap-egress *string* fc *keyword* port-redirect-group-queue queue *number*
Tree	queue
Range	1 to 8
Introduced	16.0.R1
Platforms	All

prec

Synopsis	Enter the **prec** context
Context	**configure** qos sap-egress *string* fc *keyword* prec
Tree	prec
Notes	The following elements are part of a choice: **dscp** or **prec**.
Introduced	16.0.R1
Platforms	All

exceed-profile *number*

Synopsis	Precedence for exceed-profile frames
Context	**configure** qos sap-egress *string* fc *keyword* prec exceed-profile *number*
Tree	exceed-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

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in-profile *number*

Synopsis	Precedence value for in-profile frames
Context	**configure** qos sap-egress *string* fc *keyword* prec in-profile *number*
Tree	in-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

out-profile *number*

Synopsis	Precedence value for out-of-profile frames
Context	**configure** qos sap-egress *string* fc *keyword* prec out-profile *number*
Tree	out-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

queue *reference*

Synopsis	Queue to forward the traffic
Context	**configure** qos sap-egress *string* fc *keyword* queue *reference*
Tree	queue
Reference	**configure** qos sap-egress *string* queue *number*
Notes	The following elements are part of a choice: **port-redirect-group-queue**, **queue**, or **queue-group-queue**.
Introduced	16.0.R1
Platforms	All

queue-group-queue

Synopsis	Enable the **queue-group-queue** context
Context	**configure** qos sap-egress *string* fc *keyword* queue-group-queue
Tree	queue-group-queue
Notes	The following elements are part of a choice: **port-redirect-group-queue**, **queue**, or **queue-group-queue**.

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Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Instance ID
Context	**configure** qos sap-egress *string* fc *keyword* queue-group-queue instance *number*
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

queue *reference*

Synopsis	SAP egress queue ID
Context	**configure** qos sap-egress *string* fc *keyword* queue-group-queue queue *reference*
Tree	queue
Reference	**configure** qos queue-group-templates egress queue-group *string* queue *number*
Introduced	16.0.R1
Platforms	All

queue-group-name *reference*

Synopsis	Queue group to forward traffic
Context	**configure** qos sap-egress *string* fc *keyword* queue-group-queue queue-group-name *reference*
Tree	queue-group-name
Reference	**configure** qos queue-group-templates egress queue-group *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

hs-attachment-policy *reference*

Synopsis	HS attachment policy applied

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Context	**configure** qos sap-egress *string* hs-attachment-policy *reference*
Tree	hs-attachment-policy
Reference	**configure** qos hs-attachment-policy *string*
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-group [group-id] *number*

Synopsis	Enter the **hs-wrr-group** list instance
Context	**configure** qos sap-egress *string* hs-wrr-group *number*
Tree	hs-wrr-group
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[**group-id**] *number*

Synopsis	HS WRR group identifier
Context	**configure** qos sap-egress *string* hs-wrr-group *number*
Tree	hs-wrr-group
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** qos sap-egress *string* hs-wrr-group *number* adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value

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Context	**configure** qos sap-egress *string* hs-wrr-group *number* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-class-weight *number*

Synopsis	Weight of scheduling class
Context	**configure** qos sap-egress *string* hs-wrr-group *number* hs-class-weight *number*
Tree	hs-class-weight
Range	1 | 2 | 4 | 8
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

percent-rate *decimal-number*

Synopsis	Administrative PIR percent
Context	**configure** qos sap-egress *string* hs-wrr-group *number* percent-rate *decimal-number*
Tree	percent-rate
Range	0.01 to 100.00
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

rate *(number | keyword)*

Synopsis	Administrative PIR
Context	**configure** qos sap-egress *string* hs-wrr-group *number* rate *(number | keyword)*
Tree	rate
Range	1 to 2000000000
Units	kilobps
Options	max

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Default	max
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

ip-criteria

Synopsis	Enter the **ip-criteria** context
Context	**configure** qos sap-egress *string* ip-criteria
Tree	ip-criteria
Introduced	16.0.R1
Platforms	All

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** qos sap-egress *string* ip-criteria entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**entry-id**] *number*

Synopsis	IP Criteria Entry Index
Context	**configure** qos sap-egress *string* ip-criteria entry *number*
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enter the **action** context
Context	**configure** qos sap-egress *string* ip-criteria entry *number* action

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Tree	action
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	**configure** qos sap-egress *string* ip-criteria entry *number* action fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

policer *reference*

Synopsis	Policer identifier for the matched traffic
Context	**configure** qos sap-egress *string* ip-criteria entry *number* action policer *reference*
Tree	policer
Reference	**configure** qos sap-egress *string* policer *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

port-redirect-group-queue *boolean*

Synopsis	Use queue specified in egress access port queue group
Context	**configure** qos sap-egress *string* ip-criteria entry *number* action port-redirect-group-queue *boolean*
Tree	port-redirect-group-queue
Default	false
Introduced	16.0.R1
Platforms	All

profile *keyword*

Synopsis	Default profile for the matching traffic

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Context	**configure** qos sap-egress *string* ip-criteria entry *number* action profile *keyword*
Tree	profile
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

queue *number*

Synopsis	Queue used for matched traffic policed by local policer
Context	**configure** qos sap-egress *string* ip-criteria entry *number* action queue *number*
Tree	queue
Range	1 to 8
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Action for criteria entry
Context	**configure** qos sap-egress *string* ip-criteria entry *number* action type *keyword*
Tree	type
Options	ignore-match, accept
Default	ignore-match
Introduced	16.0.R1
Platforms	All

use-fc-mapped-queue *boolean*

Synopsis	Redirect policer output to the configured queues
Context	**configure** qos sap-egress *string* ip-criteria entry *number* action use-fc-mapped-queue *boolean*
Tree	use-fc-mapped-queue
Default	false
Introduced	16.0.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** qos sap-egress *string* ip-criteria entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the **match** context
Context	**configure** qos sap-egress *string* ip-criteria entry *number* match
Tree	match
Introduced	16.0.R1
Platforms	All

dscp *keyword*

Synopsis	DSCP value to match in the packet
Context	**configure** qos sap-egress *string* ip-criteria entry *number* match dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the **dst-ip** context
Context	**configure** qos sap-egress *string* ip-criteria entry *number* match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

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address *(ipv4-prefix-with-host-bits | ipv4-address)*

Synopsis	Destination IPv4 address for SAP QoS policy match
Context	**configure** qos sap-egress *string* ip-criteria entry *number* match dst-ip address *(ipv4-prefix-with-host-bits | ipv4-address)*
Tree	address
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	All

ip-prefix-list *reference*

Synopsis	List of IPv4 prefixes for the match criteria
Context	**configure** qos sap-egress *string* ip-criteria entry *number* match dst-ip ip-prefix-list *reference*
Tree	ip-prefix-list
Reference	**configure** qos match-list ip-prefix-list *string*
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	IP address mask to match with source IP of the packet
Context	**configure** qos sap-egress *string* ip-criteria entry *number* match dst-ip mask *string*
Tree	mask
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	All

dst-port

Synopsis	Enter the **dst-port** context
Context	**configure** qos sap-egress *string* ip-criteria entry *number* match dst-port
Tree	dst-port

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Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Value 'equal to' as match condition
Context	**configure** qos sap-egress *string* ip-criteria entry *number* match dst-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Value 'greater than' as match condition
Context	**configure** qos sap-egress *string* ip-criteria entry *number* match dst-port gt *number*
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Value 'less than' as match condition
Context	**configure** qos sap-egress *string* ip-criteria entry *number* match dst-port lt *number*
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

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range

Synopsis	Enter the **range** context
Context	**configure** qos sap-egress *string* ip-criteria entry *number* match dst-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the port range
Context	**configure** qos sap-egress *string* ip-criteria entry *number* match dst-port range end *number*
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the port range
Context	**configure** qos sap-egress *string* ip-criteria entry *number* match dst-port range start *number*
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

fragment *keyword*

Synopsis	Fragmented packets as the match criterion
Context	**configure** qos sap-egress *string* ip-criteria entry *number* match fragment *keyword*
Tree	fragment
Options	false, true
Introduced	16.0.R1

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Platforms	All

protocol *(number | keyword)*

Synopsis	IP protocol to match
Context	**configure** qos sap-egress *string* ip-criteria entry *number* match protocol *(number | keyword)*
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

src-ip

Synopsis	Enter the **src-ip** context
Context	**configure** qos sap-egress *string* ip-criteria entry *number* match src-ip
Tree	src-ip
Introduced	16.0.R1
Platforms	All

address *(ipv4-prefix-with-host-bits | ipv4-address)*

Synopsis	Source IPv4 address for SAP QoS policy match criterion
Context	**configure** qos sap-egress *string* ip-criteria entry *number* match src-ip address *(ipv4-prefix-with-host-bits | ipv4-address)*
Tree	address
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	All

ip-prefix-list *reference*

Synopsis	List of IPv4 prefixes for the match criteria

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Context	**configure** qos sap-egress *string* ip-criteria entry *number* match src-ip ip-prefix-list *reference*
Tree	ip-prefix-list
Reference	**configure** qos match-list ip-prefix-list *string*
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	IP address mask to match with source IP of the packet
Context	**configure** qos sap-egress *string* ip-criteria entry *number* match src-ip mask *string*
Tree	mask
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	All

src-port

Synopsis	Enter the **src-port** context
Context	**configure** qos sap-egress *string* ip-criteria entry *number* match src-port
Tree	src-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Value 'equal to' as match condition
Context	**configure** qos sap-egress *string* ip-criteria entry *number* match src-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

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gt *number*

Synopsis	Value 'greater than' as match condition
Context	**configure** qos sap-egress *string* ip-criteria entry *number* match src-port gt *number*
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Value 'less than' as match condition
Context	**configure** qos sap-egress *string* ip-criteria entry *number* match src-port lt *number*
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enter the **range** context
Context	**configure** qos sap-egress *string* ip-criteria entry *number* match src-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the port range
Context	**configure** qos sap-egress *string* ip-criteria entry *number* match src-port range end *number*
Tree	end

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Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the port range
Context	**configure** qos sap-egress *string* ip-criteria entry *number* match src-port range start *number*
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

ipv6-criteria

Synopsis	Enter the **ipv6-criteria** context
Context	**configure** qos sap-egress *string* ipv6-criteria
Tree	ipv6-criteria
Introduced	16.0.R1
Platforms	All

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**entry-id**] *number*

Synopsis	IP Criteria Entry Index
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number*
Tree	entry
Range	1 to 65535

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enter the **action** context
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* action
Tree	action
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* action fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

policer *reference*

Synopsis	Policer identifier for the matched traffic
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* action policer *reference*
Tree	policer
Reference	**configure** qos sap-egress *string* policer *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

port-redirect-group-queue *boolean*

Synopsis	Use queue specified in egress access port queue group
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* action port-redirect-group-queue *boolean*

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Tree	port-redirect-group-queue
Default	false
Introduced	16.0.R1
Platforms	All

profile *keyword*

Synopsis	Default profile for the matching traffic
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* action profile *keyword*
Tree	profile
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

queue *number*

Synopsis	Queue used for matched traffic policed by local policer
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* action queue *number*
Tree	queue
Range	1 to 8
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Action for criteria entry
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* action type *keyword*
Tree	type
Options	ignore-match, accept
Default	ignore-match
Introduced	16.0.R1
Platforms	All

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use-fc-mapped-queue *boolean*

Synopsis	Redirect policer output to the configured queues
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* action use-fc-mapped-queue *boolean*
Tree	use-fc-mapped-queue
Default	false
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the **match** context
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* match
Tree	match
Introduced	16.0.R1
Platforms	All

dscp *keyword*

Synopsis	DSCP value to match in the packet
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* match dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

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Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the **dst-ip** context
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

address *(ipv6-prefix-with-host-bits | ipv6-address)*

Synopsis	Destination IPv6 address for SAP QoS policy match
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* match dst-ip address *(ipv6-prefix-with-host-bits | ipv6-address)*
Tree	address
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R1
Platforms	All

ipv6-prefix-list *reference*

Synopsis	IPv6 prefix list as match criterion for IPv6 addresses
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* match dst-ip ipv6-prefix-list *reference*
Tree	ipv6-prefix-list
Reference	**configure** qos match-list ipv6-prefix-list *string*
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *string*

Synopsis	IP address mask to match with destination IP of packet
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* match dst-ip mask *string*

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Tree	mask
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R1
Platforms	All

dst-port

Synopsis	Enter the **dst-port** context
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* match dst-port
Tree	dst-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Value 'equal to' as match condition
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* match dst-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Value 'greater than' as match condition
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* match dst-port gt *number*
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

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lt *number*

Synopsis	Value 'less than' as match condition
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* match dst-port lt *number*
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enter the **range** context
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* match dst-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the port range
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* match dst-port range end *number*
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the port range
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* match dst-port range start *number*
Tree	start
Range	0 to 65535

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Introduced	16.0.R1
Platforms	All

next-header *(number | keyword)*

Synopsis	IP protocol to match
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* match next-header *(number | keyword)*
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

src-ip

Synopsis	Enter the **src-ip** context
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* match src-ip
Tree	src-ip
Introduced	16.0.R1
Platforms	All

address *(ipv6-prefix-with-host-bits | ipv6-address)*

Synopsis	Source IPv6 address for SAP QoS policy match
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* match src-ip address *(ipv6-prefix-with-host-bits | ipv6-address)*
Tree	address
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R1
Platforms	All

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ipv6-prefix-list *reference*

Synopsis	IPv6 prefix list as match criterion for IPv6 addresses
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* match src-ip ipv6-prefix-list *reference*
Tree	ipv6-prefix-list
Reference	**configure** qos match-list ipv6-prefix-list *string*
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *string*

Synopsis	IP address mask to match with source IP of the packet
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* match src-ip mask *string*
Tree	mask
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R1
Platforms	All

src-port

Synopsis	Enter the **src-port** context
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* match src-port
Tree	src-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Value 'equal to' as match condition
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* match src-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1

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Platforms	All

gt *number*

Synopsis	Value 'greater than' as match condition
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* match src-port gt *number*
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Value 'less than' as match condition
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* match src-port lt *number*
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enter the **range** context
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* match src-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the port range

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Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* match src-port range end *number*
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the port range
Context	**configure** qos sap-egress *string* ipv6-criteria entry *number* match src-port range start *number*
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

parent-location *keyword*

Synopsis	Location where queues look to find parent scheduler
Context	**configure** qos sap-egress *string* parent-location *keyword*
Tree	parent-location
Options	auto, sla
Default	auto
Introduced	16.0.R1
Platforms	All

policer [policer-id] *number*

Synopsis	Enter the **policer** list instance
Context	**configure** qos sap-egress *string* policer *number*
Tree	policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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[**policer-id**] *number*

Synopsis	SAP egress policer ID
Context	**configure** qos sap-egress *string* policer *number*
Tree	policer
Range	1 to 63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** qos sap-egress *string* policer *number* adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	**configure** qos sap-egress *string* policer *number* adaptation-rule cir *keyword*
Tree	cir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	**configure** qos sap-egress *string* policer *number* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Default	closest
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

adv-config-policy *reference*

Synopsis	Advanced QoS policy name
Context	**configure** qos sap-egress *string* policer *number* adv-config-policy *reference*
Tree	adv-config-policy
Reference	**configure** qos adv-config-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

arbiter-parent

Synopsis	Enter the **arbiter-parent** context
Context	**configure** qos sap-egress *string* policer *number* arbiter-parent
Tree	arbiter-parent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

arbiter-name *string*

Synopsis	Arbiter name
Context	**configure** qos sap-egress *string* policer *number* arbiter-parent arbiter-name *string*
Tree	arbiter-name
Description	This command specifies an arbiter name. The policer is intended to become a child to one of the tiered arbiters with the specified arbiter name where an instance of the policer is created. If the specified arbiter name does not exist, the policer is placed in the orphan state.
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

level *number*

Synopsis	Level of priority while feeding to the parent
Context	**configure** qos sap-egress *string* policer *number* arbiter-parent level *number*

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Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

weight *number*

Synopsis	Weight used by the arbiter for feeding the policer
Context	**configure** qos sap-egress *string* policer *number* arbiter-parent weight *number*
Tree	weight
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs *(number | keyword)*

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	**configure** qos sap-egress *string* policer *number* cbs *(number | keyword)*
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

description *string*

Synopsis	Text description
Context	**configure** qos sap-egress *string* policer *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

dscp-prec-remarking *boolean*

Synopsis	Remark DSCP/precedence based on packet profile state
Context	**configure** qos sap-egress *string* policer *number* dscp-prec-remarking *boolean*
Tree	dscp-prec-remarking
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

exceed-pir *boolean*

Synopsis	Forward packets exceeding the PIR as exceed-profile
Context	**configure** qos sap-egress *string* policer *number* exceed-pir *boolean*
Tree	exceed-pir
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

high-prio-only *(number | keyword)*

Synopsis	Percentage of MBS reserved for high priority traffic
Context	**configure** qos sap-egress *string* policer *number* high-prio-only *(number | keyword)*
Tree	high-prio-only
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs *(number | keyword)*

Synopsis	Maximum burst tolerance allowed by the policer
Context	**configure** qos sap-egress *string* policer *number* mbs *(number | keyword)*

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Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	**configure** qos sap-egress *string* policer *number* packet-byte-offset *number*
Tree	packet-byte-offset
Range	-64 to 31
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** qos sap-egress *string* policer *number* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *decimal-number*

Synopsis	Administrative CIR percent
Context	**configure** qos sap-egress *string* policer *number* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *decimal-number*

Synopsis	Administrative PIR percent
Context	**configure** qos sap-egress *string* policer *number* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

reference-rate *keyword*

Synopsis	Reference rate
Context	**configure** qos sap-egress *string* policer *number* percent-rate reference-rate *keyword*
Tree	reference-rate
Options	local-limit, reference-port-limit
Default	local-limit
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

port-parent

Synopsis	Enable the **port-parent** context
Context	**configure** qos sap-egress *string* policer *number* port-parent
Tree	port-parent
Notes	The following elements are part of a choice: **port-parent** or **scheduler-parent**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir-level *number*

Synopsis	Port priority level for within-CIR offered load
Context	**configure** qos sap-egress *string* policer *number* port-parent cir-level *number*
Tree	cir-level

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Description	This command defines the port priority that the policer uses to receive bandwidth for its within-CIR offered load. If this command is set to the default value, the policer does not receive bandwidth during the port schedulers with-CIR pass and the **cir-weight** command is ignored.
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir-weight *number*

Synopsis	Weight to use in the within-CIR port priority level
Context	**configure** qos sap-egress *string* policer *number* port-parent cir-weight *number*
Tree	cir-weight
Description	This command defines the weight that the policer uses at the within-CIR port priority level. All CIR weight values from all weighted active policers, queues, and schedulers with a common port parent are added together. Each individual active weight is then divided by the total to determine the percentage of remaining bandwidth provided to the policer, queue, or scheduler after the higher priority level children have been serviced. A weight is considered active when the applicable policer, queue, or scheduler has not reached its maximum rate and still has packets to transmit. When this command is set to the default value, the policer receives bandwidth only after other children with a non-zero weight at this level have been serviced.
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

level *number*

Synopsis	Port priority level for above-CIR behavior
Context	**configure** qos sap-egress *string* policer *number* port-parent level *number*
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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weight *number*

Synopsis	Weight to use in the above-CIR port priority level
Context	**configure** qos sap-egress *string* policer *number* port-parent weight *number*
Tree	weight
Description	This command defines the weight that the policer uses at the above-CIR port priority level. All weight values from all weighted active policers, queues, and schedulers with a common port parent are added together. Each individual active weight is then divided by the total to determine the percentage of remaining bandwidth provided to the policer, queue, or scheduler after the higher priority level children have been serviced. A weight is considered to be active when the applicable policer, queue, or scheduler has not reached its maximum rate and still has packets to transmit. When this command is set to a value of 0, the policer receives bandwidth only after other children with a non-zero weight at this level.
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile-capped *boolean*

Synopsis	Enforce overall in-profile burst limit to CIR bucket
Context	**configure** qos sap-egress *string* policer *number* profile-capped *boolean*
Tree	profile-capped
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile-out-preserve *boolean*

Synopsis	Preserve the color of offered out-of-profile traffic
Context	**configure** qos sap-egress *string* policer *number* profile-out-preserve *boolean*
Tree	profile-out-preserve
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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rate

Synopsis	Enter the **rate** context
Context	**configure** qos sap-egress *string* policer *number* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *(number | keyword)*

Synopsis	Administrative CIR
Context	**configure** qos sap-egress *string* policer *number* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *(number | keyword)*

Synopsis	Administrative PIR
Context	**configure** qos sap-egress *string* policer *number* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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scheduler-parent

Synopsis	Enable the **scheduler-parent** context
Context	**configure** qos sap-egress *string* policer *number* scheduler-parent
Tree	scheduler-parent
Notes	The following elements are part of a choice: **port-parent** or **scheduler-parent**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir-level *number*

Synopsis	Port priority level for within-CIR offered load
Context	**configure** qos sap-egress *string* policer *number* scheduler-parent cir-level *number*
Tree	cir-level
Description	This command defines the hierarchy priority level when compared with other policers, queues, and schedulers that the policer uses to receive bandwidth for its within-CIR offered load. If this command is set to the default value, the policer does not receive bandwidth during the schedulers within-CIR pass and the **cir-weight** command is ignored.
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir-weight *number*

Synopsis	Weight to use in the within-CIR port priority level
Context	**configure** qos sap-egress *string* policer *number* scheduler-parent cir-weight *number*
Tree	cir-weight
Description	The command defines the relative weight of the policer in comparison with other child policers, queues, or schedulers competing for bandwidth on the parent scheduler name at the within-CIR priority level. A weight is considered to be active when the applicable policer, queue, or scheduler has not reached its maximum rate and still has packets to transmit. When this command is set to a value of 0, the policer receives bandwidth only after the other children with a non-zero weight at this level have been serviced.
Range	0 to 100
Default	1

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

level *number*

Synopsis	Priority level for bandwidth on the parent scheduler
Context	**configure** qos sap-egress *string* policer *number* scheduler-parent level *number*
Tree	level
Description	This command defines the priority level when compared with other policers, queues, and schedulers when competing for bandwidth on the parent scheduler. Children of the parent scheduler with a lower priority do not receive bandwidth until all children with a higher priority have either reached their maximum bandwidth or are idle. Children with the same level are serviced in relation to their relative weights.
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

scheduler-name *string*

Synopsis	Scheduler name
Context	**configure** qos sap-egress *string* policer *number* scheduler-parent scheduler-name *string*
Tree	scheduler-name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

weight *number*

Synopsis	Policer weight at the above-CIR priority level
Context	**configure** qos sap-egress *string* policer *number* scheduler-parent weight *number*
Tree	weight
Range	0 to 100
Default	1

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	**configure** qos sap-egress *string* policer *number* stat-mode *keyword*
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Default	minimal
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policers-hqos-manageable *boolean*

Synopsis	Manage policers through the Hierarchical QoS process
Context	**configure** qos sap-egress *string* policers-hqos-manageable *boolean*
Tree	policers-hqos-manageable
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, VSR

policy-id *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Egress SAP QoS policy ID
Context	**configure** qos sap-egress *string* policy-id *number*
Tree	policy-id
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

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post-policer-mapping *reference*

Synopsis	Post policer mapping policy applied to this policy
Context	**configure** qos sap-egress *string* post-policer-mapping *reference*
Tree	post-policer-mapping
Reference	**configure** qos post-policer-mapping *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

prec [prec-value] *number*

Synopsis	Enter the **prec** list instance
Context	**configure** qos sap-egress *string* prec *number*
Tree	prec
Introduced	16.0.R1
Platforms	All

[**prec-value**] *number*

Synopsis	Precedence value for which mapping is performed
Context	**configure** qos sap-egress *string* prec *number*
Tree	prec
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	**configure** qos sap-egress *string* prec *number* fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

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profile *keyword*

Synopsis	Default profile for the ingressing traffic
Context	**configure** qos sap-egress *string* prec *number* profile *keyword*
Tree	profile
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

queue [queue-id] *number*

Synopsis	Enter the **queue** list instance
Context	**configure** qos sap-egress *string* queue *number*
Tree	queue
Introduced	16.0.R1
Platforms	All

[**queue-id**] *number*

Synopsis	Egress Queue-Group queue identifier
Context	**configure** qos sap-egress *string* queue *number*
Tree	queue
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** qos sap-egress *string* queue *number* adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

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cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	**configure** qos sap-egress *string* queue *number* adaptation-rule cir *keyword*
Tree	cir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	**configure** qos sap-egress *string* queue *number* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

adv-config-policy *reference*

Synopsis	Name of the advanced configuration policy
Context	**configure** qos sap-egress *string* queue *number* adv-config-policy *reference*
Tree	adv-config-policy
Reference	**configure** qos adv-config-policy *string*
Introduced	16.0.R1
Platforms	All

agg-shaper-weight *number*

Synopsis	Aggregate shaper weight of the sap-egress queue
Context	**configure** qos sap-egress *string* queue *number* agg-shaper-weight *number*
Tree	agg-shaper-weight
Range	1 to 100

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Default	1
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

avg-frame-overhead *decimal-number*

Synopsis	Average packet-to-frame encapsulation overhead
Context	**configure** qos sap-egress *string* queue *number* avg-frame-overhead *decimal-number*
Tree	avg-frame-overhead
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1
Platforms	All

burst-limit *(number | keyword)*

Synopsis	Explicit shaping burst size of a queue
Context	**configure** qos sap-egress *string* queue *number* burst-limit *(number | keyword)*
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

cbs *(number | keyword)*

Synopsis	Reserved buffer space for the queue
Context	**configure** qos sap-egress *string* queue *number* cbs *(number | keyword)*
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Default	auto

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Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the **drop-tail** context
Context	**configure** qos sap-egress *string* queue *number* drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

exceed

Synopsis	Enter the **exceed** context
Context	**configure** qos sap-egress *string* queue *number* drop-tail exceed
Tree	exceed
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs *(number | keyword)*

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	**configure** qos sap-egress *string* queue *number* drop-tail exceed percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

high

Synopsis	Enter the **high** context
Context	**configure** qos sap-egress *string* queue *number* drop-tail high
Tree	high

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Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs *(number | keyword)*

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	**configure** qos sap-egress *string* queue *number* drop-tail high percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

highplus

Synopsis	Enter the **highplus** context
Context	**configure** qos sap-egress *string* queue *number* drop-tail highplus
Tree	highplus
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs *(number | keyword)*

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	**configure** qos sap-egress *string* queue *number* drop-tail highplus percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

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low

Synopsis	Enter the **low** context
Context	**configure** qos sap-egress *string* queue *number* drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs *(number | keyword)*

Synopsis	Low drop-tail percent from MBS that is reduced
Context	**configure** qos sap-egress *string* queue *number* drop-tail low percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

fir-burst-limit *(number | keyword)*

Synopsis	Burst limit for FIR
Context	**configure** qos sap-egress *string* queue *number* fir-burst-limit *(number | keyword)*
Tree	fir-burst-limit
Description	This command configures a burst limit for the FIR of the specified queue. If the keyword **auto** is used, the FIR burst limit is based on the PIR. In this case, it is recommended to use the explicit PIR value in the queue configuration.
Range	1 to 102400
Units	bytes
Options	auto
Default	auto
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

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hs-alt-port-class-pool *boolean*

Synopsis	Use HS alternate class port pool buffer for traffic
Context	**configure** qos sap-egress *string* queue *number* hs-alt-port-class-pool *boolean*
Tree	hs-alt-port-class-pool
Default	false
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-class-weight *number*

Synopsis	Scheduling class weight
Context	**configure** qos sap-egress *string* queue *number* hs-class-weight *number*
Tree	hs-class-weight
Range	1 | 2 | 4 | 8
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wred-queue

Synopsis	Enter the **hs-wred-queue** context
Context	**configure** qos sap-egress *string* queue *number* hs-wred-queue
Tree	hs-wred-queue
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policy *reference*

Synopsis	Slope policy name
Context	**configure** qos sap-egress *string* queue *number* hs-wred-queue policy *reference*
Tree	policy
Reference	**configure** qos slope-policy *string*
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

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hs-wrr-weight *number*

Synopsis	WRR weight with which queue parents into the scheduler
Context	**configure** qos sap-egress *string* queue *number* hs-wrr-weight *number*
Tree	hs-wrr-weight
Range	1 to 127
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

maximum-data-transmission *(number | keyword)*

Synopsis	Maximum data transmitted at each scheduling opportunity
Context	**configure** qos sap-egress *string* queue *number* maximum-data-transmission *(number | keyword)*
Tree	maximum-data-transmission
Description	This command sets the maximum amount of data transmitted at a single scheduling opportunity. If the frame to be scheduled is longer than the configured amount of data, the entire frame is still transmitted. This command is applicable only to FP4 and FP5 chipsets.
Range	512 to 32768
Units	bytes
Options	auto
Default	auto
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

mbs *(number | keyword)*

Synopsis	Buffer space allowed for the queue
Context	**configure** qos sap-egress *string* queue *number* mbs *(number | keyword)*
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Default	auto

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Introduced	16.0.R1
Platforms	All

packet-byte-offset *number*

Synopsis	Packet byte offset for addition of policing information
Context	**configure** qos sap-egress *string* queue *number* packet-byte-offset *number*
Tree	packet-byte-offset
Range	-64 to 32
Default	0
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** qos sap-egress *string* queue *number* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

cir *decimal-number*

Synopsis	Administrative CIR percent
Context	**configure** qos sap-egress *string* queue *number* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	Administrative PIR percent

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Context	**configure** qos sap-egress *string* queue *number* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

reference-rate *keyword*

Synopsis	Reference rate
Context	**configure** qos sap-egress *string* queue *number* percent-rate reference-rate *keyword*
Tree	reference-rate
Options	port-limit, local-limit, reference-port-limit
Default	port-limit
Introduced	16.0.R1
Platforms	All

port-parent

Synopsis	Enable the **port-parent** context
Context	**configure** qos sap-egress *string* queue *number* port-parent
Tree	port-parent
Notes	The following elements are part of a choice: **port-parent** or **scheduler-parent**.
Introduced	16.0.R1
Platforms	All

cir-level *number*

Synopsis	Port priority to receive bandwidth for within-CIR pass
Context	**configure** qos sap-egress *string* queue *number* port-parent cir-level *number*
Tree	cir-level
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

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cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	**configure** qos sap-egress *string* queue *number* port-parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Port priority for bandwidth for above-CIR offered load
Context	**configure** qos sap-egress *string* queue *number* port-parent level *number*
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight used at above-CIR port priority level
Context	**configure** qos sap-egress *string* queue *number* port-parent weight *number*
Tree	weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

queue-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

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Synopsis	Method used to service queue from hardware perspective
Context	**configure** qos sap-egress *string* queue *number* queue-type *keyword*
Tree	queue-type
Options	expedited, auto-expedited, best-effort
Default	auto-expedited
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** qos sap-egress *string* queue *number* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	Administrative CIR
Context	**configure** qos sap-egress *string* queue *number* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Default	0
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	Administrative PIR
Context	**configure** qos sap-egress *string* queue *number* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000

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Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

sched-class *(number | keyword)*

Synopsis	Scheduler class for the sap-egress queue
Context	**configure** qos sap-egress *string* queue *number* sched-class *(number | keyword)*
Tree	sched-class
Description	This command configures a scheduling class for the specified queue. If the keyword **auto** is used, the scheduling class mapping is done automatically.
Range	1 to 6
Options	auto
Default	auto
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

scheduler-parent

Synopsis	Enable the **scheduler-parent** context
Context	**configure** qos sap-egress *string* queue *number* scheduler-parent
Tree	scheduler-parent
Notes	The following elements are part of a choice: **port-parent** or **scheduler-parent**.
Introduced	16.0.R1
Platforms	All

cir-level *number*

Synopsis	Level of priority while feeding to the parent
Context	**configure** qos sap-egress *string* queue *number* scheduler-parent cir-level *number*
Tree	cir-level
Range	0 to 8
Default	0

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Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	**configure** qos sap-egress *string* queue *number* scheduler-parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level of priority while feeding to the parent
Context	**configure** qos sap-egress *string* queue *number* scheduler-parent level *number*
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

scheduler-name *string*

Synopsis	Parent scheduler name
Context	**configure** qos sap-egress *string* queue *number* scheduler-parent scheduler-name *string*
Tree	scheduler-name
Description	This command associates a scheduler name to a queue. The scheduler name must have previously been defined within an existing scheduler policy and exist on each SAP the queue is created on. There are no checks performed to ensure that the scheduler name exists within an existing scheduler policy. Until the scheduler name exists on the egress SAP, the queue operates in an orphaned state.
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1

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Platforms	All

weight *number*

Synopsis	Weight used by the scheduler for feeding the queue
Context	**configure** qos sap-egress *string* queue *number* scheduler-parent weight *number*
Tree	weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

wred-queue

Synopsis	Enter the **wred-queue** context
Context	**configure** qos sap-egress *string* queue *number* wred-queue
Tree	wred-queue
Introduced	16.0.R1
Platforms	All

mode *keyword*

Synopsis	Pool association to allow queue-specific WRED slopes
Context	**configure** qos sap-egress *string* queue *number* wred-queue mode *keyword*
Tree	mode
Options	native, pool-per-queue
Introduced	16.0.R1
Platforms	All

policy *reference*

Synopsis	Slope policy name
Context	**configure** qos sap-egress *string* queue *number* wred-queue policy *reference*
Tree	policy
Reference	**configure** qos slope-policy *string*

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Introduced	16.0.R1
Platforms	All

usage *keyword*

Synopsis	Congestion control type
Context	**configure** qos sap-egress *string* queue *number* wred-queue usage *keyword*
Tree	usage
Options	auto, exceed-low
Introduced	16.0.R1
Platforms	All

sched-class-elevation

Synopsis	Enter the **sched-class-elevation** context
Context	**configure** qos sap-egress *string* sched-class-elevation
Tree	sched-class-elevation
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

sched-class [class-id] *number*

Synopsis	Enter the **sched-class** list instance
Context	**configure** qos sap-egress *string* sched-class-elevation sched-class *number*
Tree	sched-class
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

[**class-id**] *number*

Synopsis	Scheduling class associated with this SAP egress
Context	**configure** qos sap-egress *string* sched-class-elevation sched-class *number*
Tree	sched-class
Range	1 to 6
Notes	This element is part of a list key.

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Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

weight *number*

Synopsis	Weight of the schedule class
Context	**configure** qos sap-egress *string* sched-class-elevation sched-class *number* weight *number*
Tree	weight
Range	1 to 8
Default	1
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

scope *keyword*

Synopsis	Scope of the policy
Context	**configure** qos sap-egress *string* scope *keyword*
Tree	scope
Options	exclusive, template
Default	template
Introduced	16.0.R1
Platforms	All

subscriber-mgmt

Synopsis	Enter the **subscriber-mgmt** context
Context	**configure** qos sap-egress *string* subscriber-mgmt
Tree	subscriber-mgmt
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dynamic-policer

Synopsis	Enter the **dynamic-policer** context
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-policer

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Tree	dynamic-policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arbiter-parent

Synopsis	Enter the **arbiter-parent** context
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-policer arbiter-parent
Tree	arbiter-parent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arbiter-name *string*

Synopsis	Arbiter name
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-policer arbiter-parent arbiter-name *string*
Tree	arbiter-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

level *number*

Synopsis	Level of priority while feeding to the parent
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-policer arbiter-parent level *number*
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

weight *number*

Synopsis	Weight to be used by the arbiter for feeding this policer

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Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-policer arbiter-parent weight *number*
Tree	weight
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cbs *(number | keyword)*

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-policer cbs *(number | keyword)*
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mbs *(number | keyword)*

Synopsis	High priority 'violate' threshold of PIR leaky bucket of this policer
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-policer mbs *(number | keyword)*
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-policer packet-byte-offset *number*
Tree	packet-byte-offset
Range	-64 to 31
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer-id-range

Synopsis	Enable the **policer-id-range** context
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-policer policer-id-range
Tree	policer-id-range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the dynamic policer ID range
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-policer policer-id-range end *number*
Tree	end
Range	1 to 63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of the dynamic policer ID range
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-policer policer-id-range start *number*
Tree	start
Range	1 to 63

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-policer stat-mode *keyword*
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir
Default	minimal
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dynamic-queue

Synopsis	Enter the **dynamic-queue** context
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-queue
Tree	dynamic-queue
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cbs *(number | keyword)*

Synopsis	Reserved buffer space for the queue
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-queue cbs *(number | keyword)*
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Default	auto
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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mbs *(number | keyword)*

Synopsis	Buffer space allowed for the queue
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-queue mbs *(number | keyword)*
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Default	auto
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

packet-byte-offset *number*

Synopsis	Packet byte offset for addition of policing information
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-queue packet-byte-offset *number*
Tree	packet-byte-offset
Range	-64 to 31
Default	0
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

port-parent

Synopsis	Enable the **port-parent** context
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-queue port-parent
Tree	port-parent
Notes	The following elements are part of a choice: **port-parent** or **scheduler-parent**.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cir-level *number*

Synopsis	Port priority queue uses to receive scheduler bandwidth

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Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-queue port-parent cir-level *number*
Tree	cir-level
Range	0 to 8
Default	0
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cir-weight *number*

Synopsis	Weight queue uses to receive scheduler bandwidth
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-queue port-parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Default	0
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

level *number*

Synopsis	Port priority queue uses to receive scheduler bandwidth
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-queue port-parent level *number*
Tree	level
Range	1 to 8
Default	1
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

weight *number*

Synopsis	Weight queue uses to receive bandwidth from scheduler
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-queue port-parent weight *number*
Tree	weight

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Range	0 to 100
Default	1
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

queue-id-range

Synopsis	Enable the **queue-id-range** context
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-queue queue-id-range
Tree	queue-id-range
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the dynamic queue range
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-queue queue-id-range end *number*
Tree	end
Range	1 to 8
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of dynamic queue range
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-queue queue-id-range start *number*
Tree	start
Range	1 to 8
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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scheduler-parent

Synopsis	Enable the **scheduler-parent** context
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-queue scheduler-parent
Tree	scheduler-parent
Notes	The following elements are part of a choice: **port-parent** or **scheduler-parent**.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cir-level *number*

Synopsis	Priority level while feeding to the parent
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-queue scheduler-parent cir-level *number*
Tree	cir-level
Range	0 to 8
Default	0
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cir-weight *number*

Synopsis	Weight used by the scheduler to which the queue feeds
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-queue scheduler-parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Default	1
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

level *number*

Synopsis	Priority level while feeding to the parent
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-queue scheduler-parent level *number*
Tree	level

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Range	1 to 8
Default	1
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler-name *string*

Synopsis	Scheduler to which the queue feeds
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-queue scheduler-parent scheduler-name *string*
Tree	scheduler-name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

weight *number*

Synopsis	Weight used by the scheduler to which the queue feeds
Context	**configure** qos sap-egress *string* subscriber-mgmt dynamic-queue scheduler-parent weight *number*
Tree	weight
Range	0 to 100
Default	1
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pcc-rule-entry

Synopsis	Enter the **pcc-rule-entry** context
Context	**configure** qos sap-egress *string* subscriber-mgmt pcc-rule-entry
Tree	pcc-rule-entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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range

Synopsis	Enable the **range** context
Context	**configure** qos sap-egress *string* subscriber-mgmt pcc-rule-entry range
Tree	range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the filter and QoS policy entries range
Context	**configure** qos sap-egress *string* subscriber-mgmt pcc-rule-entry range end *number*
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of the filter and QoS policy entries range
Context	**configure** qos sap-egress *string* subscriber-mgmt pcc-rule-entry range start *number*
Tree	start
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-policer-result-marking-dot1p-inner *boolean*

Synopsis	Enable using egress policer for Dot1p inner marking
Context	**configure** qos sap-egress *string* use-policer-result-marking-dot1p-inner *boolean*
Tree	use-policer-result-marking-dot1p-inner
Description	When configured, this command enables using the egress policer profile result to mark dot1p-inner bits.
Default	false

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Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

sap-ingress [sap-ingress-policy-name] *string*

Synopsis	Enter the **sap-ingress** list instance
Context	**configure** qos sap-ingress *string*
Tree	sap-ingress
Introduced	16.0.R1
Platforms	All

[**sap-ingress-policy-name**] *string*

Synopsis	Policy name
Context	**configure** qos sap-ingress *string*
Tree	sap-ingress
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

default-fc *string*

Synopsis	Default forwarding class for non-matching traffic
Context	**configure** qos sap-ingress *string* default-fc *string*
Tree	default-fc
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

default-priority *keyword*

Synopsis	Priority for packets received on an ingress SAP
Context	**configure** qos sap-ingress *string* default-priority *keyword*
Tree	default-priority

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Options	low, high
Default	low
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** qos sap-ingress *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dot1p [dot1p-value] *number*

Synopsis	Enter the **dot1p** list instance
Context	**configure** qos sap-ingress *string* dot1p *number*
Tree	dot1p
Introduced	16.0.R1
Platforms	All

[**dot1p-value**] *number*

Synopsis	Dot1p value to match in the packet
Context	**configure** qos sap-ingress *string* dot1p *number*
Tree	dot1p
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc *string*

Synopsis	Forwarding class for traffic matching specified dot1p

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Context	**configure** qos sap-ingress *string* dot1p *number* fc *string*
Tree	fc
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

priority *keyword*

Synopsis	Priority for packets that match the Dot1p value
Context	**configure** qos sap-ingress *string* dot1p *number* priority *keyword*
Tree	priority
Options	low, high, auto
Default	auto
Introduced	16.0.R1
Platforms	All

dscp [dscp-name] *keyword*

Synopsis	Enter the **dscp** list instance
Context	**configure** qos sap-ingress *string* dscp *keyword*
Tree	dscp
Introduced	16.0.R1
Platforms	All

[**dscp-name**] *keyword*

Synopsis	Name for the Differentiated Services Code Point (DSCP)
Context	**configure** qos sap-ingress *string* dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

fc *string*

Synopsis	Forwarding class for traffic matching specified DSCP
Context	**configure** qos sap-ingress *string* dscp *keyword* fc *string*
Tree	fc
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

priority *keyword*

Synopsis	Priority for the packet
Context	**configure** qos sap-ingress *string* dscp *keyword* priority *keyword*
Tree	priority
Options	low, high, auto
Default	auto
Introduced	16.0.R1
Platforms	All

fc [fc-name] *string*

Synopsis	Enter the **fc** list instance
Context	**configure** qos sap-ingress *string* fc *string*
Tree	fc
Introduced	16.0.R1
Platforms	All

[**fc-name**] *string*

Synopsis	Forwarding class (and optional subclass) name
Context	**configure** qos sap-ingress *string* fc *string*
Tree	fc
String Length	1 to 32

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

broadcast-policer *number*

Synopsis	Policer ID for multicast traffic in forwarding class
Context	**configure** qos sap-ingress *string* fc *string* broadcast-policer *number*
Tree	broadcast-policer
Range	1 to 63
Notes	The following elements are part of a choice: (**broadcast-policer** and **fp-redirect-group-broadcast-policer**), **broadcast-queue**, or **broadcast-queue-group-queue**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

broadcast-queue *reference*

Synopsis	Broadcast queue for packets in the forwarding class
Context	**configure** qos sap-ingress *string* fc *string* broadcast-queue *reference*
Tree	broadcast-queue
Reference	**configure** qos sap-ingress *string* queue *number*
Notes	The following elements are part of a choice: (**broadcast-policer** and **fp-redirect-group-broadcast-policer**), **broadcast-queue**, or **broadcast-queue-group-queue**.
Introduced	16.0.R1
Platforms	All

broadcast-queue-group-queue

Synopsis	Enable the **broadcast-queue-group-queue** context
Context	**configure** qos sap-ingress *string* fc *string* broadcast-queue-group-queue
Tree	broadcast-queue-group-queue
Notes	The following elements are part of a choice: (**broadcast-policer** and **fp-redirect-group-broadcast-policer**), **broadcast-queue**, or **broadcast-queue-group-queue**.
Introduced	16.0.R1
Platforms	All

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queue *reference*

Synopsis	Broadcast queue for packets in the forwarding class
Context	**configure** qos sap-ingress *string* fc *string* broadcast-queue-group-queue queue *reference*
Tree	queue
Reference	**configure** qos queue-group-templates ingress queue-group *string* queue *number*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

queue-group-name *reference*

Synopsis	Queue group name to forward traffic
Context	**configure** qos sap-ingress *string* fc *string* broadcast-queue-group-queue queue-group-name *reference*
Tree	queue-group-name
Reference	**configure** qos queue-group-templates ingress queue-group *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

de-1-out-profile *boolean*

Synopsis	Frames with DE value to be assigned as out of profile
Context	**configure** qos sap-ingress *string* fc *string* de-1-out-profile *boolean*
Tree	de-1-out-profile
Default	false
Introduced	16.0.R1
Platforms	All

egress-fc *keyword*

Synopsis	Forwarding class for egress QoS processing
Context	**configure** qos sap-ingress *string* fc *string* egress-fc *keyword*

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Tree	egress-fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

fp-redirect-group-broadcast-policer

Synopsis	Use policer as defined in FP queue-group for the SAP
Context	**configure** qos sap-ingress *string* fc *string* fp-redirect-group-broadcast-policer
Tree	fp-redirect-group-broadcast-policer
Notes	The following elements are part of a choice: (**broadcast-policer** and **fp-redirect-group-broadcast-policer**), **broadcast-queue**, or **broadcast-queue-group-queue**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

fp-redirect-group-multicast-policer

Synopsis	Use policer as defined in FP queue-group for the SAP
Context	**configure** qos sap-ingress *string* fc *string* fp-redirect-group-multicast-policer
Tree	fp-redirect-group-multicast-policer
Notes	The following elements are part of a choice: (**fp-redirect-group-multicast-policer** and **multicast-policer**), **multicast-queue**, or **multicast-queue-group-queue**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

fp-redirect-group-policer

Synopsis	Use policer as defined in FP queue-group for the SAP
Context	**configure** qos sap-ingress *string* fc *string* fp-redirect-group-policer
Tree	fp-redirect-group-policer
Notes	The following elements are part of a choice: (**fp-redirect-group-policer** and **policer**), **queue**, or **queue-group-queue**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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fp-redirect-group-unknown-policer

Synopsis	Use policer as defined in FP queue-group for the SAP
Context	**configure** qos sap-ingress *string* fc *string* fp-redirect-group-unknown-policer
Tree	fp-redirect-group-unknown-policer
Notes	The following elements are part of a choice: (**fp-redirect-group-unknown-policer** and **unknown-policer**), **unknown-queue**, or **unknown-queue-group-queue**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

in-remark

Synopsis	Enter the **in-remark** context
Context	**configure** qos sap-ingress *string* fc *string* in-remark
Tree	in-remark
Introduced	16.0.R1
Platforms	All

dscp *keyword*

Synopsis	DSCP to override DSCP bits of the matching packet
Context	**configure** qos sap-ingress *string* fc *string* in-remark dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	The following elements are part of a choice: **dscp** or **prec**.
Introduced	16.0.R1
Platforms	All

prec *number*

Synopsis	Value to override precedence bits of matching packet
Context	**configure** qos sap-ingress *string* fc *string* in-remark prec *number*
Tree	prec

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Range	0 to 7
Notes	The following elements are part of a choice: **dscp** or **prec**.
Introduced	16.0.R1
Platforms	All

multicast-policer *number*

Synopsis	Policer ID for multicast traffic in forwarding class
Context	**configure** qos sap-ingress *string* fc *string* multicast-policer *number*
Tree	multicast-policer
Range	1 to 63
Notes	The following elements are part of a choice: (**fp-redirect-group-multicast-policer** and **multicast-policer**), **multicast-queue**, or **multicast-queue-group-queue**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

multicast-queue *reference*

Synopsis	Broadcast queue to assign for packets in this forwarding class
Context	**configure** qos sap-ingress *string* fc *string* multicast-queue *reference*
Tree	multicast-queue
Reference	**configure** qos sap-ingress *string* queue *number*
Notes	The following elements are part of a choice: (**fp-redirect-group-multicast-policer** and **multicast-policer**), **multicast-queue**, or **multicast-queue-group-queue**.
Introduced	16.0.R1
Platforms	All

multicast-queue-group-queue

Synopsis	Enable the **multicast-queue-group-queue** context
Context	**configure** qos sap-ingress *string* fc *string* multicast-queue-group-queue
Tree	multicast-queue-group-queue
Notes	The following elements are part of a choice: (**fp-redirect-group-multicast-policer** and **multicast-policer**), **multicast-queue**, or **multicast-queue-group-queue**.
Introduced	16.0.R1

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Platforms	All

queue *reference*

Synopsis	Broadcast queue for packets in the forwarding class
Context	**configure** qos sap-ingress *string* fc *string* multicast-queue-group-queue queue *reference*
Tree	queue
Reference	**configure** qos queue-group-templates ingress queue-group *string* queue *number*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

queue-group-name *reference*

Synopsis	Queue group name to forward traffic
Context	**configure** qos sap-ingress *string* fc *string* multicast-queue-group-queue queue-group-name *reference*
Tree	queue-group-name
Reference	**configure** qos queue-group-templates ingress queue-group *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

out-remark

Synopsis	Enter the **out-remark** context
Context	**configure** qos sap-ingress *string* fc *string* out-remark
Tree	out-remark
Introduced	16.0.R1
Platforms	All

dscp *keyword*

Synopsis	DSCP to override DSCP bits of the matching packet

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Context	**configure** qos sap-ingress *string* fc *string* out-remark dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	The following elements are part of a choice: **dscp** or **prec**.
Introduced	16.0.R1
Platforms	All

prec *number*

Synopsis	Value to override precedence bits of matching packet
Context	**configure** qos sap-ingress *string* fc *string* out-remark prec *number*
Tree	prec
Range	0 to 7
Notes	The following elements are part of a choice: **dscp** or **prec**.
Introduced	16.0.R1
Platforms	All

policer *number*

Synopsis	Policer ID for unicast traffic in the forwarding class
Context	**configure** qos sap-ingress *string* fc *string* policer *number*
Tree	policer
Range	1 to 63
Notes	The following elements are part of a choice: (**fp-redirect-group-policer** and **policer**), **queue**, or **queue-group-queue**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile *keyword*

Synopsis	Packets profile associated with the forwarding class
Context	**configure** qos sap-ingress *string* fc *string* profile *keyword*

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Tree	profile
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

queue *reference*

Synopsis	Queue to assign for packets in this forwarding class
Context	**configure** qos sap-ingress *string* fc *string* queue *reference*
Tree	queue
Reference	**configure** qos sap-ingress *string* queue *number*
Notes	The following elements are part of a choice: (**fp-redirect-group-policer** and **policer**), **queue**, or **queue-group-queue**.
Introduced	16.0.R1
Platforms	All

queue-group-queue

Synopsis	Enable the **queue-group-queue** context
Context	**configure** qos sap-ingress *string* fc *string* queue-group-queue
Tree	queue-group-queue
Notes	The following elements are part of a choice: (**fp-redirect-group-policer** and **policer**), **queue**, or **queue-group-queue**.
Introduced	16.0.R1
Platforms	All

queue *reference*

Synopsis	Queue to assign for packets in this forwarding class
Context	**configure** qos sap-ingress *string* fc *string* queue-group-queue queue *reference*
Tree	queue
Reference	**configure** qos queue-group-templates ingress queue-group *string* queue *number*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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queue-group-name *reference*

Synopsis	Queue group to forward traffic
Context	**configure** qos sap-ingress *string* fc *string* queue-group-queue queue-group-name *reference*
Tree	queue-group-name
Reference	**configure** qos queue-group-templates ingress queue-group *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

unknown-policer *number*

Synopsis	Policer ID for multicast traffic in forwarding class
Context	**configure** qos sap-ingress *string* fc *string* unknown-policer *number*
Tree	unknown-policer
Range	1 to 63
Notes	The following elements are part of a choice: (**fp-redirect-group-unknown-policer** and **unknown-policer**), **unknown-queue**, or **unknown-queue-group-queue**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

unknown-queue *reference*

Synopsis	Broadcast queue to assign for packets in this forwarding class
Context	**configure** qos sap-ingress *string* fc *string* unknown-queue *reference*
Tree	unknown-queue
Reference	**configure** qos sap-ingress *string* queue *number*
Notes	The following elements are part of a choice: (**fp-redirect-group-unknown-policer** and **unknown-policer**), **unknown-queue**, or **unknown-queue-group-queue**.
Introduced	16.0.R1
Platforms	All

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unknown-queue-group-queue

Synopsis	Enable the **unknown-queue-group-queue** context
Context	**configure** qos sap-ingress *string* fc *string* unknown-queue-group-queue
Tree	unknown-queue-group-queue
Notes	The following elements are part of a choice: (**fp-redirect-group-unknown-policer** and **unknown-policer**), **unknown-queue**, or **unknown-queue-group-queue**.
Introduced	16.0.R1
Platforms	All

queue *reference*

Synopsis	Broadcast queue for packets in the forwarding class
Context	**configure** qos sap-ingress *string* fc *string* unknown-queue-group-queue queue *reference*
Tree	queue
Reference	**configure** qos queue-group-templates ingress queue-group *string* queue *number*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

queue-group-name *reference*

Synopsis	Queue group name to forward traffic
Context	**configure** qos sap-ingress *string* fc *string* unknown-queue-group-queue queue-group-name *reference*
Tree	queue-group-name
Reference	**configure** qos queue-group-templates ingress queue-group *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

ip-criteria

Synopsis	Enter the **ip-criteria** context
Context	**configure** qos sap-ingress *string* ip-criteria

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Tree	ip-criteria
Introduced	16.0.R1
Platforms	All

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** qos sap-ingress *string* ip-criteria entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**entry-id**] *number*

Synopsis	IP criteria entry to create or edit for the policy
Context	**configure** qos sap-ingress *string* ip-criteria entry *number*
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enter the **action** context
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* action
Tree	action
Introduced	16.0.R1
Platforms	All

fc *string*

Synopsis	Forwarding class for traffic matching the criteria
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* action fc *string*
Tree	fc

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String Length	1 to 32
Introduced	16.0.R1
Platforms	All

policer *reference*

Synopsis	Policer ID for traffic matching the criteria
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* action policer *reference*
Tree	policer
Reference	**configure** qos sap-ingress *string* policer *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority *keyword*

Synopsis	Priority for the packet
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* action priority *keyword*
Tree	priority
Options	low, high, auto
Default	auto
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Action for criteria entry
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* action type *keyword*
Tree	type
Options	ignore-match, accept
Default	ignore-match
Introduced	16.0.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the **match** context
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match
Tree	match
Introduced	16.0.R1
Platforms	All

dscp *keyword*

Synopsis	DSCP value to match in the packet
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the **dst-ip** context
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

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address *(ipv4-prefix-with-host-bits | ipv4-address)*

Synopsis	Destination IPv4 address for SAP QoS policy match
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match dst-ip address *(ipv4-prefix-with-host-bits | ipv4-address)*
Tree	address
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	All

ip-prefix-list *reference*

Synopsis	IP-prefix list as match criterion
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match dst-ip ip-prefix-list *reference*
Tree	ip-prefix-list
Reference	**configure** qos match-list ip-prefix-list *string*
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	IP address to match with source IP of the packet
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match dst-ip mask *string*
Tree	mask
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	All

dst-port

Synopsis	Enter the **dst-port** context
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match dst-port
Tree	dst-port

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Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Value 'equal to' assigned as match condition
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match dst-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Value 'greater than' assigned as match condition
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match dst-port gt *number*
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Value 'less than' assigned as match condition
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match dst-port lt *number*
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

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range

Synopsis	Enter the **range** context
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match dst-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the port range
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match dst-port range end *number*
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the port range
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match dst-port range start *number*
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

fragment *keyword*

Synopsis	Fragmented packets as the match criterion
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match fragment *keyword*
Tree	fragment
Options	false, true
Introduced	16.0.R1

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Platforms	All

protocol *(number | keyword)*

Synopsis	IP protocol to match
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match protocol *(number | keyword)*
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

src-ip

Synopsis	Enter the **src-ip** context
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match src-ip
Tree	src-ip
Introduced	16.0.R1
Platforms	All

address *(ipv4-prefix-with-host-bits | ipv4-address)*

Synopsis	Source IPv4 address for SAP QoS policy match criterion
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match src-ip address *(ipv4-prefix-with-host-bits | ipv4-address)*
Tree	address
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	All

ip-prefix-list *reference*

Synopsis	IP-prefix list as match criterion

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Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match src-ip ip-prefix-list *reference*
Tree	ip-prefix-list
Reference	**configure** qos match-list ip-prefix-list *string*
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	IP address to match with source IP of the packet
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match src-ip mask *string*
Tree	mask
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	All

src-port

Synopsis	Enter the **src-port** context
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match src-port
Tree	src-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Value 'equal to' assigned as match condition
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match src-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

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gt *number*

Synopsis	Value 'greater than' assigned as match condition
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match src-port gt *number*
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Value 'less than' assigned as match condition
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match src-port lt *number*
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enter the **range** context
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match src-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the port range
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match src-port range end *number*
Tree	end

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Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the port range
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match src-port range start *number*
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

vxlan-vni

Synopsis	Enter the **vxlan-vni** context
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match vxlan-vni
Tree	vxlan-vni
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Value 'equal to' assigned as match condition
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match vxlan-vni eq *number*
Tree	eq
Range	1 to 16777215
Notes	The following elements are part of a choice: **eq** or **range**.
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enter the **range** context

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Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match vxlan-vni range
Tree	range
Notes	The following elements are part of a choice: **eq** or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the VNI range
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match vxlan-vni range end *number*
Tree	end
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the VNI range
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* match vxlan-vni range start *number*
Tree	start
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

tag *number*

Synopsis	Tag ID associated with the criteria entry
Context	**configure** qos sap-ingress *string* ip-criteria entry *number* tag *number*
Tree	tag
Description	This command associates a tag with the criteria entry. Tag identifiers are not supported in SAP ingress QoS policies, MAC criteria statements, or in SAP egress QoS policies.
Range	0 to 255
Default	0
Introduced	20.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv4 criteria entry type
Context	**configure** qos sap-ingress *string* ip-criteria type *keyword*
Tree	type
Description	This command specifies the type of entries that can be configured for IPv4 match criteria.
Options	normal, vxlan-vni, tagged-entries
Default	normal
Introduced	16.0.R1
Platforms	All

ipv6-criteria

Synopsis	Enter the **ipv6-criteria** context
Context	**configure** qos sap-ingress *string* ipv6-criteria
Tree	ipv6-criteria
Introduced	16.0.R1
Platforms	All

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

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[**entry-id**] *number*

Synopsis	IPv6 criteria entry to create or edit for the policy
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number*
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enter the **action** context
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* action
Tree	action
Introduced	16.0.R1
Platforms	All

fc *string*

Synopsis	Forwarding class for traffic matching the criteria
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* action fc *string*
Tree	fc
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

policer *reference*

Synopsis	Policer ID for traffic matching the criteria
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* action policer *reference*
Tree	policer
Reference	**configure** qos sap-ingress *string* policer *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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priority *keyword*

Synopsis	Priority for the packet
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* action priority *keyword*
Tree	priority
Options	low, high, auto
Default	auto
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Action for criteria entry
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* action type *keyword*
Tree	type
Options	ignore-match, accept
Default	ignore-match
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the **match** context
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match
Tree	match
Introduced	16.0.R1

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Platforms	All

dscp *keyword*

Synopsis	DSCP value to match in the packet
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the **dst-ip** context
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

address *(ipv6-prefix-with-host-bits | ipv6-address)*

Synopsis	IPv6 address to match destination IP of the packet
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match dst-ip address *(ipv6-prefix-with-host-bits | ipv6-address)*
Tree	address
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R1
Platforms	All

ipv6-prefix-list *reference*

Synopsis	IPv6 prefix list as match criterion for IPv6 addresses

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Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match dst-ip ipv6-prefix-list *reference*
Tree	ipv6-prefix-list
Reference	**configure** qos match-list ipv6-prefix-list *string*
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *string*

Synopsis	IP address to match with source IP of the packet
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match dst-ip mask *string*
Tree	mask
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R1
Platforms	All

dst-port

Synopsis	Enter the **dst-port** context
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match dst-port
Tree	dst-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Value 'equal to' assigned as match condition
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match dst-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

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gt *number*

Synopsis	Value 'greater than' assigned as match condition
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match dst-port gt *number*
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Value 'less than' assigned as match condition
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match dst-port lt *number*
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enter the **range** context
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match dst-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the port range
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match dst-port range end *number*
Tree	end

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Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the port range
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match dst-port range start *number*
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

fragment *keyword*

Synopsis	Fragmented packets as the match criterion
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match fragment *keyword*
Tree	fragment
Options	false, true, first-only, non-first-only
Introduced	16.0.R1
Platforms	All

next-header *(number | keyword)*

Synopsis	IP protocol to match
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match next-header *(number | keyword)*
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

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src-ip

Synopsis	Enter the **src-ip** context
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match src-ip
Tree	src-ip
Introduced	16.0.R1
Platforms	All

address *(ipv6-prefix-with-host-bits | ipv6-address)*

Synopsis	IPv4 address to match
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match src-ip address *(ipv6-prefix-with-host-bits | ipv6-address)*
Tree	address
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R1
Platforms	All

ipv6-prefix-list *reference*

Synopsis	IPv6 prefix list as match criterion for IPv6 addresses
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match src-ip ipv6-prefix-list *reference*
Tree	ipv6-prefix-list
Reference	**configure** qos match-list ipv6-prefix-list *string*
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *string*

Synopsis	IP address to match with source IP of the packet
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match src-ip mask *string*
Tree	mask
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R1

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Platforms	All

src-port

Synopsis	Enter the **src-port** context
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match src-port
Tree	src-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Value 'equal to' assigned as match condition
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match src-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Value 'greater than' assigned as match condition
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match src-port gt *number*
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Value 'less than' assigned as match condition
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match src-port lt *number*
Tree	lt

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Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enter the **range** context
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match src-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the port range
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match src-port range end *number*
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the port range
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match src-port range start *number*
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

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vxlan-vni

Synopsis	Enter the **vxlan-vni** context
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match vxlan-vni
Tree	vxlan-vni
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Value 'equal to' assigned as match condition
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match vxlan-vni eq *number*
Tree	eq
Range	1 to 16777215
Notes	The following elements are part of a choice: **eq** or **range**.
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enter the **range** context
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match vxlan-vni range
Tree	range
Notes	The following elements are part of a choice: **eq** or **range**.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the VNI range
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match vxlan-vni range end *number*
Tree	end
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

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start *number*

Synopsis	Lower bound of the VNI range
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* match vxlan-vni range start *number*
Tree	start
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

tag *number*

Synopsis	Tag ID associated with the criteria entry
Context	**configure** qos sap-ingress *string* ipv6-criteria entry *number* tag *number*
Tree	tag
Description	This command associates a tag with the criteria entry. Tag identifiers are not supported in SAP ingress QoS policies, MAC criteria statements, or in SAP egress QoS policies.
Range	0 to 255
Default	0
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv6 criteria entry type
Context	**configure** qos sap-ingress *string* ipv6-criteria type *keyword*
Tree	type
Description	This command specifies the type of entries that can be configured for IPv6 match criteria.
Options	normal, vxlan-vni, tagged-entries
Default	normal
Introduced	16.0.R1

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Platforms	All

lsp-exp [lsp-exp-value] *number*

Synopsis	Enter the **lsp-exp** list instance
Context	**configure** qos sap-ingress *string* lsp-exp *number*
Tree	lsp-exp
Introduced	16.0.R1
Platforms	All

[**lsp-exp-value**] *number*

Synopsis	LSP EXP value to match the LSP EXP rule
Context	**configure** qos sap-ingress *string* lsp-exp *number*
Tree	lsp-exp
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc *string*

Synopsis	Forwarding class for traffic matching the LSP EXP value
Context	**configure** qos sap-ingress *string* lsp-exp *number* fc *string*
Tree	fc
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

priority *keyword*

Synopsis	Priority for the matching traffic
Context	**configure** qos sap-ingress *string* lsp-exp *number* priority *keyword*
Tree	priority
Options	low, high, auto

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Default	auto
Introduced	16.0.R1
Platforms	All

mac-criteria

Synopsis	Enter the **mac-criteria** context
Context	**configure** qos sap-ingress *string* mac-criteria
Tree	mac-criteria
Introduced	16.0.R1
Platforms	All

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** qos sap-ingress *string* mac-criteria entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**entry-id**] *number*

Synopsis	Entry ID
Context	**configure** qos sap-ingress *string* mac-criteria entry *number*
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enter the **action** context
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* action
Tree	action

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Introduced	16.0.R1
Platforms	All

fc *string*

Synopsis	Forwarding class for traffic matching the criteria
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* action fc *string*
Tree	fc
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

policer *reference*

Synopsis	Policer ID for traffic matching the criteria
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* action policer *reference*
Tree	policer
Reference	**configure** qos sap-ingress *string* policer *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority *keyword*

Synopsis	Priority for the packet
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* action priority *keyword*
Tree	priority
Options	low, high, auto
Default	auto
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Action for criteria entry
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* action type *keyword*

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Tree	type
Options	ignore-match, accept
Default	ignore-match
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the **match** context
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* match
Tree	match
Introduced	16.0.R1
Platforms	All

dot1p

Synopsis	Enable the **dot1p** context
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* match dot1p
Tree	dot1p
Introduced	16.0.R1
Platforms	All

mask *number*

Synopsis	3-bit mask for the 802.1p value
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* match dot1p mask *number*

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Tree	mask
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	802.1P priority value to use as the match criterion
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* match dot1p priority *number*
Tree	priority
Range	0 to 7
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

dst-mac

Synopsis	Enable the **dst-mac** context
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* match dst-mac
Tree	dst-mac
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Destination MAC address as QoS policy match criterion
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* match dst-mac address *string*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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mask *string*

Synopsis	Mask for destination MAC address
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* match dst-mac mask *string*
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	16.0.R1
Platforms	All

etype *string*

Synopsis	Ethernet type
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* match etype *string*
Tree	etype
String Length	5 to 6
Introduced	16.0.R1
Platforms	All

frame-type *keyword*

Synopsis	Match MAC criteria for ingress SAP QoS policy
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* match frame-type *keyword*
Tree	frame-type
Options	802dot3, 802dot2-llc, 802dot2-snap, ethernet-ii
Introduced	16.0.R1
Platforms	All

inner-tag

Synopsis	Enable the **inner-tag** context
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* match inner-tag
Tree	inner-tag
Introduced	16.0.R1
Platforms	All

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mask *number*

Synopsis	Mask to VID of the inner VLAN tag before comparing it with the inner-tag or outer-tag value
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* match inner-tag mask *number*
Tree	mask
Range	1 to 4095
Default	4095
Introduced	16.0.R1
Platforms	All

vlan *number*

Synopsis	Value to match against the VID of the second VLAN tag
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* match inner-tag vlan *number*
Tree	vlan
Range	0 to 4095
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

llc-dsap

Synopsis	Enable the **llc-dsap** context
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* match llc-dsap
Tree	llc-dsap
Introduced	16.0.R1
Platforms	All

dsap *number*

Synopsis	DSAP value
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* match llc-dsap dsap *number*
Tree	dsap
Range	0 to 255

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mask *number*

Synopsis	DSAP mask
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* match llc-dsap mask *number*
Tree	mask
Range	0 to 255
Default	255
Introduced	16.0.R1
Platforms	All

llc-ssap

Synopsis	Enable the **llc-ssap** context
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* match llc-ssap
Tree	llc-ssap
Introduced	16.0.R1
Platforms	All

mask *number*

Synopsis	Source SAP mask
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* match llc-ssap mask *number*
Tree	mask
Range	0 to 255
Default	255
Introduced	16.0.R1
Platforms	All

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ssap *number*

Synopsis	SSAP value
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* match llc-ssap ssap *number*
Tree	ssap
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

outer-tag

Synopsis	Enable the **outer-tag** context
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* match outer-tag
Tree	outer-tag
Introduced	16.0.R1
Platforms	All

mask *number*

Synopsis	First tag carried transparently through the service
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* match outer-tag mask *number*
Tree	mask
Range	1 to 4095
Default	4095
Introduced	16.0.R1
Platforms	All

vlan *number*

Synopsis	Match against VID of the first VLAN tag in the packet carried transparently through service
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* match outer-tag vlan *number*
Tree	vlan
Range	0 to 4095

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

snap-oui *keyword*

Synopsis	Parameter snap-oui as MAC filter match criteria
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* match snap-oui *keyword*
Tree	snap-oui
Options	zero, non-zero
Introduced	16.0.R1
Platforms	All

snap-pid *number*

Synopsis	Parameter snap-pid as MAC filter match criteria
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* match snap-pid *number*
Tree	snap-pid
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

src-mac

Synopsis	Enable the **src-mac** context
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* match src-mac
Tree	src-mac
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Source MAC address as QoS policy match criterion
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* match src-mac address *string*

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Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	Mask for source MAC address
Context	**configure** qos sap-ingress *string* mac-criteria entry *number* match src-mac mask *string*
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	16.0.R1
Platforms	All

type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MAC criteria filter type
Context	**configure** qos sap-ingress *string* mac-criteria type *keyword*
Tree	type
Options	normal, vid
Default	normal
Introduced	16.0.R1
Platforms	All

policer [policer-id] *number*

Synopsis	Enter the **policer** list instance
Context	**configure** qos sap-ingress *string* policer *number*
Tree	policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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[**policer-id**] *number*

Synopsis	SAP-ingress policer identifier
Context	**configure** qos sap-ingress *string* policer *number*
Tree	policer
Range	1 to 63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** qos sap-ingress *string* policer *number* adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	**configure** qos sap-ingress *string* policer *number* adaptation-rule cir *keyword*
Tree	cir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	**configure** qos sap-ingress *string* policer *number* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Default	closest

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

adv-config-policy *reference*

Synopsis	Advanced QoS policy name
Context	**configure** qos sap-ingress *string* policer *number* adv-config-policy *reference*
Tree	adv-config-policy
Reference	**configure** qos adv-config-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

arbiter-parent

Synopsis	Enter the **arbiter-parent** context
Context	**configure** qos sap-ingress *string* policer *number* arbiter-parent
Tree	arbiter-parent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

arbiter-name *string*

Synopsis	Arbiter name
Context	**configure** qos sap-ingress *string* policer *number* arbiter-parent arbiter-name *string*
Tree	arbiter-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

level *number*

Synopsis	Level of priority while feeding to the parent
Context	**configure** qos sap-ingress *string* policer *number* arbiter-parent level *number*
Tree	level
Range	1 to 8

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Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

weight *number*

Synopsis	Weight used by the arbiter for feeding the policer
Context	**configure** qos sap-ingress *string* policer *number* arbiter-parent weight *number*
Tree	weight
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs *(number | keyword)*

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	**configure** qos sap-ingress *string* policer *number* cbs *(number | keyword)*
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

description *string*

Synopsis	Text description
Context	**configure** qos sap-ingress *string* policer *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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high-prio-only *(number | keyword)*

Synopsis	Percentage of MBS reserved for high priority traffic
Context	**configure** qos sap-ingress *string* policer *number* high-prio-only *(number | keyword)*
Tree	high-prio-only
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs *(number | keyword)*

Synopsis	High priority violate threshold of PIR leaky bucket
Context	**configure** qos sap-ingress *string* policer *number* mbs *(number | keyword)*
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	**configure** qos sap-ingress *string* policer *number* packet-byte-offset *number*
Tree	packet-byte-offset
Range	-32 to 31
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** qos sap-ingress *string* policer *number* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *decimal-number*

Synopsis	Administrative CIR percent
Context	**configure** qos sap-ingress *string* policer *number* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *decimal-number*

Synopsis	Administrative PIR percent
Context	**configure** qos sap-ingress *string* policer *number* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

reference-rate *keyword*

Synopsis	Reference rate
Context	**configure** qos sap-ingress *string* policer *number* percent-rate reference-rate *keyword*
Tree	reference-rate
Options	local-limit, reference-port-limit
Default	local-limit
Introduced	20.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile-capped *boolean*

Synopsis	Enforce overall in-profile burst limit to CIR bucket
Context	**configure** qos sap-ingress *string* policer *number* profile-capped *boolean*
Tree	profile-capped
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis	Enter the **rate** context
Context	**configure** qos sap-ingress *string* policer *number* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *(number | keyword)*

Synopsis	Administrative CIR
Context	**configure** qos sap-ingress *string* policer *number* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *(number | keyword)*

Synopsis	Administrative PIR

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Context	**configure** qos sap-ingress *string* policer *number* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

scheduler-parent

Synopsis	Enter the **scheduler-parent** context
Context	**configure** qos sap-ingress *string* policer *number* scheduler-parent
Tree	scheduler-parent
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

cir-level *number*

Synopsis	Port priority level for within-CIR offered load
Context	**configure** qos sap-ingress *string* policer *number* scheduler-parent cir-level *number*
Tree	cir-level
Description	This command defines the hierarchy priority level when compared with other policers, queues, and schedulers that the policer uses to receive bandwidth for its within-CIR offered load. If this command is set to the default value, the policer does not receive bandwidth during the within-CIR pass of the scheduler and the **cir-weight** command is ignored.
Range	0 to 8
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

cir-weight *number*

Synopsis	Weight to use in the within-CIR port priority level

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Context	**configure** qos sap-ingress *string* policer *number* scheduler-parent cir-weight *number*
Tree	cir-weight
Description	The command defines the relative weight of the policer in comparison with other child policers, queues, or schedulers competing for bandwidth on the parent scheduler name at the within-CIR priority level. A weight is considered to be active when the applicable policer, queue, or scheduler has not reached its maximum rate and still has packets to transmit. When this command is set to a value of 0, the policer receives bandwidth only after the other children with a non-zero weight at this level have been serviced.
Range	0 to 100
Default	1
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

level *number*

Synopsis	Priority level for bandwidth on the parent scheduler
Context	**configure** qos sap-ingress *string* policer *number* scheduler-parent level *number*
Tree	level
Description	This command defines the priority level when compared with other policers, queues, and schedulers when competing for bandwidth on the parent scheduler. Children of the parent scheduler with a lower priority do not receive bandwidth until all children with a higher priority have either reached their maximum bandwidth or are idle. Children with the same level are serviced in relation to their relative weights.
Range	1 to 8
Default	1
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

scheduler-name *string*

Synopsis	Scheduler name
Context	**configure** qos sap-ingress *string* policer *number* scheduler-parent scheduler-name *string*
Tree	scheduler-name
String Length	1 to 32

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Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

weight *number*

Synopsis	Policer weight at the above-CIR priority level
Context	**configure** qos sap-ingress *string* policer *number* scheduler-parent weight *number*
Tree	weight
Range	0 to 100
Default	1
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	**configure** qos sap-ingress *string* policer *number* stat-mode *keyword*
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir, offered-profile-with-discards
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policers-hqos-manageable *boolean*

Synopsis	Manage policers through the hierarchical QoS process
Context	**configure** qos sap-ingress *string* policers-hqos-manageable *boolean*
Tree	policers-hqos-manageable
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

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policy-id *number*

WARNING:
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Synopsis	Ingress SAP QoS policy ID
Context	**configure** qos sap-ingress *string* policy-id *number*
Tree	policy-id
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

prec [prec-value] *number*

Synopsis	Enter the **prec** list instance
Context	**configure** qos sap-ingress *string* prec *number*
Tree	prec
Introduced	16.0.R1
Platforms	All

[**prec-value**] *number*

Synopsis	Precedence value for which mapping is performed
Context	**configure** qos sap-ingress *string* prec *number*
Tree	prec
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc *string*

Synopsis	Forwarding class for traffic matching precedence value
Context	**configure** qos sap-ingress *string* prec *number* fc *string*
Tree	fc
String Length	1 to 32

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Introduced	16.0.R1
Platforms	All

priority *keyword*

Synopsis	Priority for the matching traffic
Context	**configure** qos sap-ingress *string* prec *number* priority *keyword*
Tree	priority
Options	low, high, auto
Default	auto
Introduced	16.0.R1
Platforms	All

queue [queue-id] *number*

Synopsis	Enter the **queue** list instance
Context	**configure** qos sap-ingress *string* queue *number*
Tree	queue
Introduced	16.0.R1
Platforms	All

[**queue-id**] *number*

Synopsis	SAP-ingress policer identifier
Context	**configure** qos sap-ingress *string* queue *number*
Tree	queue
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** qos sap-ingress *string* queue *number* adaptation-rule

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Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	**configure** qos sap-ingress *string* queue *number* adaptation-rule cir *keyword*
Tree	cir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

fir *keyword*

Synopsis	Constraint used when deriving the operational FIR value
Context	**configure** qos sap-ingress *string* queue *number* adaptation-rule fir *keyword*
Tree	fir
Options	max, min, closest
Default	closest
Introduced	16.0.R2
Platforms	All

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	**configure** qos sap-ingress *string* queue *number* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

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adv-config-policy *reference*

Synopsis	Advanced QoS policy name
Context	**configure** qos sap-ingress *string* queue *number* adv-config-policy *reference*
Tree	adv-config-policy
Reference	**configure** qos adv-config-policy *string*
Introduced	16.0.R1
Platforms	All

burst-limit *(number | keyword)*

Synopsis	Explicit shaping burst size of a queue
Context	**configure** qos sap-ingress *string* queue *number* burst-limit *(number | keyword)*
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

cbs *(number | keyword)*

Synopsis	Reserved buffer space for the queue
Context	**configure** qos sap-ingress *string* queue *number* cbs *(number | keyword)*
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

cir-non-profiling *boolean*

Synopsis	Prevent profile modification of CIR dependent packets

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Context	**configure** qos sap-ingress *string* queue *number* cir-non-profiling *boolean*
Tree	cir-non-profiling
Default	false
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

drop-tail

Synopsis	Enter the **drop-tail** context
Context	**configure** qos sap-ingress *string* queue *number* drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the **low** context
Context	**configure** qos sap-ingress *string* queue *number* drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs *(number | keyword)*

Synopsis	Low drop-tail percent from MBS that is reduced
Context	**configure** qos sap-ingress *string* queue *number* drop-tail low percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

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mbs *(number | keyword)*

Synopsis	Maximum buffer space that is allowed for queue
Context	**configure** qos sap-ingress *string* queue *number* mbs *(number | keyword)*
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

multipoint *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Apply as a multicast queue
Context	**configure** qos sap-ingress *string* queue *number* multipoint *boolean*
Tree	multipoint
Introduced	16.0.R1
Platforms	All

packet-byte-offset *number*

Synopsis	Packet size modification for queue accounting
Context	**configure** qos sap-ingress *string* queue *number* packet-byte-offset *number*
Tree	packet-byte-offset
Range	-32 to 30
Default	0
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the **percent-rate** context

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Context	**configure** qos sap-ingress *string* queue *number* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

cir *decimal-number*

Synopsis	Administrative CIR percent
Context	**configure** qos sap-ingress *string* queue *number* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Default	0.00
Notes	The following elements are part of a choice: (**cir** and **fir**) or **police**.
Introduced	16.0.R1
Platforms	All

fir *decimal-number*

Synopsis	Administrative FIR percent
Context	**configure** qos sap-ingress *string* queue *number* percent-rate fir *decimal-number*
Tree	fir
Range	0.00 to 100.00
Default	0.00
Notes	The following elements are part of a choice: (**cir** and **fir**) or **police**.
Introduced	16.0.R2
Platforms	All

pir *decimal-number*

Synopsis	Administrative PIR percent
Context	**configure** qos sap-ingress *string* queue *number* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1

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Platforms	All

police

Synopsis	Drop out-of-profile traffic feeding into queue instance
Context	**configure** qos sap-ingress *string* queue *number* percent-rate police
Tree	police
Notes	The following elements are part of a choice: (**cir** and **fir**) or **police**.
Introduced	16.0.R1
Platforms	All

reference-rate *keyword*

Synopsis	Reference rate
Context	**configure** qos sap-ingress *string* queue *number* percent-rate reference-rate *keyword*
Tree	reference-rate
Options	port-limit, local-limit, reference-port-limit
Default	port-limit
Introduced	16.0.R1
Platforms	All

queue-mode *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Operating mode for this queue
Context	**configure** qos sap-ingress *string* queue *number* queue-mode *keyword*
Tree	queue-mode
Options	priority, profile
Default	priority
Introduced	16.0.R1
Platforms	All

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queue-type *keyword*

WARNING:
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Synopsis	Method used to service queue from hardware perspective
Context	**configure** qos sap-ingress *string* queue *number* queue-type *keyword*
Tree	queue-type
Options	expedited, auto-expedited, best-effort
Default	auto-expedited
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** qos sap-ingress *string* queue *number* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	Administrative CIR
Context	**configure** qos sap-ingress *string* queue *number* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Default	0
Notes	The following elements are part of a choice: (**cir** and **fir**) or **police**.
Introduced	16.0.R1
Platforms	All

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fir *(number | keyword)*

Synopsis	Administrative FIR
Context	**configure** qos sap-ingress *string* queue *number* rate fir *(number | keyword)*
Tree	fir
Range	0 to 6400000000
Units	kilobps
Options	max
Default	0
Notes	The following elements are part of a choice: (**cir** and **fir**) or **police**.
Introduced	16.0.R2
Platforms	All

pir *(number | keyword)*

Synopsis	Administrative PIR
Context	**configure** qos sap-ingress *string* queue *number* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

police

Synopsis	Drop the traffic feeding into queue above the PIR rate
Context	**configure** qos sap-ingress *string* queue *number* rate police
Tree	police
Notes	The following elements are part of a choice: (**cir** and **fir**) or **police**.
Introduced	16.0.R1
Platforms	All

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scheduler-parent

Synopsis	Enter the **scheduler-parent** context
Context	**configure** qos sap-ingress *string* queue *number* scheduler-parent
Tree	scheduler-parent
Introduced	16.0.R1
Platforms	All

cir-level *number*

Synopsis	Level of priority while feeding to the parent
Context	**configure** qos sap-ingress *string* queue *number* scheduler-parent cir-level *number*
Tree	cir-level
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	**configure** qos sap-ingress *string* queue *number* scheduler-parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level of priority while feeding to the parent
Context	**configure** qos sap-ingress *string* queue *number* scheduler-parent level *number*
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1

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Platforms	All

scheduler-name *string*

Synopsis	Scheduler name
Context	**configure** qos sap-ingress *string* queue *number* scheduler-parent scheduler-name *string*
Tree	scheduler-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	**configure** qos sap-ingress *string* queue *number* scheduler-parent weight *number*
Tree	weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

scope *keyword*

Synopsis	Scope of the policy
Context	**configure** qos sap-ingress *string* scope *keyword*
Tree	scope
Options	exclusive, template
Default	template
Introduced	16.0.R1
Platforms	All

subscriber-mgmt

Synopsis	Enter the **subscriber-mgmt** context
Context	**configure** qos sap-ingress *string* subscriber-mgmt

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Tree	subscriber-mgmt
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dynamic-policer

Synopsis	Enter the **dynamic-policer** context
Context	**configure** qos sap-ingress *string* subscriber-mgmt dynamic-policer
Tree	dynamic-policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arbiter-parent

Synopsis	Enter the **arbiter-parent** context
Context	**configure** qos sap-ingress *string* subscriber-mgmt dynamic-policer arbiter-parent
Tree	arbiter-parent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arbiter-name *string*

Synopsis	Arbiter name
Context	**configure** qos sap-ingress *string* subscriber-mgmt dynamic-policer arbiter-parent arbiter-name *string*
Tree	arbiter-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

level *number*

Synopsis	Level of priority while feeding to the parent
Context	**configure** qos sap-ingress *string* subscriber-mgmt dynamic-policer arbiter-parent level *number*
Tree	level

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Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

weight *number*

Synopsis	Weight used by the arbiter for feeding the policer
Context	**configure** qos sap-ingress *string* subscriber-mgmt dynamic-policer arbiter-parent weight *number*
Tree	weight
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cbs *(number | keyword)*

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	**configure** qos sap-ingress *string* subscriber-mgmt dynamic-policer cbs *(number | keyword)*
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mbs *(number | keyword)*

Synopsis	High priority violate threshold of PIR leaky bucket of this policer
Context	**configure** qos sap-ingress *string* subscriber-mgmt dynamic-policer mbs *(number | keyword)*
Tree	mbs
Range	0 to 268435456

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Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	**configure** qos sap-ingress *string* subscriber-mgmt dynamic-policer packet-byte-offset *number*
Tree	packet-byte-offset
Range	-32 to 31
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer-id-range

Synopsis	Enable the **policer-id-range** context
Context	**configure** qos sap-ingress *string* subscriber-mgmt dynamic-policer policer-id-range
Tree	policer-id-range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the dynamic policer ID range
Context	**configure** qos sap-ingress *string* subscriber-mgmt dynamic-policer policer-id-range end *number*
Tree	end
Range	1 to 63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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start *number*

Synopsis	Lower bound of the dynamic policer ID range
Context	**configure** qos sap-ingress *string* subscriber-mgmt dynamic-policer policer-id-range start *number*
Tree	start
Range	1 to 63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	**configure** qos sap-ingress *string* subscriber-mgmt dynamic-policer stat-mode *keyword*
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Default	minimal
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pcc-rule-entry

Synopsis	Enter the **pcc-rule-entry** context
Context	**configure** qos sap-ingress *string* subscriber-mgmt pcc-rule-entry
Tree	pcc-rule-entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the **range** context
Context	**configure** qos sap-ingress *string* subscriber-mgmt pcc-rule-entry range
Tree	range

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the filter and QoS policy entries range
Context	**configure** qos sap-ingress *string* subscriber-mgmt pcc-rule-entry range end *number*
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of the filter and QoS policy entries range
Context	**configure** qos sap-ingress *string* subscriber-mgmt pcc-rule-entry range start *number*
Tree	start
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler-policy [scheduler-policy-name] *string*

Synopsis	Enter the **scheduler-policy** list instance
Context	**configure** qos scheduler-policy *string*
Tree	scheduler-policy
Max. Instances	2047
Introduced	16.0.R1
Platforms	All

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[**scheduler-policy-name**] *string*

Synopsis	Scheduler policy name
Context	**configure** qos scheduler-policy *string*
Tree	scheduler-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** qos scheduler-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

frame-based-accounting *boolean*

Synopsis	Use frame-based accounting for queues and schedulers
Context	**configure** qos scheduler-policy *string* frame-based-accounting *boolean*
Tree	frame-based-accounting
Default	false
Introduced	16.0.R1
Platforms	All

tier [tier-id] *number*

Synopsis	Enter the **tier** list instance
Context	**configure** qos scheduler-policy *string* tier *number*
Tree	tier
Introduced	16.0.R1
Platforms	All

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[**tier-id**] *number*

Synopsis	Tier for scheduler-policy scheduler
Context	**configure** qos scheduler-policy *string* tier *number*
Tree	tier
Range	1 to 3
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

parent-location *keyword*

Synopsis	Expected location of parent schedulers
Context	**configure** qos scheduler-policy *string* tier *number* parent-location *keyword*
Tree	parent-location
Options	auto, sub, vport
Default	auto
Introduced	16.0.R1
Platforms	All

scheduler [scheduler-name] *string*

Synopsis	Enter the **scheduler** list instance
Context	**configure** qos scheduler-policy *string* tier *number* scheduler *string*
Tree	scheduler
Introduced	16.0.R1
Platforms	All

[**scheduler-name**] *string*

Synopsis	Scheduler name
Context	**configure** qos scheduler-policy *string* tier *number* scheduler *string*
Tree	scheduler
Description	This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a

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unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.

If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.

If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** qos scheduler-policy *string* tier *number* scheduler *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

limit-unused-bandwidth *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	**configure** qos scheduler-policy *string* tier *number* scheduler *string* limit-unused-bandwidth *boolean*
Tree	limit-unused-bandwidth
Default	false
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** qos scheduler-policy *string* tier *number* scheduler *string* percent-rate

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Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	All

cir *(keyword | decimal-number)*

Synopsis	Scheduler CIR
Context	**configure** qos scheduler-policy *string* tier *number* scheduler *string* percent-rate cir *(keyword | decimal-number)*
Tree	cir
Range	0.00 to 100.00
Options	sum
Default	sum
Introduced	20.10.R1
Platforms	All

pir *decimal-number*

Synopsis	Scheduler PIR
Context	**configure** qos scheduler-policy *string* tier *number* scheduler *string* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	All

reference-rate *keyword*

Synopsis	Reference rate
Context	**configure** qos scheduler-policy *string* tier *number* scheduler *string* percent-rate reference-rate *keyword*
Tree	reference-rate
Options	local-limit, reference-port-limit
Default	reference-port-limit
Introduced	20.10.R1

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Platforms	All

port-parent

Synopsis	Enable the **port-parent** context
Context	**configure** qos scheduler-policy *string* tier *number* scheduler *string* port-parent
Tree	port-parent
Notes	The following elements are part of a choice: **port-parent** or **scheduler-parent**.
Introduced	16.0.R1
Platforms	All

cir-level *number*

Synopsis	Port priority to receive bandwidth for within-CIR pass
Context	**configure** qos scheduler-policy *string* tier *number* scheduler *string* port-parent cir-level *number*
Tree	cir-level
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	**configure** qos scheduler-policy *string* tier *number* scheduler *string* port-parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Port priority for bandwidth for above-CIR offered load

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Context	**configure** qos scheduler-policy *string* tier *number* scheduler *string* port-parent level *number*
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight used at the above-CIR port priority level
Context	**configure** qos scheduler-policy *string* tier *number* scheduler *string* port-parent weight *number*
Tree	weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** qos scheduler-policy *string* tier *number* scheduler *string* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	Administrative CIR
Context	**configure** qos scheduler-policy *string* tier *number* scheduler *string* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps

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Options	sum, max
Default	sum
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	Administrative PIR
Context	**configure** qos scheduler-policy *string* tier *number* scheduler *string* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

scheduler-parent

Synopsis	Enable the **scheduler-parent** context
Context	**configure** qos scheduler-policy *string* tier *number* scheduler *string* scheduler-parent
Tree	scheduler-parent
Notes	The following elements are part of a choice: **port-parent** or **scheduler-parent**.
Introduced	16.0.R1
Platforms	All

cir-level *number*

Synopsis	Level of priority while feeding to the parent
Context	**configure** qos scheduler-policy *string* tier *number* scheduler *string* scheduler-parent cir-level *number*
Tree	cir-level
Range	0 to 8
Default	0

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Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	**configure** qos scheduler-policy *string* tier *number* scheduler *string* scheduler-parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level of priority while feeding to the parent
Context	**configure** qos scheduler-policy *string* tier *number* scheduler *string* scheduler-parent level *number*
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

scheduler-name *string*

Synopsis	Scheduler name
Context	**configure** qos scheduler-policy *string* tier *number* scheduler *string* scheduler-parent scheduler-name *string*
Tree	scheduler-name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	**configure** qos scheduler-policy *string* tier *number* scheduler *string* scheduler-parent weight *number*
Tree	weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

shared-queue [shared-queue-policy-name] *string*

Synopsis	Enter the **shared-queue** list instance
Context	**configure** qos shared-queue *string*
Tree	shared-queue
Introduced	16.0.R1
Platforms	All

[**shared-queue-policy-name**] *string*

Synopsis	Name of the default shared queue policy
Context	**configure** qos shared-queue *string*
Tree	shared-queue
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** qos shared-queue *string* description *string*
Tree	description
String Length	0 to 80

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Introduced	16.0.R1
Platforms	All

fc [fc-name] *keyword*

Synopsis	Enter the **fc** list instance
Context	**configure** qos shared-queue *string* fc *keyword*
Tree	fc
Introduced	16.0.R1
Platforms	All

[**fc-name**] *keyword*

Synopsis	Forwarding class mapping to queue mapping
Context	**configure** qos shared-queue *string* fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

broadcast-queue *number*

Synopsis	ID of queue to forward all broadcast traffic
Context	**configure** qos shared-queue *string* fc *keyword* broadcast-queue *number*
Tree	broadcast-queue
Range	9 to 32
Introduced	16.0.R1
Platforms	All

multicast-queue *number*

Synopsis	ID of queue to forward multicast traffic
Context	**configure** qos shared-queue *string* fc *keyword* multicast-queue *number*
Tree	multicast-queue

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Range	9 to 32
Introduced	16.0.R1
Platforms	All

queue *number*

Synopsis	ID of queue to foward all traffic
Context	**configure** qos shared-queue *string* fc *keyword* queue *number*
Tree	queue
Range	1 to 8
Introduced	16.0.R1
Platforms	All

unknown-queue *number*

Synopsis	ID of queue to forward unknown unicast traffic
Context	**configure** qos shared-queue *string* fc *keyword* unknown-queue *number*
Tree	unknown-queue
Range	9 to 32
Introduced	16.0.R1
Platforms	All

queue [queue-id] *number*

Synopsis	Enter the **queue** list instance
Context	**configure** qos shared-queue *string* queue *number*
Tree	queue
Introduced	16.0.R1
Platforms	All

[**queue-id**] *number*

Synopsis	Shared queue identifier
Context	**configure** qos shared-queue *string* queue *number*
Tree	queue

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Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

cbs *number*

Synopsis	Committed burst size as a percentage of the MBS
Context	**configure** qos shared-queue *string* queue *number* cbs *number*
Tree	cbs
Range	0 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the **drop-tail** context
Context	**configure** qos shared-queue *string* queue *number* drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the **low** context
Context	**configure** qos shared-queue *string* queue *number* drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs *(number | keyword)*

Synopsis	Low drop-tail percent from MBS that is reduced

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Context	**configure** qos shared-queue *string* queue *number* drop-tail low percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

mbs *number*

Synopsis	Maximum buffers for the ingress shared queue
Context	**configure** qos shared-queue *string* queue *number* mbs *number*
Tree	mbs
Range	0 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

multipoint *boolean*

Synopsis	Apply as a multicast queue
Context	**configure** qos shared-queue *string* queue *number* multipoint *boolean*
Tree	multipoint
Introduced	16.0.R1
Platforms	All

queue-type *keyword*

Synopsis	Method used to service queue from hardware perspective
Context	**configure** qos shared-queue *string* queue *number* queue-type *keyword*
Tree	queue-type
Options	expedited, auto-expedited, best-effort
Default	auto-expedited
Introduced	16.0.R1

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Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** qos shared-queue *string* queue *number* rate
Tree	rate
Introduced	16.0.R1
Platforms	All

cir *number*

Synopsis	CIR percentage rate
Context	**configure** qos shared-queue *string* queue *number* rate cir *number*
Tree	cir
Range	0 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

fir *number*

Synopsis	FIR percentage rate
Context	**configure** qos shared-queue *string* queue *number* rate fir *number*
Tree	fir
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R2
Platforms	All

pir *number*

Synopsis	PIR percentage rate
Context	**configure** qos shared-queue *string* queue *number* rate pir *number*

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Tree	pir
Range	1 to 100
Units	percent
Default	100
Introduced	16.0.R1
Platforms	All

slope-policy [slope-policy-name] *string*

Synopsis	Enter the **slope-policy** list instance
Context	**configure** qos slope-policy *string*
Tree	slope-policy
Max. Instances	511
Introduced	16.0.R1
Platforms	All

[**slope-policy-name**] *string*

Synopsis	Slope policy name
Context	**configure** qos slope-policy *string*
Tree	slope-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** qos slope-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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exceed-slope

Synopsis	Enter the **exceed-slope** context
Context	**configure** qos slope-policy *string* exceed-slope
Tree	exceed-slope
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the exceed-priority RED slope
Context	**configure** qos slope-policy *string* exceed-slope admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

max-avg *number*

Synopsis	Buffer percentage after which drop probability is one
Context	**configure** qos slope-policy *string* exceed-slope max-avg *number*
Tree	max-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

max-prob *number*

Synopsis	Drop probability to increase at exceed start-average
Context	**configure** qos slope-policy *string* exceed-slope max-prob *number*
Tree	max-prob
Range	0 to 100
Introduced	16.0.R1
Platforms	All

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start-avg *number*

Synopsis	Buffer percentage after which drop probability starts to rise above zero
Context	**configure** qos slope-policy *string* exceed-slope start-avg *number*
Tree	start-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

high-slope

Synopsis	Enter the **high-slope** context
Context	**configure** qos slope-policy *string* high-slope
Tree	high-slope
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the high priority RED slope
Context	**configure** qos slope-policy *string* high-slope admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

max-avg *number*

Synopsis	Buffer percentage after which drop probability is one
Context	**configure** qos slope-policy *string* high-slope max-avg *number*
Tree	max-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

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max-prob *number*

Synopsis	Drop probability to increase at high start-average
Context	**configure** qos slope-policy *string* high-slope max-prob *number*
Tree	max-prob
Range	0 to 100
Introduced	16.0.R1
Platforms	All

start-avg *number*

Synopsis	Buffer percentage after which drop probability starts to rise above zero
Context	**configure** qos slope-policy *string* high-slope start-avg *number*
Tree	start-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

highplus-slope

Synopsis	Enter the **highplus-slope** context
Context	**configure** qos slope-policy *string* highplus-slope
Tree	highplus-slope
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the highplus priority RED slope
Context	**configure** qos slope-policy *string* highplus-slope admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

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max-avg *number*

Synopsis	Buffer percentage after which drop probability is one
Context	**configure** qos slope-policy *string* highplus-slope max-avg *number*
Tree	max-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

max-prob *number*

Synopsis	Drop probability increase at highplus start-average
Context	**configure** qos slope-policy *string* highplus-slope max-prob *number*
Tree	max-prob
Range	0 to 100
Introduced	16.0.R1
Platforms	All

start-avg *number*

Synopsis	Buffer percentage after which drop probability starts to rise above zero
Context	**configure** qos slope-policy *string* highplus-slope start-avg *number*
Tree	start-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

low-slope

Synopsis	Enter the **low-slope** context
Context	**configure** qos slope-policy *string* low-slope
Tree	low-slope
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the low priority RED slope
Context	**configure** qos slope-policy *string* low-slope admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

max-avg *number*

Synopsis	Buffer percentage after which drop probability is one
Context	**configure** qos slope-policy *string* low-slope max-avg *number*
Tree	max-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

max-prob *number*

Synopsis	Drop probability to increase at low start-average
Context	**configure** qos slope-policy *string* low-slope max-prob *number*
Tree	max-prob
Range	0 to 100
Introduced	16.0.R1
Platforms	All

start-avg *number*

Synopsis	Buffer percentage after which drop probability starts to rise above zero
Context	**configure** qos slope-policy *string* low-slope start-avg *number*
Tree	start-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

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time-average-factor *number*

Synopsis	Weighting factor to calculate shared buffer utilization
Context	**configure** qos slope-policy *string* time-average-factor *number*
Tree	time-average-factor
Range	0 to 15
Default	7
Introduced	16.0.R1
Platforms	All

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3.38 redundancy commands

```
configure
   –  redundancy
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  bgp-evpn
         –  ethernet-segment
            –  activation-timer number
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  boot-timer number
      –  bgp-mh
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  site
            –  activation-timer number
            –  boot-timer number
            –  min-down-timer number
      –  cert-sync boolean
      –  mgmt-ethernet
         –  revert number
      –  multi-chassis
         –  ipsec-domain number
            –  admin-state keyword
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  designated-role keyword
            –  priority number
            –  revertive boolean
            –  tunnel-group reference
         –  options
            –  sub-mgmt
               –  apply-groups reference
               –  apply-groups-exclude reference
               –  dhcp-leasetime-threshold number
         –  peer (ipv4-address-no-zone | ipv6-address-no-zone)
            –  admin-state keyword
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  authentication-key string
            –  description string
            –  mc-endpoint
               –  admin-state keyword
               –  apply-groups reference
               –  apply-groups-exclude reference
               –  bfd boolean
               –  boot-timer number
               –  hold-on-neighbor-failure number
               –  keep-alive-interval number
               –  passive-mode boolean
               –  system-priority number
            –  mc-ipsec
               –  apply-groups reference
               –  apply-groups-exclude reference
               –  bfd-liveness boolean
               –  discovery-interval
                  –  boot number
                  –  interval-secs number
               –  domain reference
                  –  admin-state keyword
```


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configure redundancy multi-chassis peer mc-ipsec domain apply-groups

```
                - apply-groups reference
                - apply-groups-exclude reference
            - hold-on-neighbor-failure number
            - keep-alive-interval number
            - tunnel-group reference
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - peer-group number
                - priority number
        - mc-lag
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - hold-on-neighbor-failure number
            - keep-alive-interval number
            - lag reference
                - apply-groups reference
                - apply-groups-exclude reference
                - lacp-key number
                - remote-lag string
                - source-bmac-lsb (keyword | bmac-lsb)
                - system-id string
                - system-priority number
        - mc-ring
            - apply-groups reference
            - apply-groups-exclude reference
            - ring string
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - in-band-control-path
                    - debounce boolean
                    - dst-ip string
                    - interface string
                    - max-debounce-time number
                    - service-name string
                - path-b
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - range start number end number
                    - wildcard-saps boolean
                - path-excl
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - range start number end number
                    - wildcard-saps boolean
                - ring-node string
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - dst-ip string
                    - interval number
                    - service-name string
                    - src-ip string
                    - src-mac (keyword | ring-node-mac-address)
                    - vlan string
                - srrp-instance number
                - type keyword
        - peer-name string
        - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - sync
            - admin-state keyword
            - apply-groups reference
```


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configure redundancy multi-chassis peer sync apply-groups-exclude

```
                - apply-groups-exclude reference
                - diameter-node
                  - node reference
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - sync-tag string
                - igmp boolean
                - igmp-snooping boolean
                - ipsec boolean
                - l2tp boolean
                - local-dhcp-server boolean
                - mc-ring boolean
                - mld boolean
                - mld-snooping boolean
                - nat
                  - nat-group reference
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - sync-tag string
                - pim-snooping
                  - saps boolean
                  - spoke-sdps boolean
                - python boolean
                - srrp boolean
                - sub-host-trk boolean
                - sub-mgmt
                  - ipoe boolean
                  - pppoe boolean
                - tags
                  - lag reference
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - range start string end string
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - sync-tag string
                    - sync-tag string
                  - port reference
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - range start string end string
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - sync-tag string
                    - sync-tag string
                  - pw-port reference
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - range start string end string
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - sync-tag string
                    - sync-tag string
                  - sdp number
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - range start number end number
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - sync-tag string
                    - sync-tag string
                - track-srrp number
                  - apply-groups reference
                  - apply-groups-exclude reference
```


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configure redundancy multi-chassis peer sync track-srrp l2tp-tunnel-id-range

```
                  -  l2tp-tunnel-id-range
                     -  end number
                     -  start number
               -  transport-encryption
                  -  application keyword
                     -  apply-groups reference
                     -  apply-groups-exclude reference
                     -  keychain reference
               -  tunnel-group number
                  -  apply-groups reference
                  -  apply-groups-exclude reference
                  -  sync-tag string
      -  rollback-sync keyword
      -  srrp
         -  apply-groups reference
         -  apply-groups-exclude reference
         -  auto-srrp-id-range
            -  end number
            -  start number
      -  switchover-exec string
      -  synchronize keyword
```


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3.38.1 redundancy command descriptions

redundancy

Synopsis	Enter the **redundancy** context
Context	**configure** redundancy
Tree	redundancy
Introduced	16.0.R1
Platforms	All

bgp-evpn

Synopsis	Enter the **bgp-evpn** context
Context	**configure** redundancy bgp-evpn
Tree	bgp-evpn
Introduced	16.0.R1
Platforms	All

ethernet-segment

Synopsis	Enter the **ethernet-segment** context
Context	**configure** redundancy bgp-evpn ethernet-segment
Tree	ethernet-segment
Introduced	16.0.R1
Platforms	All

activation-timer *number*

Synopsis	Time before Ethernet segment activated on DF-elected PE
Context	**configure** redundancy bgp-evpn ethernet-segment activation-timer *number*
Tree	activation-timer
Range	0 to 100
Units	seconds
Default	3
Introduced	16.0.R1

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Platforms All

boot-timer *number*

Synopsis Time before BGP EVPN multi-homing DF election algorithm

Context **configure** redundancy bgp-evpn ethernet-segment boot-timer *number*

Tree boot-timer

Description This command allows the necessary time for the control plane protocols to come up upon PE boot-up before bringing up the ESs and running the DF algorithm.

The following considerations apply to this command:

- The **boot-timer** command must provide enough time to allow the IOMs and BGP sessions to come up before exchanging ES routes and running the DF election for each EVI or ISID.
- The boot-timer is synchronized across CPMs and is relative to the system up time; it is not changed or reset upon CPM switchover.
- The boot-timer is never interrupted (the **es-activation-timer**, however, can be interrupted if there is a new event triggering the DF election).
- The boot-timer runs per EVI or ISID on the ESs in the system. If the system up time (time the system has been up since the last reboot) is less than the **boot-timer** value, the system does not run the DF election for any EVI or ISID. When the **boot-timer** value expires, the DF election runs, and if the system is elected DF for the EVI or ISID, the **es-activation-timer** is triggered.
- The system does not advertise ES routes until the boot timer expires, which guarantees that the peer ES PEs only run the DF election when the PE is ready to become the DF, if required.

Range 0 to 1800

Units seconds

Default 10

Introduced 16.0.R1

Platforms All

bgp-mh

Synopsis Enter the **bgp-mh** context

Context **configure** redundancy bgp-mh

Tree bgp-mh

Introduced 16.0.R1

Platforms All

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site

Synopsis	Enter the **site** context
Context	**configure** redundancy bgp-mh site
Tree	site
Introduced	16.0.R1
Platforms	All

activation-timer *number*

Synopsis	Time to wait for BGP updates from remote PEs
Context	**configure** redundancy bgp-mh site activation-timer *number*
Tree	activation-timer
Range	0 to 100
Units	seconds
Default	2
Introduced	16.0.R1
Platforms	All

boot-timer *number*

Synopsis	Wait time after reboot to run the DF election algorithm
Context	**configure** redundancy bgp-mh site boot-timer *number*
Tree	boot-timer
Range	0 to 600
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

min-down-timer *number*

Synopsis	Min downtime for BGP multi-homing site after transition
Context	**configure** redundancy bgp-mh site min-down-timer *number*
Tree	min-down-timer

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Description	This command configures the BGP multi-homing site minimum down time. When this value is set and the site goes operationally down, it remains operationally down for at least the length of time configured by this timer, regardless of whether other state changes might cause the site to go operationally up. This timer is restarted every time the site transitions from operationally up to down. This timer is optimized in the following circumstances: • If the site goes down on the DF but there are no BGP multi-homing peers with the same site in an up state, this timer is not used. • If the site goes down on the DF but there are no active BGP multi-homing peers, this timer is not used. • If this timer is active and a BGP multihoming update is received from the DF indicating its site is down, this timer is immediately terminated and the BGP multihoming algorithm is triggered to determine whether this PE should become the DF.
Range	1 to 100
Units	seconds
Introduced	16.0.R1
Platforms	All

cert-sync *boolean*

Synopsis	Automatically synchronize certificate files
Context	**configure** redundancy cert-sync *boolean*
Tree	cert-sync
Default	true
Introduced	16.0.R1
Platforms	All

mgmt-ethernet

Synopsis	Enable the **mgmt-ethernet** context
Context	**configure** redundancy mgmt-ethernet
Tree	mgmt-ethernet
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

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revert *number*

Synopsis	Time before reverting standby CPM management Ethernet port to active CPM
Context	**configure** redundancy mgmt-ethernet revert *number*
Tree	revert
Range	1 to 300
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

multi-chassis

Synopsis	Enter the **multi-chassis** context
Context	**configure** redundancy multi-chassis
Tree	multi-chassis
Description	Commands in this context configure the attributes of multi-chassis redundancy.
Introduced	16.0.R1
Platforms	All

ipsec-domain [id] *number*

Synopsis	Enter the **ipsec-domain** list instance
Context	**configure** redundancy multi-chassis ipsec-domain *number*
Tree	ipsec-domain
Description	Commands in this context configure an IPsec domain used for N:M IPsec redundancy.
Max. Instances	64
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	IPsec domain ID
Context	**configure** redundancy multi-chassis ipsec-domain *number*
Tree	ipsec-domain

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Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the IPsec domain
Context	**configure** redundancy multi-chassis ipsec-domain *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

designated-role *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Designated role for the IPsec domain
Context	**configure** redundancy multi-chassis ipsec-domain *number* designated-role *keyword*
Tree	designated-role
Description	This command configures the designated role of the tunnel group in the IPsec domain.
Options	standby, active
Default	standby
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority *number*

Synopsis	Priority for the IPsec domain
Context	**configure** redundancy multi-chassis ipsec-domain *number* priority *number*
Tree	priority

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Description	This command configures the priority for the tunnel group in the IPsec domain. The node with the higher priority is more likely to be elected as active within the domain.
Range	0 to 255
Default	100
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

revertive *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable revertive behavior for the tunnel group
Context	**configure** redundancy multi-chassis ipsec-domain *number* revertive *boolean*
Tree	revertive
Description	When configured to **true**, the router enables the revertive behavior of the tunnel group, which allows a router in an N:M domain to automatically take over as the active router in the domain when it becomes eligible to do so. When configured to **false**, the revertive behavior of the tunnel group is disabled.
Default	false
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-group *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Tunnel group ID for an IPsec domain
Context	**configure** redundancy multi-chassis ipsec-domain *number* tunnel-group *reference*
Tree	tunnel-group
Description	This command specifies the tunnel group ID for the IPsec domain.
Reference	**configure** isa tunnel-group *number*
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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options

Synopsis	Enter the **options** context
Context	**configure** redundancy multi-chassis options
Tree	options
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-mgmt

Synopsis	Enter the **sub-mgmt** context
Context	**configure** redundancy multi-chassis options sub-mgmt
Tree	sub-mgmt
Description	Commands in this context configure subscriber management options for multi-chassis redundancy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp-leasetime-threshold *number*

Synopsis	DHCP lease threshold to skip MCS synchronization
Context	**configure** redundancy multi-chassis options sub-mgmt dhcp-leasetime-threshold *number*
Tree	dhcp-leasetime-threshold
Description	This command configures the DHCP lease time threshold to skip MCS synchronization.DHCP leases for the **sub-mgmt** MCS applications are eligible to skip synchronization if the committed lease time is less than the active threshold on a multi-chassis peer. The active threshold is the minimum value of the thresholds configured on the nodes at each end of a multi-chassis peer. The threshold is inactive when it is unconfigured on at least one end of the multi-chassis peer.
Range	0 to 86400
Units	seconds
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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peer [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **peer** list instance
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	peer
Description	This command configures the IP address of the peer in a redundant multi-chassis setup, and enters the context for further application-specific configuration options.
Max. Instances	20
Introduced	16.0.R1
Platforms	All

[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Peer IP address
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	peer
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the MC redundancy peer
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

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authentication-key *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Authentication key used between the node and MC peer
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* authentication-key *string*
Tree	authentication-key
String Length	1 to 54
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

mc-endpoint

Synopsis	Enable the **mc-endpoint** context
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-endpoint
Tree	mc-endpoint
Introduced	22.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the MC-EP
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-endpoint admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	disable
Introduced	22.10.R1
Platforms	All

bfd *boolean*

Synopsis	Enable BFD detection for the MC-EP peering tunnel
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-endpoint bfd *boolean*
Tree	bfd
Description	When configured to **true**, the system uses Bidirectional Forwarding Detection (BFD) to control the state of the associated protocol interface, where the state of the protocol interface is tied to the state of the BFD session between the local and remote nodes. The BFD settings are configured in the IP interface contexts.
Default	false
Introduced	22.10.R1
Platforms	All

boot-timer *number*

Synopsis	Time to attempt connection before declaring failure
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-endpoint boot-timer *number*
Tree	boot-timer
Description	This command configures the time interval to attempt connection that applies after the node reboots. This command specifies the time the multi-chassis endpoint (MC-EP) protocol takes to establish a connection before declaring a connection failure with the remote peer. When the time interval expires, all configured MC-EPs revert to single chassis behavior, activating the best local pseudowire.
Range	1 to 600
Units	seconds
Default	300
Introduced	22.10.R1
Platforms	All

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hold-on-neighbor-failure *number*

Synopsis	Number of keepalive intervals to wait for packets
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* mc-endpoint hold-on-neighbor-failure *number*
Tree	hold-on-neighbor-failure
Description	This command configures the number of keepalive intervals that the local node waits for packets from the MC-EP peer before declaring a connection failure. When the number of intervals is reached, all configured MC-EPs revert to single chassis behavior, activating the best local pseudowire.
Range	2 to 25
Default	3
Introduced	22.10.R1
Platforms	All

keep-alive-interval *number*

Synopsis	Interval for exchange of keepalive messages
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* mc-endpoint keep-alive-interval *number*
Tree	keep-alive-interval
Description	This command configures the interval for which keepalive messages are exchanged between two systems participating as MC-EP when BFD is not active. The fast keepalive messages are used to detect remote node failure.
Range	5 to 500
Default	10
Introduced	22.10.R1
Platforms	All

passive-mode *boolean*

Synopsis	Enable passive mode for the MC-EP tunnel
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* mc-endpoint passive-mode *boolean*
Tree	passive-mode
Description	When configured to **true**, the system enables passive mode behavior for the MC-EP protocol. Assuming the remote pair is configured with regular MC-EP in passive mode, the MC-EP pair remains dormant until two of the pseudowires in an MC-EP are activated by the remote PEs.

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When one pseudowire is active, the dormant MC-EP pair becomes active. The regular mechanism to select the best pseudowire between the active pair is initiated, and the system blocks the Rx and Tx directions of the other pseudowire.

Default false

Introduced 22.10.R1

Platforms All

system-priority *number*

Synopsis System priority of the MC-EP

Context **configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-endpoint system-priority *number*

Tree system-priority

Description This command configures the system priority of the MC-EP. The peer configured with the lower value is selected as the master. If the system priority values are equal, the peer with the higher system ID (chassis MAC address) becomes the master.

Range 0 to 255

Default 0

Introduced 22.10.R1

Platforms All

mc-ipsec

Synopsis Enable the **mc-ipsec** context

Context **configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ipsec

Tree mc-ipsec

Description This command enables the context to configure multi-chassis peer parameters.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bfd-liveness *boolean*

Synopsis Enable BFD

Context **configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ipsec bfd-liveness *boolean*

Tree bfd-liveness

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Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

discovery-interval

Synopsis	Enter the **discovery-interval** context
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ipsec discovery-interval
Tree	discovery-interval
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

boot *number*

Synopsis	Maximum interval after system bootup
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ipsec discovery-interval boot *number*
Tree	boot
Range	1 to 1800
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval-secs *number*

Synopsis	Maximum discovery interval
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ipsec discovery-interval interval-secs *number*
Tree	interval-secs
Range	1 to 1800
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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domain [id] *reference*

Synopsis	Enter the **domain** list instance
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ipsec domain *reference*
Tree	domain
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**id**] *reference*

Synopsis	IPsec domain ID
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ipsec domain *reference*
Tree	domain
Reference	**configure** redundancy multi-chassis ipsec-domain *number*
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the IPsec domain
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ipsec domain *reference* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-on-neighbor-failure *number*

Synopsis	Hold time on neighbor failure
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ipsec hold-on-neighbor-failure *number*

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Tree	hold-on-neighbor-failure
Range	2 to 25
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keep-alive-interval *number*

Synopsis	Keepalive interval
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* mc-ipsec keep-alive-interval *number*
Tree	keep-alive-interval
Range	5 to 500
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-group [tunnel-group-id] *reference*

Synopsis	Enter the **tunnel-group** list instance
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* mc-ipsec tunnel-group *reference*
Tree	tunnel-group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**tunnel-group-id**] *reference*

Synopsis	Tunnel group ID
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* mc-ipsec tunnel-group *reference*
Tree	tunnel-group
Reference	**configure** isa tunnel-group *number*
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the peer IPsec tunnel group
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ipsec tunnel-group *reference* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-group *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Peer tunnel group
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ipsec tunnel-group *reference* peer-group *number*
Tree	peer-group
Range	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority *number*

Synopsis	Tunnel group priority
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ipsec tunnel-group *reference* priority *number*
Tree	priority
Range	0 to 255
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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mc-lag

Synopsis	Enter the **mc-lag** context
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-lag
Tree	mc-lag
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MC-LAG
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-lag admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

hold-on-neighbor-failure *number*

Synopsis	Time to wait for packets before node failure assumed
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-lag hold-on-neighbor-failure *number*
Tree	hold-on-neighbor-failure
Range	2 to 25
Default	3
Introduced	16.0.R1
Platforms	All

keep-alive-interval *number*

Synopsis	Keepalive timer value
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-lag keep-alive-interval *number*

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Tree	keep-alive-interval
Range	5 to 500
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	All

lag [lag-name] *reference*

Synopsis	Enter the **lag** list instance
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* mc-lag lag *reference*
Tree	lag
Introduced	16.0.R1
Platforms	All

[**lag-name**] *reference*

Synopsis	LAG name
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* mc-lag lag *reference*
Tree	lag
Reference	**configure** lag *string*
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

lacp-key *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key based on the remote MC-LAG
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* mc-lag lag *reference* lacp-key *number*
Tree	lacp-key

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Range	1 to 65535
Introduced	16.0.R1
Platforms	All

remote-lag *string*

Synopsis	LAG name
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-lag lag *reference* remote-lag *string*
Tree	remote-lag
String Length	1 to 27
Introduced	16.0.R1
Platforms	All

source-bmac-lsb *(keyword \| bmac-lsb)*

Synopsis	MAC address value to apply to all ingress traffic
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-lag lag *reference* source-bmac-lsb *(keyword | bmac-lsb)*
Tree	source-bmac-lsb
Options	use-lacp-key
Introduced	16.0.R1
Platforms	All

system-id *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	ID based on the remote MC-LAG
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-lag lag *reference* system-id *string*
Tree	system-id
Introduced	16.0.R1
Platforms	All

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system-priority *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Priority based on the remote MC-LAG
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* mc-lag lag *reference* system-priority *number*
Tree	system-priority
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

mc-ring

Synopsis	Enter the **mc-ring** context
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* mc-ring
Tree	mc-ring
Introduced	16.0.R1
Platforms	All

ring [sync-tag] *string*

Synopsis	Enter the **ring** list instance
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* mc-ring ring *string*
Tree	ring
Introduced	16.0.R1
Platforms	All

[**sync-tag**] *string*

Synopsis	Tag for synchronizing with the multi-chassis peer
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* mc-ring ring *string*

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Tree	ring
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the multi-chassis ring
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ring ring *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

in-band-control-path

Synopsis	Enter the **in-band-control-path** context
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ring ring *string* in-band-control-path
Tree	in-band-control-path
Introduced	16.0.R1
Platforms	All

debounce *boolean*

Synopsis	Enable inband control path debouncing
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ring ring *string* in-band-control-path debounce *boolean*
Tree	debounce
Default	true
Introduced	16.0.R1
Platforms	All

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dst-ip *string*

Synopsis	IP address of the in-band control path peer
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ring ring *string* in-band-control-path dst-ip *string*
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

interface *string*

Synopsis	Interface to verify in-band control path
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ring ring *string* in-band-control-path interface *string*
Tree	interface
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

max-debounce-time *number*

Synopsis	Maximum delay after a failure when debouncing is active
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ring ring *string* in-band-control-path max-debounce-time *number*
Tree	max-debounce-time
Range	5 to 200
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

service-name *string*

Synopsis	Administrative service name
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ring ring *string* in-band-control-path service-name *string*

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Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

path-b

Synopsis	Enter the **path-b** context
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ring ring *string* path-b
Tree	path-b
Introduced	16.0.R1
Platforms	All

range start *number* end *number*

Synopsis	Add a list entry for **range**
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ring ring *string* path-b range start *number* end *number*
Tree	range
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the VLAN range
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ring ring *string* path-b range start *number* end *number*
Tree	range
Range	0 to 4094
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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end *number*

Synopsis	Upper bound of the VLAN range
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ring ring *string* path-b range start *number* end *number*
Tree	range
Range	0 to 4094
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

wildcard-saps *boolean*

Synopsis	Include the SAPs starting with a wildcard '*'
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ring ring *string* path-b wildcard-saps *boolean*
Tree	wildcard-saps
Default	false
Introduced	16.0.R4
Platforms	All

path-excl

Synopsis	Enter the **path-excl** context
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ring ring *string* path-excl
Tree	path-excl
Introduced	16.0.R1
Platforms	All

range start *number* end *number*

Synopsis	Add a list entry for **range**
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ring ring *string* path-excl range start *number* end *number*
Tree	range
Introduced	16.0.R1

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Platforms	All

start *number*

Synopsis	Lower bound of the VLAN range
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ring ring *string* path-excl range start *number* end *number*
Tree	range
Range	0 to 4094
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the VLAN range
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ring ring *string* path-excl range start *number* end *number*
Tree	range
Range	0 to 4094
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

wildcard-saps *boolean*

Synopsis	Include the SAPs starting with a wildcard '*'
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ring ring *string* path-excl wildcard-saps *boolean*
Tree	wildcard-saps
Default	false
Introduced	16.0.R4
Platforms	All

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ring-node [name] *string*

Synopsis	Enter the **ring-node** list instance
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ring ring *string* ring-node *string*
Tree	ring-node
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	Name of the multi-chassis ring access node
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ring ring *string* ring-node *string*
Tree	ring-node
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the ring node verification
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ring ring *string* ring-node *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

dst-ip *string*

Synopsis	Destination IP address for access node connection
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ring ring *string* ring-node *string* dst-ip *string*
Tree	dst-ip

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Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Connection verification interval
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* mc-ring ring *string* ring-node *string* interval *number*
Tree	interval
Range	1 to 6000
Units	minutes
Default	5
Introduced	16.0.R1
Platforms	All

service-name *string*

Synopsis	Administrative service name
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* mc-ring ring *string* ring-node *string* service-name *string*
Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

src-ip *string*

Synopsis	Source IP address for access node connection
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* mc-ring ring *string* ring-node *string* src-ip *string*
Tree	src-ip
Introduced	16.0.R1
Platforms	All

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src-mac *(keyword | ring-node-mac-address)*

Synopsis	Source MAC address for the access node connection
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ring ring *string* ring-node *string* src-mac *(keyword | ring-node-mac-address)*
Tree	src-mac
Options	system-mac-address
Default	system-mac-address
Introduced	16.0.R1
Platforms	All

vlan *string*

Synopsis	VLAN ID for access node connection
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ring ring *string* ring-node *string* vlan *string*
Tree	vlan
String Length	1 to 11
Introduced	16.0.R1
Platforms	All

srrp-instance [id] *number*

Synopsis	Add a list entry for **srrp-instance**
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ring ring *string* srrp-instance *number*
Tree	srrp-instance
Max. Instances	2
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	SRRP instance ID
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ring ring *string* srrp-instance *number*

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Tree	srrp-instance
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Type of the multi-chassis ring
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mc-ring ring *string* type *keyword*
Tree	type
Options	layer-2, layer-3
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

peer-name *string*

Synopsis	Multi-chassis peer name
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* peer-name *string*
Tree	peer-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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Synopsis	Source address to communicate with the MC peer
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-address
Introduced	16.0.R1
Platforms	All

sync

Synopsis	Enable the **sync** context
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync
Tree	sync
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the peer synchronization
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

diameter-node

Synopsis	Enable the **diameter-node** context
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync diameter-node
Tree	diameter-node
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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node [host-name] *reference*

Synopsis	Enter the **node** list instance
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync diameter-node node *reference*
Tree	node
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**host-name**] *reference*

Synopsis	Origin-Host of the node
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync diameter-node node *reference*
Tree	node
Reference	**configure** aaa diameter node *string*
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*

Synopsis	Sync tag to be used for synchronization
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync diameter-node node *reference* sync-tag *string*
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

igmp *boolean*

Synopsis	Synchronize IGMP protocol information with the MC peer
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync igmp *boolean*
Tree	igmp

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Default	false
Introduced	16.0.R1
Platforms	All

igmp-snooping *boolean*

Synopsis	Synchronize IGMP snooping information
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync igmp-snooping *boolean*
Tree	igmp-snooping
Default	false
Introduced	16.0.R1
Platforms	All

ipsec *boolean*

Synopsis	Synchronize IPsec information
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync ipsec *boolean*
Tree	ipsec
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2tp *boolean*

Synopsis	Synchronize Layer Two Tunnel Protocol (L2TP)
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync l2tp *boolean*
Tree	l2tp
Default	false
Introduced	16.0.R1
Platforms	All

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local-dhcp-server *boolean*

Synopsis	Synchronize DHCP Server information
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync local-dhcp-server *boolean*
Tree	local-dhcp-server
Default	false
Introduced	16.0.R1
Platforms	All

mc-ring *boolean*

Synopsis	Synchronize ring information
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync mc-ring *boolean*
Tree	mc-ring
Default	false
Introduced	16.0.R1
Platforms	All

mld *boolean*

Synopsis	Synchronize MLD protocol information
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync mld *boolean*
Tree	mld
Default	false
Introduced	16.0.R1
Platforms	All

mld-snooping *boolean*

Synopsis	Synchronize MLD snooping information
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync mld-snooping *boolean*
Tree	mld-snooping
Default	false

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Introduced	16.0.R1
Platforms	All

nat

Synopsis	Enable the **nat** context
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync nat
Tree	nat
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group [id] *reference*

Synopsis	Enter the **nat-group** list instance
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync nat nat-group *reference*
Tree	nat-group
Description	Commands in this context configure multi-chassis synchronization (MCS) for a NAT group. NAT group health information is exchanged between the pair of redundant NAT nodes. The system elects one of the nodes as the active node for the NAT group and the other node becomes the standby node.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *reference*

Synopsis	NAT group ID
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync nat nat-group *reference*
Tree	nat-group
Reference	**configure** isa nat-group *number*
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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sync-tag *string*

WARNING:
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Synopsis	NAT group synchronization tag
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync nat nat-group *reference* sync-tag *string*
Tree	sync-tag
Description	This command configures the synchronization tag for the NAT group. The tag must match the synchronization tag for the NAT group on the peering node.
String Length	1 to 32
Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pim-snooping

Synopsis	Enter the **pim-snooping** context
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync pim-snooping
Tree	pim-snooping
Introduced	16.0.R1
Platforms	All

saps *boolean*

Synopsis	Synchronize PIM snooping data with the multi-chassis peer on SDP endpoints
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync pim-snooping saps *boolean*
Tree	saps
Default	false
Introduced	16.0.R1
Platforms	All

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spoke-sdps *boolean*

Synopsis	Synchronize spoke SDPs with the multi-chassis peer
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync pim-snooping spoke-sdps *boolean*
Tree	spoke-sdps
Default	false
Introduced	16.0.R1
Platforms	All

python *boolean*

Synopsis	Synchronize Python
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync python *boolean*
Tree	python
Default	false
Introduced	16.0.R1
Platforms	All

srrp *boolean*

Synopsis	Synchronize SRRP information
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync srrp *boolean*
Tree	srrp
Default	false
Introduced	16.0.R1
Platforms	All

sub-host-trk *boolean*

Synopsis	Synchronize subscriber host tracking information
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync sub-host-trk *boolean*
Tree	sub-host-trk
Default	false

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-mgmt

Synopsis	Enter the **sub-mgmt** context
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync sub-mgmt
Tree	sub-mgmt
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe *boolean*

Synopsis	Synchronize subscriber management IPoE information
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync sub-mgmt ipoe *boolean*
Tree	ipoe
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe *boolean*

Synopsis	Synchronize subscriber management PPPoE information
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync sub-mgmt pppoe *boolean*
Tree	pppoe
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tags

Synopsis	Enter the **tags** context
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync tags

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Tree	tags
Introduced	16.0.R1
Platforms	All

lag [lag-name] *reference*

Synopsis	Enter the **lag** list instance
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync tags lag *reference*
Tree	lag
Introduced	16.0.R1
Platforms	All

[**lag-name**] *reference*

Synopsis	LAG name
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync tags lag *reference*
Tree	lag
Reference	**configure** lag *string*
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

range start *string* end *string*

Synopsis	Enter the **range** list instance
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync tags lag *reference* range start *string* end *string*
Tree	range
Introduced	16.0.R1
Platforms	All

start *string*

Synopsis	First encapsulation value

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Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync tags lag *reference* range start *string* end *string*
Tree	range
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *string*

Synopsis	Last encapsulation value
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync tags lag *reference* range start *string* end *string*
Tree	range
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

sync-tag *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync tags lag *reference* range start *string* end *string* sync-tag *string*
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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sync-tag *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync tags lag *reference* sync-tag *string*
Tree	sync-tag
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

port [id] *reference*

Synopsis	Enter the **port** list instance
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync tags port *reference*
Tree	port
Introduced	16.0.R1
Platforms	All

[**id**] *reference*

Synopsis	ID of port to be synchronized with multi-chassis peer
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync tags port *reference*
Tree	port
Reference	**configure** port *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

range start *string* end *string*

Synopsis	Enter the **range** list instance

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Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync tags port *reference* range start *string* end *string*
Tree	range
Introduced	16.0.R1
Platforms	All

start *string*

Synopsis	First encapsulation value
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync tags port *reference* range start *string* end *string*
Tree	range
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *string*

Synopsis	Last encapsulation value
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync tags port *reference* range start *string* end *string*
Tree	range
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

sync-tag *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync tags port *reference* range start *string* end *string* sync-tag *string*

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Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sync-tag *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync tags port *reference* sync-tag *string*
Tree	sync-tag
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

pw-port [id] *reference*

Synopsis	Enter the **pw-port** list instance
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync tags pw-port *reference*
Tree	pw-port
Introduced	16.0.R4
Platforms	All

[**id**] *reference*

Synopsis	ID of pseudowire port to be synchronized with MC peer
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync tags pw-port *reference*
Tree	pw-port
Reference	**configure** pw-port *number*

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Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

range start *string* end *string*

Synopsis	Enter the **range** list instance
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync tags pw-port *reference* range start *string* end *string*
Tree	range
Introduced	16.0.R4
Platforms	All

start *string*

Synopsis	First encapsulation value
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync tags pw-port *reference* range start *string* end *string*
Tree	range
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

end *string*

Synopsis	Last encapsulation value
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync tags pw-port *reference* range start *string* end *string*
Tree	range
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

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sync-tag *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync tags pw-port *reference* range start *string* end *string* sync-tag *string*
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

sync-tag *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync tags pw-port *reference* sync-tag *string*
Tree	sync-tag
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

sdp [id] *number*

Synopsis	Enter the **sdp** list instance
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync tags sdp *number*
Tree	sdp
Introduced	16.0.R1
Platforms	All

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[**id**] *number*

Synopsis	ID of SDP to be synchronized with multi-chassis peer
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync tags sdp *number*
Tree	sdp
Range	1 to 32767
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

range start *number* end *number*

Synopsis	Enter the **range** list instance
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync tags sdp *number* range start *number* end *number*
Tree	range
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	First virtual circuit ID
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync tags sdp *number* range start *number* end *number*
Tree	range
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Last virtual circuit ID
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync tags sdp *number* range start *number* end *number*
Tree	range

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Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

sync-tag *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync tags sdp *number* range start *number* end *number* sync-tag *string*
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sync-tag *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync tags sdp *number* sync-tag *string*
Tree	sync-tag
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

track-srrp [id] *number*

Synopsis	Enter the **track-srrp** list instance

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Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync track-srrp *number*
Tree	track-srrp
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	Tracked SRRP instance ID
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync track-srrp *number*
Tree	track-srrp
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

l2tp-tunnel-id-range

Synopsis	Enter the **l2tp-tunnel-id-range** context
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync track-srrp *number* l2tp-tunnel-id-range
Tree	l2tp-tunnel-id-range
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the L2TP tunnel ID range
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync track-srrp *number* l2tp-tunnel-id-range end *number*
Tree	end
Range	1 to 16383
Introduced	16.0.R1
Platforms	All

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start *number*

Synopsis	Lower bound of the L2TP tunnel ID range
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync track-srrp *number* l2tp-tunnel-id-range start *number*
Tree	start
Range	1 to 16383
Introduced	16.0.R1
Platforms	All

transport-encryption

Synopsis	Enter the **transport-encryption** context
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync transport-encryption
Tree	transport-encryption
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

application [application-id] *keyword*

Synopsis	Enter the **application** list instance
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync transport-encryption application *keyword*
Tree	application
Description	Commands in this context configure the MCS application for transport encryption. The application-id configures an application and a keychain defines the key used for the encryption.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**application-id**] *keyword*

Synopsis	Application using transport encryption
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync transport-encryption application *keyword*
Tree	application
Description	This command configures an MCS application for the transport encryption method.

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Options	igmp, igmp-snooping, sub-mgmt-ipoe, srrp, mc-ring, mld-snooping, dhcp-server, sub-host-trk, sub-mgmt-pppoe, ipsec, mld, python, l2tp, diam-proxy, pim-snpg-sap, pim-snpg-sdp, diam-node, nat
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keychain *reference*

Synopsis	Keychain containing the authentication keys
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync transport-encryption application *keyword* keychain *reference*
Tree	keychain
Description	This command specifies a keychain that contains authentication keys for the application.
Reference	**configure** system security keychains keychain *string*
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-group [tunnel-group-id] *number*

Synopsis	Enter the **tunnel-group** list instance
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync tunnel-group *number*
Tree	tunnel-group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**tunnel-group-id**] *number*

Synopsis	Multi-active tunnel group ID
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync tunnel-group *number*
Tree	tunnel-group
Range	1 to 64
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*

Synopsis	Tag to synchronize the tunnel group with the MC peer
Context	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync tunnel-group *number* sync-tag *string*
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rollback-sync *keyword*

Synopsis	Parameters for redundancy rollback synchronization
Context	**configure** redundancy rollback-sync *keyword*
Tree	rollback-sync
Options	rollback-single, rollback-all
Introduced	16.0.R1
Platforms	All

srrp

Synopsis	Enter the **srrp** context
Context	**configure** redundancy srrp
Tree	srrp
Description	Commands in this context configure system parameters for BNG CUPS inter-UPF resiliency.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-srrp-id-range

Synopsis	Enable the **auto-srrp-id-range** context

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Context	**configure** redundancy srrp auto-srrp-id-range
Tree	auto-srrp-id-range
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the ID range
Context	**configure** redundancy srrp auto-srrp-id-range end *number*
Tree	end
Range	2 to 4294967295
Default	4294967295
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of the ID range
Context	**configure** redundancy srrp auto-srrp-id-range start *number*
Tree	start
Range	1 to 4294967294
Default	2147483648
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

switchover-exec *string*

Synopsis	CLI script file executed after a redundancy switchover
Context	**configure** redundancy switchover-exec *string*
Tree	switchover-exec
Description	This command specifies the location and name of the CLI script file executed following a redundancy switchover from the previously active CPM card. A switchover can happen because of a fatal failure or by manual action. The CLI script file can contain commands for environment settings, classic CLI debug configuration (excluding mirroring settings), and other commands not maintained by the configuration redundancy.

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	The following commands are not supported in the switchover-exec file: **clear**, **configure**, **candidate**, **oam**, **tools**, **oam**, **ping**, **traceroute**, **mstat**, **mtrace**, and **mrinfo**.
String Length	1 to 100
Introduced	16.0.R1
Platforms	All

synchronize *keyword*

Synopsis	Parameters for redundancy synchronization
Context	**configure** redundancy synchronize *keyword*
Tree	synchronize
Options	off, config, boot-env
Introduced	16.0.R1
Platforms	All

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3.39 router commands

```
configure
   –  router string
      –  aggregates
         –  aggregate (ipv4-prefix | ipv6-prefix)
            –  aggregator
               –  address string
               –  as-number number
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  as-set boolean
            –  blackhole
               –  generate-icmp boolean
            –  community string
            –  description string
            –  discard-component-communities boolean
            –  indirect (ipv4-address-no-zone | ipv6-address-no-zone)
            –  local-preference number
            –  policy reference
            –  summary-only boolean
            –  tunnel-group number
         –  apply-groups reference
         –  apply-groups-exclude reference
      –  allow-bgp-to-igp-export boolean
      –  allow-icmp-redirect boolean
      –  allow-icmp6-redirect boolean
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  autonomous-system number
      –  bfd
         –  seamless-bfd
            –  peer (ipv4-address-no-zone | ipv6-address-no-zone)
               –  apply-groups reference
               –  apply-groups-exclude reference
               –  discriminator number
      –  bgp
         –  add-paths
            –  evpn
               –  receive boolean
               –  send (number | keyword)
            –  ipv4
               –  receive boolean
               –  send (number | keyword)
            –  ipv6
               –  receive boolean
               –  send (number | keyword)
            –  label-ipv4
               –  receive boolean
               –  send (number | keyword)
            –  label-ipv6
               –  receive boolean
               –  send (number | keyword)
            –  mcast-vpn-ipv4
               –  receive boolean
               –  send number
            –  mcast-vpn-ipv6
               –  receive boolean
               –  send number
            –  mvpn-ipv4
               –  receive boolean
```


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configure router bgp add-paths mvpn-ipv4 send

```
            - send number
         - mvpn-ipv6
            - receive boolean
            - send number
         - vpn-ipv4
            - receive boolean
            - send (number | keyword)
         - vpn-ipv6
            - receive boolean
            - send (number | keyword)
      - admin-state keyword
      - advertise-external
         - ipv4 boolean
         - ipv6 boolean
         - label-ipv4 boolean
         - label-ipv6 boolean
      - advertise-inactive boolean
      - advertise-ipv6-next-hops
         - evpn boolean
         - ipv4 boolean
         - label-ipv4 boolean
         - label-ipv6 boolean
         - vpn-ipv4 boolean
         - vpn-ipv6 boolean
      - aggregator-id-zero boolean
      - apply-groups reference
      - apply-groups-exclude reference
      - asn-4-byte boolean
      - authentication-key string
      - authentication-keychain reference
      - backup-path
         - ipv4 boolean
         - ipv6 boolean
         - label-ipv4 boolean
         - label-ipv6 boolean
      - best-path-selection
         - always-compare-med
            - med-value keyword
            - strict-as boolean
         - as-path-ignore
            - ipv4 boolean
            - ipv6 boolean
            - l2-vpn boolean
            - label-ipv4 boolean
            - label-ipv6 boolean
            - mcast-ipv4 boolean
            - mcast-ipv6 boolean
            - mvpn-ipv4 boolean
            - mvpn-ipv6 boolean
            - vpn-ipv4 boolean
            - vpn-ipv6 boolean
         - compare-origin-validation-state boolean
         - d-path-length-ignore boolean
         - deterministic-med boolean
         - ebgp-ibgp-equal
            - evpn boolean
            - ipv4 boolean
            - ipv6 boolean
            - label-ipv4 boolean
            - label-ipv6 boolean
            - vpn-ipv4 boolean
            - vpn-ipv6 boolean
         - ignore-nh-metric boolean
         - ignore-router-id
```


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configure router bgp best-path-selection ignore-router-id include-internal

```
                - include-internal
                  - mvpn-ipv4 boolean
                  - mvpn-ipv6 boolean
            - origin-invalid-unusable boolean
        - bfd-liveness boolean
        - bfd-strict-mode
            - advertise
                - holdtime number
            - next-hop-reachability boolean
        - bgp-tunnel-metric
            - prefer-aigp boolean
            - prefer-med boolean
            - value number
        - bgp-tunnel-preference number
        - block-prefix-sid boolean
        - client-reflect boolean
        - cluster
            - allow-local-fallback boolean
            - cluster-id string
            - orr-location number
        - connect-retry number
        - convergence
            - family keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - max-wait-to-advertise number
            - min-wait-to-advertise number
        - damp-peer-oscillations
            - error-interval number
            - idle-hold-time
                - initial-wait number
                - max-wait number
                - second-wait number
        - damping boolean
        - def-recv-evpn-encap keyword
        - default-label-preference
            - ebgp number
            - ibgp number
        - default-preference
            - ebgp number
            - ibgp number
        - description string
        - dynamic-neighbor-limit number
        - ebgp-default-reject-policy
            - export boolean
            - import boolean
        - egress-peer-engineering
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
        - enforce-first-as boolean
        - error-handling
            - update-fault-tolerance boolean
        - export
            - apply-groups reference
            - apply-groups-exclude reference
            - policy (policy-expr-string | string)
        - extended-nh-encoding
            - ipv4 boolean
            - label-ipv4 boolean
            - vpn-ipv4 boolean
        - family
            - bgp-ls boolean
            - evpn boolean
```


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configure router bgp family flow-ipv4

```
            - flow-ipv4 boolean
            - flow-ipv6 boolean
            - flow-vpn-ipv4 boolean
            - flow-vpn-ipv6 boolean
            - ipv4 boolean
            - ipv6 boolean
            - l2-vpn boolean
            - label-ipv4 boolean
            - label-ipv6 boolean
            - mcast-ipv4 boolean
            - mcast-ipv6 boolean
            - mcast-vpn-ipv4 boolean
            - mcast-vpn-ipv6 boolean
            - mdt-safi boolean
            - ms-pw boolean
            - mvpn-ipv4 boolean
            - mvpn-ipv6 boolean
            - route-target boolean
            - sr-policy-ipv4 boolean
            - sr-policy-ipv6 boolean
            - vpn-ipv4 boolean
            - vpn-ipv6 boolean
         - fast-external-failover boolean
         - flowspec
            - validate-dest-prefix boolean
            - validate-redirect-ip boolean
         - graceful-restart
            - gr-notification boolean
            - long-lived
               - advertise-stale-to-all-neighbors boolean
               - advertised-stale-time number
               - family keyword
                  - advertised-stale-time number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - helper-override-stale-time number
               - forwarding-bits-set keyword
               - helper-override-restart-time number
               - helper-override-stale-time number
               - without-no-export boolean
            - restart-time number
            - stale-routes-time number
         - group string
            - add-paths
               - evpn
                  - receive boolean
                  - send (number | keyword)
               - ipv4
                  - receive boolean
                  - send (number | keyword)
               - ipv6
                  - receive boolean
                  - send (number | keyword)
               - label-ipv4
                  - receive boolean
                  - send (number | keyword)
               - label-ipv6
                  - receive boolean
                  - send (number | keyword)
               - mcast-vpn-ipv4
                  - receive boolean
                  - send number
               - mcast-vpn-ipv6
                  - receive boolean
```


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configure router bgp group add-paths mcast-vpn-ipv6 send

```
                - send number
            - mvpn-ipv4
                - receive boolean
                - send number
            - mvpn-ipv6
                - receive boolean
                - send number
            - vpn-ipv4
                - receive boolean
                - send (number | keyword)
            - vpn-ipv6
                - receive boolean
                - send (number | keyword)
        - admin-state keyword
        - advertise-inactive boolean
        - advertise-ipv6-next-hops
            - evpn boolean
            - ipv4 boolean
            - label-ipv4 boolean
            - label-ipv6 boolean
            - vpn-ipv4 boolean
            - vpn-ipv6 boolean
        - aggregator-id-zero boolean
        - aigp boolean
        - apply-groups reference
        - apply-groups-exclude reference
        - as-override boolean
        - asn-4-byte boolean
        - authentication-key string
        - authentication-keychain reference
        - bfd-liveness boolean
        - bfd-strict-mode
            - advertise
                - holdtime number
            - next-hop-reachability boolean
        - block-prefix-sid boolean
        - capability-negotiation boolean
        - client-reflect boolean
        - cluster
            - allow-local-fallback boolean
            - cluster-id string
            - orr-location number
        - connect-retry number
        - damp-peer-oscillations
            - error-interval number
            - idle-hold-time
                - initial-wait number
                - max-wait number
                - second-wait number
        - damping boolean
        - def-recv-evpn-encap keyword
        - default-label-preference
            - ebgp number
            - ibgp number
        - default-preference
            - ebgp number
            - ibgp number
        - default-route-target boolean
        - description string
        - dynamic-neighbor
            - interface string
                - allowed-peer-as string
                - apply-groups reference
                - apply-groups-exclude reference
```


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configure router bgp group dynamic-neighbor interface max-sessions

```
                - max-sessions number
            - match
                - prefix (ipv4-prefix | ipv6-prefix)
                    - allowed-peer-as string
                    - apply-groups reference
                    - apply-groups-exclude reference
        - dynamic-neighbor-limit number
        - ebgp-default-reject-policy
            - export boolean
            - import boolean
        - egress-engineering
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
        - egress-peer-engineering-label-unicast boolean
        - enforce-first-as boolean
        - error-handling
            - update-fault-tolerance boolean
        - export
            - apply-groups reference
            - apply-groups-exclude reference
            - policy (policy-expr-string | string)
        - extended-nh-encoding
            - ipv4 boolean
            - label-ipv4 boolean
            - vpn-ipv4 boolean
        - family
            - bgp-ls boolean
            - evpn boolean
            - flow-ipv4 boolean
            - flow-ipv6 boolean
            - flow-vpn-ipv4 boolean
            - flow-vpn-ipv6 boolean
            - ipv4 boolean
            - ipv6 boolean
            - l2-vpn boolean
            - label-ipv4 boolean
            - label-ipv6 boolean
            - mcast-ipv4 boolean
            - mcast-ipv6 boolean
            - mcast-vpn-ipv4 boolean
            - mcast-vpn-ipv6 boolean
            - mdt-safi boolean
            - ms-pw boolean
            - mvpn-ipv4 boolean
            - mvpn-ipv6 boolean
            - route-target boolean
            - sr-policy-ipv4 boolean
            - sr-policy-ipv6 boolean
            - vpn-ipv4 boolean
            - vpn-ipv6 boolean
        - fast-external-failover boolean
        - graceful-restart
            - gr-notification boolean
            - long-lived
                - advertise-stale-to-all-neighbors boolean
                - advertised-stale-time number
                - family keyword
                    - advertised-stale-time number
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - helper-override-stale-time number
                - forwarding-bits-set keyword
                - helper-override-restart-time number
```


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configure router bgp group graceful-restart long-lived helper-override-stale-time

```
                  - helper-override-stale-time number
                  - without-no-export boolean
               - restart-time number
               - stale-routes-time number
            - hold-time
               - minimum-hold-time number
               - seconds number
            - import
               - apply-groups reference
               - apply-groups-exclude reference
               - policy (policy-expr-string | string)
            - initial-send-delay-zero boolean
            - keepalive number
            - label-preference number
            - link-bandwidth
               - accept-from-ebgp
                  - ipv4 boolean
                  - ipv6 boolean
                  - label-ipv4 boolean
                  - label-ipv6 boolean
                  - vpn-ipv4 boolean
                  - vpn-ipv6 boolean
               - add-to-received-ebgp
                  - ipv4 boolean
                  - ipv6 boolean
                  - label-ipv4 boolean
                  - label-ipv6 boolean
                  - vpn-ipv4 boolean
                  - vpn-ipv6 boolean
               - aggregate-used-paths
                  - ipv4 boolean
                  - ipv6 boolean
                  - label-ipv4 boolean
                  - label-ipv6 boolean
                  - vpn-ipv4 boolean
                  - vpn-ipv6 boolean
               - send-to-ebgp
                  - ipv4 boolean
                  - ipv6 boolean
                  - label-ipv4 boolean
                  - label-ipv6 boolean
                  - vpn-ipv4 boolean
                  - vpn-ipv6 boolean
            - local-address (ipv4-address-no-zone | ipv6-address-no-zone | interface-name)
            - local-as
               - as-number number
               - prepend-global-as boolean
               - private boolean
            - local-preference number
            - loop-detect keyword
            - loop-detect-threshold number
            - med-out (number | keyword)
            - min-route-advertisement number
            - monitor
               - admin-state keyword
               - all-stations boolean
               - apply-groups reference
               - apply-groups-exclude reference
               - route-monitoring
                  - post-policy boolean
                  - pre-policy boolean
               - station reference
            - multihop number
            - multipath-eligible boolean
```


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configure router bgp group next-hop-self

```
            - next-hop-self boolean
            - next-hop-unchanged
               - evpn boolean
               - label-ipv4 boolean
               - label-ipv6 boolean
               - vpn-ipv4 boolean
               - vpn-ipv6 boolean
            - origin-validation
               - ipv4 boolean
               - ipv6 boolean
               - label-ipv4 boolean
               - label-ipv6 boolean
            - outbound-route-filtering
               - extended-community
                  - accept-orf boolean
                  - send-orf
                     - route-target string
            - passive boolean
            - path-mtu-discovery boolean
            - peer-as number
            - peer-ip-tracking boolean
            - preference number
            - prefix-limit keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - hold-excess number
               - idle-timeout number
               - log-only boolean
               - maximum number
               - post-import boolean
               - threshold number
            - remove-private
               - limited boolean
               - replace boolean
               - skip-peer-as boolean
            - segment-routing-v6
               - route-advertisement
                  - drop-routes-with-srv6-tlvs boolean
                  - family keyword
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - strip-srv6-tlvs boolean
            - selective-label-ipv4-install boolean
            - send-communities
               - extended boolean
               - large boolean
               - standard boolean
            - send-default
               - export-policy reference
               - ipv4 boolean
               - ipv6 boolean
            - split-horizon boolean
            - static-group boolean
            - tcp-mss (number | keyword)
            - third-party-nexthop boolean
            - ttl-security number
            - type keyword
            - vpn-apply-export boolean
            - vpn-apply-import boolean
         - hold-time
            - minimum-hold-time number
            - seconds number
         - ibgp-multipath boolean
         - import
```


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configure router bgp import apply-groups

```
            - apply-groups reference
            - apply-groups-exclude reference
            - policy (policy-expr-string | string)
         - initial-send-delay-zero boolean
         - inter-as-vpn boolean
         - keepalive number
         - label-allocation
            - label-ipv6
               - explicit-null boolean
         - label-preference number
         - link-state-route-export boolean
         - link-state-route-import boolean
         - local-as
            - as-number number
            - prepend-global-as boolean
            - private boolean
         - local-preference number
         - loop-detect keyword
         - loop-detect-threshold number
         - med-out (number | keyword)
         - min-route-advertisement number
         - monitor
            - admin-state keyword
            - all-stations boolean
            - apply-groups reference
            - apply-groups-exclude reference
            - route-monitoring
               - post-policy boolean
               - pre-policy boolean
            - station reference
         - mp-bgp-keep boolean
         - multihop number
         - multipath
            - ebgp number
            - family keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - ebgp number
               - ibgp number
               - max-paths number
               - restrict keyword
               - unequal-cost boolean
            - ibgp number
            - max-paths number
            - restrict keyword
            - unequal-cost boolean
         - mvpn-vrf-import-subtype-new boolean
         - neighbor (ipv4-address-with-zone | ipv6-address-with-zone)
            - add-paths
               - evpn
                  - receive boolean
                  - send (number | keyword)
               - ipv4
                  - receive boolean
                  - send (number | keyword)
               - ipv6
                  - receive boolean
                  - send (number | keyword)
               - label-ipv4
                  - receive boolean
                  - send (number | keyword)
               - label-ipv6
                  - receive boolean
                  - send (number | keyword)
```


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configure router bgp neighbor add-paths mcast-vpn-ipv4

```
                - mcast-vpn-ipv4
                  - receive boolean
                  - send number
                - mcast-vpn-ipv6
                  - receive boolean
                  - send number
                - mvpn-ipv4
                  - receive boolean
                  - send number
                - mvpn-ipv6
                  - receive boolean
                  - send number
                - vpn-ipv4
                  - receive boolean
                  - send (number | keyword)
                - vpn-ipv6
                  - receive boolean
                  - send (number | keyword)
            - admin-state keyword
            - advertise-inactive boolean
            - advertise-ipv6-next-hops
                - evpn boolean
                - ipv4 boolean
                - label-ipv4 boolean
                - label-ipv6 boolean
                - vpn-ipv4 boolean
                - vpn-ipv6 boolean
            - advertise-ldp-prefix boolean
            - aggregator-id-zero boolean
            - aigp boolean
            - apply-groups reference
            - apply-groups-exclude reference
            - as-override boolean
            - asn-4-byte boolean
            - authentication-key string
            - authentication-keychain reference
            - bfd-liveness boolean
            - bfd-strict-mode
                - advertise
                  - holdtime number
                - next-hop-reachability boolean
            - block-prefix-sid boolean
            - capability-negotiation boolean
            - client-reflect boolean
            - cluster
                - allow-local-fallback boolean
                - cluster-id string
                - orr-location number
            - connect-retry number
            - damp-peer-oscillations
                - error-interval number
                - idle-hold-time
                  - initial-wait number
                  - max-wait number
                  - second-wait number
            - damping boolean
            - def-recv-evpn-encap keyword
            - default-label-preference
                - ebgp number
                - ibgp number
            - default-preference
                - ebgp number
                - ibgp number
            - default-route-target boolean
```


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```
            - description string
            - ebgp-default-reject-policy
              - export boolean
              - import boolean
            - egress-engineering
              - admin-state keyword
              - apply-groups reference
              - apply-groups-exclude reference
            - egress-peer-engineering-label-unicast boolean
            - enforce-first-as boolean
            - error-handling
              - update-fault-tolerance boolean
            - export
              - apply-groups reference
              - apply-groups-exclude reference
              - policy (policy-expr-string | string)
            - extended-nh-encoding
              - ipv4 boolean
              - label-ipv4 boolean
              - vpn-ipv4 boolean
            - family
              - bgp-ls boolean
              - evpn boolean
              - flow-ipv4 boolean
              - flow-ipv6 boolean
              - flow-vpn-ipv4 boolean
              - flow-vpn-ipv6 boolean
              - ipv4 boolean
              - ipv6 boolean
              - l2-vpn boolean
              - label-ipv4 boolean
              - label-ipv6 boolean
              - mcast-ipv4 boolean
              - mcast-ipv6 boolean
              - mcast-vpn-ipv4 boolean
              - mcast-vpn-ipv6 boolean
              - mdt-safi boolean
              - ms-pw boolean
              - mvpn-ipv4 boolean
              - mvpn-ipv6 boolean
              - route-target boolean
              - sr-policy-ipv4 boolean
              - sr-policy-ipv6 boolean
              - vpn-ipv4 boolean
              - vpn-ipv6 boolean
            - fast-external-failover boolean
            - graceful-restart
              - gr-notification boolean
              - long-lived
                - advertise-stale-to-all-neighbors boolean
                - advertised-stale-time number
                - family keyword
                  - advertised-stale-time number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - helper-override-stale-time number
                - forwarding-bits-set keyword
                - helper-override-restart-time number
                - helper-override-stale-time number
                - without-no-export boolean
              - restart-time number
              - stale-routes-time number
            - group reference
            - hold-time
```


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configure router bgp neighbor hold-time minimum-hold-time

```
                - minimum-hold-time number
                - seconds number
            - import
                - apply-groups reference
                - apply-groups-exclude reference
                - policy (policy-expr-string | string)
            - initial-send-delay-zero boolean
            - keepalive number
            - l2vpn-cisco-interop boolean
            - label-preference number
            - link-bandwidth
                - accept-from-ebgp
                    - ipv4 boolean
                    - ipv6 boolean
                    - label-ipv4 boolean
                    - label-ipv6 boolean
                    - vpn-ipv4 boolean
                    - vpn-ipv6 boolean
                - add-to-received-ebgp
                    - ipv4 boolean
                    - ipv6 boolean
                    - label-ipv4 boolean
                    - label-ipv6 boolean
                    - vpn-ipv4 boolean
                    - vpn-ipv6 boolean
                - aggregate-used-paths
                    - ipv4 boolean
                    - ipv6 boolean
                    - label-ipv4 boolean
                    - label-ipv6 boolean
                    - vpn-ipv4 boolean
                    - vpn-ipv6 boolean
                - send-to-ebgp
                    - ipv4 boolean
                    - ipv6 boolean
                    - label-ipv4 boolean
                    - label-ipv6 boolean
                    - vpn-ipv4 boolean
                    - vpn-ipv6 boolean
            - local-address (ipv4-address-no-zone | ipv6-address-no-zone | interface-name)
            - local-as
                - as-number number
                - prepend-global-as boolean
                - private boolean
            - local-preference number
            - loop-detect keyword
            - loop-detect-threshold number
            - med-out (number | keyword)
            - min-route-advertisement number
            - monitor
                - admin-state keyword
                - all-stations boolean
                - apply-groups reference
                - apply-groups-exclude reference
                - route-monitoring
                    - post-policy boolean
                    - pre-policy boolean
                - station reference
            - multihop number
            - multipath-eligible boolean
            - next-hop-self boolean
            - next-hop-unchanged
                - evpn boolean
                - label-ipv4 boolean
```


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configure router bgp neighbor next-hop-unchanged label-ipv6

```
            - label-ipv6 boolean
            - vpn-ipv4 boolean
            - vpn-ipv6 boolean
         - origin-validation
            - ipv4 boolean
            - ipv6 boolean
            - label-ipv4 boolean
            - label-ipv6 boolean
         - outbound-route-filtering
            - extended-community
               - accept-orf boolean
               - send-orf
                  - route-target string
         - passive boolean
         - path-mtu-discovery boolean
         - peer-as number
         - peer-creation-type keyword
         - peer-ip-tracking boolean
         - preference number
         - prefix-limit keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - hold-excess number
            - idle-timeout number
            - log-only boolean
            - maximum number
            - post-import boolean
            - threshold number
         - remove-private
            - limited boolean
            - replace boolean
            - skip-peer-as boolean
         - segment-routing-v6
            - route-advertisement
               - drop-routes-with-srv6-tlvs boolean
               - family keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - strip-srv6-tlvs boolean
         - selective-label-ipv4-install boolean
         - send-communities
            - extended boolean
            - large boolean
            - standard boolean
         - send-default
            - export-policy reference
            - ipv4 boolean
            - ipv6 boolean
         - split-horizon boolean
         - tcp-mss (number | keyword)
         - third-party-nexthop boolean
         - ttl-security number
         - type keyword
         - vpn-apply-export boolean
         - vpn-apply-import boolean
      - neighbor-trust
         - evpn boolean
         - vpn-ipv4 boolean
         - vpn-ipv6 boolean
      - next-hop-resolution
         - allow-unresolved-leaking boolean
         - labeled-routes
            - allow-static boolean
            - rr-use-route-table boolean
```


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configure router bgp next-hop-resolution labeled-routes transport-tunnel

```
            - transport-tunnel
              - family keyword
                - allow-flex-algo-fallback boolean
                - apply-groups reference
                - apply-groups-exclude reference
                - enforce-strict-tunnel-tagging boolean
                - resolution keyword
                - resolution-filter
                  - bgp boolean
                  - ldp boolean
                  - mpls-fwd-policy boolean
                  - rib-api boolean
                  - rsvp boolean
                  - sr-isis boolean
                  - sr-ospf boolean
                  - sr-ospf3 boolean
                  - sr-policy boolean
                  - sr-te boolean
                  - udp boolean
            - use-bgp-routes
              - label-ipv6-explicit-null boolean
          - policy reference
          - shortcut-tunnel
            - family keyword
              - allow-flex-algo-fallback boolean
              - apply-groups reference
              - apply-groups-exclude reference
              - disallow-igp boolean
              - enforce-strict-tunnel-tagging boolean
              - resolution keyword
              - resolution-filter
                - bgp boolean
                - ldp boolean
                - mpls-fwd-policy boolean
                - rib-api boolean
                - rsvp boolean
                - sr-isis boolean
                - sr-ospf boolean
                - sr-ospf3 boolean
                - sr-policy boolean
                - sr-te boolean
          - use-bgp-routes boolean
          - use-leaked-routes
            - static boolean
          - vpn-family-policy reference
          - weighted-ecmp boolean
        - optimal-route-reflection
          - location number
            - apply-groups reference
            - apply-groups-exclude reference
            - primary-ip-address string
            - primary-ipv6-address string
            - secondary-ip-address string
            - secondary-ipv6-address string
            - tertiary-ip-address string
            - tertiary-ipv6-address string
          - spf-wait
            - initial-wait number
            - max-wait number
            - second-wait number
        - outbound-route-filtering
          - extended-community
            - accept-orf boolean
            - send-orf
```


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configure router bgp outbound-route-filtering extended-community send-orf route-target

```
                - route-target string
        - override-tunnel-elc boolean
        - path-mtu-discovery boolean
        - peer-ip-tracking boolean
        - peer-tracking-policy reference
        - preference number
        - purge-timer number
        - rapid-update
          - evpn boolean
          - l2-vpn boolean
          - label-ipv4 boolean
          - label-ipv6 boolean
          - mcast-vpn-ipv4 boolean
          - mcast-vpn-ipv6 boolean
          - mdt-safi boolean
          - mvpn-ipv4 boolean
          - mvpn-ipv6 boolean
          - vpn-ipv4 boolean
          - vpn-ipv6 boolean
        - rapid-withdrawal boolean
        - remove-private
          - limited boolean
          - replace boolean
          - skip-peer-as boolean
        - rib-management
          - ipv4
            - leak-import
              - apply-groups reference
              - apply-groups-exclude reference
              - policy (policy-expr-string | string)
            - route-table-import
              - apply-groups reference
              - apply-groups-exclude reference
              - policy-name reference
          - ipv6
            - leak-import
              - apply-groups reference
              - apply-groups-exclude reference
              - policy (policy-expr-string | string)
            - route-table-import
              - apply-groups reference
              - apply-groups-exclude reference
              - policy-name reference
          - label-ipv4
            - leak-import
              - apply-groups reference
              - apply-groups-exclude reference
              - policy (policy-expr-string | string)
            - route-table-import
              - apply-groups reference
              - apply-groups-exclude reference
              - policy-name reference
          - label-ipv6
            - route-table-import
              - apply-groups reference
              - apply-groups-exclude reference
              - policy-name reference
        - route-table-install boolean
        - route-target-list string
        - router-id string
        - rr-vpn-forwarding boolean
        - segment-routing
          - admin-state keyword
          - apply-groups reference
```


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configure router bgp segment-routing apply-groups-exclude

```
            - apply-groups-exclude reference
            - prefix-sid-range
               - global
               - max-index number
               - start-label number
         - segment-routing-v6
            - family keyword
               - add-srv6-tlvs
                  - locator-name reference
                  - micro-segment-locator-name reference
               - apply-groups reference
               - apply-groups-exclude reference
               - ignore-received-srv6-tlvs boolean
               - resolution keyword
            - source-address string
         - selective-label-ip keyword
         - selective-label-ip-prioritization boolean
         - selective-label-ipv4-install boolean
         - send-communities
            - extended boolean
            - large boolean
            - standard boolean
         - send-default
            - export-policy reference
            - ipv4 boolean
            - ipv6 boolean
         - split-horizon boolean
         - sr-policy-import boolean
         - subconfed-vpn-forwarding boolean
         - tcp-mss number
         - third-party-nexthop boolean
         - vpn-apply-export boolean
         - vpn-apply-import boolean
      - bier
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - bfd-liveness keyword
         - fast-reroute boolean
         - template string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - sub-domain number end number
               - apply-groups reference
               - apply-groups-exclude reference
               - bfr-id number
               - multi-topology keyword
               - prefix string
      - class-forwarding boolean
      - confederation
         - confed-as-num number
         - members number
      - description string
      - dhcp-server
         - apply-groups reference
         - apply-groups-exclude reference
         - dhcpv4 string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - failover
               - admin-state keyword
```


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configure router dhcp-server dhcpv4 failover apply-groups

```
                - apply-groups reference
                - apply-groups-exclude reference
                - ignore-mclt-on-takeover boolean
                - maximum-client-lead-time number
                - partner-down-delay number
                - peer reference
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - sync-tag string
                - startup-wait-time number
            - force-renews boolean
            - lease-hold
                - additional-scenarios
                  - internal-lease-ipsec boolean
                  - solicited-release boolean
                - time number
            - pool string
                - apply-groups reference
                - apply-groups-exclude reference
                - description string
                - failover
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - ignore-mclt-on-takeover boolean
                  - maximum-client-lead-time number
                  - partner-down-delay number
                  - peer reference
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - sync-tag string
                  - startup-wait-time number
                - max-lease-time number
                - min-lease-time number
                - minimum-free
                  - absolute number
                  - event-when-depleted boolean
                  - percent number
                - nak-non-matching-subnet boolean
                - offer-time number
                - options
                  - option (number | keyword)
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - ascii-string string
                    - duration number
                    - empty
                    - hex-string string
                    - ipv4-address string
                    - netbios-node-type keyword
                - subnet string
                  - address-range string end string
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - failover-control-type keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - drain boolean
                  - exclude-addresses string end string
                  - maximum-declined number
                  - minimum-free
                    - absolute number
                    - event-when-depleted boolean
                    - percent number
```


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configure router dhcp-server dhcpv4 pool subnet options

```
                – options
                  – option (number | keyword)
                    – apply-groups reference
                    – apply-groups-exclude reference
                    – ascii-string string
                    – duration number
                    – empty
                    – hex-string string
                    – ipv4-address string
                    – netbios-node-type keyword
          – pool-selection
            – use-gi-address
              – scope keyword
            – use-pool-from-client
              – delimiter string
          – user-db reference
          – user-identification keyword
        – dhcpv6 string
          – admin-state keyword
          – apply-groups reference
          – apply-groups-exclude reference
          – auto-provisioned boolean
          – defaults
            – apply-groups reference
            – apply-groups-exclude reference
            – options
              – option (number | keyword)
                – apply-groups reference
                – apply-groups-exclude reference
                – ascii-string string
                – domain-string string
                – duration number
                – empty
                – hex-string string
                – ipv6-address string
            – preferred-lifetime number
            – rebind-time number
            – renew-time number
            – valid-lifetime number
          – description string
          – failover
            – admin-state keyword
            – apply-groups reference
            – apply-groups-exclude reference
            – ignore-mclt-on-takeover boolean
            – maximum-client-lead-time number
            – partner-down-delay number
            – peer reference
              – apply-groups reference
              – apply-groups-exclude reference
              – sync-tag string
            – startup-wait-time number
          – ignore-rapid-commit boolean
          – interface-id-mapping boolean
          – lease-hold
            – additional-scenarios
              – internal-lease-ipsec boolean
              – solicited-release boolean
            – time number
          – lease-query boolean
          – pool string
            – apply-groups reference
            – apply-groups-exclude reference
            – delegated-prefix
```


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configure router dhcp-server dhcpv6 pool delegated-prefix length

```
                  - length number
                  - maximum number
                  - minimum number
               - description string
               - exclude-prefix string
               - failover
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - ignore-mclt-on-takeover boolean
                  - maximum-client-lead-time number
                  - partner-down-delay number
                  - peer reference
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - sync-tag string
                  - startup-wait-time number
               - options
                  - option (number | keyword)
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - ascii-string string
                     - domain-string string
                     - duration number
                     - empty
                     - hex-string string
                     - ipv6-address string
               - prefix string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - drain boolean
                  - failover-control-type keyword
                  - options
                     - option (number | keyword)
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - ascii-string string
                        - domain-string string
                        - duration number
                        - empty
                        - hex-string string
                        - ipv6-address string
                  - preferred-lifetime number
                  - prefix-length-threshold number
                     - absolute number
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - event-when-depleted boolean
                     - percent number
                  - prefix-type
                     - pd boolean
                     - wan-host boolean
                  - rebind-time number
                  - renew-time number
                  - valid-lifetime number
               - prefix-length-threshold number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - event-when-depleted boolean
                  - minimum-free-percent number
            - pool-selection
               - use-link-address
                  - scope keyword
               - use-pool-from-client
```


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configure router dhcp-server dhcpv6 pool-selection use-pool-from-client delimiter

```
                  - delimiter string
            - server-id
               - apply-groups reference
               - apply-groups-exclude reference
               - duid-enterprise
                  - ascii-string string
                  - hex-string string
               - duid-link-local
            - user-identification keyword
      - dns
         - redirect-vprn
            - service reference
               - apply-groups reference
               - apply-groups-exclude reference
               - preference number
      - ecmp number
      - entropy-label boolean
      - fib-priority keyword
      - fib-telemetry boolean
      - firewall
         - apply-groups reference
         - apply-groups-exclude reference
         - domain string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - dhcpv6-server
               - name string
               - router-instance string
            - nat-group reference
            - prefix string
               - apply-groups reference
               - apply-groups-exclude reference
               - description string
            - wlan-gw-group reference
      - flowspec
         - apply-groups reference
         - apply-groups-exclude reference
         - filter-cam-type keyword
         - ip-filter-max-size number
         - ipv6-filter-max-size number
      - gtm
         - apply-groups reference
         - apply-groups-exclude reference
         - mvpn boolean
         - provider-tunnel
            - inclusive
               - rsvp
                  - admin-state keyword
                  - lsp-template reference
            - selective
               - data-delay-interval number
               - data-threshold
                  - group-prefix (ipv4-prefix | ipv6-prefix)
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - pe-threshold-add number
                     - pe-threshold-delete number
                     - threshold number
               - maximum-p2mp-spmsi number
               - rsvp
                  - admin-state keyword
                  - lsp-template reference
      - gtp
```


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```
        - s11
          - interface reference
            - apn-policy reference
            - apply-groups reference
            - apply-groups-exclude reference
          - peer-profile-map
            - prefix (ipv4-prefix | ipv6-prefix)
              - apply-groups reference
              - apply-groups-exclude reference
              - peer-profile reference
        - upf-data-endpoint
          - apply-groups reference
          - apply-groups-exclude reference
          - fpe reference
          - interface reference
        - uplink
          - apn string
          - apply-groups reference
          - apply-groups-exclude reference
          - pdn-type keyword
          - peer-profile-map
            - prefix (ipv4-prefix | ipv6-prefix)
              - apply-groups reference
              - apply-groups-exclude reference
              - peer-profile reference
      - icmp-tunneling boolean
      - igmp
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - forwarding-group-interface forwarding-service string group-interface-
name reference
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - import-policy reference
          - maximum-number-group-sources number
          - maximum-number-groups number
          - maximum-number-sources number
          - mcac
            - bandwidth
              - mandatory (number | keyword)
              - total (number | keyword)
            - interface-policy reference
            - policy reference
          - query-interval number
          - query-last-member-interval number
          - query-response-interval number
          - query-source-address string
          - router-alert-check boolean
          - sub-hosts-only boolean
          - subnet-check boolean
          - version keyword
        - group-if-query-source-address string
        - group-interface reference
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - import-policy reference
          - maximum-number-group-sources number
          - maximum-number-groups number
          - maximum-number-sources number
          - mcac
            - bandwidth
```


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configure router igmp group-interface mcac bandwidth mandatory

```
                  - mandatory (number | keyword)
                  - total (number | keyword)
               - interface-policy reference
               - policy reference
            - query-interval number
            - query-last-member-interval number
            - query-response-interval number
            - query-source-address string
            - router-alert-check boolean
            - sub-hosts-only boolean
            - subnet-check boolean
            - version keyword
         - interface string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - import-policy reference
            - maximum-number-group-sources number
            - maximum-number-groups number
            - maximum-number-sources number
            - mcac
               - bandwidth
                  - mandatory (number | keyword)
                  - total (number | keyword)
               - interface-policy reference
               - mc-constraints
                  - level number
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - bandwidth number
                  - number-down number
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - level number
                  - use-lag-port-weight boolean
               - policy reference
            - query-interval number
            - query-last-member-interval number
            - query-response-interval number
            - redundant-mcast boolean
            - router-alert-check boolean
            - ssm-translate
               - group-range start string end string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - source string
            - static
               - group string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - source string
                  - starg
               - group-range start string end string step string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - source string
                  - starg
            - subnet-check boolean
            - version keyword
         - query-interval number
         - query-last-member-interval number
         - query-response-interval number
         - robust-count number
         - ssm-translate
```


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```
            - group-range start string end string
              - apply-groups reference
              - apply-groups-exclude reference
              - source string
        - tunnel-interface
            - ldp-p2mp-root reference sender-address reference
              - admin-state keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - static
                - group string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - source string
                  - starg
            - rsvp-p2mp-root reference
              - admin-state keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - static
                - group string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - source string
                  - starg
    - interface string
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - cflowd-parameters
            - sampling keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - direction keyword
              - sample-profile (keyword | number)
              - type keyword
        - cpu-protection reference
        - description string
        - dist-cpu-protection reference
        - egress
            - filter
              - ip reference
              - ipv6 reference
        - eth-cfm
            - mep md-admin-name reference ma-admin-name reference mep-id number
              - admin-state keyword
              - alarm-notification
                - fng-alarm-time number
                - fng-reset-time number
              - apply-groups reference
              - apply-groups-exclude reference
              - ccm boolean
              - ccm-ltm-priority number
              - ccm-padding-size number
              - ccm-tlv-ignore keyword
              - collect-lmm-fc-stats
                - fc keyword
                - fc-in-profile keyword
              - collect-lmm-stats boolean
              - description string
              - eth-test
                - bit-error-threshold number
                - test-pattern
                  - crc-tlv boolean
```


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configure router interface eth-cfm mep eth-test test-pattern pattern

```
                  - pattern keyword
            - facility-fault boolean
            - grace
               - eth-ed
                  - max-rx-defect-window number
                  - priority number
                  - rx-eth-ed boolean
                  - tx-eth-ed boolean
               - eth-vsm-grace
                  - rx-eth-vsm-grace boolean
                  - tx-eth-vsm-grace boolean
            - lbm-svc-act-responder boolean
            - low-priority-defect keyword
            - mac-address string
            - one-way-delay-threshold number
      - flavor keyword
      - gre-termination boolean
      - hold-time
         - ipv4
            - down
               - init-only boolean
               - seconds number
            - up
               - seconds number
         - ipv6
            - down
               - init-only boolean
               - seconds number
            - up
               - seconds number
      - if-attribute
         - admin-group reference
         - delay
            - delay-selection keyword
            - dynamic
               - measurement-template reference
               - twamp-light
                  - ipv4
                     - admin-state keyword
                     - destination string
                     - source string
                  - ipv6
                     - admin-state keyword
                     - destination string
                     - source string
            - static number
         - srlg-group reference
      - ingress
         - destination-class-lookup boolean
         - filter
            - ip reference
            - ipv6 reference
         - policy-accounting reference
      - ingress-stats boolean
      - ip-mtu number
      - ipsec
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - ip-exception reference
         - ipsec-tunnel string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
```


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configure router interface ipsec ipsec-tunnel bfd

```
                - bfd
                  - bfd-designate boolean
                  - bfd-liveness
                    - dest-ip string
                    - interface string
                    - service-name string
                - clear-df-bit boolean
                - copy-traffic-class-upon-decapsulation boolean
                - description string
                - encapsulated-ip-mtu number
                - icmp-generation
                  - frag-required
                    - admin-state keyword
                    - interval number
                    - message-count number
                - icmp6-generation
                  - packet-too-big
                    - admin-state keyword
                    - interval number
                    - message-count number
                - ip-mtu number
                - key-exchange
                  - dynamic
                    - auto-establish boolean
                    - cert
                      - cert-profile reference
                      - status-verify
                        - default-result keyword
                        - primary keyword
                        - secondary keyword
                      - trust-anchor-profile reference
                    - id
                      - fqdn string
                      - ipv4 string
                      - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
                    - ike-policy reference
                    - ipsec-transform reference
                    - pre-shared-key string
                  - manual
                    - keys number direction keyword
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - authentication-key string
                      - encryption-key string
                      - ipsec-transform reference
                      - spi number
                - local-gateway-address-override (ipv4-address-no-zone | ipv6-address-no-zone)
                - max-history-key-records
                  - esp number
                  - ike number
                - pmtu-discovery-aging number
                - private-sap number
                - private-service string
                - private-tcp-mss-adjust number
                - propagate-pmtu-v4 boolean
                - propagate-pmtu-v6 boolean
                - public-tcp-mss-adjust (number | keyword)
                - remote-gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
                - replay-window number
                - security-policy
                  - id number
                  - strict-match boolean
            - ipv6-exception reference
            - public-sap number
```


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configure router interface ipsec tunnel-group

```
            - tunnel-group reference
        - ipv4
            - allow-directed-broadcasts boolean
            - bfd
                - admin-state keyword
                - echo-receive number
                - multiplier number
                - receive number
                - transmit-interval number
                - type keyword
            - dhcp
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - description string
                - gi-address string
                - option-82
                    - action keyword
                    - circuit-id
                        - ascii-tuple
                        - if-name
                        - ifindex
                        - none
                        - port-id
                        - vlan-ascii-tuple
                    - remote-id
                        - ascii-string string
                        - mac
                        - none
                    - vendor-specific-option
                        - client-mac-address boolean
                        - pool-name boolean
                        - port-id boolean
                        - service-id boolean
                        - string string
                        - system-id boolean
                - python-policy reference
                - relay-plain-bootp boolean
                - release-include-gi-address boolean
                - server string
                - src-ip-addr keyword
                - trusted boolean
            - icmp
                - mask-reply boolean
                - param-problem
                    - admin-state keyword
                    - number number
                    - seconds number
                - redirects
                    - admin-state keyword
                    - number number
                    - seconds number
                - ttl-expired
                    - admin-state keyword
                    - number number
                    - seconds number
                - unreachables
                    - admin-state keyword
                    - number number
                    - seconds number
            - ip-helper-address string
            - local-dhcp-server reference
            - neighbor-discovery
                - learn-unsolicited boolean
```


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configure router interface ipv4 neighbor-discovery limit

```
            - limit
              - log-only boolean
              - max-entries number
              - threshold number
            - local-proxy-arp boolean
            - proactive-refresh boolean
            - proxy-arp-policy reference
            - remote-proxy-arp boolean
            - retry-timer number
            - static-neighbor string
              - apply-groups reference
              - apply-groups-exclude reference
              - mac-address string
            - static-neighbor-unnumbered
              - mac-address string
            - timeout number
        - primary
            - address string
            - apply-groups reference
            - apply-groups-exclude reference
            - broadcast keyword
            - gre-termination boolean
            - prefix-length number
            - track-srrp number
        - qos-route-lookup keyword
        - secondary string
            - apply-groups reference
            - apply-groups-exclude reference
            - broadcast keyword
            - igp-inhibit boolean
            - prefix-length number
            - track-srrp number
        - tcp-mss number
        - unnumbered
            - ip-address string
            - ip-int-name string
            - system
        - urpf-check
            - ignore-default boolean
            - mode keyword
        - vrrp number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - authentication-key string
            - backup string
            - bfd-liveness
              - apply-groups reference
              - apply-groups-exclude reference
              - dest-ip string
              - interface-name string
              - service-name string
            - init-delay number
            - mac string
            - master-int-inherit boolean
            - message-interval number
            - monitor-oper-group reference
            - ntp-reply boolean
            - oper-group reference
            - owner boolean
            - passive boolean
            - ping-reply boolean
            - policy reference
            - preempt boolean
```


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configure router interface ipv4 vrrp priority

```
            - priority number
            - ssh-reply boolean
            - standby-forwarding boolean
            - telnet-reply boolean
            - traceroute-reply boolean
      - ipv6
         - address string
            - apply-groups reference
            - apply-groups-exclude reference
            - duplicate-address-detection boolean
            - eui-64 boolean
            - prefix-length number
            - primary-preference number
            - track-srrp number
         - bfd
            - admin-state keyword
            - echo-receive number
            - multiplier number
            - receive number
            - transmit-interval number
            - type keyword
         - duplicate-address-detection boolean
         - forward-ipv4-packets boolean
         - icmp6
            - packet-too-big
               - admin-state keyword
               - number number
               - seconds number
            - param-problem
               - admin-state keyword
               - number number
               - seconds number
            - redirects
               - admin-state keyword
               - number number
               - seconds number
            - time-exceeded
               - admin-state keyword
               - number number
               - seconds number
            - unreachables
               - admin-state keyword
               - number number
               - seconds number
         - link-local-address
            - address string
            - duplicate-address-detection boolean
         - local-dhcp-server reference
         - neighbor-discovery
            - learn-unsolicited keyword
            - limit
               - log-only boolean
               - max-entries number
               - threshold number
            - local-proxy-nd boolean
            - proactive-refresh keyword
            - proxy-nd-policy reference
            - reachable-time number
            - secure-nd
               - admin-state keyword
               - allow-unsecured-msgs boolean
               - public-key-min-bits number
               - security-parameter number
            - stale-time number
```


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configure router interface ipv6 neighbor-discovery static-neighbor

```
            - static-neighbor string
               - apply-groups reference
               - apply-groups-exclude reference
               - mac-address string
         - qos-route-lookup keyword
         - tcp-mss number
         - urpf-check
            - ignore-default boolean
            - mode keyword
         - vrrp number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - backup string
            - bfd-liveness
               - apply-groups reference
               - apply-groups-exclude reference
               - dest-ip (ipv4-address-no-zone | ipv6-address-no-zone)
               - interface-name string
               - service-name string
            - init-delay number
            - mac string
            - master-int-inherit boolean
            - message-interval number
            - monitor-oper-group reference
            - ntp-reply boolean
            - oper-group reference
            - owner boolean
            - passive boolean
            - ping-reply boolean
            - policy reference
            - preempt boolean
            - priority number
            - standby-forwarding boolean
            - telnet-reply boolean
            - traceroute-reply boolean
      - lag
         - link-map-profile number
         - per-link-hash
            - class number
            - weight number
      - ldp-sync-timer
         - end-of-lib boolean
         - seconds number
      - load-balancing
         - flow-label-load-balancing boolean
         - ip-load-balancing keyword
         - lsr-load-balancing keyword
         - spi-load-balancing boolean
         - teid-load-balancing boolean
      - loopback
      - mac string
      - mac-accounting boolean
      - network-domains
         - network-domain reference
      - port (port-and-encap | keyword)
      - ptp-hw-assist
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
      - qos
         - apply-groups reference
         - apply-groups-exclude reference
         - egress-instance number
```


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```
            - egress-port-redirect-group reference
            - ingress-fp-redirect-group reference
            - ingress-instance number
            - network-policy reference
         - strip-label boolean
         - tos-marking-state keyword
         - untrusted
            - default-forwarding keyword
         - urpf-selected-vprns boolean
         - vas-if-type keyword
      - ipsec
         - multi-chassis-shunt-interface string
            - apply-groups reference
            - apply-groups-exclude reference
            - next-hop
               - address (ipv4-address-no-zone | ipv6-address-no-zone)
         - multi-chassis-shunting-profile string
            - apply-groups reference
            - apply-groups-exclude reference
            - peer reference
               - apply-groups reference
               - apply-groups-exclude reference
               - multi-chassis-shunt-interface reference
         - security-policy number
            - apply-groups reference
            - apply-groups-exclude reference
            - entry number
               - apply-groups reference
               - apply-groups-exclude reference
               - local-ip
                  - address string
                  - any boolean
               - local-ipv6
                  - address string
                  - any boolean
               - remote-ip
                  - address string
                  - any boolean
               - remote-ipv6
                  - address string
                  - any boolean
      - ipv6
         - neighbor-discovery
            - reachable-time number
            - stale-time number
         - router-advertisement
            - apply-groups reference
            - apply-groups-exclude reference
            - dns-options
               - apply-groups reference
               - apply-groups-exclude reference
               - rdnss-lifetime (keyword | number)
               - server string
            - interface string
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - current-hop-limit number
               - dns-options
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - include-rdnss boolean
                  - rdnss-lifetime (number | keyword)
                  - server string
```


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configure router ipv6 router-advertisement interface managed-configuration

```
            - managed-configuration boolean
            - max-advertisement-interval number
            - min-advertisement-interval number
            - mtu number
            - other-stateful-configuration boolean
            - prefix string
              - apply-groups reference
              - apply-groups-exclude reference
              - autonomous boolean
              - on-link boolean
              - preferred-lifetime (keyword | number)
              - valid-lifetime (keyword | number)
            - reachable-time number
            - retransmit-time number
            - router-lifetime number
            - use-virtual-mac boolean
  - ipv6-te-router-id
    - interface reference
  - isa-service-chaining
    - apply-groups reference
    - apply-groups-exclude reference
    - nat-group number
    - vxlan-vtep-range
      - end (ipv4-address-no-zone | ipv6-address-no-zone)
      - start (ipv4-address-no-zone | ipv6-address-no-zone)
  - isis number
    - admin-state keyword
    - advertise-passive-only boolean
    - advertise-router-capability keyword
    - advertise-tunnel-link boolean
    - all-l1isis string
    - all-l2isis string
    - apply-groups reference
    - apply-groups-exclude reference
    - area-address string
    - authentication-check boolean
    - authentication-key string
    - authentication-keychain reference
    - authentication-type keyword
    - csnp-authentication boolean
    - database-export
      - bgp-ls-identifier
        - value number
      - igp-identifier number
    - default-route-tag number
    - entropy-label
      - override-tunnel-elc boolean
    - export-limit
      - log-percent number
      - number number
    - export-policy reference
    - flexible-algorithms
      - admin-state keyword
      - advertise-admin-group keyword
      - flex-algo number
        - advertise reference
        - apply-groups reference
        - apply-groups-exclude reference
        - loopfree-alternate
        - micro-loop-avoidance
        - participate boolean
    - graceful-restart
      - helper-mode boolean
    - hello-authentication boolean
```


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```
        - hello-padding keyword
        - ignore-attached-bit boolean
        - ignore-lsp-errors boolean
        - ignore-narrow-metric boolean
        - igp-shortcut
          - admin-state keyword
          - allow-sr-over-srte boolean
          - apply-groups reference
          - apply-groups-exclude reference
          - tunnel-next-hop
            - family keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - resolution keyword
              - resolution-filter
                - rsvp boolean
                - sr-te boolean
        - iid-tlv boolean
        - import-policy reference
        - interface string
          - adjacency-set reference
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - bfd-liveness
            - ipv4
              - include-bfd-tlv boolean
            - ipv6
              - include-bfd-tlv boolean
          - csnp-interval number
          - default-instance boolean
          - flex-algo number
            - apply-groups reference
            - apply-groups-exclude reference
            - ipv4-node-sid
              - index number
              - label number
            - ipv6-node-sid
              - index number
              - label number
          - hello-authentication boolean
          - hello-authentication-key string
          - hello-authentication-keychain reference
          - hello-authentication-type keyword
          - hello-padding keyword
          - interface-type keyword
          - ipv4-adjacency-sid
            - label number
          - ipv4-multicast boolean
          - ipv4-node-sid
            - clear-n-flag boolean
            - index number
            - label number
          - ipv6-adjacency-sid
            - label number
          - ipv6-multicast boolean
          - ipv6-node-sid
            - clear-n-flag boolean
            - index number
            - label number
          - ipv6-unicast boolean
          - level keyword
            - apply-groups reference
            - apply-groups-exclude reference
```


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configure router isis interface level hello-authentication-key

```
                - hello-authentication-key string
                - hello-authentication-keychain reference
                - hello-authentication-type keyword
                - hello-interval number
                - hello-multiplier number
                - hello-padding keyword
                - ipv4-multicast-metric number
                - ipv6-multicast-metric number
                - ipv6-unicast-metric number
                - metric number
                - passive boolean
                - priority number
                - sd-offset number
                - sf-offset number
            - level-capability keyword
            - load-balancing-weight number
            - loopfree-alternate
                - exclude boolean
                - policy-map
                    - route-nh-template reference
            - lsp-pacing-interval number
            - mesh-group
                - blocked
                - value number
            - passive boolean
            - retransmit-interval number
            - sid-protection boolean
            - tag number
        - ipv4-multicast-routing keyword
        - ipv4-routing boolean
        - ipv6-multicast-routing keyword
        - ipv6-routing keyword
        - ldp-over-rsvp boolean
        - ldp-sync boolean
        - level keyword
            - advertise-router-capability boolean
            - apply-groups reference
            - apply-groups-exclude reference
            - authentication-key string
            - authentication-keychain reference
            - authentication-type keyword
            - bier
                - admin-state keyword
                - template reference
            - csnp-authentication boolean
            - database-export-exclude boolean
            - default-ipv4-multicast-metric number
            - default-ipv6-multicast-metric number
            - default-ipv6-unicast-metric number
            - default-metric number
            - external-preference number
            - hello-authentication boolean
            - hello-padding keyword
            - loopfree-alternate-exclude boolean
            - lsp-mtu-size number
            - preference number
            - psnp-authentication boolean
            - wide-metrics-only boolean
        - level-capability keyword
        - link-group string
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - level keyword
```


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configure router isis link-group level apply-groups

```
            - apply-groups reference
            - apply-groups-exclude reference
            - ipv4-multicast-metric-offset number
            - ipv4-unicast-metric-offset number
            - ipv6-multicast-metric-offset number
            - ipv6-unicast-metric-offset number
            - member reference
            - oper-members number
            - revert-members number
      - loopfree-alternate
         - augment-route-table boolean
         - exclude
            - prefix-policy reference
         - multi-homed-prefix
            - preference keyword
         - remote-lfa
            - max-pq-cost number
            - node-protect
               - max-pq-nodes number
         - ti-lfa
            - max-sr-frr-labels number
            - max-srv6-frr-sids number
            - node-protect
      - lsp-lifetime number
      - lsp-minimum-remaining-lifetime number
      - lsp-mtu-size number
      - lsp-refresh
         - half-lifetime boolean
         - interval number
      - mru-mismatch-detection boolean
      - multi-topology
         - ipv4-multicast boolean
         - ipv6-multicast boolean
         - ipv6-unicast boolean
      - multicast-import
         - ipv4 boolean
         - ipv6 boolean
      - overload
         - max-metric boolean
      - overload-export-external boolean
      - overload-export-interlevel boolean
      - overload-fib-error-notify-only
         - retry number
      - overload-on-boot
         - max-metric boolean
         - timeout number
      - poi-tlv boolean
      - prefix-attributes-tlv boolean
      - prefix-limit
         - limit number
         - log-only boolean
         - overload-timeout (number | keyword)
         - warning-threshold number
      - psnp-authentication boolean
      - reference-bandwidth number
      - rib-priority
         - high
            - prefix-list reference
            - tag number
      - router-id string
      - segment-routing
         - adj-sid-hold (number | keyword)
         - adjacency-set number
            - advertise boolean
```


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configure router isis segment-routing adjacency-set apply-groups

```
            - apply-groups reference
            - apply-groups-exclude reference
            - family keyword
            - parallel boolean
            - sid
               - label number
         - adjacency-sid
            - allocate-dual-sids boolean
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - class-forwarding boolean
         - egress-statistics
            - adj-set boolean
            - adj-sid boolean
            - node-sid boolean
         - entropy-label boolean
         - export-tunnel-table keyword
         - ingress-statistics
            - adj-set boolean
            - adj-sid boolean
            - node-sid boolean
         - mapping-server
            - admin-state keyword
            - node-sid-map number
               - apply-groups reference
               - apply-groups-exclude reference
               - clear-n-flag boolean
               - ip-prefix string
               - level-capability keyword
               - range number
               - set-flags
                  - bit-s boolean
         - maximum-sid-depth
            - override-bmi number
            - override-erld number
         - micro-loop-avoidance
            - fib-delay number
         - prefix-sid-range
            - global
            - max-index number
            - start-label number
         - srlb reference
         - tunnel-mtu number
         - tunnel-table-pref number
      - segment-routing-v6
         - adj-sid-hold (number | keyword)
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - locator reference
            - apply-groups reference
            - apply-groups-exclude reference
            - level keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - metric number
            - level-capability keyword
            - multi-topology
               - mt0 boolean
               - mt2 boolean
            - tag number
         - micro-segment-locator reference
            - apply-groups reference
```


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configure router isis segment-routing-v6 micro-segment-locator apply-groups-exclude

```
            - apply-groups-exclude reference
            - level keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - metric number
            - level-capability keyword
            - multi-topology
               - mt0 boolean
               - mt2 boolean
            - tag number
      - standard-multi-instance boolean
      - strict-adjacency-check boolean
      - summary-address (ipv4-prefix | ipv6-prefix)
         - algorithm number
         - apply-groups reference
         - apply-groups-exclude reference
         - level-capability keyword
         - route-tag number
      - suppress-attached-bit boolean
      - system-id string
      - timers
         - lsp-wait
            - lsp-initial-wait number
            - lsp-max-wait number
            - lsp-second-wait number
         - spf-wait
            - spf-initial-wait number
            - spf-max-wait number
            - spf-second-wait number
      - traffic-engineering boolean
      - traffic-engineering-options
         - advertise-delay boolean
         - application-link-attributes
            - legacy boolean
         - ipv6 boolean
      - unicast-import
         - ipv4 boolean
         - ipv6 boolean
   - l2tp
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - avp-hiding keyword
      - challenge boolean
      - destruct-timeout number
      - ethernet-tunnel
         - reconnect-timeout (number | keyword)
      - exclude-avps
         - calling-number boolean
         - initial-rx-lcp-conf-req boolean
      - failover
         - recovery-max-session-lifetime number
         - recovery-method keyword
         - recovery-time number
         - track-srrp reference
            - apply-groups reference
            - apply-groups-exclude reference
            - peer reference
            - sync-tag string
      - group string
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - avp-hiding keyword
```


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configure router l2tp group challenge

```
            - challenge keyword
            - description string
            - destruct-timeout number
            - ethernet-tunnel
               - reconnect-timeout (number | keyword)
            - failover
               - recovery-method keyword
               - recovery-time number
            - hello-interval (number | keyword)
            - idle-timeout (number | keyword)
            - l2tpv3
               - cookie-length (number | keyword)
               - digest-type keyword
               - nonce-length number
               - password string
               - private-tcp-mss-adjust (number | keyword)
               - public-tcp-mss-adjust (number | keyword)
               - pw-cap-list
                  - ethernet boolean
                  - ethernet-vlan boolean
               - rem-router-id string
               - track-password-change boolean
            - lac
               - df-bit keyword
            - lns
               - lns-group reference
               - load-balance-method keyword
               - mlppp
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - endpoint
                     - ip (ipv4-address | keyword)
                     - mac (mac-address | keyword)
                  - interleave boolean
                  - max-fragment-delay (number | keyword)
                  - max-links number
                  - reassembly-timeout number
                  - short-sequence-numbers boolean
               - ppp
                  - authentication keyword
                  - authentication-policy string
                  - chap-challenge-length
                     - end number
                     - start number
                  - default-group-interface
                     - interface string
                     - service-name string
                  - ipcp-subnet-negotiation boolean
                  - keepalive
                     - interval number
                     - multiplier number
                  - lcp-force-ack-accm boolean
                  - lcp-ignore-magic-numbers boolean
                  - mtu number
                  - proxy-authentication boolean
                  - proxy-lcp boolean
                  - reject-disabled-ncp boolean
                  - user-db string
            - local-address string
            - local-name string
            - max-retries-estab number
            - max-retries-not-estab number
            - password string
```


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```
            - protocol keyword
            - radius-accounting-policy reference
            - receive-window-size number
            - session-assign-method keyword
            - session-limit (number | keyword)
            - tunnel string
              - admin-state keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - auto-establish boolean
              - avp-hiding keyword
              - challenge keyword
              - description string
              - destruct-timeout number
              - failover
                - recovery-method keyword
                - recovery-time number
              - hello-interval (number | keyword)
              - idle-timeout (number | keyword)
              - l2tpv3
                - private-tcp-mss-adjust (number | keyword)
                - public-tcp-mss-adjust (number | keyword)
              - lac
                - df-bit keyword
              - lns
                - lns-group reference
                - load-balance-method keyword
                - mlppp
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - endpoint
                    - ip (ipv4-address | keyword)
                    - mac (mac-address | keyword)
                  - interleave keyword
                  - max-fragment-delay number
                  - max-links number
                  - reassembly-timeout number
                  - short-sequence-numbers keyword
                - ppp
                  - authentication keyword
                  - authentication-policy string
                  - chap-challenge-length
                    - end number
                    - start number
                  - default-group-interface
                    - interface string
                    - service-name string
                  - ipcp-subnet-negotiation keyword
                  - keepalive
                    - interval number
                    - multiplier number
                  - lcp-force-ack-accm keyword
                  - lcp-ignore-magic-numbers keyword
                  - mtu number
                  - proxy-authentication keyword
                  - proxy-lcp keyword
                  - reject-disabled-ncp keyword
                  - user-db string
              - local-address string
              - local-name string
              - max-retries-estab number
              - max-retries-not-estab number
              - password string
```


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configure router l2tp group tunnel peer

```
            - peer string
            - preference number
            - radius-accounting-policy reference
            - receive-window-size number
            - remote-name string
            - session-limit (number | keyword)
      - group-session-limit number
      - hello-interval (number | keyword)
      - idle-timeout (number | keyword)
      - ignore-avps
         - sequencing-required boolean
      - l2tpv3
         - cookie-length number
         - digest-type keyword
         - nonce-length number
         - password string
         - private-tcp-mss-adjust number
         - public-tcp-mss-adjust number
         - transport-type
            - ip boolean
      - lac
         - calling-number-format string
         - cisco-nas-port
            - ethernet string
         - df-bit boolean
      - local-address string
      - local-name string
      - max-retries-estab number
      - max-retries-not-estab number
      - next-attempt keyword
      - password string
      - peer-address-change-policy keyword
      - radius-accounting-policy reference
      - receive-window-size number
      - replace-result-code
         - cdn-invalid-dst boolean
         - cdn-permanent-no-facilities boolean
         - cdn-temporary-no-facilities boolean
      - rtm-debounce-time (number | keyword)
      - session-assign-method keyword
      - session-limit number
      - tunnel-selection-blacklist
         - add-tunnel-on
            - address-change-timeout boolean
            - cdn-err-code boolean
            - cdn-invalid-dst boolean
            - cdn-permanent-no-facilities boolean
            - cdn-temporary-no-facilities boolean
            - stop-ccn-err-code boolean
            - stop-ccn-other boolean
            - tx-cdn-not-established-in-time boolean
         - max-list-length (number | keyword)
         - max-time number
         - timeout-action keyword
      - tunnel-session-limit number
   - ldp
      - admin-state keyword
      - aggregate-prefix-match
         - admin-state keyword
         - prefix-exclude reference
      - apply-groups reference
      - apply-groups-exclude reference
      - class-forwarding keyword
      - consider-system-ip-in-gep boolean
```


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```
        - egress-statistics
          - fec-prefix (ipv4-prefix | ipv6-prefix)
            - accounting-policy reference
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - collect-stats boolean
        - entropy-label-capability boolean
        - export-policy reference
        - export-tunnel-table reference
        - fast-reroute
          - backup-sr-tunnel boolean
        - fec-originate (ipv4-prefix | ipv6-prefix)
          - advertised-label number
          - apply-groups reference
          - apply-groups-exclude reference
          - interface string
          - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
          - pop boolean
          - swap-label number
        - generate-basic-fec-only boolean
        - graceful-restart
          - helper-mode boolean
          - maximum-recovery-time number
          - neighbor-liveness-time number
        - implicit-null-label boolean
        - import-mcast-policy reference
        - import-pmsi-routes
          - mvpn boolean
          - mvpn-no-export-community boolean
        - import-policy reference
        - import-tunnel-table reference
        - interface-parameters
          - interface reference
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - bfd-liveness
              - ipv4 boolean
              - ipv6 boolean
            - ipv4
              - admin-state keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - fec-type-capability
                - p2mp-ipv4 boolean
                - p2mp-ipv6 boolean
                - prefix-ipv4 boolean
                - prefix-ipv6 boolean
              - hello
                - factor number
                - timeout number
              - keepalive
                - factor number
                - timeout number
              - local-lsr-id
                - interface-name reference
              - transport-address keyword
            - ipv6
              - admin-state keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - fec-type-capability
                - p2mp-ipv4 boolean
```


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configure router ldp interface-parameters interface ipv6 fec-type-capability p2mp-ipv6

```
                    - p2mp-ipv6 boolean
                    - prefix-ipv4 boolean
                    - prefix-ipv6 boolean
                 - hello
                    - factor number
                    - timeout number
                 - keepalive
                    - factor number
                    - timeout number
                 - local-lsr-id
                    - format-32bit boolean
                    - interface-name reference
                 - transport-address keyword
              - load-balancing-weight number
           - ipv4
              - hello
                 - factor number
                 - timeout number
              - keepalive
                 - factor number
                 - timeout number
              - transport-address keyword
           - ipv6
              - hello
                 - factor number
                 - timeout number
              - keepalive
                 - factor number
                 - timeout number
              - transport-address keyword
        - label-withdrawal-delay number
        - ldp-shortcut
           - ipv4 boolean
           - ipv6 boolean
        - legacy-ipv4-lsr-interop boolean
        - lsp-bfd reference
           - apply-groups reference
           - apply-groups-exclude reference
           - bfd-liveness boolean
           - bfd-template reference
           - failure-action keyword
           - lsp-ping-interval (number | keyword)
           - priority number
           - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - max-ecmp-routes number
        - mcast-upstream-asbr-frr boolean
        - mcast-upstream-frr boolean
        - mp-mbb-time number
        - prefer-mcast-tunnel-in-tunnel boolean
        - prefer-protocol-stitching boolean
        - prefer-tunnel-in-tunnel boolean
        - resolve-root-using keyword
        - session-parameters
           - peer (ipv4-address-no-zone | ipv6-address-no-zone)
              - adv-adj-addr-only boolean
              - adv-local-lsr-id boolean
              - apply-groups reference
              - apply-groups-exclude reference
              - community string
              - dod-label-distribution boolean
              - export-addresses reference
              - export-prefixes reference
              - fec-limit
                 - limit number
```


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configure router ldp session-parameters peer fec-limit log-only

```
                  - log-only boolean
                  - threshold number
               - fec-type-capability
                  - p2mp boolean
                  - prefix-ipv4 boolean
                  - prefix-ipv6 boolean
               - fec129-cisco-interop boolean
               - import-prefixes reference
               - pe-id-mac-flush-interop boolean
         - shortcut-local-ttl-propagate boolean
         - shortcut-transit-ttl-propagate boolean
         - targeted-session
            - auto-rx
               - ipv4
                  - admin-state keyword
                  - tunneling boolean
            - auto-tx
               - ipv4
                  - admin-state keyword
                  - tunneling boolean
            - export-prefixes reference
            - import-prefixes reference
            - ipv4
               - hello
                  - factor number
                  - timeout number
               - hello-reduction
                  - admin-state keyword
                  - factor number
               - keepalive
                  - factor number
                  - timeout number
            - ipv6
               - hello
                  - factor number
                  - timeout number
               - hello-reduction
                  - admin-state keyword
                  - factor number
               - keepalive
                  - factor number
                  - timeout number
            - peer (ipv4-address-no-zone | ipv6-address-no-zone)
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - bfd-liveness boolean
               - hello
                  - factor number
                  - timeout number
               - hello-reduction
                  - admin-state keyword
                  - factor number
               - keepalive
                  - factor number
                  - timeout number
               - local-lsr-id
                  - format-32bit boolean
                  - interface-name reference
               - mcast-tunneling
                  - lsp string
               - tunneling
                  - lsp string
            - peer-template string
```


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configure router ldp targeted-session peer-template admin-state

```
                - admin-state keyword
                - adv-local-lsr-id boolean
                - apply-groups reference
                - apply-groups-exclude reference
                - bfd-liveness boolean
                - community string
                - hello
                  - factor number
                  - timeout number
                - hello-reduction
                  - admin-state keyword
                  - factor number
                - keepalive
                  - factor number
                  - timeout number
                - local-lsr-id
                  - interface-name reference
                - mcast-tunneling boolean
                - tunneling boolean
            - peer-template-map reference
                - apply-groups reference
                - apply-groups-exclude reference
                - policy-map reference
            - resolve-v6-prefix-over-shortcut boolean
            - sdp-auto-targeted-session boolean
        - tcp-session-parameters
            - authentication-key string
            - authentication-keychain reference
            - peer-transport (ipv4-address-no-zone | ipv6-address-no-zone)
                - apply-groups reference
                - apply-groups-exclude reference
                - authentication-key string
                - authentication-keychain reference
                - path-mtu-discovery boolean
                - ttl-security number
        - tunnel-down-damp-time number
        - tunnel-table-pref number
        - weighted-ecmp boolean
    - leak-export
        - leak-export-limit number
        - policy-name (policy-expr-string | string)
    - lsp-bfd
        - bfd-sessions number
        - tail-end
            - apply-groups reference
            - apply-groups-exclude reference
            - multiplier number
            - receive-interval number
            - transmit-interval number
    - mc-maximum-routes
        - log-only boolean
        - threshold number
        - value number
    - mld
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - forwarding-group-interface forwarding-service string group-interface-
name reference
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - import-policy reference
            - maximum-number-group-sources number
```


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configure router mld forwarding-group-interface maximum-number-groups

```
            - maximum-number-groups number
            - maximum-number-sources number
            - mcac
               - bandwidth
                  - mandatory (number | keyword)
                  - total (number | keyword)
               - interface-policy reference
               - policy reference
            - query-interval number
            - query-last-member-interval number
            - query-response-interval number
            - query-source-address string
            - router-alert-check boolean
            - sub-hosts-only boolean
            - subnet-check boolean
            - version keyword
         - group-if-query-source-address string
         - group-interface reference
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - import-policy reference
            - maximum-number-group-sources number
            - maximum-number-groups number
            - maximum-number-sources number
            - mcac
               - bandwidth
                  - mandatory (number | keyword)
                  - total (number | keyword)
               - interface-policy reference
               - policy reference
            - query-interval number
            - query-last-member-interval number
            - query-response-interval number
            - query-source-address string
            - router-alert-check boolean
            - sub-hosts-only boolean
            - subnet-check boolean
            - version keyword
         - interface string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - import-policy reference
            - maximum-number-group-sources number
            - maximum-number-groups number
            - maximum-number-sources number
            - mcac
               - bandwidth
                  - mandatory (number | keyword)
                  - total (number | keyword)
               - interface-policy reference
               - mc-constraints
                  - level number
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - bandwidth number
                  - number-down number
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - level number
                  - use-lag-port-weight boolean
               - policy reference
            - query-interval number
```


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```
            - query-last-member-interval number
            - query-response-interval number
            - router-alert-check boolean
            - ssm-translate
               - group-range start string end string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - source string
            - static
               - group string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - source string
                  - starg
               - group-range start string end string step string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - source string
                  - starg
            - version keyword
         - query-interval number
         - query-last-member-interval number
         - query-response-interval number
         - robust-count number
         - ssm-translate
            - group-range start string end string
               - apply-groups reference
               - apply-groups-exclude reference
               - source string
      - mpls
         - admin-group-frr boolean
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - auto-bandwidth-multipliers
            - adjust-multiplier number
            - sample-multiplier number
         - auto-lsp reference
            - apply-groups reference
            - apply-groups-exclude reference
            - one-hop boolean
            - policy reference
         - aux-stats
            - sr boolean
         - bypass-resignal-timer number
         - class-forwarding-policy string
            - apply-groups reference
            - apply-groups-exclude reference
            - default-set number
            - fc keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - forwarding-set number
         - cspf-on-loose-hop boolean
         - dynamic-bypass boolean
         - entropy-label
            - rsvp-te boolean
            - sr-te boolean
         - exponential-backoff-retry boolean
         - forwarding-policies
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - forwarding-policy string
```


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configure router mpls forwarding-policies forwarding-policy admin-state

```
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - binding-label number
                - egress-statistics
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                - endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
                - ingress-statistics
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                - metric number
                - next-hop-group number
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - backup-next-hop
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
                    - pushed-labels number
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - label number
                  - load-balancing-weight number
                  - primary-next-hop
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
                    - pushed-labels number
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - label number
                  - resolution-type keyword
                - preference number
                - revert-timer number
                - tunnel-table-pref number
              - reserved-label-block reference
          - frr-object boolean
          - hold-timer number
          - ingress-statistics
            - lsp sender (ipv4-address-no-zone | ipv6-address-no-zone) lsp-name string
              - accounting-policy reference
              - admin-state keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - collect-stats boolean
              - stat-mode keyword
            - p2mp-template-lsp sender (ipv4-address-no-zone | ipv6-address-no-zone) rsvp-
session-name string
              - accounting-policy reference
              - admin-state keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - collect-stats boolean
              - max-stats number
              - stat-mode keyword
            - p2p-template-lsp sender (ipv4-address-no-zone | ipv6-address-no-zone) rsvp-
session-name string
              - accounting-policy reference
              - admin-state keyword
              - apply-groups reference
```


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configure router mpls ingress-statistics p2p-template-lsp apply-groups-exclude

```
            - apply-groups-exclude reference
            - collect-stats boolean
            - max-stats number
            - stat-mode keyword
      - interface reference
         - admin-group reference
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - label-map number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - pop
            - swap
               - apply-groups reference
               - apply-groups-exclude reference
               - next-hop string
               - out-label (number | keyword)
         - srlg-group reference
         - te-metric number
      - least-fill-min-thd number
      - least-fill-reoptim-thd number
      - logger-event-bundling boolean
      - lsp string
         - adaptive boolean
         - admin-state keyword
         - admin-tag reference
         - adspec boolean
         - apply-groups reference
         - apply-groups-exclude reference
         - auto-bandwidth
            - adjust-down
               - bw number
               - percent number
            - adjust-up
               - bw number
               - percent number
            - apply-groups reference
            - apply-groups-exclude reference
            - fc keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - sampling-weight number
            - max-bandwidth number
            - min-bandwidth number
            - monitor-bandwidth boolean
            - multipliers
               - adjust-multiplier number
               - sample-multiplier number
            - overflow-limit
               - bw number
               - number number
               - threshold number
            - underflow-limit
               - bw number
               - number number
               - threshold number
            - use-last-adj-bw
               - secondary-retry-limit (number | keyword)
         - bfd
            - bfd-liveness boolean
            - bfd-template reference
            - failure-action keyword
```


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```
            - lsp-ping-interval (number | keyword)
            - return-path-label number
            - wait-for-up-timer number
         - bgp-shortcut boolean
         - bgp-transport-tunnel boolean
         - binding-sid number
         - class-forwarding
            - forwarding-set
               - policy reference
               - set number
         - class-type number
         - egress-statistics
            - accounting-policy reference
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - collect-stats boolean
            - stat-mode keyword
         - entropy-label keyword
         - exclude-admin-group reference
         - exclude-node (ipv4-address-no-zone | ipv6-address-no-zone)
         - fallback-path-computation-method keyword
         - fast-reroute
            - frr-method keyword
            - hop-limit number
            - node-protect boolean
            - propagate-admin-group boolean
         - from (ipv4-address-no-zone | ipv6-address-no-zone)
         - hop-limit number
         - igp-shortcut
            - admin-state keyword
            - allow-sr-over-srte boolean
            - lfa-type keyword
            - relative-metric number
         - include-admin-group reference
         - label-stack-reduction boolean
         - ldp-over-rsvp boolean
         - least-fill boolean
         - load-balancing-weight number
         - local-sr-protection keyword
         - lsp-self-ping keyword
         - main-ct-retry-limit number
         - max-sr-labels
            - additional-frr-labels number
            - label-stack-size number
         - metric number
         - metric-type keyword
         - override-tunnel-elc boolean
         - p2mp-id number
         - path-computation-method keyword
         - path-profile number
            - apply-groups reference
            - apply-groups-exclude reference
            - path-group number
         - pce-associations
            - diversity reference
            - policy reference
         - pce-control boolean
         - pce-report keyword
         - primary reference
            - adaptive boolean
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
```


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configure router mpls lsp primary backup-class-type

```
            - backup-class-type number
            - bandwidth number
            - bfd
              - bfd-liveness boolean
              - bfd-template reference
              - lsp-ping-interval (number | keyword)
              - return-path-label number
              - wait-for-up-timer number
            - class-type number
            - exclude-admin-group
              - group reference
            - hop-limit number
            - include-admin-group
              - group reference
            - priority
              - hold-priority number
              - setup-priority number
            - record boolean
            - record-label boolean
        - primary-p2mp-instance string
            - adaptive boolean
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - bandwidth number
            - exclude-admin-group
              - group reference
            - hop-limit number
            - include-admin-group
              - group reference
            - priority
              - hold-priority number
              - setup-priority number
            - record boolean
            - record-label boolean
            - s2l-path reference to (ipv4-address-no-zone | ipv6-address-no-zone)
              - admin-state keyword
              - apply-groups reference
              - apply-groups-exclude reference
        - propagate-admin-group boolean
        - retry-limit number
        - retry-timer number
        - revert-timer number
        - rsvp-resv-style keyword
        - secondary reference
            - adaptive boolean
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - bandwidth number
            - bfd
              - bfd-liveness boolean
              - bfd-template reference
              - lsp-ping-interval (number | keyword)
              - return-path-label number
              - wait-for-up-timer number
            - class-type number
            - exclude-admin-group
              - group reference
            - hop-limit number
            - include-admin-group
              - group reference
            - path-preference number
            - priority
```


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```
                  - hold-priority number
                  - setup-priority number
               - record boolean
               - record-label boolean
               - srlg boolean
               - standby boolean
            - soft-preemption boolean
            - to (ipv4-address-no-zone | ipv6-address-no-zone)
            - type keyword
            - vprn-auto-bind boolean
         - lsp-bsid-block reference
         - lsp-history
            - admin-state keyword
         - lsp-init-retry-timeout number
         - lsp-self-ping
            - interval number
            - rsvp-te boolean
            - timeout number
            - timeout-action keyword
         - lsp-template string
            - adaptive boolean
            - admin-state keyword
            - admin-tag reference
            - adspec boolean
            - apply-groups reference
            - apply-groups-exclude reference
            - auto-bandwidth
               - adjust-down
                  - bw number
                  - percent number
               - adjust-up
                  - bw number
                  - percent number
               - apply-groups reference
               - apply-groups-exclude reference
               - fc keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - sampling-weight number
               - max-bandwidth number
               - min-bandwidth number
               - monitor-bandwidth boolean
               - multipliers
                  - adjust-multiplier number
                  - sample-multiplier number
               - overflow-limit
                  - bw number
                  - number number
                  - threshold number
               - underflow-limit
                  - bw number
                  - number number
                  - threshold number
            - backup-class-type number
            - bandwidth number
            - bfd
               - bfd-liveness boolean
               - bfd-template reference
               - failure-action keyword
               - lsp-ping-interval (number | keyword)
               - return-path-label number
               - wait-for-up-timer number
            - bgp-shortcut boolean
            - bgp-transport-tunnel boolean
```


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configure router mpls lsp-template binding-sid

```
            - binding-sid boolean
            - class-forwarding
              - forwarding-set
                - policy reference
                - set number
            - class-type number
            - default-path reference
            - egress-statistics
              - accounting-policy reference
              - collect-stats boolean
              - stat-mode keyword
            - entropy-label keyword
            - exclude-admin-group reference
            - fallback-path-computation-method keyword
            - family keyword
            - fast-reroute
              - frr-method keyword
              - hop-limit number
              - node-protect boolean
              - propagate-admin-group boolean
            - from (ipv4-address-no-zone | ipv6-address-no-zone)
            - hop-limit number
            - igp-shortcut
              - admin-state keyword
              - allow-sr-over-srte boolean
              - lfa-type keyword
              - relative-metric number
            - include-admin-group reference
            - label-stack-reduction boolean
            - ldp-over-rsvp boolean
            - least-fill boolean
            - load-balancing-weight number
            - local-sr-protection keyword
            - lsp-self-ping keyword
            - main-ct-retry-limit number
            - max-sr-labels
              - additional-frr-labels number
              - label-stack-size number
            - metric number
            - metric-type keyword
            - override-tunnel-elc boolean
            - path-computation-method keyword
            - path-profile number
              - apply-groups reference
              - apply-groups-exclude reference
              - path-group number
            - pce-associations
              - diversity reference
              - policy reference
            - pce-control boolean
            - pce-report keyword
            - priority
              - hold-priority number
              - setup-priority number
            - propagate-admin-group boolean
            - record boolean
            - record-label boolean
            - retry-limit number
            - retry-timer number
            - soft-preemption boolean
            - template-id (number | keyword)
            - type keyword
            - vprn-auto-bind boolean
          - max-bypass-associations number
```


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```
        - max-bypass-plr-associations number
        - mbb-prefer-current-hops boolean
        - p2mp-resignal-timer number
        - p2mp-s2l-fast-retry number
        - p2mp-ttl-propagate boolean
        - p2p-active-path-fast-retry number
        - path string
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - hop number
            - apply-groups reference
            - apply-groups-exclude reference
            - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
            - sid-label number
            - type keyword
        - pce-init-lsp
          - apply-groups reference
          - apply-groups-exclude reference
          - sr-te
            - admin-state keyword
        - pce-report
          - rsvp-te boolean
          - sr-te boolean
        - resignal-on-igp-overload boolean
        - resignal-timer number
        - retry-on-igp-overload boolean
        - secondary-fast-retry-timer number
        - shortcut-local-ttl-propagate boolean
        - shortcut-transit-ttl-propagate boolean
        - sr-te-resignal
          - resignal-on-igp-event boolean
          - resignal-on-igp-overload boolean
          - resignal-timer number
        - srlg-database
          - router-id string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - interface string srlg-group reference
        - srlg-frr keyword
        - static-lsp string
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - metric number
          - push
            - apply-groups reference
            - apply-groups-exclude reference
            - next-hop string
            - out-label (number | keyword)
          - to string
        - static-lsp-fast-retry number
        - strict-ero-nhop-direct-resolution boolean
        - tunnel-table-pref
          - rsvp-te number
          - sr-te number
        - user-srlg-db boolean
      - mpls-labels
        - apply-groups reference
        - apply-groups-exclude reference
        - bgp-labels-hold-timer number
        - reserved-label-block string
          - apply-groups reference
```


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configure router mpls-labels reserved-label-block apply-groups-exclude

```
            - apply-groups-exclude reference
            - end-label number
            - start-label number
         - sr-labels
            - end number
            - start number
         - static-label-range number
      - msdp
         - active-source-limit number
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - data-encapsulation boolean
         - export-policy reference
         - group string
            - active-source-limit number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - export-policy reference
            - import-policy reference
            - local-address string
            - mode keyword
            - peer string
               - active-source-limit number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - authentication-key string
               - default-peer boolean
               - export-policy reference
               - import-policy reference
               - local-address string
               - receive-message-rate
                  - rate number
                  - threshold number
                  - time number
            - receive-message-rate
               - rate number
               - threshold number
               - time number
         - import-policy reference
         - local-address string
         - peer string
            - active-source-limit number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - authentication-key string
            - default-peer boolean
            - export-policy reference
            - import-policy reference
            - local-address string
            - receive-message-rate
               - rate number
               - threshold number
               - time number
         - receive-message-rate
            - rate number
            - threshold number
            - time number
         - rpf-table keyword
         - source string
            - active-source-limit number
```


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configure router msdp source apply-groups

```
            - apply-groups reference
            - apply-groups-exclude reference
         - source-active-cache-lifetime number
      - mss-adjust
         - apply-groups reference
         - apply-groups-exclude reference
         - nat-group number
         - segment-size number
      - mtrace2
         - admin-state keyword
         - udp-port number
      - multicast-info-policy reference
      - nat
         - apply-groups reference
         - apply-groups-exclude reference
         - inside
            - l2-aware
               - force-unique-ip-addresses boolean
               - subscribers string
            - large-scale
               - dnat-only
                  - source-prefix-list reference
               - dual-stack-lite
                  - admin-state keyword
                  - deterministic
                     - prefix-map string nat-policy reference
                        - admin-state keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - map string to string
                           - apply-groups reference
                           - apply-groups-exclude reference
                           - first-outside-address string
                  - endpoint string
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - ip-fragmentation keyword
                     - min-first-fragment-size-rx number
                     - reassembly boolean
                     - tunnel-mtu number
                  - max-subscriber-limit number
                  - subscriber-prefix-length number
               - nat-policy reference
               - nat44
                  - destination-prefix string
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - nat-policy reference
                  - deterministic
                     - prefix-map string nat-policy reference
                        - admin-state keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - map string to string
                           - apply-groups reference
                           - apply-groups-exclude reference
                           - first-outside-address string
                  - max-subscriber-limit number
                  - nat-import reference
                  - source-prefix string
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - nat-policy reference
               - nat64
```


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configure router nat inside large-scale nat64 admin-state

```
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - drop-zero-ipv4-checksum boolean
                  - insert-ipv6-fragment-header boolean
                  - ip-fragmentation keyword
                  - ipv6-mtu number
                  - prefix string
                  - subscriber-prefix-length number
                  - tos
                     - downstream
                        - use-ipv4 boolean
                     - upstream
                        - set-tos (keyword | number)
               - redundancy
                  - peer string
                  - peer6 string
                  - steering-route string
               - subscriber-identification
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - attribute
                     - type keyword
                     - vendor keyword
                  - description string
                  - drop-unidentified-traffic boolean
                  - radius-proxy-server
                     - router-instance string
                     - server string
               - traffic-identification
                  - source-prefix-only boolean
         - map
            - map-domain reference
         - outside
            - dnat-only
               - route-limit number
            - filters
               - downstream
                  - ipv4 reference
                  - ipv6 reference
               - upstream
                  - ipv4 reference
                  - ipv6 reference
            - mtu number
            - pool string
               - address-pooling keyword
               - address-range string end string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - description string
                  - drain boolean
               - admin-state keyword
               - applications
                  - agnostic boolean
               - apply-groups reference
               - apply-groups-exclude reference
               - description string
               - icmp-echo-reply boolean
               - l2-aware
                  - default-host
                     - inside-router-instance string
                     - ip-address string
                     - rate-limit number
```


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```
                  - external-assignment boolean
                  - port-block-extension
                     - ports number
                     - subscriber
                        - watermarks
                           - high number
                           - low number
                     - subscriber-limit number
                     - watermarks
                        - high number
                        - low number
               - large-scale
                  - default-host
                     - inside-router-instance string
                     - ip-address string
                     - rate-limit number
                  - deterministic
                     - port-reservation number
                     - watermarks
                        - high number
                        - low number
                  - redundancy
                     - admin-state keyword
                     - export-route string
                     - follow
                        - name string
                        - router-instance string
                     - monitor-route string
                  - subscriber-limit number
               - mode keyword
               - nat-group reference
               - port-forwarding
                  - dynamic-block-reservation boolean
                  - range-end number
                  - range-start number
               - port-reservation
                  - port-blocks number
                  - ports number
               - type keyword
               - watermarks
                  - high number
                  - low number
               - wlan-gw-group reference
      - network-domains
         - network-domain string
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
      - origin-validation
         - apply-groups reference
         - apply-groups-exclude reference
         - rpki-session (ipv4-address-no-zone | ipv6-address-no-zone)
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - connect-retry number
            - description string
            - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
            - port number
            - refresh-time
               - hold-time number
               - value number
            - stale-time number
         - static-entry (ipv4-prefix | ipv6-prefix) upto number origin-as number
```


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configure router origin-validation static-entry apply-groups

```
            - apply-groups reference
            - apply-groups-exclude reference
            - valid boolean
      - ospf number
         - admin-state keyword
         - advertise-router-capability keyword
         - advertise-tunnel-link boolean
         - apply-groups reference
         - apply-groups-exclude reference
         - area string
            - advertise-router-capability boolean
            - apply-groups reference
            - apply-groups-exclude reference
            - area-range string
               - advertise boolean
               - apply-groups reference
               - apply-groups-exclude reference
            - bier
               - admin-state keyword
               - template reference
            - blackhole-aggregate boolean
            - database-export-exclude boolean
            - export-policy reference
            - import-policy reference
            - interface string
               - adjacency-set reference
               - adjacency-sid
                  - label number
               - admin-state keyword
               - advertise-router-capability boolean
               - advertise-subnet boolean
               - apply-groups reference
               - apply-groups-exclude reference
               - authentication-key string
               - authentication-keychain reference
               - authentication-type keyword
               - bfd-liveness
                  - remain-down-on-failure boolean
                  - strict boolean
                  - strict-mode-holddown number
               - dead-interval number
               - flex-algo number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - node-sid
                     - index number
                     - label number
               - hello-interval number
               - interface-type keyword
               - load-balancing-weight number
               - loopfree-alternate
                  - exclude boolean
                  - policy-map
                     - route-nh-template reference
               - lsa-filter-out keyword
               - message-digest-key number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - md5 string
               - metric number
               - mtu number
               - neighbor string
               - node-sid
                  - clear-n-flag boolean
```


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```
                  - index number
                  - label number
               - passive boolean
               - poll-interval number
               - priority number
               - retransmit-interval number
               - rib-priority keyword
               - sid-protection boolean
               - transit-delay number
            - loopfree-alternate-exclude boolean
            - nssa
               - area-range string
                  - advertise boolean
                  - apply-groups reference
                  - apply-groups-exclude reference
               - originate-default-route
                  - adjacency-check boolean
                  - type-nssa boolean
               - redistribute-external boolean
               - summaries boolean
            - stub
               - default-metric number
               - summaries boolean
            - virtual-link string transit-area reference
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - authentication-key string
               - authentication-keychain reference
               - authentication-type keyword
               - dead-interval number
               - hello-interval number
               - message-digest-key number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - md5 string
               - retransmit-interval number
               - transit-delay number
         - asbr
            - trace-path (number | keyword)
         - compatible-rfc1583 boolean
         - database-export
            - bgp-ls-identifier
               - value number
            - igp-identifier number
         - entropy-label
            - override-tunnel-elc boolean
         - export-limit
            - log-percent number
            - number number
         - export-policy reference
         - external-db-overflow
            - interval number
            - limit number
         - external-preference number
         - flexible-algorithms
            - admin-state keyword
            - advertise-admin-group keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - flex-algo number
               - advertise reference
               - apply-groups reference
               - apply-groups-exclude reference
```


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configure router ospf flexible-algorithms flex-algo loopfree-alternate

```
            - loopfree-alternate
            - participate boolean
      - graceful-restart
         - helper-mode boolean
         - strict-lsa-checking boolean
      - igp-shortcut
         - admin-state keyword
         - allow-sr-over-srte boolean
         - apply-groups reference
         - apply-groups-exclude reference
         - tunnel-next-hop
            - family keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - resolution keyword
               - resolution-filter
                  - rsvp boolean
                  - sr-te boolean
      - import-policy reference
      - ldp-over-rsvp boolean
      - ldp-sync boolean
      - loopfree-alternate
         - augment-route-table boolean
         - exclude
            - prefix-policy reference
         - multi-homed-prefix
            - preference keyword
         - remote-lfa
            - max-pq-cost number
            - node-protect
               - max-pq-nodes number
         - ti-lfa
            - max-sr-frr-labels number
            - node-protect
      - multi-instance boolean
      - multicast-import boolean
      - overload boolean
      - overload-include-ext-1 boolean
      - overload-include-ext-2 boolean
      - overload-include-stub boolean
      - overload-on-boot
         - timeout number
      - preference number
      - reference-bandwidth number
      - rib-priority
         - high
            - prefix-list reference
      - router-id string
      - rtr-adv-lsa-limit
         - log-only boolean
         - max-lsa-count number
         - overload-timeout (number | keyword)
         - warning-threshold number
      - segment-routing
         - adj-sid-hold (number | keyword)
         - adjacency-set number
            - advertise boolean
            - apply-groups reference
            - apply-groups-exclude reference
            - parallel boolean
            - sid
               - label number
         - adjacency-sid
            - allocate-dual-sids boolean
```


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configure router ospf segment-routing admin-state

```
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - backup-node-sid
               - index number
               - ip-prefix string
               - label number
            - class-forwarding boolean
            - egress-statistics
               - adj-set boolean
               - adj-sid boolean
               - node-sid boolean
            - entropy-label boolean
            - export-tunnel-table keyword
            - ingress-statistics
               - adj-set boolean
               - adj-sid boolean
               - node-sid boolean
            - mapping-server
               - admin-state keyword
               - node-sid-map number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - ip-prefix string
                  - range number
                  - scope
                     - area reference
                     - as
            - maximum-sid-depth
               - override-bmi number
               - override-erld number
            - prefix-sid-range
               - global
               - max-index number
               - start-label number
            - srlb reference
            - tunnel-mtu number
            - tunnel-table-pref number
         - timers
            - incremental-spf-wait number
            - lsa-accumulate number
            - lsa-arrival number
            - lsa-generate
               - lsa-initial-wait number
               - lsa-second-wait number
               - max-lsa-wait number
            - redistribute-delay number
            - spf-wait
               - spf-initial-wait number
               - spf-max-wait number
               - spf-second-wait number
         - traffic-engineering boolean
         - traffic-engineering-options
            - advertise-delay boolean
            - sr-te keyword
         - unicast-import boolean
      - ospf3 number
         - admin-state keyword
         - advertise-router-capability keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - area string
            - advertise-router-capability boolean
            - apply-groups reference
```


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```
            - apply-groups-exclude reference
            - area-range (ipv4-prefix | ipv6-prefix)
              - advertise boolean
              - apply-groups reference
              - apply-groups-exclude reference
            - blackhole-aggregate boolean
            - database-export-exclude boolean
            - export-policy reference
            - extended-lsa keyword
            - import-policy reference
            - interface string
              - admin-state keyword
              - advertise-router-capability boolean
              - apply-groups reference
              - apply-groups-exclude reference
              - authentication
                - inbound reference
                - outbound reference
              - bfd-liveness
                - remain-down-on-failure boolean
                - strict boolean
                - strict-mode-holddown number
              - dead-interval number
              - hello-interval number
              - interface-type keyword
              - load-balancing-weight number
              - loopfree-alternate
                - exclude boolean
                - policy-map
                  - route-nh-template reference
              - lsa-filter-out keyword
              - metric number
              - mtu number
              - neighbor (ipv4-address-no-zone | ipv6-address-no-zone)
              - node-sid
                - clear-n-flag boolean
                - index number
                - label number
              - passive boolean
              - poll-interval number
              - priority number
              - retransmit-interval number
              - rib-priority keyword
              - sid-protection boolean
              - transit-delay number
            - key-rollover-interval number
            - loopfree-alternate-exclude boolean
            - nssa
              - area-range (ipv4-prefix | ipv6-prefix)
                - advertise boolean
                - apply-groups reference
                - apply-groups-exclude reference
              - originate-default-route
                - adjacency-check boolean
                - type-nssa boolean
              - redistribute-external boolean
              - summaries boolean
            - stub
              - default-metric number
              - summaries boolean
            - virtual-link string transit-area reference
              - admin-state keyword
              - apply-groups reference
              - apply-groups-exclude reference
```


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configure router ospf3 area virtual-link authentication

```
            - authentication
               - inbound reference
               - outbound reference
            - dead-interval number
            - hello-interval number
            - retransmit-interval number
            - transit-delay number
      - asbr
      - database-export
         - bgp-ls-identifier
            - value number
         - igp-identifier number
      - export-limit
         - log-percent number
         - number number
      - export-policy reference
      - extended-lsa keyword
      - external-db-overflow
         - interval number
         - limit number
      - external-preference number
      - graceful-restart
         - helper-mode boolean
         - strict-lsa-checking boolean
      - igp-shortcut
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - tunnel-next-hop
            - family keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - resolution keyword
               - resolution-filter
                  - rsvp boolean
                  - sr-te boolean
      - import-policy reference
      - ldp-sync boolean
      - loopfree-alternate
         - exclude
            - prefix-policy reference
         - remote-lfa
            - max-pq-cost number
            - node-protect
               - max-pq-nodes number
         - ti-lfa
            - max-sr-frr-labels number
            - node-protect
      - multicast-import boolean
      - overload boolean
      - overload-include-ext-1 boolean
      - overload-include-ext-2 boolean
      - overload-include-stub boolean
      - overload-on-boot
         - timeout number
      - preference number
      - reference-bandwidth number
      - rib-priority
         - high
            - prefix-list reference
      - router-id string
      - rtr-adv-lsa-limit
         - log-only boolean
         - max-lsa-count number
```


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```
            - overload-timeout (number | keyword)
            - warning-threshold number
         - segment-routing
            - adj-sid-hold (number | keyword)
            - adjacency-sid
               - allocate-dual-sids boolean
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - egress-statistics
               - adj-sid boolean
               - node-sid boolean
            - ingress-statistics
               - adj-sid boolean
               - node-sid boolean
            - prefix-sid-range
               - global
               - max-index number
               - start-label number
            - tunnel-mtu number
            - tunnel-table-pref number
         - timers
            - incremental-spf-wait number
            - lsa-accumulate number
            - lsa-arrival number
            - lsa-generate
               - lsa-initial-wait number
               - lsa-second-wait number
               - max-lsa-wait number
            - redistribute-delay number
            - spf-wait
               - spf-initial-wait number
               - spf-max-wait number
               - spf-second-wait number
         - unicast-import boolean
      - p2mp-sr-tree
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - bfd-liveness keyword
         - p2mp-policy string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - candidate-path string
               - active-instance reference
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - path-instances number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - instance-id number
               - preference number
            - root-address (ipv4-address-no-zone | ipv6-address-no-zone)
            - tree-id number
         - replication-segment string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - downstream-nodes number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
```


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configure router p2mp-sr-tree replication-segment downstream-nodes label

```
                - label
                  - sid-list number
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - replication-sid number
                - next-hop-address (ipv4-address-with-zone | ipv6-address-with-zone)
                - next-hop-interface-name string
                - protect-nexthop-id reference
            - instance-id number
            - replication-sid number
            - root-address (ipv4-address-no-zone | ipv6-address-no-zone)
            - sid-action keyword
            - tree-id number
        - reserved-label-block reference
    - pcep
        - apply-groups reference
        - apply-groups-exclude reference
        - pcc
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - dead-timer number
            - keepalive number
            - local-address string
            - local-address-ipv6 string
            - max-srte-pce-init-lsps number
            - pce-associations
                - diversity string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - association-id number
                  - association-source (ipv4-address-no-zone | ipv6-address-no-zone)
                  - disjointness-reference boolean
                  - disjointness-type keyword
                  - diversity-type keyword
                - policy string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - association-id number
                  - association-source (ipv4-address-no-zone | ipv6-address-no-zone)
            - peer (ipv4-address-no-zone | ipv6-address-no-zone)
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - authentication-keychain reference
                - preference number
                - route-preference keyword
                - tls-client-profile reference
                - tls-wait-timer number
            - redelegation-timer number
            - report-path-constraints boolean
            - state-timer
                - timer number
                - timer-action keyword
            - unknown-message-rate number
    - pcp
        - server string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - dual-stack-lite-address string
            - fwd-inside-router string
            - interface reference
```


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configure router pcp server policy

```
            - policy reference
      - pim
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - apply-to keyword
         - import
            - join-policy reference
            - register-policy reference
         - interface string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - assert-period number
            - bfd-liveness
               - ipv4 boolean
               - ipv6 boolean
            - bier-signaling-type
               - ipv4 boolean
               - ipv6 boolean
            - bsm-check-rtr-alert boolean
            - hello-interval number
            - hello-multiplier number
            - improved-assert boolean
            - instant-prune-echo boolean
            - ipv4
               - apply-groups reference
               - apply-groups-exclude reference
               - monitor-oper-group
                  - name reference
                  - operation keyword
                  - priority-delta number
               - multicast boolean
            - ipv6
               - apply-groups reference
               - apply-groups-exclude reference
               - monitor-oper-group
                  - name reference
                  - operation keyword
                  - priority-delta number
               - multicast boolean
            - max-groups number
            - mcac
               - bandwidth
                  - mandatory (number | keyword)
                  - total (number | keyword)
               - interface-policy reference
               - mc-constraints
                  - admin-state keyword
                  - level number
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - bandwidth number
                  - number-down number
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - level number
                  - use-lag-port-weight boolean
               - policy reference
            - multicast-senders keyword
            - p2mp-ldp-tree-join
               - ipv4 boolean
               - ipv6 boolean
            - priority number
```


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configure router pim interface sticky-dr

```
            - sticky-dr
               - priority number
            - three-way-hello boolean
            - tracking-support boolean
         - ipv4
            - admin-state keyword
            - gtm
               - auto-discovery keyword
            - multicast-fast-failover boolean
            - rpf-table keyword
            - source-address
               - register-message string
            - ssm-assert-compatible-mode boolean
            - ssm-default-range boolean
         - ipv6
            - admin-state keyword
            - multicast-fast-failover boolean
            - rpf-table keyword
            - source-address
               - register-message string
            - ssm-default-range boolean
         - lag-usage-optimization boolean
         - mc-ecmp-balance boolean
         - mc-ecmp-balance-hold number
         - mc-ecmp-hashing
            - rebalance boolean
         - mdt-spt boolean
         - non-dr-attract-traffic boolean
         - pim-ssm-scaling boolean
         - rp
            - bootstrap
               - export reference
               - import reference
            - ipv4
               - anycast string rp-set-peer string
               - auto-rp-discovery boolean
               - bsr-candidate
                  - address string
                  - admin-state keyword
                  - hash-mask-len number
                  - priority number
               - candidate boolean
               - mapping-agent boolean
               - rp-candidate
                  - address string
                  - admin-state keyword
                  - group-range string
                  - holdtime number
                  - priority number
               - static
                  - address string
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - group-prefix string
                     - override boolean
            - ipv6
               - anycast string rp-set-peer string
               - bsr-candidate
                  - address string
                  - admin-state keyword
                  - hash-mask-len number
                  - priority number
               - embedded-rp
                  - admin-state keyword
```


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configure router pim rp ipv6 embedded-rp group-range

```
                  - group-range string
               - rp-candidate
                  - address string
                  - admin-state keyword
                  - group-range string
                  - holdtime number
                  - priority number
               - static
                  - address string
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - group-prefix string
                     - override boolean
         - rpfv
            - core boolean
            - mvpn boolean
         - spt-switchover (ipv4-prefix | ipv6-prefix)
            - apply-groups reference
            - apply-groups-exclude reference
            - threshold (number | keyword)
         - ssm-groups
            - group-range (ipv4-prefix | ipv6-prefix)
      - radius
         - apply-groups reference
         - apply-groups-exclude reference
         - proxy string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - attribute-matching
               - entry number
                  - accounting-server-policy string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - authentication-server-policy string
                  - prefix-string string
                  - suffix-string string
               - type number
               - vendor (number | keyword)
            - cache
               - admin-state keyword
               - key
                  - attribute-type number
                  - packet-type keyword
                  - vendor (number | keyword)
               - timeout number
               - track-accounting
                  - accounting-off boolean
                  - accounting-on boolean
                  - interim-update boolean
                  - start boolean
                  - stop boolean
               - track-authentication
                  - accept boolean
               - track-delete-hold-time number
            - defaults
               - accounting-server-policy string
               - authentication-server-policy string
            - description string
            - interface string
            - load-balance-key
               - attribute-1
                  - type number
                  - vendor (number | keyword)
```


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configure router radius proxy load-balance-key attribute-2

```
            - attribute-2
              - type number
              - vendor (number | keyword)
            - attribute-3
              - type number
              - vendor (number | keyword)
            - attribute-4
              - type number
              - vendor (number | keyword)
            - attribute-5
              - type number
              - vendor (number | keyword)
            - source-ip-udp
        - purpose keyword
        - python-policy reference
        - secret string
        - send-accounting-response boolean
        - wlan-gw
          - address string
          - apply-groups reference
          - apply-groups-exclude reference
          - ipv6-address string
        - wlan-gw-group reference
      - server string
        - accept-coa boolean
        - acct-port number
        - address (ipv4-address-no-zone | ipv6-address-no-zone)
        - apply-groups reference
        - apply-groups-exclude reference
        - auth-port number
        - description string
        - pending-requests-limit number
        - python-policy reference
        - secret string
    - reassembly
      - apply-groups reference
      - apply-groups-exclude reference
      - nat-group number
      - to-base-network boolean
    - rib-api
      - apply-groups reference
      - apply-groups-exclude reference
      - mpls
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - label-name reference
    - rip
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-key string
      - authentication-type keyword
      - bfd-liveness boolean
      - check-zero boolean
      - description string
      - export-limit
        - log-percent number
        - number number
      - export-policy reference
      - group string
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
```


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```
            - authentication-key string
            - authentication-type keyword
            - bfd-liveness boolean
            - check-zero boolean
            - description string
            - export-policy reference
            - import-policy reference
            - message-size number
            - metric-in number
            - metric-out number
            - neighbor string
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - authentication-key string
               - authentication-type keyword
               - bfd-liveness boolean
               - check-zero boolean
               - description string
               - export-policy reference
               - import-policy reference
               - message-size number
               - metric-in number
               - metric-out number
               - preference number
               - receive keyword
               - send keyword
               - split-horizon boolean
               - timers
                  - flush number
                  - timeout number
                  - update number
               - unicast-address string
            - preference number
            - receive keyword
            - send keyword
            - split-horizon boolean
            - timers
               - flush number
               - timeout number
               - update number
         - import-policy reference
         - message-size number
         - metric-in number
         - metric-out number
         - preference number
         - receive keyword
         - send keyword
         - split-horizon boolean
         - timers
            - flush number
            - timeout number
            - update number
      - ripng
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - bfd-liveness boolean
         - check-zero boolean
         - description string
         - export-limit
            - log-percent number
            - number number
         - export-policy reference
```


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```
        - group string
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - bfd-liveness boolean
          - check-zero boolean
          - description string
          - export-policy reference
          - import-policy reference
          - message-size number
          - metric-in number
          - metric-out number
          - neighbor string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - bfd-liveness boolean
            - check-zero boolean
            - description string
            - export-policy reference
            - import-policy reference
            - message-size number
            - metric-in number
            - metric-out number
            - preference number
            - receive keyword
            - send keyword
            - split-horizon boolean
            - timers
              - flush number
              - timeout number
              - update number
            - unicast-address string
          - preference number
          - receive keyword
          - send keyword
          - split-horizon boolean
          - timers
            - flush number
            - timeout number
            - update number
        - import-policy reference
        - message-size number
        - metric-in number
        - metric-out number
        - preference number
        - receive keyword
        - send keyword
        - split-horizon boolean
        - timers
          - flush number
          - timeout number
          - update number
    - router-id string
    - rsvp
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - authentication-over-bypass boolean
        - dbw-accounting
          - dbw-multiplier number
          - down-threshold
            - bw number
            - percent number
```


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```
            - sample-interval number
            - sample-multiplier number
            - up-threshold
               - bw number
               - percent number
         - diffserv-te
            - admission-control-model keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - class-type-bw
               - ct0 number
               - ct1 number
               - ct2 number
               - ct3 number
               - ct4 number
               - ct5 number
               - ct6 number
               - ct7 number
            - fc keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - class-type number
            - te-class number
               - apply-groups reference
               - apply-groups-exclude reference
               - class-type number
               - priority number
         - entropy-label-capability boolean
         - graceful-restart
            - max-recovery number
            - max-restart number
         - graceful-shutdown boolean
         - implicit-null-label boolean
         - include-node-id-in-rro boolean
         - interface reference
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - authentication-key string
            - authentication-keychain reference
            - bfd-liveness boolean
            - class-type-bw
               - ct0 number
               - ct1 number
               - ct2 number
               - ct3 number
               - ct4 number
               - ct5 number
               - ct6 number
               - ct7 number
            - dbw-down-threshold
               - bw number
               - percent number
            - dbw-multiplier number
            - dbw-up-threshold
               - bw number
               - percent number
            - graceful-restart-helper-mode boolean
            - graceful-shutdown boolean
            - hello-interval number
            - implicit-null-label boolean
            - refresh-reduction
               - reliable-delivery boolean
            - subscription number
```


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configure router rsvp interface te-down-threshold

```
            - te-down-threshold
               - apply-groups reference
               - apply-groups-exclude reference
               - value number
            - te-up-threshold
               - apply-groups reference
               - apply-groups-exclude reference
               - value number
         - keep-multiplier number
         - msg-pacing
            - max-burst number
            - period number
         - p2mp-merge-point-abort-timer number
         - p2p-merge-point-abort-timer number
         - preemption-timer number
         - rapid-retransmit-time number
         - rapid-retry-limit number
         - refresh-reduction-over-bypass boolean
         - refresh-time number
         - te-down-threshold number
         - te-threshold-update
            - on-cac-failure boolean
            - update-timer number
         - te-up-threshold number
      - segment-routing
         - apply-groups reference
         - apply-groups-exclude reference
         - maintenance-policy string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - bfd-liveness boolean
            - bfd-template reference
            - hold-down-timer number
            - mode keyword
            - return-path-label number
            - revert-timer number
            - threshold number
         - segment-routing-v6
            - apply-groups reference
            - apply-groups-exclude reference
            - base-routing-instance
               - apply-groups reference
               - apply-groups-exclude reference
               - locator reference
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - function
                     - end number
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - srh-mode keyword
                     - end-dt4
                        - value number
                     - end-dt46
                        - value number
                     - end-dt6
                        - value number
                     - end-x number
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - interface-name reference
                        - protection keyword
                        - srh-mode keyword
```


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configure router segment-routing segment-routing-v6 base-routing-instance locator function end-x-auto-allocate

```
                  - end-x-auto-allocate keyword protection keyword
            - micro-segment-locator reference
               - apply-groups reference
               - apply-groups-exclude reference
               - function
                  - ua number
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - interface-name reference
                     - protection keyword
                     - srh-mode keyword
                  - ua-auto-allocate keyword protection keyword
                  - udt4
                     - value number
                  - udt46
                     - value number
                  - udt6
                     - value number
         - locator string
            - admin-state keyword
            - algorithm number
            - apply-groups reference
            - apply-groups-exclude reference
            - block-length number
            - function-length number
            - label-block reference
            - prefix
               - ip-prefix string
            - static-function
               - label-block reference
               - max-entries number
            - termination-fpe reference
         - micro-segment
            - apply-groups reference
            - apply-groups-exclude reference
            - block string
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - label-block reference
               - prefix
                  - ip-prefix string
               - static-function
                  - max-entries number
               - termination-fpe reference
            - block-length number
            - global-sid-entries number
            - sid-length number
         - micro-segment-locator string
            - admin-state keyword
            - algorithm number
            - apply-groups reference
            - apply-groups-exclude reference
            - block reference
            - un
               - srh-mode keyword
               - value number
         - origination-fpe reference
         - source-address string
      - sr-mpls
         - apply-groups reference
         - apply-groups-exclude reference
         - prefix-sids reference
            - apply-groups reference
```


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configure router segment-routing sr-mpls prefix-sids apply-groups-exclude

```
            - apply-groups-exclude reference
            - ipv4-sid
               - index number
               - label number
            - ipv6-sid
               - index number
               - label number
            - node-sid boolean
      - sr-policies
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - egress-statistics
            - accounting-policy reference
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - collect-stats boolean
         - ingress-statistics
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
         - reserved-label-block reference
         - static-policy string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - binding-sid number
            - color number
            - distinguisher number
            - endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
            - head-end (ipv4-address-no-zone | ipv6-address-no-zone | keyword)
            - maintenance-policy reference
            - preference number
            - segment-list number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - segment number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - mpls-label number
                  - srv6-sid string
               - weight number
            - segment-routing-v6
               - binding-sid number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - ip-address string
                  - locator
                     - function keyword
                     - function-value number
                     - locator-name reference
               - return-path-bfd-sid string
            - type keyword
   - selective-fib boolean
   - sfm-overload
      - holdoff-time number
   - sgt-qos
      - dot1p
         - application keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - dot1p (keyword | number)
```


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```
        - dscp
          - application keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - dscp (keyword | number)
          - dscp-map keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - fc keyword
    - static-routes
      - apply-groups reference
      - apply-groups-exclude reference
      - hold-down
        - initial number
        - max-value number
        - multiplier number
      - route (ipv4-prefix | ipv6-prefix) route-type keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - backup-tag number
        - blackhole
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - community string
          - description string
          - dynamic-bgp boolean
          - generate-icmp boolean
          - metric number
          - preference number
          - prefix-list
            - flag keyword
            - name reference
          - tag number
        - community string
        - indirect (ipv4-address-no-zone | ipv6-address-no-zone)
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - community string
          - cpe-check (ipv4-address-no-zone | ipv6-address-no-zone)
            - apply-groups reference
            - apply-groups-exclude reference
            - drop-count number
            - interval number
            - log boolean
            - padding-size number
          - description string
          - destination-class number
          - metric number
          - preference number
          - prefix-list
            - flag keyword
            - name reference
          - qos
            - forwarding-class keyword
            - priority keyword
          - source-class number
          - tag number
          - tunnel-next-hop
            - disallow-igp boolean
            - flex-algo number
            - resolution keyword
            - resolution-filter
```


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configure router static-routes route indirect tunnel-next-hop resolution-filter ldp

```
                    - ldp boolean
                    - mpls-fwd-policy boolean
                    - rib-api boolean
                    - rsvp-te
                      - lsp string
                    - sr-isis boolean
                    - sr-ospf boolean
                    - sr-ospf3 boolean
                    - sr-te
                      - lsp string
          - interface string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - community string
            - cpe-check (ipv4-address-no-zone | ipv6-address-no-zone)
              - apply-groups reference
              - apply-groups-exclude reference
              - drop-count number
              - interval number
              - log boolean
              - padding-size number
            - description string
            - destination-class number
            - load-balancing-weight number
            - metric number
            - preference number
            - prefix-list
              - flag keyword
              - name reference
            - qos
              - forwarding-class keyword
              - priority keyword
            - source-class number
            - tag number
          - ipsec-tunnel string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - community string
            - description string
            - metric number
            - preference number
            - tag number
          - next-hop (ipv4-address-with-zone | ipv6-address-with-zone)
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - backup-next-hop
              - address (ipv4-address-no-zone | ipv6-address-no-zone)
            - bfd-liveness boolean
            - community string
            - cpe-check (ipv4-address-no-zone | ipv6-address-no-zone)
              - apply-groups reference
              - apply-groups-exclude reference
              - drop-count number
              - interval number
              - log boolean
              - padding-size number
            - description string
            - destination-class number
            - ldp-sync boolean
            - load-balancing-weight number
            - metric number
```


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configure router static-routes route next-hop preference

```
                - preference number
                - prefix-list
                  - flag keyword
                  - name reference
                - qos
                  - forwarding-class keyword
                  - priority keyword
                - source-class number
                - tag number
                - validate-next-hop boolean
              - tag number
        - subscriber-mgmt
          - apply-groups reference
          - apply-groups-exclude reference
          - dhcpv4
            - apply-groups reference
            - apply-groups-exclude reference
            - routed-subnet-transparent-forward boolean
        - triggered-policy boolean
        - ttl-propagate
          - apply-groups reference
          - apply-groups-exclude reference
          - label-route-local keyword
          - label-route-transit keyword
          - lsr-label-route keyword
          - vprn-local keyword
          - vprn-transit keyword
        - tunnel-interface
          - ldp-p2mp-leaf number sender-address string
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
          - ldp-p2mp-root number sender-address string
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
          - rsvp-p2mp-leaf string sender-address string
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
          - rsvp-p2mp-root string
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
        - twamp-light
          - apply-groups reference
          - apply-groups-exclude reference
          - reflector
            - admin-state keyword
            - allow-ipv6-udp-checksum-zero boolean
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - prefix (ipv4-prefix | ipv6-prefix)
              - apply-groups reference
              - apply-groups-exclude reference
              - description string
            - type keyword
            - udp-port number
        - vrgw
          - lanext
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
```


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```
            - vxlan-port number
            - vxlan-vtep-range
               - end (ipv4-address-no-zone | ipv6-address-no-zone)
               - start (ipv4-address-no-zone | ipv6-address-no-zone)
            - wlan-gw-group reference
      - weighted-ecmp keyword
      - wlan-gw
         - apply-groups reference
         - apply-groups-exclude reference
         - distributed-subscriber-mgmt
            - apply-groups reference
            - apply-groups-exclude reference
            - ipv6-tcp-mss-adjust number
         - mobility-triggered-accounting
            - admin-state keyword
            - hold-down number
            - include-counters boolean
         - xconnect
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - tunnel-source-ip string
            - wlan-gw-group reference
      - wpp
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - portal string
            - ack-auth-retry-count number
            - address (ipv4-address-no-zone | ipv6-address-no-zone)
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - ntf-logout-retry-count number
            - port-format keyword
            - retry-interval number
            - secret string
            - version number
```


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3.39.1 router command descriptions

router [router-name] *string*

Synopsis	Enter the **router** list instance
Context	**configure** router *string*
Tree	router
Max. Instances	4
Introduced	16.0.R1
Platforms	All

[**router-name**] *string*

Synopsis	Administrative router name
Context	**configure** router *string*
Tree	router
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

aggregates

Synopsis	Enter the **aggregates** context
Context	**configure** router *string* aggregates
Tree	aggregates
Introduced	16.0.R1
Platforms	All

aggregate [ip-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **aggregate** list instance
Context	**configure** router *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)*
Tree	aggregate

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Description	Commands in this context add aggregate routes to the routing table when there are one or more component routes. A component route is any route installed in the forwarding table that is a more-specific match of the aggregate. The use of aggregate routes can lead to smaller routing table sizes by reducing the number of routes that need to be advertised to neighbor routes.
Introduced	16.0.R1
Platforms	All

[**ip-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Destination IP address prefix of the aggregate route
Context	**configure** router *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)*
Tree	aggregate
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

aggregator

Synopsis	Enter the **aggregator** context
Context	**configure** router *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* aggregator
Tree	aggregator
Description	Commands in this context configure the BGP AGGREGATOR path attribute for the aggregate route.
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Aggregator IP address
Context	**configure** router *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* aggregator address *string*
Tree	address
Introduced	16.0.R1
Platforms	All

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as-number *number*

Synopsis	Aggregator AS number
Context	**configure** router *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* aggregator as-number *number*
Tree	as-number
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

as-set *boolean*

Synopsis	Use AS_SET path segment type for the aggregate route
Context	**configure** router *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* as-set *boolean*
Tree	as-set
Description	When configured to **true**, the AS_PATH attribute of the aggregate contains an AS_SET containing all AS numbers from the contributing routes. This can increase the amount of churn due to best-path changes. When configured to **false**, the AS_PATH attribute contains no AS_SET and will be originated by the ESR.
Default	false
Introduced	16.0.R1
Platforms	All

blackhole

Synopsis	Enable the **blackhole** context
Context	**configure** router *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* blackhole
Tree	blackhole
Notes	The following elements are part of a choice: **blackhole** or **indirect**.
Introduced	16.0.R1
Platforms	All

generate-icmp *boolean*

Synopsis	Send ICMP unreachable messages for aggregate routes

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Context	**configure** router *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* blackhole generate-icmp *boolean*
Tree	generate-icmp
Description	When configured to **true**, ICMP unreachable messages are sent when packets match an aggregate route in the FIB with a black-hole next-hop. When configured to **false**, ICMP unreachable messages are not generated.
Default	false
Introduced	16.0.R2
Platforms	All

community *string*

Synopsis	Community name that is added to the aggregate route
Context	**configure** router *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* community *string*
Tree	community
Description	This command associates a BGP community with the aggregate route. The community name can be matched in route policies and is automatically added to BGP routes exported from the aggregate route.
String Length	1 to 72
Max. Instances	12
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** router *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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discard-component-communities *boolean*

Synopsis	Advertise aggregate with aggregate route community set
Context	**configure** router *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* discard-component-communities *boolean*
Tree	discard-component-communities
Default	false
Introduced	19.7.R1
Platforms	All

indirect *(ipv4-address-no-zone \| ipv6-address-no-zone)*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Address of the indirect next hop
Context	**configure** router *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	indirect
Description	This command programs aggregate routes into the forwarding table with an indirect next hop. If a packet matches the aggregate route but not a contributing route, it is forwarded toward the indirect next hop rather than being discarded.
Notes	The following elements are part of a choice: **blackhole** or **indirect**.
Introduced	16.0.R1
Platforms	All

local-preference *number*

Synopsis	Local preference used when aggregate route is exported
Context	**configure** router *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* local-preference *number*
Tree	local-preference
Description	This command configures the local preference value to use when the aggregate route is exported rather than using any of the local preference values assigned for any of the contributing routes.
Range	0 to 4294967295
Introduced	16.0.R1

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Platforms	All

policy *reference*

Synopsis	Policy name for the aggregated route
Context	**configure** router *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* policy *reference*
Tree	policy
Description	This command associates an aggregate route with a policy reference. The aggregated route is activated only when there is at least one eligible active route in the sub-trees below it that is accepted by the policy evaluation. There is no evaluation into any sub-tree that starts with another active aggregate route. Eligible routes exclude host routes and LDP shortcut routes. If an aggregate route has no policy, or the reference is to an empty policy, this configuration is treated as equivalent to a policy with one rule that accepts all routes.
Reference	**configure** policy-options policy-statement *string*
Introduced	20.10.R1
Platforms	All

summary-only *boolean*

Synopsis	Advertise the aggregate route only
Context	**configure** router *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* summary-only *boolean*
Tree	summary-only
Description	When configured to **true**, the router suppresses the advertisement of more specific component routes for the aggregate. When configured to **false**, the router advertises both the aggregate route and its contributing routes.
Default	false
Introduced	16.0.R1
Platforms	All

tunnel-group *number*

Synopsis	Tunnel group from which to associate the MC IPSec state
Context	**configure** router *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* tunnel-group *number*
Tree	tunnel-group

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Description	This command adds the MC-IPsec state of the specific tunnel-group to the aggregate route.
Range	1 to 64
Introduced	20.7.R1
Platforms	All

allow-bgp-to-igp-export *boolean*

Synopsis	Enable the distribution of BGP routes into the IGP
Context	**configure** router *string* allow-bgp-to-igp-export *boolean*
Tree	allow-bgp-to-igp-export
Description	When configured to **true**, the router can export base BGP RTM routes into the IGP routing instance within the base router. This command applies to already exported BGP prefixes and to newly received BGP prefixes.
Default	true
Introduced	23.7.R1
Platforms	All

allow-icmp-redirect *boolean*

Synopsis	Allow ICMP redirects on the management interface
Context	**configure** router *string* allow-icmp-redirect *boolean*
Tree	allow-icmp-redirect
Description	When configured to **true**, ICMP redirect messages can be received on the management interface. When configured to **false**, all received ICMP redirect messages are dropped. This command cannot be configured on a non-management interface.
Default	false
Introduced	16.0.R1
Platforms	All

allow-icmp6-redirect *boolean*

Synopsis	Allow IPv6 ICMP redirects on the management interface
Context	**configure** router *string* allow-icmp6-redirect *boolean*
Tree	allow-icmp6-redirect

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Description	When configured to **true**, IPv6 ICMP redirect messages can be received on the management interface. When configured to **false**, all received IPv6 ICMP redirect messages are dropped. This command cannot be configured on a non-management interface.
Default	false
Introduced	16.0.R1
Platforms	All

autonomous-system *number*

Synopsis	AS number advertised to peers for this router
Context	**configure** router *string* autonomous-system *number*
Tree	autonomous-system
Description	This command configures the autonomous system (AS) number for the router. This value must be set before BGP can be activated. If the AS number is changed on a router with an active BGP instance, the new AS number is not used until the BGP instance is restarted.
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

bfd

Synopsis	Enter the **bfd** context
Context	**configure** router *string* bfd
Tree	bfd
Introduced	19.7.R1
Platforms	All

seamless-bfd

Synopsis	Enter the **seamless-bfd** context
Context	**configure** router *string* bfd seamless-bfd
Tree	seamless-bfd
Introduced	19.7.R1
Platforms	All

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peer [address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **peer** list instance
Context	**configure** router *string* bfd seamless-bfd peer *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	peer
Max. Instances	8000
Introduced	19.7.R1
Platforms	All

[**address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Address of the remote node
Context	**configure** router *string* bfd seamless-bfd peer *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	peer
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	All

discriminator *number*

Synopsis	Discriminator of the remote node
Context	**configure** router *string* bfd seamless-bfd peer *(ipv4-address-no-zone | ipv6-address-no-zone)* discriminator *number*
Tree	discriminator
Range	1 to 4294967295
Introduced	19.7.R1
Platforms	All

bgp

Synopsis	Enable the **bgp** context
Context	**configure** router *string* bgp
Tree	bgp

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Introduced	16.0.R1
Platforms	All

add-paths

Synopsis	Enable the **add-paths** context
Context	**configure** router *string* bgp add-paths
Tree	add-paths
Description	Commands in this context configure add-paths support for the specified address families of the BGP instance. The BGP add-paths capability allows the router to send or receive multiple paths per prefix to and from a peer.
Introduced	16.0.R1
Platforms	All

evpn

Synopsis	Enter the **evpn** context
Context	**configure** router *string* bgp add-paths evpn
Tree	evpn
Description	Commands in this context configure the Add-Paths capability for EVPN routes. By default, Add-Paths is not enabled for EVPN routes.
Introduced	21.10.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple EVPN paths per prefix from a peer
Context	**configure** router *string* bgp add-paths evpn receive *boolean*
Tree	receive
Default	false
Introduced	21.10.R1
Platforms	All

send *(number | keyword)*

Synopsis	Maximum number of EVPN paths to send

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Context	**configure** router *string* bgp add-paths evpn send *(number | keyword)*
Tree	send
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	21.10.R1
Platforms	All

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** router *string* bgp add-paths ipv4
Tree	ipv4
Description	Commands in this context configure add-paths support for the IPv4 unicast address family.
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple routes per unlabeled IPv4 prefix
Context	**configure** router *string* bgp add-paths ipv4 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple unlabeled IPv4 unicast routes per prefix to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *(number | keyword)*

Synopsis	Maximum paths per unlabeled IPv4 unicast prefix
Context	**configure** router *string* bgp add-paths ipv4 send *(number | keyword)*
Tree	send
Description	This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of

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advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

When not configured, add-paths send capability is not enabled for unlabeled IPv4 unicast routes.

Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** router *string* bgp add-paths ipv6
Tree	ipv6
Description	Commands in this context configure add-paths support for the IPv6 unicast address family.
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple routes per unlabeled IPv6 prefix
Context	**configure** router *string* bgp add-paths ipv6 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple unlabeled IPv6 unicast routes per prefix to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *(number | keyword)*

Synopsis	Maximum paths per unlabeled IPv6 unicast prefix
Context	**configure** router *string* bgp add-paths ipv6 send *(number | keyword)*
Tree	send

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Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per unlabeled IPv6 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, add-paths send capability is not enabled for unlabeled IPv6 unicast routes.
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

label-ipv4

Synopsis	Enter the **label-ipv4** context
Context	**configure** router *string* bgp add-paths label-ipv4
Tree	label-ipv4
Description	Commands in this context configure add-paths support for the labeled IPv4 unicast address family.
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv4 prefix
Context	**configure** router *string* bgp add-paths label-ipv4 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple labeled-unicast routes per IPv4 prefix to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *(number | keyword)*

Synopsis	Paths advertised per labeled IPv4 unicast prefix
Context	**configure** router *string* bgp add-paths label-ipv4 send *(number | keyword)*

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Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv4 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, add-paths send capability is not enabled for labeled IPv4 unicast routes.
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

label-ipv6

Synopsis	Enter the **label-ipv6** context
Context	**configure** router *string* bgp add-paths label-ipv6
Tree	label-ipv6
Description	Commands in this context configure add-paths support for the labeled IPv6 unicast address family.
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv6 prefix
Context	**configure** router *string* bgp add-paths label-ipv6 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple labeled-unicast routes per IPv6 prefix to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *(number | keyword)*

Synopsis	Paths advertised per labeled IPv6 unicast prefix

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Context	**configure** router *string* bgp add-paths label-ipv6 send *(number | keyword)*
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv6 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, add-paths send capability is not enabled for labeled IPv6 unicast routes.
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv4

Synopsis	Enter the **mcast-vpn-ipv4** context
Context	**configure** router *string* bgp add-paths mcast-vpn-ipv4
Tree	mcast-vpn-ipv4
Description	Commands in this context configure add-paths support for the multicast IPv4 VPN address family.
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple multicast routes per IPv4 VPN prefix
Context	**configure** router *string* bgp add-paths mcast-vpn-ipv4 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple multicast routes per IPv4 VPN prefix to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

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send *number*

Synopsis	Maximum paths advertised per multicast IPv4 VPN prefix
Context	**configure** router *string* bgp add-paths mcast-vpn-ipv4 send *number*
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv4 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, add-paths send capability is not enabled for multicast IPv4 VPN routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv6

Synopsis	Enter the **mcast-vpn-ipv6** context
Context	**configure** router *string* bgp add-paths mcast-vpn-ipv6
Tree	mcast-vpn-ipv6
Description	Commands in this context configure add-paths support for the multicast IPv6 VPN address family.
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple multicast routes per IPv6 VPN prefix
Context	**configure** router *string* bgp add-paths mcast-vpn-ipv6 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple multicast routes per IPv6 VPN prefix to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

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send *number*

Synopsis	Maximum paths advertised per multicast IPv6 VPN prefix
Context	**configure** router *string* bgp add-paths mcast-vpn-ipv6 send *number*
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv6 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, add-paths send capability is not enabled for multicast IPv6 VPN routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

mvpn-ipv4

Synopsis	Enter the **mvpn-ipv4** context
Context	**configure** router *string* bgp add-paths mvpn-ipv4
Tree	mvpn-ipv4
Description	Commands in this context configure add-paths support for the multicast VPN IPv4 address family.
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple routes per multicast VPN IPv4 NRLI
Context	**configure** router *string* bgp add-paths mvpn-ipv4 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple routes per multicast VPN IPv4 NRLI to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

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send *number*

Synopsis	Maximum paths advertised per multicast VPN IPv4 NRLI
Context	**configure** router *string* bgp add-paths mvpn-ipv4 send *number*
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv4 NRLI. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, add-paths send capability is not enabled for multicast VPN IPv4 routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

mvpn-ipv6

Synopsis	Enter the **mvpn-ipv6** context
Context	**configure** router *string* bgp add-paths mvpn-ipv6
Tree	mvpn-ipv6
Description	Commands in this context configure add-paths support for the multicast VPN IPv6 address family.
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple routes per multicast VPN IPv6 NRLI
Context	**configure** router *string* bgp add-paths mvpn-ipv6 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple routes per multicast VPN IPv6 NRLI to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

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send *number*

Synopsis	Maximum paths advertised per multicast VPN IPv6 NRLI
Context	**configure** router *string* bgp add-paths mvpn-ipv6 send *number*
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv6 NRLI. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, add-paths send capability is not enabled for multicast VPN IPv6 routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

vpn-ipv4

Synopsis	Enter the **vpn-ipv4** context
Context	**configure** router *string* bgp add-paths vpn-ipv4
Tree	vpn-ipv4
Description	Commands in this context configure add-paths support for the VPN-IPv4 address family.
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple routes per VPN-IPv4 prefix
Context	**configure** router *string* bgp add-paths vpn-ipv4 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple routes per VPN-IPv4 prefix to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

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send *(number | keyword)*

Synopsis	Maximum paths advertised per VPN-IPv4 prefix
Context	**configure** router *string* bgp add-paths vpn-ipv4 send *(number | keyword)*
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, add-paths send capability is not enabled for VPN-IPv4 routes.
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

vpn-ipv6

Synopsis	Enter the **vpn-ipv6** context
Context	**configure** router *string* bgp add-paths vpn-ipv6
Tree	vpn-ipv6
Description	Commands in this context configure add-paths support for the VPN-IPv6 address family.
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple routes per VPN-IPv6 prefix
Context	**configure** router *string* bgp add-paths vpn-ipv6 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple routes per VPN-IPv6 prefix to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

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send *(number | keyword)*

Synopsis	Maximum paths advertised per VPN-IPv6 prefix
Context	**configure** router *string* bgp add-paths vpn-ipv6 send *(number | keyword)*
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, add-paths send capability is not enabled for VPN-IPv6 routes.
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the BGP instance
Context	**configure** router *string* bgp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

advertise-external

Synopsis	Enter the **advertise-external** context
Context	**configure** router *string* bgp advertise-external
Tree	advertise-external
Description	Commands in this context allow BGP to advertise its best external route to a destination for specified address families even when its best overall route is an internal route.
Introduced	16.0.R1
Platforms	All

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ipv4 *boolean*

Synopsis	Enable support for unlabeled unicast IPv4 routes
Context	**configure** router *string* bgp advertise-external ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	**configure** router *string* bgp advertise-external ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	**configure** router *string* bgp advertise-external label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Enable support for labeled-unicast IPv6 routes
Context	**configure** router *string* bgp advertise-external label-ipv6 *boolean*
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

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advertise-inactive *boolean*

Synopsis	Advertise inactive BGP routes to peers
Context	**configure** router *string* bgp advertise-inactive *boolean*
Tree	advertise-inactive
Description	When configured to **true**, this command allows any inactive BGP route to be advertised, even though it is not the used route. When configured to **false**, the advertisement of inactive BGP routes to other BGP peers is disabled.
Default	false
Introduced	16.0.R1
Platforms	All

advertise-ipv6-next-hops

Synopsis	Enter the **advertise-ipv6-next-hops** context
Context	**configure** router *string* bgp advertise-ipv6-next-hops
Tree	advertise-ipv6-next-hops
Introduced	16.0.R1
Platforms	All

evpn *boolean*

Synopsis	Advertise EVPN route with IPv6 next-hop address
Context	**configure** router *string* bgp advertise-ipv6-next-hops evpn *boolean*
Tree	evpn
Description	When configured to **true**, EVPN routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. When configured to **false**, EVPN routes are advertised with IPv4 next-hop addresses to IPv6 transport peers.
Default	false
Introduced	19.5.R1
Platforms	All

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ipv4 *boolean*

Synopsis	Advertise IPv4 route with IPv6 next-hop address
Context	**configure** router *string* bgp advertise-ipv6-next-hops ipv4 *boolean*
Tree	ipv4
Description	When configured to **true**, IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop. When configured to **false**, IPv4 routes are advertised with IPv4 next-hop addresses to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.
Default	false
Introduced	19.5.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Advertise label IPv4 route with IPv6 next-hop address
Context	**configure** router *string* bgp advertise-ipv6-next-hops label-ipv4 *boolean*
Tree	label-ipv4
Description	When configured to **true**, label IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop. When configured to **false**, label IPv4 routes are advertised with the system IPv4 address as the next hop to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Advertise label IPv6 route with IPv6 next-hop address
Context	**configure** router *string* bgp advertise-ipv6-next-hops label-ipv6 *boolean*

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Tree	label-ipv6
Description	When configured to **true**, label IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. When configured to **false**, label IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise VPN IPv4 route with IPv6 next-hop address
Context	**configure** router *string* bgp advertise-ipv6-next-hops vpn-ipv4 *boolean*
Tree	vpn-ipv4
Description	When configured to **true**, VPN IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop. When configured to **false**, VPN IPv4 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Advertise VPN IPv6 route with IPv6 next-hop address
Context	**configure** router *string* bgp advertise-ipv6-next-hops vpn-ipv6 *boolean*
Tree	vpn-ipv6
Description	When configured to **true**, VPN IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. When configured to **false**, VPN IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.
Default	false

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Introduced	16.0.R1
Platforms	All

aggregator-id-zero *boolean*

Synopsis	Set router ID in the BGP AGGREGATOR attribute to 0
Context	**configure** router *string* bgp aggregator-id-zero *boolean*
Tree	aggregator-id-zero
Description	When configured to **true**, the router ID in the BGP AGGREGATOR path attribute is set to 0 when BGP aggregates routes. This prevents different routers within an AS from creating aggregate routes for the same prefix with different path attributes. When configured to **false**, the AS number and router ID are added to the AGGREGATOR path attribute.
Default	false
Introduced	16.0.R1
Platforms	All

asn-4-byte *boolean*

Synopsis	Advertise support for 4-byte ASNs
Context	**configure** router *string* bgp asn-4-byte *boolean*
Tree	asn-4-byte
Default	true
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	BGP authentication key for all peers
Context	**configure** router *string* bgp authentication-key *string*
Tree	authentication-key
Description	This command configures the authentication key used to protect all sessions. The stored format of the authentication key is based on the **configure system security hash-control management-interface md-cli hash-algorithm** setting.
String Length	1 to 370
Introduced	16.0.R1

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Platforms	All

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	**configure** router *string* bgp authentication-keychain *reference*
Tree	authentication-keychain
Description	This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.
Reference	**configure** system security keychains keychain *string*
Introduced	16.0.R3
Platforms	All

backup-path

Synopsis	Enter the **backup-path** context
Context	**configure** router *string* bgp backup-path
Tree	backup-path
Description	Commands in this context enable the use of a backup path for specified BGP-learned prefixes belonging to the base router. Multiple paths must be received for a prefix in order to take advantage of this feature. When a prefix has a backup path and its primary paths fail, the affected traffic is rapidly diverted to the backup path without waiting for control plane re-convergence to occur. When many prefixes share the same primary paths and in some cases, the same backup path, the time to divert failover traffic to the backup path is independent of the number of prefixes. By default, IPv4 and IPv6 prefixes do not have a backup path installed in the IOM.
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable support for unlabeled unicast IPv4 routes
Context	**configure** router *string* bgp backup-path ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

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ipv6 *boolean*

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	**configure** router *string* bgp backup-path ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	**configure** router *string* bgp backup-path label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Enable support for labeled-unicast IPv6 routes
Context	**configure** router *string* bgp backup-path label-ipv6 *boolean*
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

best-path-selection

Synopsis	Enter the **best-path-selection** context
Context	**configure** router *string* bgp best-path-selection
Tree	best-path-selection
Introduced	16.0.R1
Platforms	All

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always-compare-med

Synopsis	Enter the **always-compare-med** context
Context	**configure** router *string* bgp best-path-selection always-compare-med
Tree	always-compare-med
Description	Commands in this context determine how the BGP decision process is affected by the MED path attribute.
Introduced	16.0.R1
Platforms	All

med-value *keyword*

Synopsis	Action for a missing MED attribute
Context	**configure** router *string* bgp best-path-selection always-compare-med med-value *keyword*
Tree	med-value
Options	off, missing-med-zero, missing-med-infinity, on
Default	off
Introduced	16.0.R1
Platforms	All

strict-as *boolean*

Synopsis	Compare MED only for routes from same neighbor AS
Context	**configure** router *string* bgp best-path-selection always-compare-med strict-as *boolean*
Tree	strict-as
Description	When configured to **true**, the route selection process can compare the MED path attribute between routes only if they come from the same neighbor AS. When configured to **false**, the route selection process can compare the MED path attribute between routes even if they come from different neighbor ASs.
Default	true
Introduced	16.0.R1
Platforms	All

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as-path-ignore

Synopsis	Enter the **as-path-ignore** context
Context	**configure** router *string* bgp best-path-selection as-path-ignore
Tree	as-path-ignore
Description	Commands in this context determine whether the AS path length is considered in the selection process for routes of the specified address families.
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Ignore AS path length for unlabeled unicast IPv4 routes
Context	**configure** router *string* bgp best-path-selection as-path-ignore ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Ignore AS path length for unlabeled unicast IPv6 routes
Context	**configure** router *string* bgp best-path-selection as-path-ignore ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

l2-vpn *boolean*

Synopsis	Ignore AS path length for L2-VPN routes
Context	**configure** router *string* bgp best-path-selection as-path-ignore l2-vpn *boolean*
Tree	l2-vpn
Default	false
Introduced	16.0.R1
Platforms	All

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label-ipv4 *boolean*

Synopsis	Ignore AS path length for labeled-unicast IPv4 routes
Context	**configure** router *string* bgp best-path-selection as-path-ignore label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Ignore AS path length for labeled-unicast IPv6 routes
Context	**configure** router *string* bgp best-path-selection as-path-ignore label-ipv6 *boolean*
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv4 *boolean*

Synopsis	Ignore AS path length for IPv4 multicast routes
Context	**configure** router *string* bgp best-path-selection as-path-ignore mcast-ipv4 *boolean*
Tree	mcast-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv6 *boolean*

Synopsis	Ignore AS path length for IPv6 multicast routes
Context	**configure** router *string* bgp best-path-selection as-path-ignore mcast-ipv6 *boolean*
Tree	mcast-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

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mvpn-ipv4 *boolean*

Synopsis	Ignore AS path length for IPv4 MVPN routes
Context	**configure** router *string* bgp best-path-selection as-path-ignore mvpn-ipv4 *boolean*
Tree	mvpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv6 *boolean*

Synopsis	Ignore AS path length for IPv6 MVPN routes
Context	**configure** router *string* bgp best-path-selection as-path-ignore mvpn-ipv6 *boolean*
Tree	mvpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Ignore AS path length for VPN IPv4 (SAFI 128) routes
Context	**configure** router *string* bgp best-path-selection as-path-ignore vpn-ipv4 *boolean*
Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Ignore AS path length for VPN IPv6 (SAFI 128) routes
Context	**configure** router *string* bgp best-path-selection as-path-ignore vpn-ipv6 *boolean*
Tree	vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

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compare-origin-validation-state *boolean*

Synopsis	Compare RPKI origin validation state of usable routes
Context	**configure** router *string* bgp best-path-selection compare-origin-validation-state *boolean*
Tree	compare-origin-validation-state
Description	When configured to **true**, the RPKI origin validation state is compared between BGP routes, where a Valid state is preferred over a Not-Found state, and a Not-Found state is preferred over an Invalid state. When configured to **false**, the RPKI origin validate state comparison is not performed as part of the BGP route selection process.
Default	false
Introduced	16.0.R1
Platforms	All

d-path-length-ignore *boolean*

Synopsis	Enable D-PATH length ignore
Context	**configure** router *string* bgp best-path-selection d-path-length-ignore *boolean*
Tree	d-path-length-ignore
Description	When configured to **true**, this command, enables the router to ignore the D-PATH domain segment length during best-path selection. At the base router level (or VPRN BGP level for PE-CE routers), this command allows BGP to ignore the D-PATH domain segment length for best-path selection purposes. BGP ignores the D-PATH length when comparing two VPN routes or two IFL routes within the same RD. However, these VPN/IFL routes are processed in the main-BGP instance. At the VPRN router level, this command allows the VPRN RTM to ignore the D-PATH domain segment length for best-path selection purposes (for routes in VPRN). The user can control whether the RTM considers the D-PATH length when comparing two VPN routes with different RDs. Best-path selection for EVPN-IFF routes against other owners (for example, EVPN-IFL or IPVPN) still relies on RTM preference. When EVPN-IFF RTM preference matches the RTM preference of another BGP owner, the existing RTM selection applies and D-PATH is not considered, irrespective of the **d-path-length-ignore** configuration. When configured to **false**, this command disables the ability to ignore the D-PATH domain segment length.
Default	false
Introduced	21.10.R1
Platforms	All

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deterministic-med *boolean*

Synopsis	Group paths based on AS before MED attribute comparison
Context	**configure** router *string* bgp best-path-selection deterministic-med *boolean*
Tree	deterministic-med
Description	When configured to **true**, BGP groups paths from the same AS that are equal up to the MED attribute comparison and then compares the best path from each group to select the overall best path. This process ensures that the best-path selection process is deterministic in all cases. When configured to **false**, paths are not grouped and the overall best-path selection can depend on the order of route arrival.
Default	false
Introduced	16.0.R1
Platforms	All

ebgp-ibgp-equal

Synopsis	Enter the **ebgp-ibgp-equal** context
Context	**configure** router *string* bgp best-path-selection ebgp-ibgp-equal
Tree	ebgp-ibgp-equal
Description	Commands in this context allow BGP to ignore the difference between EBGP and IBGP routes in selecting the best path and eligible multipaths (if multipath and ECMP are enabled) for the specified address families. The result is a form of EIBGP load-balancing in a multipath scenario. This behavior can be applied selectively to certain address families. By default, the BGP decision process prefers an EBGP learned route over an IBGP learned route.
Introduced	16.0.R1
Platforms	All

evpn *boolean*

Synopsis	Consider EBGP and IBGP EVPN routes equal
Context	**configure** router *string* bgp best-path-selection ebgp-ibgp-equal evpn *boolean*
Tree	evpn
Default	false
Introduced	22.7.R1

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Platforms	All

ipv4 *boolean*

Synopsis	Consider EBGP and IBGP IPv4 routes equal
Context	**configure** router *string* bgp best-path-selection ebgp-ibgp-equal ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Consider EBGP and IBGP IPv6 routes equal
Context	**configure** router *string* bgp best-path-selection ebgp-ibgp-equal ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Consider EBGP and IBGP label-IPv4 routes equal
Context	**configure** router *string* bgp best-path-selection ebgp-ibgp-equal label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Consider EBGP and IBGP label-IPv6 routes equal
Context	**configure** router *string* bgp best-path-selection ebgp-ibgp-equal label-ipv6 *boolean*
Tree	label-ipv6
Default	false

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Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Consider EBGP and IBGP VPN-IPv4 routes equal
Context	**configure** router *string* bgp best-path-selection ebgp-ibgp-equal vpn-ipv4 *boolean*
Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Consider EBGP and IBGP VPN-IPv6 routes equal
Context	**configure** router *string* bgp best-path-selection ebgp-ibgp-equal vpn-ipv6 *boolean*
Tree	vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

ignore-nh-metric *boolean*

Synopsis	Ignore next-hop distance in best path selection
Context	**configure** router *string* bgp best-path-selection ignore-nh-metric *boolean*
Tree	ignore-nh-metric
Description	When configured to **true**, BGP ignores the resolved distance to the BGP next hop in its route selection process. When configured to **false**, BGP factors the distance to the next hop into its decision process when it compares two BGP routes with the same NLRI learned from base router BGP peers (in the **router** context) or IP prefix learned from VPRN BGP peers (in the **vprn** context).
Default	false
Introduced	16.0.R1
Platforms	All

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ignore-router-id

Synopsis	Enable the **ignore-router-id** context
Context	**configure** router *string* bgp best-path-selection ignore-router-id
Tree	ignore-router-id
Description	Commands in this context determine whether the BGP selection process ignores the BGP identifier (router ID) comparison of two EBGP paths from different EBGP peers when determining the best path for the specified address families. By default, BGP selects the path with the lower router ID when it compares two paths from EBGP peers.
Introduced	16.0.R1
Platforms	All

include-internal

Synopsis	Enter the **include-internal** context
Context	**configure** router *string* bgp best-path-selection ignore-router-id include-internal
Tree	include-internal
Description	Commands in this context specify the internal address families for which the router ID values are ignored, even when comparing two IBGP paths or an EBGP and an IBGP path.
Introduced	16.0.R1
Platforms	All

mvpn-ipv4 *boolean*

Synopsis	Ignore the router IDs of MVPN-IPv4 routes
Context	**configure** router *string* bgp best-path-selection ignore-router-id include-internal mvpn-ipv4 *boolean*
Tree	mvpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv6 *boolean*

Synopsis	Ignore the router IDs of MVPN-IPv6 routes

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Context	**configure** router *string* bgp best-path-selection ignore-router-id include-internal mvpn-ipv6 *boolean*
Tree	mvpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

origin-invalid-unusable *boolean*

Synopsis	Deem invalid routes unusable for best-path selection
Context	**configure** router *string* bgp best-path-selection origin-invalid-unusable *boolean*
Tree	origin-invalid-unusable
Description	When configured to **true**, routes that have an RPKI origin validation state of Invalid are considered unusable by the best-path selection algorithm. These routes cannot be used for forwarding and cannot be advertised to BGP peers. When configured to **false**, routes with an RPKI origin validation state of Invalid are compared to other usable routes for the same prefix according to the BGP decision process.
Default	false
Introduced	16.0.R1
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD
Context	**configure** router *string* bgp bfd-liveness *boolean*
Tree	bfd-liveness
Description	When configured to **true**, BFD is enabled on all BGP sessions, subject to the association of those BGP sessions with IP interfaces that have BFD configurations. When configured to **false**, BFD is not enabled globally for all BGP sessions.
Default	false
Introduced	16.0.R1
Platforms	All

bfd-strict-mode

Synopsis	Enter the **bfd-strict-mode** context

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Context	**configure** router *string* bgp bfd-strict-mode
Tree	bfd-strict-mode
Introduced	23.7.R1
Platforms	All

advertise

Synopsis	Enable the **advertise** context
Context	**configure** router *string* bgp bfd-strict-mode advertise
Tree	advertise
Description	Commands in this context configure BGP to advertise the Strict-BFD capability to peers that are within scope of this command and meet the following requirements: • The inherited or configured value for the **bfd-liveness** command that applies to the peer is **true**. • The interface associated with the peer has a valid BFD configuration. When the preceding conditions are satisfied and two peers attempting to form a session both advertise the Strict-BFD capability, the BGP finite state machine in each router transitions the session state to established after the BFD session with the peer enters the up state. When unconfigured, BGP does not advertise the Strict-BFD capability to peers.
Introduced	23.7.R1
Platforms	All

holdtime *number*

Synopsis	Maximum time BGP waits for the BFD session to come up
Context	**configure** router *string* bgp bfd-strict-mode advertise holdtime *number*
Tree	holdtime
Description	This command configures the maximum time BGP waits for the BFD session to come up, provided that the Strict-BFD procedures apply to a session, and the negotiated BGP hold time is zero (no keepalives). If the negotiated BGP hold time is greater than zero, the advertised hold time is not considered.
Range	1 to 65535
Units	seconds
Default	30
Introduced	23.7.R1
Platforms	All

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next-hop-reachability *boolean*

Synopsis Consider next hop unreachable if BFD session is down

Context **configure** router *string* bgp bfd-strict-mode next-hop-reachability *boolean*

Tree next-hop-reachability

Description When configured to **true**, the router considers next-hop self routes belonging to specific address families received from a peer within scope of this command as having an unresolved next hop, provided that the following requirements are met:

- The BFD session to the peer is in a down state.
- There is a valid interface BFD configuration that applies to the peer.
- There is a valid BFD liveness configuration that applies to the peer.

The unresolved state is maintained until the BFD session state changes to up or administratively down, even if there is a resolving route or tunnel that matches the BGP next-hop address.

Routes received from one peer with a BGP next-hop address equal to the address of another peer are not affected by the BFD session to the other peer.

The behavior of the router when this command is **true** does not depend on whether Strict-BFD is used, as both features are independent.

Configuring this command to **true** only affects routes belonging to the following address families:

- IPv4
- IPv6
- IPv4 VPN
- IPv6 VPN
- labeled unicast IPv4
- labeled unicast IPv6
- EVPN
- IPv4 multicast
- IPv6 multicast
- IPv4 VPN multicast
- IPv6 VPN multicast

When configured to **false**, the router does not consider next-hop self routes belonging to the preceding address families as having an unresolved next hop if the BFD session goes down.

Default false

Introduced 23.7.R1

Platforms All

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bgp-tunnel-metric

Synopsis	Enter the **bgp-tunnel-metric** context
Context	**configure** router *string* bgp bgp-tunnel-metric
Tree	bgp-tunnel-metric
Description	Commands in this context control the tunnel table metrics associated with BGP label unicast routes.
Introduced	20.5.R1
Platforms	All

prefer-aigp *boolean*

Synopsis	Use the AIGP attribute as tunnel metric when present
Context	**configure** router *string* bgp bgp-tunnel-metric prefer-aigp *boolean*
Tree	prefer-aigp
Description	When configured to **true**, the TTM metric is based on the AIGP metric if the route has the path attribute. When the BGP-LU route is selected for installation in TTM and it is not matched by a BGP import policy entry that overrides the BGP tunnel metric action, the TTM metric of the tunnel is set to the AIGP metric value of the BGP-LU route plus the resolved cost to the BGP next-hop of the route; otherwise, the metric is set to the value in the **value** setting. When configured to **false**, the AIGP attribute is ignored for purposes to TTM metric derivation.
Default	false
Introduced	20.5.R1
Platforms	All

prefer-med *boolean*

Synopsis	Use the MED attribute as tunnel metric when present
Context	**configure** router *string* bgp bgp-tunnel-metric prefer-med *boolean*
Tree	prefer-med
Description	When configured to **true**, the TTM metric is based on the MED metric value of the BGP-LU route. When a BGP-LU route is selected for installation in TTM and is not matched by a BGP import policy entry that overrides the BGP tunnel metric action, the TTM metric of the tunnel is set to the MED metric value of the BGP-LU route with the resolved cost to the BGP next hop of the route added to it. Otherwise, the metric is set to the value configured using the **value** command. When configured to **false**, the MED attribute is ignored for TTM metric derivation.

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Note: prefer-aigp takes precedence over this command if the received BGP-LU has both attributes.

Default false

Introduced 23.3.R1

Platforms All

value *number*

Synopsis BGP tunnel metric value

Context **configure** router *string* bgp bgp-tunnel-metric value *number*

Tree value

Description This command configures a BGP tunnel metric for label IPv4 routes that do not have their metric set by more specific means.

If a BGP-LU route is selected for installation in the TTM and there is no tunnel metric policy action that applies to the route, the TTM metric of the associated tunnel is set to this value if either:

- **prefer-aigp** is set to **false**
- **prefer-aigp** is set to **true** but the BGP-LU route does not have an AIGP attribute

Range 0 to 4294967295

Default 1000

Introduced 20.5.R1

Platforms All

bgp-tunnel-preference *number*

Synopsis BGP tunnel table preference

Context **configure** router *string* bgp bgp-tunnel-preference *number*

Tree bgp-tunnel-preference

Description This command configures the tunnel table preference for BGP-LU tunnel type.

The tunnel table preference applies to next-hop resolution of BGP routes for: EVPN, IPv4, IPv6, VPN-IPv4, VPN-IPv6, label-IPv4, and label-IPV6 in the tunnel table.

This feature does not apply to a VPRN, VPLS, or VLL service with explicit binding to an SDP that enabled the **mixed-lsp-mode** option. The service manager controls and fixes the tunnel preference in such an SDP. The tunnel table preference configuration does not modify the SDP behavior, nor the services that bind to it.

Range 1 to 255

Default 12

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Introduced	21.10.R1
Platforms	All

block-prefix-sid *boolean*

Synopsis	Block the prefix SID attribute
Context	**configure** router *string* bgp block-prefix-sid *boolean*
Tree	block-prefix-sid
Description	When configured to **true**, all prefix SID attributes are removed from label IPv4 and label IPv6 routes when they are exchanged with EBGP and IBGP peers covered by the scope of the command. Locally-imposed prefix SID attributes are also removed. When configured to **false**, all prefix SID attributes associated with label IPv4 and label IPv6 routes are propagated without restriction. A change of this configuration causes the affected BGP sessions to flap.
Default	false
Introduced	19.10.R1
Platforms	All

client-reflect *boolean*

Synopsis	Allow client reflection of routes by route reflector
Context	**configure** router *string* bgp client-reflect *boolean*
Tree	client-reflect
Description	When configured to **true**, routes received from neighbors considered to be RR clients are reflected to other peers as expected. When configured to **false**, routes received from neighbors considered to be RR clients are not reflected to other clients.
Default	true
Introduced	16.0.R1
Platforms	All

cluster

Synopsis	Enter the **cluster** context
Context	**configure** router *string* bgp cluster
Tree	cluster
Introduced	16.0.R1

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Platforms	All

allow-local-fallback *boolean*

Synopsis	Allow fallback to RR topology location for ORR
Context	**configure** router *string* bgp cluster allow-local-fallback *boolean*
Tree	allow-local-fallback
Description	When configured to **true**, this command allows the RR to advertise the best BGP path from its own topology location when there are no reachable routes from the client's ORR location. The ORR location must be specified before this command can be set to **true**. When configured to **false**, no route is advertised to the clients when there are no reachable routes from the client's ORR location.
Default	false
Introduced	16.0.R1
Platforms	All

cluster-id *string*

Synopsis	Route reflector cluster ID
Context	**configure** router *string* bgp cluster cluster-id *string*
Tree	cluster-id
Description	The command specifies the cluster ID to associate with the routing instance, effectively making all IBGP peers of the routing instance RR clients.
Introduced	16.0.R1
Platforms	All

orr-location *number*

Synopsis	Optimal route reflection location for the cluster
Context	**configure** router *string* bgp cluster orr-location *number*
Tree	orr-location
Description	This command configures an ORR location ID. If a cluster ID is also specified, the clients in that cluster receive routes optimal for that specific location. With optimal route reflection, the best path advertised to a client takes location ID into account. If the tie-break for best path (or Add-Paths) comes down to next-hop IGP cost, the IGP costs will be calculated relative to the specified location. In the SR OS implementation, the IGP costs from arbitrary ORR locations are calculated using OSPF, OSPFv3, IS-IS, or BGP-LS information in the TE DB.

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Range	1 to 255
Introduced	16.0.R1
Platforms	All

connect-retry *number*

Synopsis	BGP connect retry timer value
Context	**configure** router *string* bgp connect-retry *number*
Tree	connect-retry
Description	This command configures the BGP connect retry timer. When the timer expires, BGP tries to reconnect to the configured peer.
Range	1 to 65535
Default	120
Introduced	16.0.R1
Platforms	All

convergence

Synopsis	Enter the **convergence** context
Context	**configure** router *string* bgp convergence
Tree	convergence
Description	Commands in this context configure the route convergence delay.
Introduced	19.7.R1
Platforms	All

family [family-type] *keyword*

Synopsis	Enter the **family** list instance
Context	**configure** router *string* bgp convergence family *keyword*
Tree	family
Description	Commands in this context configure route convergence options for a specific BGP address family, specifically, the maximum amount of time BGP waits until it advertises the routes of the address family to its BGP peers.
Introduced	19.7.R1
Platforms	All

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[**family-type**] *keyword*

Synopsis	Address family for which convergence selection applies
Context	**configure** router *string* bgp convergence family *keyword*
Tree	family
Options	ipv4, vpn-ipv4, ipv6, vpn-ipv6, label-ipv4, label-ipv6
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	All

max-wait-to-advertise *number*

Synopsis	Maximum wait time before advertising routes
Context	**configure** router *string* bgp convergence family *keyword* max-wait-to-advertise *number*
Tree	max-wait-to-advertise
Range	0 to 3600
Default	0
Introduced	19.7.R1
Platforms	All

min-wait-to-advertise *number*

Synopsis	Minimum wait time before advertising routes
Context	**configure** router *string* bgp convergence min-wait-to-advertise *number*
Tree	min-wait-to-advertise
Range	0 to 3600
Default	0
Introduced	19.7.R1
Platforms	All

damp-peer-oscillations

Synopsis	Enable the **damp-peer-oscillations** context
Context	**configure** router *string* bgp damp-peer-oscillations
Tree	damp-peer-oscillations

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Description	Commands in this context support the DampPeerOscillations FSM behavior described in section 8.1 of RFC 4271, *A Border Gateway Protocol 4 (BGP-4)*. When unconfigured, the router does not perform peer oscillation damping and immediately transitions out of the idle state after every reset.
Introduced	16.0.R1
Platforms	All

error-interval *number*

Synopsis	Time after a reset that the session must be error-free
Context	**configure** router *string* bgp damp-peer-oscillations error-interval *number*
Tree	error-interval
Description	This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.
Range	0 to 2048
Default	30
Introduced	16.0.R1
Platforms	All

idle-hold-time

Synopsis	Enter the **idle-hold-time** context
Context	**configure** router *string* bgp damp-peer-oscillations idle-hold-time
Tree	idle-hold-time
Description	Commands in this context configure how long a BGP peer session remains in the idle state after some type of error causes the session to reset. In the idle state, BGP does not initiate or respond to attempts to establish a new session. Repeated errors that occur in a short time period after each session reset cause longer and longer hold times in the idle state.
Introduced	16.0.R1
Platforms	All

initial-wait *number*

Synopsis	Time session remains in idle state after stabilization
Context	**configure** router *string* bgp damp-peer-oscillations idle-hold-time initial-wait *number*

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Tree	initial-wait
Range	0 to 2048
Default	0
Introduced	16.0.R1
Platforms	All

max-wait *number*

Synopsis	Maximum session idle time after repeated instability
Context	**configure** router *string* bgp damp-peer-oscillations idle-hold-time max-wait *number*
Tree	max-wait
Range	1 to 2048
Default	60
Introduced	16.0.R1
Platforms	All

second-wait *number*

Synopsis	Time that doubles after each session failure
Context	**configure** router *string* bgp damp-peer-oscillations idle-hold-time second-wait *number*
Tree	second-wait
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	16.0.R1
Platforms	All

damping *boolean*

Synopsis	Use BGP route damping to reduce route flap
Context	**configure** router *string* bgp damping *boolean*
Tree	damping
Description	When configured to **true**, this command enables route damping to reduce the number of update messages sent between BGP peers and reduce the load on peers without affecting the route convergence time for stable routes.

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Route damping is controlled by profiles set in route policies. If no profile is specified in the route policy, the default damping profile is used with the following parameters:

- Half-life: 15 minutes
- Max-suppress: 60 minutes
- Suppress-threshold: 3000
- Reuse-threshold: 750

When configured to **false**, BGP route damping for learned routes is disabled.

Default	false
Introduced	16.0.R1
Platforms	All

def-recv-evpn-encap *keyword*

Synopsis	Default EVPN encapsulation type
Context	**configure** router *string* bgp def-recv-evpn-encap *keyword*
Tree	def-recv-evpn-encap
Description	This command specifies the encapsulation type that BGP uses when an EVPN route is received without the Encapsulation Extended Community.
Options	mpls, vxlan
Default	mpls
Introduced	16.0.R1
Platforms	All

default-label-preference

Synopsis	Enter the **default-label-preference** context
Context	**configure** router *string* bgp default-label-preference
Tree	default-label-preference
Introduced	19.5.R1
Platforms	All

ebgp *number*

Synopsis	Default preference for EBGP
Context	**configure** router *string* bgp default-label-preference ebgp *number*
Tree	ebgp

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Range	0 to 255
Default	0
Introduced	19.5.R1
Platforms	All

ibgp *number*

Synopsis	Default preference for IBGP
Context	**configure** router *string* bgp default-label-preference ibgp *number*
Tree	ibgp
Range	0 to 255
Default	0
Introduced	19.5.R1
Platforms	All

default-preference

Synopsis	Enter the **default-preference** context
Context	**configure** router *string* bgp default-preference
Tree	default-preference
Introduced	19.5.R1
Platforms	All

ebgp *number*

Synopsis	Default preference for EBGP
Context	**configure** router *string* bgp default-preference ebgp *number*
Tree	ebgp
Range	0 to 255
Default	0
Introduced	19.5.R1
Platforms	All

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ibgp *number*

Synopsis	Default preference for IBGP
Context	**configure** router *string* bgp default-preference ibgp *number*
Tree	ibgp
Range	0 to 255
Default	0
Introduced	19.5.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** router *string* bgp description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dynamic-neighbor-limit *number*

Synopsis	Max dynamic BGP sessions to accept from remote peers
Context	**configure** router *string* bgp dynamic-neighbor-limit *number*
Tree	dynamic-neighbor-limit
Description	This command configures the maximum number of dynamic BGP sessions to accept from remote peers associated with the entire BGP instance. If accepting a new dynamic session causes the instance limit to be exceeded, the new session attempt is rejected and a Notification message is sent back to the remote peer.
Range	1 to 8192
Introduced	16.0.R1
Platforms	All

ebgp-default-reject-policy

Synopsis	Enter the **ebgp-default-reject-policy** context
Context	**configure** router *string* bgp ebgp-default-reject-policy
Tree	ebgp-default-reject-policy

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Introduced	19.5.R1
Platforms	All

export *boolean*

Synopsis	Enable default reject export policy for external peers
Context	**configure** router *string* bgp ebgp-default-reject-policy export *boolean*
Tree	export
Default	true
Introduced	19.5.R1
Platforms	All

import *boolean*

Synopsis	Enable default reject import policy for external peers
Context	**configure** router *string* bgp ebgp-default-reject-policy import *boolean*
Tree	import
Default	true
Introduced	19.5.R1
Platforms	All

egress-peer-engineering

Synopsis	Enable the **egress-peer-engineering** context
Context	**configure** router *string* bgp egress-peer-engineering
Tree	egress-peer-engineering
Introduced	21.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BGP egress engineering
Context	**configure** router *string* bgp egress-peer-engineering admin-state *keyword*
Tree	admin-state

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Description	This command administratively enables or disables egress engineering for the BGP. If enabled, peer node SIDs and peer adjacency SIDs are advertised in BGP-LS.
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	All

enforce-first-as *boolean*

Synopsis	Enforce the configured peer AS value in received routes
Context	**configure** router *string* bgp enforce-first-as *boolean*
Tree	enforce-first-as
Description	When configured to **true** for an EBGP session, all routes received from an EBGP peer are checked to ensure that the most recent ASN in the AS_PATH attribute of each route matches the configured AS of the session. If there is not a match, the session is reset (if the **update-fault-tolerance** command in the **error-handling** context is set to **false**) or the session is left up but the route is treated as withdrawn (if **update-fault-tolerance** is set to **true**). This command does not flap an established session because it applies only to routes received after the command is issued. When configured to **false**, received routes are not checked for compliance with the rule.
Default	false
Introduced	16.0.R1
Platforms	All

error-handling

Synopsis	Enter the **error-handling** context
Context	**configure** router *string* bgp error-handling
Tree	error-handling
Introduced	16.0.R1
Platforms	All

update-fault-tolerance *boolean*

Synopsis	Tolerate non-critical errors in UPDATE messages
Context	**configure** router *string* bgp error-handling update-fault-tolerance *boolean*

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Tree	update-fault-tolerance
Description	When configured to **true**, non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset. When configured to **false**, most errors trigger a session reset.
Default	false
Introduced	16.0.R1
Platforms	All

export

Synopsis	Enable the **export** context
Context	**configure** router *string* bgp export
Tree	export
Description	Commands in this context specify route policies that control the handling of outbound routes transmitted to all peers. Route policies are configured in the **configure policy-options** context. When no export policies are specified in this context, BGP-learned routes are advertised by default and non-BGP routes are not advertised.
Introduced	16.0.R1
Platforms	All

policy *(policy-expr-string | string)*

Synopsis	List of export policy names
Context	**configure** router *string* bgp export policy *(policy-expr-string | string)*
Tree	policy
Description	This command specifies route policies that control the handling of outbound routes transmitted to certain peers. Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route. Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). When no export policies are specified, BGP-learned routes are advertised by default and non-BGP routes are not advertised.
String Length	1 to 255

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Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

extended-nh-encoding

Synopsis	Enter the **extended-nh-encoding** context
Context	**configure** router *string* bgp extended-nh-encoding
Tree	extended-nh-encoding
Description	Commands in this context specify the IPv4-related address families that can receive IPv6 next hops from peers. The peers should not send such routes unless the peers receive notification of this capability. If the router receives an enabled address family route from a peer to which it did not advertise the necessary capability, the UPDATE message will be considered malformed. This causes either a session reset or treat-as-withdraw behavior depending on the error handling settings.
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Advertise encoding capability for IPv4 routes
Context	**configure** router *string* bgp extended-nh-encoding ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	19.5.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Advertise encoding capability for label-IPv4 routes
Context	**configure** router *string* bgp extended-nh-encoding label-ipv4 *boolean*
Tree	label-ipv4
Default	false

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Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise encoding capability for VPN-IPv4 routes
Context	**configure** router *string* bgp extended-nh-encoding vpn-ipv4 *boolean*
Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

family

Synopsis	Enter the **family** context
Context	**configure** router *string* bgp family
Tree	family
Description	Commands in this context specify the BGP address families supported by the base router BGP sessions.
Introduced	16.0.R1
Platforms	All

bgp-ls *boolean*

Synopsis	Advertise MP-BGP support for the BGP-LS address family
Context	**configure** router *string* bgp family bgp-ls *boolean*
Tree	bgp-ls
Default	false
Introduced	16.0.R1
Platforms	All

evpn *boolean*

Synopsis	Advertise MP-BGP support for the EVPN address family
Context	**configure** router *string* bgp family evpn *boolean*

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Tree	evpn
Default	false
Introduced	16.0.R1
Platforms	All

flow-ipv4 *boolean*

Synopsis	Advertise support for the flowspec-IPv4 address family
Context	**configure** router *string* bgp family flow-ipv4 *boolean*
Tree	flow-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

flow-ipv6 *boolean*

Synopsis	Advertise support for the flowspec-IPv6 address family
Context	**configure** router *string* bgp family flow-ipv6 *boolean*
Tree	flow-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

flow-vpn-ipv4 *boolean*

Synopsis	Advertise support for FlowSpec-VPN IPv4 address family
Context	**configure** router *string* bgp family flow-vpn-ipv4 *boolean*
Tree	flow-vpn-ipv4
Default	false
Introduced	22.7.R1
Platforms	All

flow-vpn-ipv6 *boolean*

Synopsis	Advertise support for FlowSpec-VPN IPv6 address family

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Context	**configure** router *string* bgp family flow-vpn-ipv6 *boolean*
Tree	flow-vpn-ipv6
Default	false
Introduced	22.7.R1
Platforms	All

ipv4 *boolean*

Synopsis	Advertise MP-BGP support for the IPv4 address family
Context	**configure** router *string* bgp family ipv4 *boolean*
Tree	ipv4
Default	true
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the IPv6 address family
Context	**configure** router *string* bgp family ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

l2-vpn *boolean*

Synopsis	Advertise MP-BGP support for the L2-VPN address family
Context	**configure** router *string* bgp family l2-vpn *boolean*
Tree	l2-vpn
Default	false
Introduced	16.0.R1
Platforms	All

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label-ipv4 *boolean*

Synopsis	Advertise support for the label-IPv4 address family
Context	**configure** router *string* bgp family label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Advertise support for the label-IPv6 address family
Context	**configure** router *string* bgp family label-ipv6 *boolean*
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv4 *boolean*

Synopsis	Advertise support for the MCAST-IPv4 address family
Context	**configure** router *string* bgp family mcast-ipv4 *boolean*
Tree	mcast-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv6 *boolean*

Synopsis	Advertise support for the MCAST-IPv6 address family
Context	**configure** router *string* bgp family mcast-ipv6 *boolean*
Tree	mcast-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

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mcast-vpn-ipv4 *boolean*

Synopsis	Advertise support for the IPv4 VPN MCAST address family
Context	**configure** router *string* bgp family mcast-vpn-ipv4 *boolean*
Tree	mcast-vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv6 *boolean*

Synopsis	Advertise support for the IPv6 VPN MCAST address family
Context	**configure** router *string* bgp family mcast-vpn-ipv6 *boolean*
Tree	mcast-vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mdt-safi *boolean*

Synopsis	Advertise MP-BGP support for MDT-SAFI address family
Context	**configure** router *string* bgp family mdt-safi *boolean*
Tree	mdt-safi
Default	false
Introduced	16.0.R1
Platforms	All

ms-pw *boolean*

Synopsis	Advertise support for multi-segment PW address family
Context	**configure** router *string* bgp family ms-pw *boolean*
Tree	ms-pw
Default	false
Introduced	16.0.R1
Platforms	All

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mvpn-ipv4 *boolean*

Synopsis	Advertise support for the IPv4 MCAST VPN address family
Context	**configure** router *string* bgp family mvpn-ipv4 *boolean*
Tree	mvpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv6 *boolean*

Synopsis	Advertise support for the IPv6 MCAST VPN address family
Context	**configure** router *string* bgp family mvpn-ipv6 *boolean*
Tree	mvpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

route-target *boolean*

Synopsis	Advertise MP-BGP support for RT constraint routes
Context	**configure** router *string* bgp family route-target *boolean*
Tree	route-target
Default	false
Introduced	16.0.R1
Platforms	All

sr-policy-ipv4 *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv4 family
Context	**configure** router *string* bgp family sr-policy-ipv4 *boolean*
Tree	sr-policy-ipv4
Description	This command allows the router to advertise the capability for AFI1/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv4 destination.
Default	false

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Introduced	16.0.R1
Platforms	All

sr-policy-ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv6 family
Context	**configure** router *string* bgp family sr-policy-ipv6 *boolean*
Tree	sr-policy-ipv6
Description	This command allows the router to advertise the capability for AFI2/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv6 destination.
Default	false
Introduced	19.10.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise MP-BGP support for IPv4 VPN address family
Context	**configure** router *string* bgp family vpn-ipv4 *boolean*
Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Advertise MP-BGP support for IPv6 VPN address family
Context	**configure** router *string* bgp family vpn-ipv6 *boolean*
Tree	vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

fast-external-failover *boolean*

Synopsis	Drop external BGP session immediately when link fails

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Context	**configure** router *string* bgp fast-external-failover *boolean*
Tree	fast-external-failover
Description	When configured to **true**, the router drops an external BGP session to a single-hop neighbor immediately when the local interface goes down. When configured to **false**, the BGP session remains up until the hold time expires.
Default	true
Introduced	16.0.R1
Platforms	All

flowspec

Synopsis	Enter the **flowspec** context
Context	**configure** router *string* bgp flowspec
Tree	flowspec
Introduced	16.0.R1
Platforms	All

validate-dest-prefix *boolean*

Synopsis	Validate destination prefix in FlowSpec-IPv4/IPv6 route
Context	**configure** router *string* bgp flowspec validate-dest-prefix *boolean*
Tree	validate-dest-prefix
Description	When configured to **true**, this command enables validation of received IPv4 and IPv6 FlowSpec routes that contain a destination-prefix subcomponent. A FlowSpec route with a destination-prefix subcomponent is considered invalid if both of the following are true: • it was originated outside the local AS of the receiving BGP router • the neighbor AS of the FlowSpec route does not match the neighbor AS of the best match BGP (unicast) route for the destination prefix or the neighbor AS of any longer match BGP (unicast) route for the destination prefix An invalid route is retained in the BGP but it is not used for filtering traffic or propagated to other BGP routers. When configured to **false**, destination-prefix validation is disabled.
Default	false
Introduced	16.0.R1
Platforms	All

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validate-redirect-ip *boolean*

Synopsis	Validate the redirect-to-IPv4 action in FlowSpec route
Context	**configure** router *string* bgp flowspec validate-redirect-ip *boolean*
Tree	validate-redirect-ip
Description	When configured to **true**, this command enables procedures to validate the redirect-to-IPv4 action attached to FlowSpec-IPv4 routes that are received by the BGP instance. A FlowSpec-IPv4 route is considered invalid and is not installed as a filter rule if the FlowSpec-IPv4 route is deemed to have originated from a different AS than the IP route that resolves the redirection IPv4 address. The originating AS of a FlowSpec route is determined from its AS path. When configured to **false**, the validation check is disabled.
Default	false
Introduced	16.0.R1
Platforms	All

graceful-restart

Synopsis	Enable the **graceful-restart** context
Context	**configure** router *string* bgp graceful-restart
Tree	graceful-restart
Description	Commands in this context configure BGP graceful restart helper procedures for address families included in the GR capabilities of both peers.
Introduced	16.0.R1
Platforms	All

gr-notification *boolean*

Synopsis	Perform Graceful Restart procedures
Context	**configure** router *string* bgp graceful-restart gr-notification *boolean*
Tree	gr-notification
Description	When configured to **true**, the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error. When configured to **false**, NOTIFICATION messages are not supported.
Default	false

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Introduced	16.0.R1
Platforms	All

long-lived

Synopsis	Enable the **long-lived** context
Context	**configure** router *string* bgp graceful-restart long-lived
Tree	long-lived
Description	Commands in this context configure the BGP Long-Lived Graceful-Restart (LLGR) procedures. LLGR, known informally as BGP persistence, is an extension of BGP GR that allows a session to stay down for a longer period of time. During this time, learned routes are marked and re-advertised as stale but they can continue to be used as routes of last resort. The LLGR handling of a session failure can be invoked immediately or it can be delayed until the end of the traditional GR restart window.
Introduced	16.0.R1
Platforms	All

advertise-stale-to-all-neighbors *boolean*

Synopsis	Advertise stale routes to all BGP peers
Context	**configure** router *string* bgp graceful-restart long-lived advertise-stale-to-all-neighbors *boolean*
Tree	advertise-stale-to-all-neighbors
Default	false
Introduced	16.0.R1
Platforms	All

advertised-stale-time *number*

Synopsis	LLGR stale routes time
Context	**configure** router *string* bgp graceful-restart long-lived advertised-stale-time *number*
Tree	advertised-stale-time
Range	0 to 16777215
Default	86400
Introduced	16.0.R1

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Platforms	All

family [family-type] *keyword*

Synopsis	Enter the **family** list instance
Context	**configure** router *string* bgp graceful-restart long-lived family *keyword*
Tree	family
Introduced	16.0.R1
Platforms	All

[**family-type**] *keyword*

Synopsis	Family type for family-specific LLGR configuration
Context	**configure** router *string* bgp graceful-restart long-lived family *keyword*
Tree	family
Options	ipv4, vpn-ipv4, ipv6, vpn-ipv6, l2-vpn, flow-ipv4, route-target, flow-ipv6, label-ipv4, label-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertised-stale-time *number*

Synopsis	LLGR stale routes time for family override
Context	**configure** router *string* bgp graceful-restart long-lived family *keyword* advertised-stale-time *number*
Tree	advertised-stale-time
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time

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Context	**configure** router *string* bgp graceful-restart long-lived family *keyword* helper-override-stale-time *number*
Tree	helper-override-stale-time
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

forwarding-bits-set *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family
Context	**configure** router *string* bgp graceful-restart long-lived forwarding-bits-set *keyword*
Tree	forwarding-bits-set
Description	This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family. This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).
Options	none, all, non-fwd
Default	none
Introduced	16.0.R1
Platforms	All

helper-override-restart-time *number*

Synopsis	Locally-configured override for restart time
Context	**configure** router *string* bgp graceful-restart long-lived helper-override-restart-time *number*
Tree	helper-override-restart-time
Description	This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.
Range	0 to 4095
Introduced	16.0.R1

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Platforms	All

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	**configure** router *string* bgp graceful-restart long-lived helper-override-stale-time *number*
Tree	helper-override-stale-time
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

without-no-export *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	**configure** router *string* bgp graceful-restart long-lived without-no-export *boolean*
Tree	without-no-export
Description	When configured to **true**, LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0. When configured to **false**, LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.
Default	false
Introduced	16.0.R1
Platforms	All

restart-time *number*

Synopsis	Restart time advertised by GR capability
Context	**configure** router *string* bgp graceful-restart restart-time *number*
Tree	restart-time

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Range	0 to 4095
Default	120
Introduced	16.0.R1
Platforms	All

stale-routes-time *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	**configure** router *string* bgp graceful-restart stale-routes-time *number*
Tree	stale-routes-time
Range	1 to 3600
Default	360
Introduced	16.0.R1
Platforms	All

group [group-name] *string*

Synopsis	Enter the **group** list instance
Context	**configure** router *string* bgp group *string*
Tree	group
Description	Commands in this context define BGP peer groups and their group-specific command options. The options in this context are identical to the global BGP options. Any options that are not overridden by the group-specific commands inherit the configuration settings from the BGP global level.
Introduced	16.0.R1
Platforms	All

[**group-name**] *string*

Synopsis	BGP peer group name
Context	**configure** router *string* bgp group *string*
Tree	group
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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add-paths

Synopsis	Enable the **add-paths** context
Context	**configure** router *string* bgp group *string* add-paths
Tree	add-paths
Description	Commands in this context allow the add-paths node to be configured for the specified families for configuration of the BGP group or neighbor. The BGP add-paths capability allows the router to send or receive multiple paths per prefix to and from a peer. When unconfigured, command settings are inherited from a higher level BGP configuration.
Introduced	16.0.R1
Platforms	All

evpn

Synopsis	Enter the **evpn** context
Context	**configure** router *string* bgp group *string* add-paths evpn
Tree	evpn
Description	Commands in this context configure the add-paths capability for EVPN routes. By default, add-paths is not enabled for EVPN routes.
Introduced	21.10.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple EVPN paths per prefix from a peer
Context	**configure** router *string* bgp group *string* add-paths evpn receive *boolean*
Tree	receive
Default	false
Introduced	21.10.R1
Platforms	All

send *(number | keyword)*

Synopsis	Maximum paths per EVPN prefix to Add-Path peers
Context	**configure** router *string* bgp group *string* add-paths evpn send *(number | keyword)*

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Tree	send
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	21.10.R1
Platforms	All

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** router *string* bgp group *string* add-paths ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv4 prefix
Context	**configure** router *string* bgp group *string* add-paths ipv4 receive *boolean*
Tree	receive
Description	When configured to **true**, the router can receive multiple unlabeled IPv4 unicast routes per prefix from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *(number | keyword)*

Synopsis	Maximum paths per unlabeled IPv4 unicast prefix
Context	**configure** router *string* bgp group *string* add-paths ipv4 send *(number | keyword)*
Tree	send
Description	This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

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When not configured, ADD-PATH send capability is not enabled for unlabeled IPv4 unicast routes.

Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** router *string* bgp group *string* add-paths ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple routes per IPv6 prefix
Context	**configure** router *string* bgp group *string* add-paths ipv6 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple unlabeled IPv6 unicast routes per prefix to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *(number | keyword)*

Synopsis	Maximum paths per unlabeled IPv6 unicast prefix
Context	**configure** router *string* bgp group *string* add-paths ipv6 send *(number | keyword)*
Tree	send
Description	This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

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When not configured, ADD-PATH send capability is not enabled for unlabeled IPv4 unicast routes.

Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

label-ipv4

Synopsis	Enter the **label-ipv4** context
Context	**configure** router *string* bgp group *string* add-paths label-ipv4
Tree	label-ipv4
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv4 prefix
Context	**configure** router *string* bgp group *string* add-paths label-ipv4 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple labeled-unicast routes per IPv4 prefix to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *(number | keyword)*

Synopsis	Maximum paths per labeled IPv4 unicast prefix
Context	**configure** router *string* bgp group *string* add-paths label-ipv4 send *(number | keyword)*
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv4 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

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When not configured, ADD-PATH send capability is not enabled for labeled IPv4 unicast routes.

Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

label-ipv6

Synopsis	Enter the **label-ipv6** context
Context	**configure** router *string* bgp group *string* add-paths label-ipv6
Tree	label-ipv6
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv6 prefix
Context	**configure** router *string* bgp group *string* add-paths label-ipv6 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple labeled-unicast routes per IPv6 prefix to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *(number | keyword)*

Synopsis	Maximum paths per labeled IPv6 unicast prefix
Context	**configure** router *string* bgp group *string* add-paths label-ipv6 send *(number | keyword)*
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv6 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

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When not configured, ADD-PATH send capability is not enabled for labeled IPv6 unicast routes.

Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv4

Synopsis	Enter the **mcast-vpn-ipv4** context
Context	**configure** router *string* bgp group *string* add-paths mcast-vpn-ipv4
Tree	mcast-vpn-ipv4
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple multicast routes per IPv4 VPN prefix
Context	**configure** router *string* bgp group *string* add-paths mcast-vpn-ipv4 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple multicast routes per IPv4 VPN prefix to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *number*

Synopsis	Maximum paths per multicast IPv4 VPN prefix
Context	**configure** router *string* bgp group *string* add-paths mcast-vpn-ipv4 send *number*
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv4 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

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When not configured, ADD-PATH send capability is not enabled for multicast IPv4 VPN routes.

Range	1 to 16
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv6

Synopsis	Enter the **mcast-vpn-ipv6** context
Context	**configure** router *string* bgp group *string* add-paths mcast-vpn-ipv6
Tree	mcast-vpn-ipv6
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple multicast routes per IPv6 VPN prefix
Context	**configure** router *string* bgp group *string* add-paths mcast-vpn-ipv6 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple multicast routes per IPv6 VPN prefix to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *number*

Synopsis	Maximum paths per multicast IPv6 VPN prefix
Context	**configure** router *string* bgp group *string* add-paths mcast-vpn-ipv6 send *number*
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv6 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast IPv6 VPN routes.

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Range	1 to 16
Introduced	16.0.R1
Platforms	All

mvpn-ipv4

Synopsis	Enter the **mvpn-ipv4** context
Context	**configure** router *string* bgp group *string* add-paths mvpn-ipv4
Tree	mvpn-ipv4
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple multicast VPN routes per IPv4 prefix
Context	**configure** router *string* bgp group *string* add-paths mvpn-ipv4 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple multicast VPN routes per IPv4 prefix to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *number*

Synopsis	Maximum paths per multicast VPN IPv4 prefix
Context	**configure** router *string* bgp group *string* add-paths mvpn-ipv4 send *number*
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast VPN IPv4 routes.
Range	1 to 16

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Introduced	16.0.R1
Platforms	All

mvpn-ipv6

Synopsis	Enter the **mvpn-ipv6** context
Context	**configure** router *string* bgp group *string* add-paths mvpn-ipv6
Tree	mvpn-ipv6
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple multicast VPN routes per IPv6 prefix
Context	**configure** router *string* bgp group *string* add-paths mvpn-ipv6 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple multicast VPN routes per IPv6 prefix to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *number*

Synopsis	Maximum paths per multicast VPN IPv6 prefix
Context	**configure** router *string* bgp group *string* add-paths mvpn-ipv6 send *number*
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast VPN IPv6 routes.
Range	1 to 16
Introduced	16.0.R1

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Platforms	All

vpn-ipv4

Synopsis	Enter the **vpn-ipv4** context
Context	**configure** router *string* bgp group *string* add-paths vpn-ipv4
Tree	vpn-ipv4
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple routes per VPN-IPv4 prefix
Context	**configure** router *string* bgp group *string* add-paths vpn-ipv4 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple VPN-IPv4 routes per prefix to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *(number | keyword)*

Synopsis	Maximum paths per VPN-IPv4 prefix
Context	**configure** router *string* bgp group *string* add-paths vpn-ipv4 send *(number | keyword)*
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for VPN-IPv4 routes.
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

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vpn-ipv6

Synopsis	Enter the **vpn-ipv6** context
Context	**configure** router *string* bgp group *string* add-paths vpn-ipv6
Tree	vpn-ipv6
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple routes per VPN-IPv6 prefix
Context	**configure** router *string* bgp group *string* add-paths vpn-ipv6 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple VPN-IPv6 routes per prefix to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *(number | keyword)*

Synopsis	Maximum paths per VPN-IPv6 prefix
Context	**configure** router *string* bgp group *string* add-paths vpn-ipv6 send *(number | keyword)*
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for VPN-IPv6 routes.
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the BGP group
Context	**configure** router *string* bgp group *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

advertise-inactive *boolean*

Synopsis	Advertise an inactive BGP route to peers
Context	**configure** router *string* bgp group *string* advertise-inactive *boolean*
Tree	advertise-inactive
Description	When configured to **true**, this command allows an inactive BGP route to be advertised, even though it is not the most preferred route. The effect of the command on advertised unlabeled, labeled, and multicast IPv4 and IPv6 routes depends on several factors. • If the active route for the IP prefix is a BGP route, that route is advertised. • If the active route is a non-BGP route and there are valid inactive BGP routes to the same destination, the best valid inactive route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session. • If the active route is a non-BGP route and there are no valid BGP routes to the same destination, no route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session. When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**. When this command inherits a value of **false**, the advertisement of inactive BGP routes to other BGP peers is disabled.
Introduced	16.0.R1
Platforms	All

advertise-ipv6-next-hops

Synopsis	Enable the **advertise-ipv6-next-hops** context
Context	**configure** router *string* bgp group *string* advertise-ipv6-next-hops
Tree	advertise-ipv6-next-hops

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Description	Commands in this context allow specified IP family routes to be advertised to IPv6 transport peers with a true IPv6 address when originated or when a configured or automatic next-hop-self action is applied. When unconfigured, command settings are inherited from a higher level BGP configuration.
Introduced	16.0.R1
Platforms	All

evpn *boolean*

Synopsis	Advertise EVPN route with IPv6 next-hop address
Context	**configure** router *string* bgp group *string* advertise-ipv6-next-hops evpn *boolean*
Tree	evpn
Description	When configured to **true**, EVPN routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. When configured to **false**, EVPN routes are advertised with IPv4 next-hop addresses to IPv6 transport peers.
Default	false
Introduced	19.5.R1
Platforms	All

ipv4 *boolean*

Synopsis	Advertise IPv4 route with IPv6 next-hop address
Context	**configure** router *string* bgp group *string* advertise-ipv6-next-hops ipv4 *boolean*
Tree	ipv4
Description	When configured to **true**, IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop. When configured to **false**, IPv4 routes are advertised with IPv4 next-hop addresses to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.
Default	false
Introduced	19.5.R1
Platforms	All

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label-ipv4 *boolean*

Synopsis	Advertise label IPv4 route with IPv6 next-hop address
Context	**configure** router *string* bgp group *string* advertise-ipv6-next-hops label-ipv4 *boolean*
Tree	label-ipv4
Description	When configured to **true**, label IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop. When configured to **false**, label IPv4 routes are advertised with the system IPv4 address as the next hop to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Advertise label IPv6 route with IPv6 next-hop address
Context	**configure** router *string* bgp group *string* advertise-ipv6-next-hops label-ipv6 *boolean*
Tree	label-ipv6
Description	When configured to **true**, label IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. When configured to **false**, label IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise VPN IPv4 route with IPv6 next-hop address
Context	**configure** router *string* bgp group *string* advertise-ipv6-next-hops vpn-ipv4 *boolean*
Tree	vpn-ipv4

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Description	When configured to **true**, VPN IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop. When configured to **false**, VPN IPv4 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Advertise VPN IPv6 route with IPv6 next-hop address
Context	**configure** router *string* bgp group *string* advertise-ipv6-next-hops vpn-ipv6 *boolean*
Tree	vpn-ipv6
Description	When configured to **true**, VPN IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. When configured to **false**, VPN IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.
Default	false
Introduced	16.0.R1
Platforms	All

aggregator-id-zero *boolean*

Synopsis	Set router ID in the BGP AGGREGATOR attribute to zero
Context	**configure** router *string* bgp group *string* aggregator-id-zero *boolean*
Tree	aggregator-id-zero
Introduced	16.0.R1
Platforms	All

aigp *boolean*

Synopsis	Add AIGP attribute to advertised routes

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Context	**configure** router *string* bgp group *string* aigp *boolean*
Tree	aigp
Description	When configured to **true**, this command enables Accumulated IGP (AIGP) path attribute support with one or more BGP peers. BGP path selection among routes with an associated AIGP metric is based on the end-to-end IGP metrics of the different BGP paths, even when these BGP paths span more than one AS and IGP instance. When configured to **false**, the AIGP attribute is removed from advertised routes, if present, and is ignored in received routes.
Default	false
Introduced	16.0.R1
Platforms	All

as-override *boolean*

Synopsis	Replace the peer ASN with the local ASN in AS Path
Context	**configure** router *string* bgp group *string* as-override *boolean*
Tree	as-override
Description	When configured to **true**, the advertising router's local AS replaces all occurrences of the peer AS in the AS_PATH attribute. This command should be used with caution, as it breaks BGP's loop detection mechanism. When configured to **false**, no AS override is performed.
Default	false
Introduced	19.7.R1
Platforms	All

asn-4-byte *boolean*

Synopsis	Advertise the use of 4-byte ASNs
Context	**configure** router *string* bgp group *string* asn-4-byte *boolean*
Tree	asn-4-byte
Description	When this command inherits a value of **true**, the use of 4-byte ASNs is supported. When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **true**. When configured to **false**, this command disables the use of 4-byte ASNs.
Introduced	16.0.R1
Platforms	All

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authentication-key *string*

Synopsis	BGP authentication key for peers in the group
Context	**configure** router *string* bgp group *string* authentication-key *string*
Tree	authentication-key
Description	This command configures the authentication key that must be configured on both peers. The stored format of the authentication key is based on the **configure system security hash-control management-interface md-cli hash-algorithm** setting**.**
String Length	1 to 370
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	**configure** router *string* bgp group *string* authentication-keychain *reference*
Tree	authentication-keychain
Description	This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.
Reference	**configure** system security keychains keychain *string*
Introduced	16.0.R3
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD
Context	**configure** router *string* bgp group *string* bfd-liveness *boolean*
Tree	bfd-liveness
Description	When configured to **true**, BFD is enabled on a given protocol interface where the state of the protocol interface is tied to the state of the BFD session between the local node and the remote node. When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**. When this command inherits a value of **false**, BFD is removed from the associated protocol adjacency.
Introduced	16.0.R1
Platforms	All

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bfd-strict-mode

Synopsis	Enter the **bfd-strict-mode** context
Context	**configure** router *string* bgp group *string* bfd-strict-mode
Tree	bfd-strict-mode
Introduced	23.7.R1
Platforms	All

advertise

Synopsis	Enable the **advertise** context
Context	**configure** router *string* bgp group *string* bfd-strict-mode advertise
Tree	advertise
Description	Commands in this context configure BGP to advertise the Strict-BFD capability to peers that are within scope of this command and meet the following requirements: • The inherited or configured value for the **bfd-liveness** command that applies to the peer is **true**. • The interface associated with the peer has a valid BFD configuration. When the preceding conditions are satisfied and two peers attempting to form a session both advertise the Strict-BFD capability, the BGP finite state machine in each router transitions the session state to established after the BFD session with the peer enters the up state. When unconfigured, BGP does not advertise the Strict-BFD capability to peers.
Introduced	23.7.R1
Platforms	All

holdtime *number*

Synopsis	Maximum time BGP waits for the BFD session to come up
Context	**configure** router *string* bgp group *string* bfd-strict-mode advertise holdtime *number*
Tree	holdtime
Description	This command configures the maximum time BGP waits for the BFD session to come up, provided that the Strict-BFD procedures apply to a session, and the negotiated BGP hold time is zero (no keepalives). If the negotiated BGP hold time is greater than zero, the advertised hold time is not considered.
Range	1 to 65535
Units	seconds

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Default	30
Introduced	23.7.R1
Platforms	All

next-hop-reachability *boolean*

Synopsis	Consider next hop unreachable if BFD session is down
Context	**configure** router *string* bgp group *string* bfd-strict-mode next-hop-reachability *boolean*
Tree	next-hop-reachability
Description	When configured to **true**, the router considers next-hop self routes belonging to specific address families received from a peer within scope of this command as having an unresolved next hop, provided that the following requirements are met: • The BFD session to the peer is in a down state. • There is a valid interface BFD configuration that applies to the peer. • There is a valid BFD liveness configuration that applies to the peer. The unresolved state is maintained until the BFD session state changes to up or administratively down, even if there is a resolving route or tunnel that matches the BGP next-hop address. Routes received from one peer with a BGP next-hop address equal to the address of another peer are not affected by the BFD session to the other peer. The behavior of the router when this command is **true** does not depend on whether Strict-BFD is used, as both features are independent. Configuring this command to **true** only affects routes belonging to the following address families: • IPv4 • IPv6 • IPv4 VPN • IPv6 VPN • labeled unicast IPv4 • labeled unicast IPv6 • EVPN • IPv4 multicast • IPv6 multicast • IPv4 VPN multicast • IPv6 VPN multicast When configured to **false**, the router does not consider next-hop self routes belonging to the preceding address families as having an unresolved next hop if the BFD session goes down.

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Introduced	23.7.R1
Platforms	All

block-prefix-sid *boolean*

Synopsis	Block the prefix SID attribute
Context	**configure** router *string* bgp group *string* block-prefix-sid *boolean*
Tree	block-prefix-sid
Description	When configured to **true**, all prefix SID attributes are removed from all routes exchanged between EBGP and IBGP peers covered by the scope of the command. Locally-imposed prefix SID attributes are also removed. When configured to **false**, all prefix SID attributes are propagated without restriction. A change of this configuration causes the affected BGP sessions to flap.
Default	false
Introduced	19.10.R1
Platforms	All

capability-negotiation *boolean*

Synopsis	Enable capability negotiation
Context	**configure** router *string* bgp group *string* capability-negotiation *boolean*
Tree	capability-negotiation
Description	When configured to **true**, this command enables the exchange of capabilities. When configured to **false** and the peering is flapped, new capabilities are not negotiated and strictly IPv4 exchanges are supported with the peer.
Default	true
Introduced	16.0.R1
Platforms	All

client-reflect *boolean*

Synopsis	Allow cluster RR to advertise routes to its clients
Context	**configure** router *string* bgp group *string* client-reflect *boolean*
Tree	client-reflect
Description	When unconfigured, this command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **true**.

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When the command inherits a value of **true**, client reflection of routes is enabled.

When configured to **false**, this command disables client reflection of routes.

Introduced 16.0.R1

Platforms All

cluster

Synopsis Enter the **cluster** context

Context **configure** router *string* bgp group *string* cluster

Tree cluster

Introduced 16.0.R1

Platforms All

allow-local-fallback *boolean*

Synopsis Allow fallback to RR topology location

Context **configure** router *string* bgp group *string* cluster allow-local-fallback *boolean*

Tree allow-local-fallback

Description When configured to **true**, this command allows the RR to advertise the best BGP path from its own topology location when there are no reachable routes from the client's ORR location. The ORR location must be specified before this command can be set to **true**.

When configured to **false**, no route is advertised to the client.

Default false

Introduced 16.0.R1

Platforms All

cluster-id *string*

Synopsis Route reflector cluster ID

Context **configure** router *string* bgp group *string* cluster cluster-id *string*

Tree cluster-id

Introduced 16.0.R1

Platforms All

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orr-location *number*

Synopsis	Optimal route reflection location for the cluster
Context	**configure** router *string* bgp group *string* cluster orr-location *number*
Tree	orr-location
Description	This command configures an ORR location ID. If a cluster ID is also specified, the clients in that cluster receive routes optimal for that specific location. With optimal route reflection, the best path advertised to a client takes location ID into account. If the tie-break for best path (or Add-Paths) comes down to next-hop IGP cost, the IGP costs are calculated relative to the specified location. In the SR OS implementation, the IGP costs from arbitrary ORR locations are calculated using OSPF, OSPFv3, IS-IS, or BGP-LS information in the TE DB.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

connect-retry *number*

Synopsis	BGP connect retry timer value
Context	**configure** router *string* bgp group *string* connect-retry *number*
Tree	connect-retry
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

damp-peer-oscillations

Synopsis	Enable the **damp-peer-oscillations** context
Context	**configure** router *string* bgp group *string* damp-peer-oscillations
Tree	damp-peer-oscillations
Description	Commands in this context specify how long a BGP peer session remains in the idle state after an error causes the session to reset. In the idle state, BGP does not initiate or respond to attempts to establish a new session. Repeated errors that occur a short time after each session reset cause longer and longer hold times in the idle state. When unconfigured, command settings are inherited from the global-level configuration.
Introduced	16.0.R1
Platforms	All

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error-interval *number*

Synopsis	Time after a reset that the session must be error-free
Context	**configure** router *string* bgp group *string* damp-peer-oscillations error-interval *number*
Tree	error-interval
Description	This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.
Range	0 to 2048
Default	30
Introduced	16.0.R1
Platforms	All

idle-hold-time

Synopsis	Enter the **idle-hold-time** context
Context	**configure** router *string* bgp group *string* damp-peer-oscillations idle-hold-time
Tree	idle-hold-time
Introduced	16.0.R1
Platforms	All

initial-wait *number*

Synopsis	Time session remains in idle state after stabilization
Context	**configure** router *string* bgp group *string* damp-peer-oscillations idle-hold-time initial-wait *number*
Tree	initial-wait
Range	0 to 2048
Default	0
Introduced	16.0.R1
Platforms	All

max-wait *number*

Synopsis	Maximum session idle time after repeated instability

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Context	**configure** router *string* bgp group *string* damp-peer-oscillations idle-hold-time max-wait *number*
Tree	max-wait
Range	1 to 2048
Default	60
Introduced	16.0.R1
Platforms	All

second-wait *number*

Synopsis	Time that doubles after each repeated session failure
Context	**configure** router *string* bgp group *string* damp-peer-oscillations idle-hold-time second-wait *number*
Tree	second-wait
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	16.0.R1
Platforms	All

damping *boolean*

Synopsis	Use BGP route damping to reduce route flap
Context	**configure** router *string* bgp group *string* damping *boolean*
Tree	damping
Introduced	16.0.R1
Platforms	All

def-recv-evpn-encap *keyword*

Synopsis	Default EVPN encapsulation type
Context	**configure** router *string* bgp group *string* def-recv-evpn-encap *keyword*
Tree	def-recv-evpn-encap
Description	This command specifies the encapsulation type that BGP uses when an EVPN route is received without the Encapsulation Extended Community.

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When unconfigured, the setting for this command is inherited from the BGP global-level configuration.

Options	mpls, vxlan
Introduced	16.0.R1
Platforms	All

default-label-preference

Synopsis	Enter the **default-label-preference** context
Context	**configure** router *string* bgp group *string* default-label-preference
Tree	default-label-preference
Introduced	19.5.R1
Platforms	All

ebgp *number*

Synopsis	Default preference for EBGP
Context	**configure** router *string* bgp group *string* default-label-preference ebgp *number*
Tree	ebgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

ibgp *number*

Synopsis	Default preference for IBGP
Context	**configure** router *string* bgp group *string* default-label-preference ibgp *number*
Tree	ibgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

default-preference

Synopsis	Enter the **default-preference** context
Context	**configure** router *string* bgp group *string* default-preference

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Tree	default-preference
Introduced	19.5.R1
Platforms	All

ebgp *number*

Synopsis	Default preference for EBGP
Context	**configure** router *string* bgp group *string* default-preference ebgp *number*
Tree	ebgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

ibgp *number*

Synopsis	Default preference for IBGP
Context	**configure** router *string* bgp group *string* default-preference ibgp *number*
Tree	ibgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

default-route-target *boolean*

Synopsis	Send default RTC route (zero prefix length) to peers
Context	**configure** router *string* bgp group *string* default-route-target *boolean*
Tree	default-route-target
Description	When configured to **true**, this command sends the default RTC route (zero prefix length) toward the selected peers. When configured to **false**, a default RTC route is not sent.
Default	false
Introduced	16.0.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** router *string* bgp group *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dynamic-neighbor

Synopsis	Enter the **dynamic-neighbor** context
Context	**configure** router *string* bgp group *string* dynamic-neighbor
Tree	dynamic-neighbor
Description	Commands in this context configure dynamic BGP sessions for a peer group.
Introduced	16.0.R1
Platforms	All

interface [interface-name] *string*

Synopsis	Enter the **interface** list instance
Context	**configure** router *string* bgp group *string* dynamic-neighbor interface *string*
Tree	interface
Description	Commands in this context configure an unnumbered base router network interface for dynamic neighbors. If this interface connects to a network with other BGP routers, sessions with the other routers can be set up automatically without explicitly configuring them as BGP neighbors. The interface must be IPv6 enabled, but because the interface is considered unnumbered, it does not require an IPv4 address or a global-unicast IPv6 address. The sessions are set up using IPv6 link-local addresses. The BGP unnumbered feature supports all address families that allow IPv6 link-local BGP next-hop addresses. This includes IPv4 with the use of RFC 8950 extensions. When an interface is added to the list of dynamic-neighbor interfaces, an outgoing connection attempt is initiated toward any directly connected router on the interface that announces itself using an ICMPv6 router advertisement message. The session attempt is unsuccessful if the peer type is not EBGP, the reported AS number of the peer does not match one of the allowed values, or the maximum session limit of the interface would be exceeded.
Introduced	22.10.R1

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Platforms	All

[**interface-name**] *string*

Synopsis	Name of the dynamic neighbor interface
Context	**configure** router *string* bgp group *string* dynamic-neighbor interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

allowed-peer-as *string*

Synopsis	Allowed peer AS value or range of acceptable values
Context	**configure** router *string* bgp group *string* dynamic-neighbor interface *string* allowed-peer-as *string*
Tree	allowed-peer-as
Description	This command specifies a singular allowed peer AS value or a range of acceptable values in the format *n1*..*n*2. All values greater than or equal to *n1* and less than or equal to *n2*are acceptable. For example, if the acceptable peer AS numbers are 65001 to 65005 (range) and 62100 (singular value), configure this command to use a value of [65001..65005 62100].
Max. Instances	32
Notes	This element is ordered by the user.
Introduced	22.10.R1
Platforms	All

max-sessions *number*

Synopsis	Maximum number of dynamic sessions allowed
Context	**configure** router *string* bgp group *string* dynamic-neighbor interface *string* max-sessions *number*
Tree	max-sessions

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Description	This command specifies the maximum number of dynamic sessions that are allowed to be set up on the interface as a result of accepting sessions from link-local addresses or initiating sessions by receiving IPv6 router advertisements.
Range	1 to 255
Default	1
Introduced	22.10.R1
Platforms	All

match

Synopsis	Enter the **match** context
Context	**configure** router *string* bgp group *string* dynamic-neighbor match
Tree	match
Description	Commands in this context configure match conditions for the dynamic neighbors.
Introduced	19.5.R1
Platforms	All

prefix [ip-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **prefix** list instance
Context	**configure** router *string* bgp group *string* dynamic-neighbor match prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Introduced	19.5.R1
Platforms	All

[**ip-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Dynamic peer prefix for the group
Context	**configure** router *string* bgp group *string* dynamic-neighbor match prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

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allowed-peer-as *string*

Synopsis	Allowed peer AS value or range of acceptable values
Context	**configure** router *string* bgp group *string* dynamic-neighbor match prefix *(ipv4-prefix | ipv6-prefix)* allowed-peer-as *string*
Tree	allowed-peer-as
Description	This command specifies a singular allowed peer AS value or a range of acceptable values in the format *n1*..*n*2. All values greater than or equal to *n1* and less than or equal to *n2*are acceptable. For example, if the acceptable peer AS numbers are 65001 to 65005 (range) and 62100 (singular value), configure this command to use a value of [65001..65005 62100].
Max. Instances	32
Notes	This element is ordered by the user.
Introduced	19.5.R1
Platforms	All

dynamic-neighbor-limit *number*

Synopsis	Maximum dynamic BGP sessions to accept from remote peer
Context	**configure** router *string* bgp group *string* dynamic-neighbor-limit *number*
Tree	dynamic-neighbor-limit
Description	This command configures the maximum number of dynamic BGP sessions that are accepted from remote peers associated with a specific peer group. If accepting a new dynamic session causes the group limit to be exceeded, the new session attempt is rejected and a Notification message is sent back to the remote peer. When unconfigured, the setting is inherited from the BGP global-level configuration.
Range	1 to 8192
Introduced	16.0.R1
Platforms	All

ebgp-default-reject-policy

Synopsis	Enable the **ebgp-default-reject-policy** context
Context	**configure** router *string* bgp group *string* ebgp-default-reject-policy
Tree	ebgp-default-reject-policy
Introduced	19.5.R1

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Platforms	All

export *boolean*

Synopsis	Enable default reject export policy for external peers
Context	**configure** router *string* bgp group *string* ebgp-default-reject-policy export *boolean*
Tree	export
Default	true
Introduced	19.5.R1
Platforms	All

import *boolean*

Synopsis	Enable default reject import policy for external peers
Context	**configure** router *string* bgp group *string* ebgp-default-reject-policy import *boolean*
Tree	import
Default	true
Introduced	19.5.R1
Platforms	All

egress-engineering

Synopsis	Enable the **egress-engineering** context
Context	**configure** router *string* bgp group *string* egress-engineering
Tree	egress-engineering
Introduced	21.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BGP egress engineering
Context	**configure** router *string* bgp group *string* egress-engineering admin-state *keyword*
Tree	admin-state
Description	This command administratively enables or disables egress engineering for the BGP. If enabled, peer node SIDs and peer adjacency SIDs are advertised in BGP-LS.

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Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	All

egress-peer-engineering-label-unicast *boolean*

Synopsis	Generate EPE label-unicast routes for group
Context	**configure** router *string* bgp group *string* egress-peer-engineering-label-unicast *boolean*
Tree	egress-peer-engineering-label-unicast
Description	When configured to **true**, BGP generates a label-unicast route for each /32 or /128 prefix that corresponds to the BGP group address in the scope of the command. These routes can be advertised to other routers to recursively resolve unlabeled BGP routes for AS external destinations. They support the Egress Peer Engineering (EPE) use case.
Default	false
Introduced	22.2.R1
Platforms	All

enforce-first-as *boolean*

Synopsis	Enforce the configured peer AS value in received routes
Context	**configure** router *string* bgp group *string* enforce-first-as *boolean*
Tree	enforce-first-as
Introduced	16.0.R1
Platforms	All

error-handling

Synopsis	Enter the **error-handling** context
Context	**configure** router *string* bgp group *string* error-handling
Tree	error-handling
Introduced	16.0.R1
Platforms	All

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update-fault-tolerance *boolean*

Synopsis	Tolerate non-critical errors in UPDATE messages
Context	**configure** router *string* bgp group *string* error-handling update-fault-tolerance *boolean*
Tree	update-fault-tolerance
Description	When configured to **true**, non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset. When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**. When this command inherits a value of **false**, all errors trigger a session reset.
Introduced	16.0.R1
Platforms	All

export

Synopsis	Enable the **export** context
Context	**configure** router *string* bgp group *string* export
Tree	export
Description	Commands in this context specify route policies that control the handling of outbound routes transmitted to certain peers. Route policies are configured in the **configure policy-options** context. When this context is unconfigured, the policy association for the group is inherited from the BGP global-level configuration.
Introduced	16.0.R1
Platforms	All

policy *(policy-expr-string | string)*

Synopsis	BGP export policy name
Context	**configure** router *string* bgp group *string* export policy *(policy-expr-string | string)*
Tree	policy
Description	This command specifies route policies that control the handling of outbound routes transmitted to certain peers. Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route.

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	Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@," "start@variable@end"," @variable@end", or"start@variable@".
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

extended-nh-encoding

Synopsis	Enable the **extended-nh-encoding** context
Context	**configure** router *string* bgp group *string* extended-nh-encoding
Tree	extended-nh-encoding
Description	Commands in this context specify the address families enabled to advertise the capability to receive label IPv4 routes, VPN IPv4 routes, or IPv6 next hops from peers. The peers should not send such routes unless notification has been received of this capability. If the router receives an enabled address family route from a peer to which it did not advertise the necessary capability, the UPDATE message will be considered malformed. This causes either a session reset or treat-as-withdraw behavior depending on the error handling settings. When the context is unconfigured, command settings are inherited from the higher level BGP configuration.
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Advertise encoding capability for IPv4 routes
Context	**configure** router *string* bgp group *string* extended-nh-encoding ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	19.5.R1

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Platforms	All

label-ipv4 *boolean*

Synopsis	Advertise encoding capability for label-IPv4 routes
Context	**configure** router *string* bgp group *string* extended-nh-encoding label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise encoding capability for VPN-IPv4 routes
Context	**configure** router *string* bgp group *string* extended-nh-encoding vpn-ipv4 *boolean*
Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

family

Synopsis	Enable the **family** context
Context	**configure** router *string* bgp group *string* family
Tree	family
Introduced	16.0.R1
Platforms	All

bgp-ls *boolean*

Synopsis	Advertise MP-BGP support for the BGP-LS address family
Context	**configure** router *string* bgp group *string* family bgp-ls *boolean*
Tree	bgp-ls
Default	false
Introduced	16.0.R1

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Platforms	All

evpn *boolean*

Synopsis	Advertise MP-BGP support for the EVPN address family
Context	**configure** router *string* bgp group *string* family evpn *boolean*
Tree	evpn
Default	false
Introduced	16.0.R1
Platforms	All

flow-ipv4 *boolean*

Synopsis	Advertise support for the flowspec-IPv4 address family
Context	**configure** router *string* bgp group *string* family flow-ipv4 *boolean*
Tree	flow-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

flow-ipv6 *boolean*

Synopsis	Advertise support for the flowspec-IPv6 address family
Context	**configure** router *string* bgp group *string* family flow-ipv6 *boolean*
Tree	flow-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

flow-vpn-ipv4 *boolean*

Synopsis	Advertise support for FlowSpec-VPN IPv4 address family
Context	**configure** router *string* bgp group *string* family flow-vpn-ipv4 *boolean*
Tree	flow-vpn-ipv4
Default	false

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Introduced	22.7.R1
Platforms	All

flow-vpn-ipv6 *boolean*

Synopsis	Advertise support for FlowSpec-VPN IPv6 address family
Context	**configure** router *string* bgp group *string* family flow-vpn-ipv6 *boolean*
Tree	flow-vpn-ipv6
Default	false
Introduced	22.7.R1
Platforms	All

ipv4 *boolean*

Synopsis	Add support for the IPv4 address family
Context	**configure** router *string* bgp group *string* family ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the IPv6 address family
Context	**configure** router *string* bgp group *string* family ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

l2-vpn *boolean*

Synopsis	Advertise MP-BGP support for the L2-VPN address family
Context	**configure** router *string* bgp group *string* family l2-vpn *boolean*
Tree	l2-vpn

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Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Advertise support for the label-IPv4 address family
Context	**configure** router *string* bgp group *string* family label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Advertise support for the label-IPv6 address family
Context	**configure** router *string* bgp group *string* family label-ipv6 *boolean*
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv4 *boolean*

Synopsis	Advertise support for the MCAST-IPv4 address family
Context	**configure** router *string* bgp group *string* family mcast-ipv4 *boolean*
Tree	mcast-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv6 *boolean*

Synopsis	Advertise support for the MCAST-IPv6 address family
Context	**configure** router *string* bgp group *string* family mcast-ipv6 *boolean*

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Tree	mcast-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv4 *boolean*

Synopsis	Advertise support for the IPv4 VPN MCAST address family
Context	**configure** router *string* bgp group *string* family mcast-vpn-ipv4 *boolean*
Tree	mcast-vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv6 *boolean*

Synopsis	Advertise support for the IPv6 VPN MCAST address family
Context	**configure** router *string* bgp group *string* family mcast-vpn-ipv6 *boolean*
Tree	mcast-vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mdt-safi *boolean*

Synopsis	Advertise MP-BGP support for MDT-SAFI address family
Context	**configure** router *string* bgp group *string* family mdt-safi *boolean*
Tree	mdt-safi
Default	false
Introduced	16.0.R1
Platforms	All

ms-pw *boolean*

Synopsis	Advertise support for multi-segment PW address family

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Context	**configure** router *string* bgp group *string* family ms-pw *boolean*
Tree	ms-pw
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv4 *boolean*

Synopsis	Advertise support for the IPv4 MCAST VPN address family
Context	**configure** router *string* bgp group *string* family mvpn-ipv4 *boolean*
Tree	mvpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv6 *boolean*

Synopsis	Advertise support for the IPv6 MCAST VPN address family
Context	**configure** router *string* bgp group *string* family mvpn-ipv6 *boolean*
Tree	mvpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

route-target *boolean*

Synopsis	Advertise MP-BGP support for RT constraint routes
Context	**configure** router *string* bgp group *string* family route-target *boolean*
Tree	route-target
Default	false
Introduced	16.0.R1
Platforms	All

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sr-policy-ipv4 *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv4 family
Context	**configure** router *string* bgp group *string* family sr-policy-ipv4 *boolean*
Tree	sr-policy-ipv4
Description	This command allows the router to advertise the capability for AFI1/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv4 destination.
Default	false
Introduced	16.0.R1
Platforms	All

sr-policy-ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv6 family
Context	**configure** router *string* bgp group *string* family sr-policy-ipv6 *boolean*
Tree	sr-policy-ipv6
Description	This command allows the router to advertise the capability for AFI2/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv6 destination.
Default	false
Introduced	19.10.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise MP-BGP support for IPv4 VPN address family
Context	**configure** router *string* bgp group *string* family vpn-ipv4 *boolean*
Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Advertise MP-BGP support for IPv6 VPN address family
Context	**configure** router *string* bgp group *string* family vpn-ipv6 *boolean*
Tree	vpn-ipv6

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Default	false
Introduced	16.0.R1
Platforms	All

fast-external-failover *boolean*

Synopsis	Drop external BGP session immediately when link fails
Context	**configure** router *string* bgp group *string* fast-external-failover *boolean*
Tree	fast-external-failover
Description	When this command inherits a value of **true**, the router drops an external BGP session on a single-hop route immediately when the local interface goes down. When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **true**. When configured to **false**, the BGP session remains up until the hold time expires.
Introduced	16.0.R1
Platforms	All

graceful-restart

Synopsis	Enable the **graceful-restart** context
Context	**configure** router *string* bgp group *string* graceful-restart
Tree	graceful-restart
Description	Commands in this context configure BGP graceful restart helper procedures for address families included in the GR capabilities of both peers. When the context is unconfigured, the command settings are inherited from the BGP global-level configuration.
Introduced	16.0.R1
Platforms	All

gr-notification *boolean*

Synopsis	Perform graceful restart procedures after NOTIFICATION
Context	**configure** router *string* bgp group *string* graceful-restart gr-notification *boolean*
Tree	gr-notification
Description	When configured to **true**, the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the

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session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error.

When configured to **false**, NOTIFICATION messages are not supported.

Default false

Introduced 16.0.R1

Platforms All

long-lived

Synopsis Enable the **long-lived** context

Context **configure** router *string* bgp group *string* graceful-restart long-lived

Tree long-lived

Description Commands in this context configure the BGP Long-Lived Graceful-Restart (LLGR) procedures.

LLGR, known informally as BGP persistence, is an extension of BGP GR that allows a session to stay down for a longer period of time. During this time, learned routes are marked and re-advertised as stale but they can continue to be used as routes of last resort.

The LLGR handling of a session failure can be invoked immediately or it can be delayed until the end of the traditional GR restart window.

Introduced 16.0.R1

Platforms All

advertise-stale-to-all-neighbors *boolean*

Synopsis Advertise stale routes to all BGP peers

Context **configure** router *string* bgp group *string* graceful-restart long-lived advertise-stale-to-all-neighbors *boolean*

Tree advertise-stale-to-all-neighbors

Default false

Introduced 16.0.R1

Platforms All

advertised-stale-time *number*

Synopsis Advertised long-lived stale time for LLGR routes

Context **configure** router *string* bgp group *string* graceful-restart long-lived advertised-stale-time *number*

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Tree	advertised-stale-time
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

family [family-type] *keyword*

Synopsis	Enter the **family** list instance
Context	**configure** router *string* bgp group *string* graceful-restart long-lived family *keyword*
Tree	family
Introduced	16.0.R1
Platforms	All

[**family-type**] *keyword*

Synopsis	Family type for family-specific LLGR configuration
Context	**configure** router *string* bgp group *string* graceful-restart long-lived family *keyword*
Tree	family
Options	ipv4, vpn-ipv4, ipv6, vpn-ipv6, l2-vpn, flow-ipv4, route-target, flow-ipv6, label-ipv4, label-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertised-stale-time *number*

Synopsis	LLGR stale routes time for family override
Context	**configure** router *string* bgp group *string* graceful-restart long-lived family *keyword* advertised-stale-time *number*
Tree	advertised-stale-time
Description	This command configures the long-lived stale routes time that is advertised by the router in its LLGR capability. This command applies to all AFI/SAFI in the advertised LLGR capability with a family-specific override.
Range	0 to 16777215

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Default	86400
Introduced	16.0.R1
Platforms	All

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	**configure** router *string* bgp group *string* graceful-restart long-lived family *keyword* helper-override-stale-time *number*
Tree	helper-override-stale-time
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This is a family-specific override value.
Range	0 to 16777216
Default	16777216
Introduced	16.0.R1
Platforms	All

forwarding-bits-set *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family
Context	**configure** router *string* bgp group *string* graceful-restart long-lived forwarding-bits-set *keyword*
Tree	forwarding-bits-set
Description	This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family. This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).
Options	none, all, non-fwd
Default	none
Introduced	16.0.R1
Platforms	All

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helper-override-restart-time *number*

Synopsis	Locally-configured override for restart time
Context	**configure** router *string* bgp group *string* graceful-restart long-lived helper-override-restart-time *number*
Tree	helper-override-restart-time
Description	This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.
Range	0 to 4095
Introduced	16.0.R1
Platforms	All

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	**configure** router *string* bgp group *string* graceful-restart long-lived helper-override-stale-time *number*
Tree	helper-override-stale-time
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

without-no-export *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	**configure** router *string* bgp group *string* graceful-restart long-lived without-no-export *boolean*
Tree	without-no-export
Description	When configured to **true**, LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0.

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When configured to **false**, LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.

Default	false
Introduced	16.0.R1
Platforms	All

restart-time *number*

Synopsis	Restart time advertised by GR capability
Context	**configure** router *string* bgp group *string* graceful-restart restart-time *number*
Tree	restart-time
Range	0 to 4095
Default	300
Introduced	16.0.R1
Platforms	All

stale-routes-time *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	**configure** router *string* bgp group *string* graceful-restart stale-routes-time *number*
Tree	stale-routes-time
Range	1 to 3600
Default	360
Introduced	16.0.R1
Platforms	All

hold-time

Synopsis	Enter the **hold-time** context
Context	**configure** router *string* bgp group *string* hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	All

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minimum-hold-time *number*

Synopsis	Minimum hold time between successive messages
Context	**configure** router *string* bgp group *string* hold-time minimum-hold-time *number*
Tree	minimum-hold-time
Description	This command specifies the minimum hold time that is accepted for the session. If a peer proposes a hold time lower than this value, the session attempt is rejected. When unconfigured, the command value is inherited from the BGP global-level setting.
Range	0 | 3 to 65536
Default	0
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Maximum time BGP waits between successive messages
Context	**configure** router *string* bgp group *string* hold-time seconds *number*
Tree	seconds
Description	This command configures the maximum time BGP waits between successive messages (either keepalive or update) from its peer before closing the connection. Although the implementation allows setting the keepalive timer at the BGP group level times separately, the configured keepalive timer is overridden by this value under the following circumstances. • If the specified hold time is less than the configured keepalive time, the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed. • If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. The connection with the peer is up permanently and no keepalive packets are sent to the peer. When unconfigured, the command setting is inherited from the BGP global-level configuration.
Range	0 | 3 to 65535
Introduced	16.0.R1
Platforms	All

import

Synopsis	Enable the **import** context

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Context	**configure** router *string* bgp group *string* import
Tree	import
Description	Commands in this context specify route policies that control the handling of inbound routes received from certain peers. Route policies are configured in the **configure policy-options** context. When this context is unconfigured, the policy association for the group is inherited from the BGP global-level configuration.
Introduced	16.0.R1
Platforms	All

policy *(policy-expr-string | string)*

Synopsis	BGP import policy name
Context	**configure** router *string* bgp group *string* import policy *(policy-expr-string | string)*
Tree	policy
Description	This command specifies route policies that control the handling of inbound routes received from certain peers. Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route. Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@," "start@variable@end"," @variable@end", or"start@variable@".
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

initial-send-delay-zero *boolean*

Synopsis	Send BGP updates as soon as the session comes up
Context	**configure** router *string* bgp group *string* initial-send-delay-zero *boolean*

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Tree	initial-send-delay-zero
Description	When configured to **true**, BGP updates are sent as soon as the session comes up. When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**. When this command inherits a value of **false**, BGP waits to send UPDATE messages for the minimum route advertisement time after a session is established.
Introduced	16.0.R1
Platforms	All

keepalive *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	**configure** router *string* bgp group *string* keepalive *number*
Tree	keepalive
Description	This command configures the BGP keepalive timer value. A keepalive message is sent every time this timer expires. This value is generally one-third of the hold time interval configured in the **hold-time seconds** context. Although the implementation allows this keepalive value and the hold time interval to be independently set, under the following circumstances, the configured keepalive value is overridden by the hold time interval value: • If the specified keepalive value is greater than the configured hold time, the specified keepalive value is ignored and the timer value is set to one third of the current hold time value. • If the specified hold time interval is less than the configured keepalive value, the keepalive value is reset to one third of the specified hold time interval. • If the hold time interval is set to zero, the configured keepalive value is ignored. This means that the connection with the peer is up permanently and no keepalive packets are sent to the peer. When unconfigured, the command inherits the BGP global-level setting.
Range	0 to 21845
Introduced	16.0.R1
Platforms	All

label-preference *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	**configure** router *string* bgp group *string* label-preference *number*
Tree	label-preference

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Range	1 to 255
Introduced	16.0.R1
Platforms	All

link-bandwidth

Synopsis	Enter the **link-bandwidth** context
Context	**configure** router *string* bgp group *string* link-bandwidth
Tree	link-bandwidth
Description	Commands in this context specify the handling of the Link Bandwidth Extended Community attached to specific BGP routes. When all used multipaths of an IP prefix correspond to BGP routes with a Link Bandwidth EC, the datapath is programmed to use weighted ECMP across the BGP next hops in proportion to the bandwidth values.
Introduced	16.0.R3
Platforms	All

accept-from-ebgp

Synopsis	Enter the **accept-from-ebgp** context
Context	**configure** router *string* bgp group *string* link-bandwidth accept-from-ebgp
Tree	accept-from-ebgp
Introduced	16.0.R4
Platforms	All

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	**configure** router *string* bgp group *string* link-bandwidth accept-from-ebgp ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R4
Platforms	All

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ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	**configure** router *string* bgp group *string* link-bandwidth accept-from-ebgp ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	**configure** router *string* bgp group *string* link-bandwidth accept-from-ebgp label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	**configure** router *string* bgp group *string* link-bandwidth accept-from-ebgp label-ipv6 *boolean*
Tree	label-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	**configure** router *string* bgp group *string* link-bandwidth accept-from-ebgp vpn-ipv4 *boolean*
Tree	vpn-ipv4
Default	false
Introduced	16.0.R4

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Platforms	All

vpn-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	**configure** router *string* bgp group *string* link-bandwidth accept-from-ebgp vpn-ipv6 *boolean*
Tree	vpn-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

add-to-received-ebgp

Synopsis	Enter the **add-to-received-ebgp** context
Context	**configure** router *string* bgp group *string* link-bandwidth add-to-received-ebgp
Tree	add-to-received-ebgp
Introduced	16.0.R3
Platforms	All

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	**configure** router *string* bgp group *string* link-bandwidth add-to-received-ebgp ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R3
Platforms	All

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	**configure** router *string* bgp group *string* link-bandwidth add-to-received-ebgp ipv6 *boolean*
Tree	ipv6

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Default	false
Introduced	16.0.R3
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	**configure** router *string* bgp group *string* link-bandwidth add-to-received-ebgp label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R3
Platforms	All

label-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	**configure** router *string* bgp group *string* link-bandwidth add-to-received-ebgp label-ipv6 *boolean*
Tree	label-ipv6
Default	false
Introduced	16.0.R3
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	**configure** router *string* bgp group *string* link-bandwidth add-to-received-ebgp vpn-ipv4 *boolean*
Tree	vpn-ipv4
Default	false
Introduced	16.0.R3
Platforms	All

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vpn-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	**configure** router *string* bgp group *string* link-bandwidth add-to-received-ebgp vpn-ipv6 *boolean*
Tree	vpn-ipv6
Default	false
Introduced	16.0.R3
Platforms	All

aggregate-used-paths

Synopsis	Enter the **aggregate-used-paths** context
Context	**configure** router *string* bgp group *string* link-bandwidth aggregate-used-paths
Tree	aggregate-used-paths
Introduced	16.0.R4
Platforms	All

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	**configure** router *string* bgp group *string* link-bandwidth aggregate-used-paths ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R4
Platforms	All

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	**configure** router *string* bgp group *string* link-bandwidth aggregate-used-paths ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R4
Platforms	All

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label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	**configure** router *string* bgp group *string* link-bandwidth aggregate-used-paths label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	**configure** router *string* bgp group *string* link-bandwidth aggregate-used-paths label-ipv6 *boolean*
Tree	label-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	**configure** router *string* bgp group *string* link-bandwidth aggregate-used-paths vpn-ipv4 *boolean*
Tree	vpn-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	**configure** router *string* bgp group *string* link-bandwidth aggregate-used-paths vpn-ipv6 *boolean*
Tree	vpn-ipv6

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Default	false
Introduced	16.0.R4
Platforms	All

send-to-ebgp

Synopsis	Enter the **send-to-ebgp** context
Context	**configure** router *string* bgp group *string* link-bandwidth send-to-ebgp
Tree	send-to-ebgp
Introduced	16.0.R4
Platforms	All

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	**configure** router *string* bgp group *string* link-bandwidth send-to-ebgp ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R4
Platforms	All

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	**configure** router *string* bgp group *string* link-bandwidth send-to-ebgp ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	**configure** router *string* bgp group *string* link-bandwidth send-to-ebgp label-ipv4 *boolean*
Tree	label-ipv4

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Default	false
Introduced	16.0.R4
Platforms	All

label-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	**configure** router *string* bgp group *string* link-bandwidth send-to-ebgp label-ipv6 *boolean*
Tree	label-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	**configure** router *string* bgp group *string* link-bandwidth send-to-ebgp vpn-ipv4 *boolean*
Tree	vpn-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	**configure** router *string* bgp group *string* link-bandwidth send-to-ebgp vpn-ipv6 *boolean*
Tree	vpn-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

local-address *(ipv4-address-no-zone | ipv6-address-no-zone | interface-name)*

Synopsis	Local IP address used when communicating with BGP peers
Context	**configure** router *string* bgp group *string* local-address *(ipv4-address-no-zone | ipv6-address-no-zone | interface-name)*

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Tree	local-address
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

local-as

Synopsis	Enter the **local-as** context
Context	**configure** router *string* bgp group *string* local-as
Tree	local-as
Introduced	16.0.R1
Platforms	All

as-number *number*

Synopsis	Local (or virtual) BGP AS number
Context	**configure** router *string* bgp group *string* local-as as-number *number*
Tree	as-number
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

prepend-global-as *boolean*

Synopsis	Prepend global ASN when advertising routes to BGP peer
Context	**configure** router *string* bgp group *string* local-as prepend-global-as *boolean*
Tree	prepend-global-as
Description	When configured to **true**, the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer. When configured to **false**, the global ASN is not included in the AS_PATH attribute.
Default	true
Introduced	16.0.R1
Platforms	All

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private *boolean*

Synopsis	Hide the local ASN in sent paths learned from peering
Context	**configure** router *string* bgp group *string* local-as private *boolean*
Tree	private
Description	When configured to **true**, the local AS number is only advertised to peers that use the local ASN for establishing BGP peering sessions. When configured to **false**, the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.
Default	false
Introduced	16.0.R1
Platforms	All

local-preference *number*

Synopsis	Default local preference if not in incoming routes
Context	**configure** router *string* bgp group *string* local-preference *number*
Tree	local-preference
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

loop-detect *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	**configure** router *string* bgp group *string* loop-detect *keyword*
Tree	loop-detect
Options	drop-peer, ignore-loop, off, discard-route
Introduced	16.0.R1
Platforms	All

loop-detect-threshold *number*

Synopsis	Threshold for the global ASN in a received AS path
Context	**configure** router *string* bgp group *string* loop-detect-threshold *number*
Tree	loop-detect-threshold

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Range	0 to 15
Introduced	16.0.R6
Platforms	All

med-out *(number | keyword)*

Synopsis	Default MED attribute value to advertise to peers
Context	**configure** router *string* bgp group *string* med-out *(number | keyword)*
Tree	med-out
Max. Range	0 to 4294967295
Options	igp-cost
Introduced	16.0.R1
Platforms	All

min-route-advertisement *number*

Synopsis	Minimum time before a prefix can be advertised to peer
Context	**configure** router *string* bgp group *string* min-route-advertisement *number*
Tree	min-route-advertisement
Range	1 to 255
Introduced	16.0.R1
Platforms	All

monitor

Synopsis	Enable the **monitor** context
Context	**configure** router *string* bgp group *string* monitor
Tree	monitor
Description	Commands in this context specify BMP-related configurations at the BGP group level. When this context is unconfigured, the command settings are inherited from the BGP global-level configuration.
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of BMP monitoring
Context	**configure** router *string* bgp group *string* monitor admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

all-stations *boolean*

Synopsis	Send BMP messages to all configured stations
Context	**configure** router *string* bgp group *string* monitor all-stations *boolean*
Tree	all-stations
Description	When configured to **true**, this command specifies that BMP messages are to be sent to all configured BMP monitoring stations. When configured to **false**, the command is not used to indicate the stations which can receive BMP messages. The **station** command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.
Default	false
Introduced	16.0.R1
Platforms	All

route-monitoring

Synopsis	Enter the **route-monitoring** context
Context	**configure** router *string* bgp group *string* monitor route-monitoring
Tree	route-monitoring
Introduced	16.0.R1
Platforms	All

post-policy *boolean*

Synopsis	Allow post-policy route-monitoring messages to be sent
Context	**configure** router *string* bgp group *string* monitor route-monitoring post-policy *boolean*
Tree	post-policy

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Default	false
Introduced	16.0.R1
Platforms	All

pre-policy *boolean*

Synopsis	Allow pre-policy route-monitoring messages to be sent
Context	**configure** router *string* bgp group *string* monitor route-monitoring pre-policy *boolean*
Tree	pre-policy
Default	false
Introduced	16.0.R1
Platforms	All

station [station-name] *reference*

Synopsis	Add a list entry for **station**
Context	**configure** router *string* bgp group *string* monitor station *reference*
Tree	station
Description	This command identifies a BMP monitoring station for which BMP messages are to be sent.
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[**station-name**] *reference*

Synopsis	BMP monitoring station
Context	**configure** router *string* bgp group *string* monitor station *reference*
Tree	station
Reference	**configure** bmp station *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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multihop *number*

Synopsis	TTL in IP packet headers for EBGP peers multi-hops away
Context	**configure** router *string* bgp group *string* multihop *number*
Tree	multihop
Range	1 to 255
Introduced	16.0.R1
Platforms	All

multipath-eligible *boolean*

Synopsis	Allow routes from group peers in multipath eligibility
Context	**configure** router *string* bgp group *string* multipath-eligible *boolean*
Tree	multipath-eligible
Default	false
Introduced	19.5.R1
Platforms	All

next-hop-self *boolean*

Synopsis	Advertise routes with local address as next-hop address
Context	**configure** router *string* bgp group *string* next-hop-self *boolean*
Tree	next-hop-self
Default	false
Introduced	16.0.R1
Platforms	All

next-hop-unchanged

Synopsis	Enter the **next-hop-unchanged** context
Context	**configure** router *string* bgp group *string* next-hop-unchanged
Tree	next-hop-unchanged
Description	Commands in this context specify the IP address families that allow unchanged BGP next-hops when sending BGP routes to peers in the group.
Introduced	16.0.R1
Platforms	All

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evpn *boolean*

Synopsis	Advertise EVPN routes with unchanged BGP next hop
Context	**configure** router *string* bgp group *string* next-hop-unchanged evpn *boolean*
Tree	evpn
Default	false
Introduced	20.2.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Advertise label-IPv4 routes with unchanged BGP next hop
Context	**configure** router *string* bgp group *string* next-hop-unchanged label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Advertise label-IPv6 routes with unchanged BGP next hop
Context	**configure** router *string* bgp group *string* next-hop-unchanged label-ipv6 *boolean*
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise VPN IPv4 routes with unchanged BGP next hop
Context	**configure** router *string* bgp group *string* next-hop-unchanged vpn-ipv4 *boolean*
Tree	vpn-ipv4
Default	false
Introduced	20.2.R1
Platforms	All

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vpn-ipv6 *boolean*

Synopsis	Advertise VPN IPv6 routes with unchanged BGP next hop
Context	**configure** router *string* bgp group *string* next-hop-unchanged vpn-ipv6 *boolean*
Tree	vpn-ipv6
Default	false
Introduced	20.2.R1
Platforms	All

origin-validation

Synopsis	Enter the **origin-validation** context
Context	**configure** router *string* bgp group *string* origin-validation
Tree	origin-validation
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable support for unlabeled unicast IPv4 routes
Context	**configure** router *string* bgp group *string* origin-validation ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	**configure** router *string* bgp group *string* origin-validation ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

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label-ipv4 *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	**configure** router *string* bgp group *string* origin-validation label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Enable support for labeled-unicast IPv6 routes
Context	**configure** router *string* bgp group *string* origin-validation label-ipv6 *boolean*
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

outbound-route-filtering

Synopsis	Enable the **outbound-route-filtering** context
Context	**configure** router *string* bgp group *string* outbound-route-filtering
Tree	outbound-route-filtering
Description	Commands in this context configure the send and receive capabilities for Outbound Route Filtering (ORF). When this context is unconfigured, the group command settings are inherited from the BGP global-level configuration.
Introduced	16.0.R1
Platforms	All

extended-community

Synopsis	Enable the **extended-community** context
Context	**configure** router *string* bgp group *string* outbound-route-filtering extended-community
Tree	extended-community

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Description	Commands in this context configure the ORF send and receive capabilities based on Extended Communities. When this context is unconfigured, the command settings are inherited from the global-level configuration.
Introduced	16.0.R1
Platforms	All

accept-orf *boolean*

Synopsis	Negotiate with peer to accept BGP ORF filters
Context	**configure** router *string* bgp group *string* outbound-route-filtering extended-community accept-orf *boolean*
Tree	accept-orf
Description	When configured to **true**, the receive capability in the BGP ORF is negotiated with a peer and ORF filters can be accepted from peers. When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**. When this command inherits a value of **false**, the accept capability in the BGP ORF is removed and any existing ORF filters that are currently in place are cleared.
Introduced	16.0.R1
Platforms	All

send-orf

Synopsis	Enable the **send-orf** context
Context	**configure** router *string* bgp group *string* outbound-route-filtering extended-community send-orf
Tree	send-orf
Description	Commands in this context allow BGP to negotiate the send capability in the ORF negotiation with a peer. The send capability also causes the router to send a community filter, prefix filter, or AS path filter configured as an inbound filter on the BGP session to its peer as an ORF Action ADD. When this context is unconfigured, the command settings are inherited from the BGP global-level configuration.
Introduced	16.0.R1
Platforms	All

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route-target [community-name] *string*

Synopsis	Add a list entry for **route-target**
Context	**configure** router *string* bgp group *string* outbound-route-filtering extended-community send-orf route-target *string*
Tree	route-target
Introduced	16.0.R1
Platforms	All

[**community-name**] *string*

Synopsis	Route target community name
Context	**configure** router *string* bgp group *string* outbound-route-filtering extended-community send-orf route-target *string*
Tree	route-target
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

passive *boolean*

Synopsis	Enable passive mode for BGP communication
Context	**configure** router *string* bgp group *string* passive *boolean*
Tree	passive
Default	false
Introduced	16.0.R1
Platforms	All

path-mtu-discovery *boolean*

Synopsis	Enable Path MTU Discovery
Context	**configure** router *string* bgp group *string* path-mtu-discovery *boolean*
Tree	path-mtu-discovery
Description	When configured to **true**, Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.

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When set to **true**, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.

When configured to **false** and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.

Introduced 16.0.R1

Platforms All

peer-as *number*

Synopsis Peer AS number

Context **configure** router *string* bgp group *string* peer-as *number*

Tree peer-as

Range 1 to 4294967295

Introduced 16.0.R1

Platforms All

peer-ip-tracking *boolean*

Synopsis Enable BGP peer tracking

Context **configure** router *string* bgp group *string* peer-ip-tracking *boolean*

Tree peer-ip-tracking

Description When configured to **true**, this command enables BGP peer tracking.

Peer tracking should be used with caution. Peer tracking can tear a session down even if the loss of connectivity turns out to be short-lived (for example, while the IGP protocol is re-converging). Next-hop tracking, which is always enabled, handles temporary connectivity issues more effectively.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, peer tracking is disabled.

Introduced 16.0.R1

Platforms All

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preference *number*

Synopsis	Route preference for routes learned from all peers
Context	**configure** router *string* bgp group *string* preference *number*
Tree	preference
Range	1 to 255
Introduced	16.0.R1
Platforms	All

prefix-limit [family] *keyword*

Synopsis	Enter the **prefix-limit** list instance
Context	**configure** router *string* bgp group *string* prefix-limit *keyword*
Tree	prefix-limit
Description	Commands in this context limit the number of BGP routes per address family received from a BGP peer and define the actions when crossing the configured maximum.
Introduced	16.0.R1
Platforms	All

[**family**] *keyword*

Synopsis	Address family to which the limit applies
Context	**configure** router *string* bgp group *string* prefix-limit *keyword*
Tree	prefix-limit
Options	ipv4, vpn-ipv4, ipv6, mcast-ipv4, vpn-ipv6, l2-vpn, mvpn-ipv4, mdt-safi, ms-pw, flow-ipv4, route-target, mcast-vpn-ipv4, mvpn-ipv6, flow-ipv6, evpn, mcast-ipv6, label-ipv4, label-ipv6, bgp-ls, mcast-vpn-ipv6, sr-policy-ipv4, sr-policy-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

hold-excess *number*

Synopsis	Percentage of maximum routes to install in route table
Context	**configure** router *string* bgp group *string* prefix-limit *keyword* hold-excess *number*
Tree	hold-excess

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Description This command specifies the percentage of maximum routes that are allowed to be installed in the route table for the configured address family. If a peer within scope of the configuration exceeds the limit, the overflow routes are held in the BGP RIB as inactive routes and are ineligible for forwarding and advertisement to other peers. If the **post-import** command is configured to **true**, only routes not rejected by import policies count toward the limit.

A BGP route in an overflow state is reconsidered for activation and reinstallation when an UPDATE message is received for the route.

This command is mutually exclusive with the **idle-timeou**t and l**og-only** commands.

Range 1 to 100

Introduced 23.7.R1

Platforms All

idle-timeout *number*

Synopsis Time BGP peering remains idle before reconnecting

Context **configure** router *string* bgp group *string* prefix-limit *keyword* idle-timeout *number*

Tree idle-timeout

Description This command configures the time in minutes before a BGP peer is automatically re-established after reaching the prefix limit.

When unconfigured, the BGP peer stays down until the operator performs a reset. This command and **log-only** cannot be configured simultaneously.

Range 1 to 1024

Introduced 16.0.R1

Platforms All

log-only *boolean*

Synopsis Send warning message at threshold instead of take-down

Context **configure** router *string* bgp group *string* prefix-limit *keyword* log-only *boolean*

Tree log-only

Description When configured to **true**, the router disables the BGP session from being taken down upon reaching the prefix limit. Instead, only a warning message is sent when the limit is reached. A warning message is also sent when the configured threshold percentage of the limit is reached.

This command and **idle-timeout** cannot be configured simultaneously.

When configured to **false**, the router generates a log event and takes the BGP session down upon reaching the prefix limit.

Default false

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Introduced	16.0.R1
Platforms	All

maximum *number*

Synopsis	Maximum number of routes to be learned from a peer
Context	**configure** router *string* bgp group *string* prefix-limit *keyword* maximum *number*
Tree	maximum
Description	This command configures the maximum number of BGP routes of the specified address family that can be received from a peer before administrative action is taken. When **log-only** is unconfigured, the BGP session is taken down whenever the limit of any family is exceeded even if the limits of the other family has not been exceeded.
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R2
Platforms	All

post-import *boolean*

Synopsis	Apply limit only to routes accepted by import policies
Context	**configure** router *string* bgp group *string* prefix-limit *keyword* post-import *boolean*
Tree	post-import
Description	When configured to **true**, the system limits the number of routes that are accepted by import policies. Routes rejected by import policies are not counted against the configured limit. When configured to **false**, the system limits the number of routes to all routes received from the peer.
Default	false
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Percentage threshold that triggers a warning message
Context	**configure** router *string* bgp group *string* prefix-limit *keyword* threshold *number*
Tree	threshold

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Range	1 to 100
Default	90
Introduced	16.0.R1
Platforms	All

remove-private

Synopsis	Enable the **remove-private** context
Context	**configure** router *string* bgp group *string* remove-private
Tree	remove-private
Introduced	16.0.R1
Platforms	All

limited *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	**configure** router *string* bgp group *string* remove-private limited *boolean*
Tree	limited
Default	false
Introduced	16.0.R1
Platforms	All

replace *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	**configure** router *string* bgp group *string* remove-private replace *boolean*
Tree	replace
Default	false
Introduced	19.10.R1
Platforms	All

skip-peer-as *boolean*

Synopsis	Keep private ASN if it is the same as the BGP peer ASN
Context	**configure** router *string* bgp group *string* remove-private skip-peer-as *boolean*

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Tree	skip-peer-as
Default	false
Introduced	16.0.R1
Platforms	All

segment-routing-v6

Synopsis	Enable the **segment-routing-v6** context
Context	**configure** router *string* bgp group *string* segment-routing-v6
Tree	segment-routing-v6
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

route-advertisement

Synopsis	Enable the **route-advertisement** context
Context	**configure** router *string* bgp group *string* segment-routing-v6 route-advertisement
Tree	route-advertisement
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

drop-routes-with-srv6-tlvs *boolean*

Synopsis	Drop BGP routes with SRv6 TLVs
Context	**configure** router *string* bgp group *string* segment-routing-v6 route-advertisement drop-routes-with-srv6-tlvs *boolean*
Tree	drop-routes-with-srv6-tlvs
Description	When configured to **true**, the router drops and does not advertise BGP routes (that belong to any address family) with SRv6 TLVs. When configured to **false**, the router advertises BGP routes with SRv6 TLVs.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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family [family-type] *keyword*

Synopsis	Enter the **family** list instance
Context	**configure** router *string* bgp group *string* segment-routing-v6 route-advertisement family *keyword*
Tree	family
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**family-type**] *keyword*

Synopsis	IP address type that SRv6 route attributes apply to
Context	**configure** router *string* bgp group *string* segment-routing-v6 route-advertisement family *keyword*
Tree	family
Options	ipv4, ipv6
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

strip-srv6-tlvs *boolean*

Synopsis	Strip SRv6 TLVs from BGP routes advertised to peers
Context	**configure** router *string* bgp group *string* segment-routing-v6 route-advertisement family *keyword* strip-srv6-tlvs *boolean*
Tree	strip-srv6-tlvs
Description	When configured to **true**, BGP routes that belong to the address family specified using the **family** command are advertised to peers with SRv6 TLVs removed. Locally or remotely added SRv6 TLVs can be removed. When configured to **false**, SRv6 TLVs are not stripped from BGP routes advertised to peers.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

selective-label-ipv4-install *boolean*

Synopsis	Enable selective download for bgp label-ipv4 routes

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Context	**configure** router *string* bgp group *string* selective-label-ipv4-install *boolean*
Tree	selective-label-ipv4-install
Introduced	19.10.R1
Platforms	All

send-communities

Synopsis	Enter the **send-communities** context
Context	**configure** router *string* bgp group *string* send-communities
Tree	send-communities
Introduced	16.0.R1
Platforms	All

extended *boolean*

Synopsis	Advertise the Extended Communities attribute to peers
Context	**configure** router *string* bgp group *string* send-communities extended *boolean*
Tree	extended
Description	When unconfigured, this command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **true**. When this command inherits a value of **true**, BGP extended communities are sent to peers in the Extended Communities attribute. When configured to **false**, all extended communities are removed from all routes advertised to BGP peers.
Introduced	16.0.R1
Platforms	All

large *boolean*

Synopsis	Advertise the Large Communities attribute to peers
Context	**configure** router *string* bgp group *string* send-communities large *boolean*
Tree	large
Description	When unconfigured, this command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **true**. When this command inherits a value of **true**, BGP large communities are sent to peers in the Large Communities attribute.

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When configured to **false**, all large communities are removed from all routes advertised to BGP peers.

Introduced 16.0.R1

Platforms All

standard *boolean*

Synopsis Advertise the Communities attribute to peers

Context **configure** router *string* bgp group *string* send-communities standard *boolean*

Tree standard

Description When unconfigured, this command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **true**.

When this command inherits a value of **true**, BGP standard communities are sent to peers in the Communities attribute.

When configured to **false**, all standard communities are removed from all routes advertised to BGP peers.

Introduced 16.0.R1

Platforms All

send-default

Synopsis Enable the **send-default** context

Context **configure** router *string* bgp group *string* send-default

Tree send-default

Introduced 19.7.R1

Platforms All

export-policy *reference*

Synopsis Export policy name

Context **configure** router *string* bgp group *string* send-default export-policy *reference*

Tree export-policy

Reference **configure** policy-options policy-statement *string*

Introduced 19.7.R1

Platforms All

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ipv4 *boolean*

Synopsis	Generate and advertise an IPv4 default route (0/0)
Context	**configure** router *string* bgp group *string* send-default ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	19.7.R1
Platforms	All

ipv6 *boolean*

Synopsis	Generate and advertise an IPv6 default route (::/0)
Context	**configure** router *string* bgp group *string* send-default ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	19.7.R1
Platforms	All

split-horizon *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	**configure** router *string* bgp group *string* split-horizon *boolean*
Tree	split-horizon
Description	When configured to **true**, this command enables the use of split-horizon. This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP. Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary. When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**. When this command inherits a value of **false**, the use of split-horizon is disabled.
Introduced	16.0.R1
Platforms	All

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static-group *boolean*

Synopsis	Use group for static peers
Context	**configure** router *string* bgp group *string* static-group *boolean*
Tree	static-group
Default	true
Introduced	16.0.R1
Platforms	All

tcp-mss *(number | keyword)*

Synopsis	TCP maximum segment size override
Context	**configure** router *string* bgp group *string* tcp-mss *(number | keyword)*
Tree	tcp-mss
Description	This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command). The configured value controls two properties of the TCP connection as follows: TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router. TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.
Range	384 to 9746
Options	ip-stack
Introduced	21.2.R1
Platforms	All

third-party-nexthop *boolean*

Synopsis	Apply third-party next-hop processing to EBGP peers
Context	**configure** router *string* bgp group *string* third-party-nexthop *boolean*
Tree	third-party-nexthop
Description	When configured to **true**, this command enables the router to send third-party next hop to EBGP peers in the same subnet as the source peer. The address family of the transport must match the address family of the route. When an IPv4 or IPv6 route is received from one EBGP peer and advertised to another EBGP peer in the same IP subnet, the BGP next hop is left unchanged.

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When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, third-party next-hop processing is disabled and the next hop carries the IP address of the interface used to establish the TCP connection to the peer.

Introduced 16.0.R1

Platforms All

ttl-security *number*

Synopsis Minimum TTL value for an incoming BGP packet

Context **configure** router *string* bgp group *string* ttl-security *number*

Tree ttl-security

Description This command configures the minimum TTL value that BGP accepst from an incoming packet. A packet with a TTL value less than the minimum configured TTL value is discarded.

Range 1 to 255

Introduced 16.0.R1

Platforms All

type *keyword*

Synopsis BGP peer type

Context **configure** router *string* bgp group *string* type *keyword*

Tree type

Options no-type, internal, external

Default no-type

Introduced 16.0.R1

Platforms All

vpn-apply-export *boolean*

Synopsis Apply base-instance BGP export policies to VPN routes

Context **configure** router *string* bgp group *string* vpn-apply-export *boolean*

Tree vpn-apply-export

Description When configured to **true**, base-instance BGP export route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes.

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When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the export policies are not applied.

Introduced 16.0.R1

Platforms All

vpn-apply-import *boolean*

Synopsis Apply base-instance BGP import policies to VPN routes

Context **configure** router *string* bgp group *string* vpn-apply-import *boolean*

Tree vpn-apply-import

Description When configured to **true**, base-instance BGP import route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the import policies are not applied.

Introduced 16.0.R1

Platforms All

hold-time

Synopsis Enter the **hold-time** context

Context **configure** router *string* bgp hold-time

Tree hold-time

Introduced 16.0.R1

Platforms All

minimum-hold-time *number*

Synopsis Minimum hold time between successive messages

Context **configure** router *string* bgp hold-time minimum-hold-time *number*

Tree minimum-hold-time

Description This command specifies the minimum hold time that is accepted for the session. If a peer proposes a hold time lower than this value, the session attempt is rejected.

Range 0 | 3 to 65535

Default 0

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Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Maximum time BGP waits between successive messages
Context	**configure** router *string* bgp hold-time seconds *number*
Tree	seconds
Description	This command configures the maximum time BGP waits between successive messages (either keepalive or update) from its peer before closing the connection. Although the implementation allows setting the keepalive timer at the BGP global level times separately, the configured keepalive timer is overridden by this value under the following circumstances. • If the specified hold time is less than the configured keepalive time, the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed. • If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. The connection with the peer is up permanently and no keepalive packets are sent to the peer.
Range	0 | 3 to 65535
Default	90
Introduced	16.0.R1
Platforms	All

ibgp-multipath *boolean*

Synopsis	Enable IBGP multipath load balancing
Context	**configure** router *string* bgp ibgp-multipath *boolean*
Tree	ibgp-multipath
Description	When configured to **true**, this command enables IBGP multipath load balancing when adding BGP routes to the route table if the route resolving the BGP next hop offers multiple next hops. When configured to **false**, this command disables IBGP multipath load balancing.
Default	false
Introduced	16.0.R1
Platforms	All

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import

Synopsis	Enable the **import** context
Context	**configure** router *string* bgp import
Tree	import
Description	Commands in this context specify route policies that control the handling of inbound routes received from certain peers. Route policies are configured in the **configure policy-options** context. When no import policies are specified in this context, BGP routes are accepted by default.
Introduced	16.0.R1
Platforms	All

policy *(policy-expr-string | string)*

Synopsis	BGP import policy name
Context	**configure** router *string* bgp import policy *(policy-expr-string | string)*
Tree	policy
Description	This command specifies a list of objects, where each object is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route. Only one of the objects referenced by this command is allowed to be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@," "start@variable@end"," @variable@end", or"start@variable@".
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

initial-send-delay-zero *boolean*

Synopsis	Send BGP updates as soon as session comes up

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Context	**configure** router *string* bgp initial-send-delay-zero *boolean*
Tree	initial-send-delay-zero
Default	false
Introduced	16.0.R1
Platforms	All

inter-as-vpn *boolean*

Synopsis	Allow advertisement of VPN routes across AS boundaries
Context	**configure** router *string* bgp inter-as-vpn *boolean*
Tree	inter-as-vpn
Description	When configured to **true**, VPNs can exchange routes across AS boundaries, providing model B connectivity. When configured to **false**, ASBRs are prevented from advertising VPN routes to peers in other ASs.
Default	false
Introduced	16.0.R1
Platforms	All

keepalive *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	**configure** router *string* bgp keepalive *number*
Tree	keepalive
Range	0 to 21845
Default	30
Introduced	16.0.R1
Platforms	All

label-allocation

Synopsis	Enter the **label-allocation** context
Context	**configure** router *string* bgp label-allocation
Tree	label-allocation
Introduced	20.10.R1

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Platforms All

label-ipv6

Synopsis Enter the **label-ipv6** context

Context **configure** router *string* bgp label-allocation label-ipv6

Tree label-ipv6

Description This command controls the label allocation behavior for labeled unicast IPv6 routes. The label options are **explicit-null** and **normal**.

Introduced 20.10.R1

Platforms All

explicit-null *boolean*

Synopsis Apply advertised label and associated programming rules

Context **configure** router *string* bgp label-allocation label-ipv6 explicit-null *boolean*

Tree explicit-null

Description When configured to **true**, this command uses the advertised label and associated programming rules on this instance of BGP. The following applies:

- The router is required to act as the BGP next-hop of a label-unicast IPv6 route that it is advertising. It sets the BGP label value to IPv6 explicit null (value 2), forcing a POP behavior for received packets.
- The received label-unicast IPv6 routes never create tunnels in TTM that can be used to resolve other BGP routes (with an IPv6 next-hop).
- A received label-unicast IPv6 route can be resolved by a label-ipv4 BGP tunnel that is transported over a stacked tunnel (SR-TE LSP or LDPoRSVP LSP).

When configured to **false**, advertised label IPv6 programming rules are not used. The following applies

- When the router is required to act as the BGP next-hop of a label-unicast IPv6 route that it is advertising, it sets the BGP label value to a proper value in the dynamic label range and programs a POP or SWAP operation for that label, depending on the origin of the route and various import policy actions that could apply to the route.
- Received label-unicast IPv6 routes that have a prefix length of 128 bits are automatically installed in TTM so that they can be used to resolve other (non-labeled-unicast) BGP routes (with an IPv6 next-hop).
- A received label-unicast IPv6 route cannot be resolved by a label-ipv4 BGP tunnel that is transported over a stacked tunnel (SR-TE LSP or LDPoRSVP LSP).
- The label-ipv6 routes used for ECMP toward an IPv6 destination cannot be a mix of routes with regular label values and routes with special (IPv6 explicit null) label values.

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	Changes in the value of this leaf do not cause the BGP sessions of the base router to reset.
Default	true
Introduced	20.10.R1
Platforms	All

label-preference *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	**configure** router *string* bgp label-preference *number*
Tree	label-preference
Range	1 to 255
Default	170
Introduced	16.0.R1
Platforms	All

link-state-route-export *boolean*

Synopsis	Allow the export of the TED NLRI database
Context	**configure** router *string* bgp link-state-route-export *boolean*
Tree	link-state-route-export
Description	When configured to **true**, this command allows BGP to export link-state information to BGP neighbors. When configured to **false**, link-state information is not exported.
Default	false
Introduced	16.0.R1
Platforms	All

link-state-route-import *boolean*

Synopsis	Allow the import of the TED NLRI database
Context	**configure** router *string* bgp link-state-route-import *boolean*
Tree	link-state-route-import
Description	When configured to **true**, this command enables the import of link-state information into the BGP-LS address family for advertisement to other BGP neighbors. When configured to **false**, this command disables the import of link-state information.

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Default	false
Introduced	16.0.R1
Platforms	All

local-as

Synopsis	Enter the **local-as** context
Context	**configure** router *string* bgp local-as
Tree	local-as
Introduced	16.0.R1
Platforms	All

as-number *number*

Synopsis	Local (or virtual) BGP AS number
Context	**configure** router *string* bgp local-as as-number *number*
Tree	as-number
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

prepend-global-as *boolean*

Synopsis	Prepend global AS when advertising routes to BGP peer
Context	**configure** router *string* bgp local-as prepend-global-as *boolean*
Tree	prepend-global-as
Description	When configured to **true**, the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer. When configured to **false**, the global ASN is hidden in paths announced to the EBGP peer.
Default	true
Introduced	16.0.R1
Platforms	All

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private *boolean*

Synopsis	Hide the local ASN in sent paths learned from peering
Context	**configure** router *string* bgp local-as private *boolean*
Tree	private
Description	When configured to **true**, the local ASN is hidden in paths learned from the peering. When configured to **false**, the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.
Default	false
Introduced	16.0.R1
Platforms	All

local-preference *number*

Synopsis	Default local preference if not in incoming routes
Context	**configure** router *string* bgp local-preference *number*
Tree	local-preference
Max. Range	0 to 4294967295
Default	100
Introduced	16.0.R1
Platforms	All

loop-detect *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	**configure** router *string* bgp loop-detect *keyword*
Tree	loop-detect
Options	drop-peer, ignore-loop, off, discard-route
Default	ignore-loop
Introduced	16.0.R1
Platforms	All

loop-detect-threshold *number*

Synopsis	Threshold for the global ASN in a received AS path
Context	**configure** router *string* bgp loop-detect-threshold *number*

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Tree	loop-detect-threshold
Range	0 to 15
Default	0
Introduced	16.0.R6
Platforms	All

med-out *(number | keyword)*

Synopsis	Default MED attribute value to advertise to peers
Context	**configure** router *string* bgp med-out *(number | keyword)*
Tree	med-out
Max. Range	0 to 4294967295
Options	igp-cost
Introduced	16.0.R1
Platforms	All

min-route-advertisement *number*

Synopsis	Minimum time before a prefix can be advertised to peer
Context	**configure** router *string* bgp min-route-advertisement *number*
Tree	min-route-advertisement
Range	1 to 255
Default	30
Introduced	16.0.R1
Platforms	All

monitor

Synopsis	Enable the **monitor** context
Context	**configure** router *string* bgp monitor
Tree	monitor
Description	Commands in this context specify BMP-related configurations. When this context is unconfigured, the sending of BMP messages to BMP monitoring stations is disabled.
Introduced	16.0.R1

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Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BMP monitoring
Context	**configure** router *string* bgp monitor admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

all-stations *boolean*

Synopsis	Send BMP messages to all configured stations
Context	**configure** router *string* bgp monitor all-stations *boolean*
Tree	all-stations
Description	When configured to **true**, this command specifies that BMP messages are to be sent to all configured BMP monitoring stations. When configured to **false**, the command is not used to indicate the stations which can receive BMP messages. The **station** command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.
Default	false
Introduced	16.0.R1
Platforms	All

route-monitoring

Synopsis	Enter the **route-monitoring** context
Context	**configure** router *string* bgp monitor route-monitoring
Tree	route-monitoring
Introduced	16.0.R1
Platforms	All

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post-policy *boolean*

Synopsis	Allow post-policy route-monitoring messages to be sent
Context	**configure** router *string* bgp monitor route-monitoring post-policy *boolean*
Tree	post-policy
Default	false
Introduced	16.0.R1
Platforms	All

pre-policy *boolean*

Synopsis	Allow pre-policy route-monitoring messages to be sent
Context	**configure** router *string* bgp monitor route-monitoring pre-policy *boolean*
Tree	pre-policy
Default	false
Introduced	16.0.R1
Platforms	All

station [station-name] *reference*

Synopsis	Add a list entry for **station**
Context	**configure** router *string* bgp monitor station *reference*
Tree	station
Description	This command identifies a BMP monitoring station for which BMP messages are to be sent.
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[**station-name**] *reference*

Synopsis	BMP monitoring station
Context	**configure** router *string* bgp monitor station *reference*
Tree	station
Reference	**configure** bmp station *string*

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

mp-bgp-keep *boolean*

Synopsis	Keep rejected VPN-IP routes in RIB-IN
Context	**configure** router *string* bgp mp-bgp-keep *boolean*
Tree	mp-bgp-keep
Description	When configured to **true**, the RIB-IN retains all MP-BGP routes, including VPN routes rejected by import policies or not imported by any services. As a result, sending Route Refresh messages is not required when an import policy changes. When configured to **false**, these VPN routes are deleted from the RIB-IN.
Default	false
Introduced	16.0.R1
Platforms	All

multihop *number*

Synopsis	TTL in IP packet headers for EBGP peers multi-hops away
Context	**configure** router *string* bgp multihop *number*
Tree	multihop
Description	This command configures the Time to Live (TTL) value entered in the IP header of packets sent to an EBGP peer multiple hops away. This command applies only to EBGP.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

multipath

Synopsis	Enter the **multipath** context
Context	**configure** router *string* bgp multipath
Tree	multipath
Introduced	16.0.R1
Platforms	All

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ebgp *number*

Synopsis	Maximum multipaths per prefix for EBGP learned routes
Context	**configure** router *string* bgp multipath ebgp *number*
Tree	ebgp
Range	1 to 64
Introduced	16.0.R1
Platforms	All

family [family-type] *keyword*

Synopsis	Enter the **family** list instance
Context	**configure** router *string* bgp multipath family *keyword*
Tree	family
Introduced	19.5.R1
Platforms	All

[**family-type**] *keyword*

Synopsis	Address family for which multipath selection applies
Context	**configure** router *string* bgp multipath family *keyword*
Tree	family
Options	ipv4, ipv6, label-ipv4, label-ipv6
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

ebgp *number*

Synopsis	Maximum multipaths when best path is EBGP learned route
Context	**configure** router *string* bgp multipath family *keyword* ebgp *number*
Tree	ebgp
Description	This command configures the maximum number of multipaths per prefix or NLRI when the best path is an EBGP learned route. The limit configured using this command overrides the limit configured in the **max-paths** command. If the best path is an EBGP learned route, and this command is set to 1, multipaths are disabled.

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Range	1 to 64
Introduced	19.5.R1
Platforms	All

ibgp *number*

Synopsis	Maximum multipaths when best path is IBGP learned route
Context	**configure** router *string* bgp multipath family *keyword* ibgp *number*
Tree	ibgp
Description	This command configures the maximum number of multipaths per prefix or NLRI when the best path is an IBGP learned route. The limit configured using this command overrides the limit configured in the **max-paths** command. If the best path is an IBGP learned route and this command is set to 1, multipaths are disabled.
Range	1 to 64
Introduced	19.5.R1
Platforms	All

max-paths *number*

Synopsis	Maximum number of multipaths per prefix or NLRI
Context	**configure** router *string* bgp multipath family *keyword* max-paths *number*
Tree	max-paths
Description	This command configures the maximum number of multipaths per prefix or NLRI for the IP family option specified using the **family** command. Consider the following when configuring this command: • If the best path is an EBGP-learned route and the **ebgp** command is configured, the limit configured in the **ebgp** command overrides the limit configured in this command. • If the best path is an IBGP-learned route and the **ibgp** command is configured, the limit configured in the **ibgp** command overrides the limit configured in this command. • If the best path is an EBGP-learned route and the **ebgp** command is not configured, and this command is configured to 1, multipaths are disabled. • If the best path is an IBGP-learned route and the **ibgp** command is not configured, and this command is configured to 1, multipaths are disabled.
Range	1 to 64
Introduced	19.5.R1
Platforms	All

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restrict *keyword*

Synopsis	AS path restriction for the non-best path
Context	**configure** router *string* bgp multipath family *keyword* restrict *keyword*
Tree	restrict
Options	same-as-path-length, same-neighbor-as, exact-as-path
Default	same-as-path-length
Introduced	19.5.R1
Platforms	All

unequal-cost *boolean*

Synopsis	Ignore differences in the next-hop cost for multipath
Context	**configure** router *string* bgp multipath family *keyword* unequal-cost *boolean*
Tree	unequal-cost
Description	When configured to **true**, BGP ignores differences in the next-hop cost when determining eligible multipaths.
Default	false
Introduced	19.5.R1
Platforms	All

ibgp *number*

Synopsis	Maximum multipaths per prefix for IBGP learned routes
Context	**configure** router *string* bgp multipath ibgp *number*
Tree	ibgp
Range	1 to 64
Introduced	16.0.R1
Platforms	All

max-paths *number*

Synopsis	Maximum multipaths per prefix
Context	**configure** router *string* bgp multipath max-paths *number*
Tree	max-paths

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Range	1 to 64
Default	1
Introduced	16.0.R1
Platforms	All

restrict *keyword*

Synopsis	AS path restriction for the non-best path
Context	**configure** router *string* bgp multipath restrict *keyword*
Tree	restrict
Options	same-as-path-length, same-neighbor-as, exact-as-path
Default	same-as-path-length
Introduced	16.0.R1
Platforms	All

unequal-cost *boolean*

Synopsis	Ignore differences in the next-hop cost for multipath
Context	**configure** router *string* bgp multipath unequal-cost *boolean*
Tree	unequal-cost
Default	false
Introduced	19.5.R1
Platforms	All

mvpn-vrf-import-subtype-new *boolean*

Synopsis	Encode the IANA value of 0x010b in advertised routes
Context	**configure** router *string* bgp mvpn-vrf-import-subtype-new *boolean*
Tree	mvpn-vrf-import-subtype-new
Description	When configured to **true**, this command encodes the value of 0x010b for the type or subtype in advertised routes. When configured to **false**, BGP encodes the extended community type or subtype as 0x010a to preserve backwards compatibility.
Default	false
Introduced	16.0.R1

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Platforms	All

neighbor [ip-address] *(ipv4-address-with-zone | ipv6-address-with-zone)*

Synopsis	Enter the **neighbor** list instance
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)*
Tree	neighbor
Introduced	16.0.R1
Platforms	All

[**ip-address**] *(ipv4-address-with-zone | ipv6-address-with-zone)*

Synopsis	IP address of the BGP peer router
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)*
Tree	neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

add-paths

Synopsis	Enable the **add-paths** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths
Tree	add-paths
Description	Commands in this context allow the add-paths node to be configured for the specified families for configuration of the BGP group or neighbor. The BGP add-paths capability allows the router to send or receive multiple paths per prefix to and from a peer. When unconfigured, command settings are inherited from a higher level BGP configuration.
Introduced	16.0.R1
Platforms	All

evpn

Synopsis	Enter the **evpn** context

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Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths evpn
Tree	evpn
Description	Commands in this context configure the add-paths capability for EVPN routes. By default, add-paths is not enabled for EVPN routes.
Introduced	21.10.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple EVPN paths per prefix from a peer
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths evpn receive *boolean*
Tree	receive
Default	false
Introduced	21.10.R1
Platforms	All

send *(number | keyword)*

Synopsis	Maximum paths per EVPN prefix to Add-Path peers
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths evpn send *(number | keyword)*
Tree	send
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	21.10.R1
Platforms	All

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths ipv4
Tree	ipv4
Introduced	16.0.R1

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Platforms All

receive *boolean*

Synopsis Receive multiple labeled-unicast routes per IPv4 prefix

Context **configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths ipv4 receive *boolean*

Tree receive

Description When configured to **true**, the router can receive multiple unlabeled IPv4 unicast routes per prefix from a peer.

When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced 16.0.R1

Platforms All

send *(number | keyword)*

Synopsis Maximum paths per unlabeled IPv4 unicast prefix

Context **configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths ipv4 send *(number | keyword)*

Tree send

Description This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

When not configured, ADD-PATH send capability is not enabled for unlabeled IPv4 unicast routes.

Range 1 to 16

Options multipaths – Number of best multipaths for each NLRI

Introduced 16.0.R1

Platforms All

ipv6

Synopsis Enter the **ipv6** context

Context **configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths ipv6

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Tree	ipv6
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple routes per IPv6 prefix
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths ipv6 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple unlabeled IPv6 unicast routes per prefix to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *(number | keyword)*

Synopsis	Maximum paths per unlabeled IPv6 unicast prefix
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths ipv6 send *(number | keyword)*
Tree	send
Description	This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for unlabeled IPv4 unicast routes.
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

label-ipv4

Synopsis	Enter the **label-ipv4** context

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Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths label-ipv4
Tree	label-ipv4
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv4 prefix
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths label-ipv4 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple labeled-unicast routes per IPv4 prefix to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *(number | keyword)*

Synopsis	Maximum paths per labeled IPv4 unicast prefix
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths label-ipv4 send *(number | keyword)*
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv4 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for labeled IPv4 unicast routes.
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

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label-ipv6

Synopsis	Enter the **label-ipv6** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths label-ipv6
Tree	label-ipv6
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv6 prefix
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths label-ipv6 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple labeled-unicast routes per IPv6 prefix to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *(number | keyword)*

Synopsis	Maximum paths per labeled IPv6 unicast prefix
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths label-ipv6 send *(number | keyword)*
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv6 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for labeled IPv6 unicast routes.
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

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mcast-vpn-ipv4

Synopsis	Enter the **mcast-vpn-ipv4** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths mcast-vpn-ipv4
Tree	mcast-vpn-ipv4
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple multicast routes per IPv4 VPN prefix
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths mcast-vpn-ipv4 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple multicast routes per IPv4 VPN prefix to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *number*

Synopsis	Maximum paths per multicast IPv4 VPN prefix
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths mcast-vpn-ipv4 send *number*
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv4 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast IPv4 VPN routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

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mcast-vpn-ipv6

Synopsis	Enter the **mcast-vpn-ipv6** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths mcast-vpn-ipv6
Tree	mcast-vpn-ipv6
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple multicast routes per IPv6 VPN prefix
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths mcast-vpn-ipv6 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple multicast routes per IPv6 VPN prefix to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *number*

Synopsis	Maximum paths per multicast IPv6 VPN prefix
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths mcast-vpn-ipv6 send *number*
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv6 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast IPv6 VPN routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

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mvpn-ipv4

Synopsis	Enter the **mvpn-ipv4** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths mvpn-ipv4
Tree	mvpn-ipv4
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple multicast VPN routes per IPv4 prefix
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths mvpn-ipv4 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple multicast VPN routes per IPv4 prefix to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *number*

Synopsis	Maximum paths per multicast VPN IPv4 prefix
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths mvpn-ipv4 send *number*
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast VPN IPv4 routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

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mvpn-ipv6

Synopsis	Enter the **mvpn-ipv6** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths mvpn-ipv6
Tree	mvpn-ipv6
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple multicast VPN routes per IPv6 prefix
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths mvpn-ipv6 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple multicast VPN routes per IPv6 prefix to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *number*

Synopsis	Maximum paths per multicast VPN IPv6 prefix
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths mvpn-ipv6 send *number*
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast VPN IPv6 routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

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vpn-ipv4

Synopsis	Enter the **vpn-ipv4** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths vpn-ipv4
Tree	vpn-ipv4
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple routes per VPN-IPv4 prefix
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths vpn-ipv4 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple VPN-IPv4 routes per prefix to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *(number | keyword)*

Synopsis	Maximum paths per VPN-IPv4 prefix
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths vpn-ipv4 send *(number | keyword)*
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for VPN-IPv4 routes.
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

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vpn-ipv6

Synopsis	Enter the **vpn-ipv6** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths vpn-ipv6
Tree	vpn-ipv6
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple routes per VPN-IPv6 prefix
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths vpn-ipv6 receive *boolean*
Tree	receive
Description	When configured to **true**, this command allows multiple VPN-IPv6 routes per prefix to be received from a peer. When configured to **false**, the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *(number | keyword)*

Synopsis	Maximum paths per VPN-IPv6 prefix
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* add-paths vpn-ipv6 send *(number | keyword)*
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for VPN-IPv6 routes.
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the BGP neighbor
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

advertise-inactive *boolean*

Synopsis	Advertise an inactive BGP route to peers
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* advertise-inactive *boolean*
Tree	advertise-inactive
Description	When configured to **true**, this command allows an inactive BGP route to be advertised, even though it is not the most preferred route. The effect of the command on advertised unlabeled, labeled, and multicast IPv4 and IPv6 routes depends on several factors. • If the active route for the IP prefix is a BGP route, that route is advertised. • If the active route is a non-BGP route and there are valid inactive BGP routes to the same destination, the best valid inactive route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session. • If the active route is a non-BGP route and there are no valid BGP routes to the same destination, no route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session. When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**. When this command inherits a value of **false**, the advertisement of inactive BGP routes to other BGP peers is disabled.
Introduced	16.0.R1
Platforms	All

advertise-ipv6-next-hops

Synopsis	Enable the **advertise-ipv6-next-hops** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* advertise-ipv6-next-hops

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Tree	advertise-ipv6-next-hops
Description	Commands in this context allow specified IP family routes to be advertised to IPv6 transport peers with a true IPv6 address when originated or when a configured or automatic next-hop-self action is applied. When unconfigured, command settings are inherited from a higher level BGP configuration.
Introduced	16.0.R1
Platforms	All

evpn *boolean*

Synopsis	Advertise EVPN route with IPv6 next-hop address
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* advertise-ipv6-next-hops evpn *boolean*
Tree	evpn
Description	When configured to **true**, EVPN routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. When configured to **false**, EVPN routes are advertised with IPv4 next-hop addresses to IPv6 transport peers.
Default	false
Introduced	19.5.R1
Platforms	All

ipv4 *boolean*

Synopsis	Advertise IPv4 route with IPv6 next-hop address
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* advertise-ipv6-next-hops ipv4 *boolean*
Tree	ipv4
Description	When configured to **true**, IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop. When configured to **false**, IPv4 routes are advertised with IPv4 next-hop addresses to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.
Default	false

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Introduced	19.5.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Advertise label IPv4 route with IPv6 next-hop address
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* advertise-ipv6-next-hops label-ipv4 *boolean*
Tree	label-ipv4
Description	When configured to **true**, label IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop. When configured to **false**, label IPv4 routes are advertised with the system IPv4 address as the next hop to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Advertise label IPv6 route with IPv6 next-hop address
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* advertise-ipv6-next-hops label-ipv6 *boolean*
Tree	label-ipv6
Description	When configured to **true**, label IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. When configured to **false**, label IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.
Default	false
Introduced	16.0.R1
Platforms	All

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vpn-ipv4 *boolean*

Synopsis	Advertise VPN IPv4 route with IPv6 next-hop address
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* advertise-ipv6-next-hops vpn-ipv4 *boolean*
Tree	vpn-ipv4
Description	When configured to **true**, VPN IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop. When configured to **false**, VPN IPv4 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Advertise VPN IPv6 route with IPv6 next-hop address
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* advertise-ipv6-next-hops vpn-ipv6 *boolean*
Tree	vpn-ipv6
Description	When configured to **true**, VPN IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. When configured to **false**, VPN IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.
Default	false
Introduced	16.0.R1
Platforms	All

advertise-ldp-prefix *boolean*

Synopsis	Advertise active /32 LDP FEC prefixes to BGP peers
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* advertise-ldp-prefix *boolean*
Tree	advertise-ldp-prefix

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Default	false
Introduced	16.0.R1
Platforms	All

aggregator-id-zero *boolean*

Synopsis	Set router ID in the BGP AGGREGATOR attribute to zero
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* aggregator-id-zero *boolean*
Tree	aggregator-id-zero
Introduced	16.0.R1
Platforms	All

aigp *boolean*

Synopsis	Add AIGP attribute to advertised routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* aigp *boolean*
Tree	aigp
Description	When configured to **true**, this command enables Accumulated IGP (AIGP) path attribute support with one or more BGP peers. BGP path selection among routes with an associated AIGP metric is based on the end-to-end IGP metrics of the different BGP paths, even when these BGP paths span more than one AS and IGP instance. When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**. When this command inherits a value of **false**, the AIGP attribute is removed from advertised routes, if present, and is ignored in received routes.
Introduced	16.0.R1
Platforms	All

as-override *boolean*

Synopsis	Replace the peer's ASN with the local ASN in AS Path
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* as-override *boolean*
Tree	as-override
Description	When configured to **true**, the advertising router's local AS replaces all occurrences of the peer AS in the AS_PATH attribute.

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This command should be used with caution, as it breaks BGP's loop detection mechanism.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). This command cannot be explicitly configured to **false**.

When configured to **false**, no AS override is performed.

Introduced 19.7.R1

Platforms All

asn-4-byte *boolean*

Synopsis Advertise the use of 4-byte ASNs

Context **configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* asn-4-byte *boolean*

Tree asn-4-byte

Introduced 16.0.R1

Platforms All

authentication-key *string*

Synopsis BGP authentication key

Context **configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* authentication-key *string*

Tree authentication-key

String Length 1 to 370

Introduced 16.0.R1

Platforms All

authentication-keychain *reference*

Synopsis TCP authentication keychain for the session

Context **configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* authentication-keychain *reference*

Tree authentication-keychain

Description This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.

Reference **configure** system security keychains keychain *string*

Introduced 16.0.R3

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Platforms All

bfd-liveness *boolean*

Synopsis Enable BFD

Context **configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* bfd-liveness *boolean*

Tree bfd-liveness

Description When configured to **true**, BFD is enabled on a given protocol interface where the state of the protocol interface is tied to the state of the BFD session between the local node and the remote node.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, BFD is removed from the associated protocol adjacency.

Introduced 16.0.R1

Platforms All

bfd-strict-mode

Synopsis Enter the **bfd-strict-mode** context

Context **configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* bfd-strict-mode

Tree bfd-strict-mode

Introduced 23.7.R1

Platforms All

advertise

Synopsis Enable the **advertise** context

Context **configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* bfd-strict-mode advertise

Tree advertise

Description Commands in this context configure BGP to advertise the Strict-BFD capability to peers that are within scope of this command and meet the following requirements:

- The inherited or configured value for the **bfd-liveness** command that applies to the peer is **true**.
- The interface associated with the peer has a valid BFD configuration.

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When the preceding conditions are satisfied and two peers attempting to form a session both advertise the Strict-BFD capability, the BGP finite state machine in each router transitions the session state to established after the BFD session with the peer enters the up state.

When unconfigured, BGP does not advertise the Strict-BFD capability to peers.

Introduced 23.7.R1

Platforms All

holdtime *number*

Synopsis Maximum time BGP waits for the BFD session to come up

Context **configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* bfd-strict-mode advertise holdtime *number*

Tree holdtime

Description This command configures the maximum time BGP waits for the BFD session to come up, provided that the Strict-BFD procedures apply to a session, and the negotiated BGP hold time is zero (no keepalives). If the negotiated BGP hold time is greater than zero, the advertised hold time is not considered.

Range 1 to 65535

Units seconds

Default 30

Introduced 23.7.R1

Platforms All

next-hop-reachability *boolean*

Synopsis Consider next hop unreachable if BFD session is down

Context **configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* bfd-strict-mode next-hop-reachability *boolean*

Tree next-hop-reachability

Description When configured to **true**, the router considers next-hop self routes belonging to specific address families received from a peer within scope of this command as having an unresolved next hop, provided that the following requirements are met:

- The BFD session to the peer is in a down state.
- There is a valid interface BFD configuration that applies to the peer.
- There is a valid BFD liveness configuration that applies to the peer.

The unresolved state is maintained until the BFD session state changes to up or administratively down, even if there is a resolving route or tunnel that matches the BGP next-hop address.

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Routes received from one peer with a BGP next-hop address equal to the address of another peer are not affected by the BFD session to the other peer.The behavior of the router when this command is **true** does not depend on whether Strict-BFD is used, as both features are independent.

Configuring this command to **true** only affects routes belonging to the following address families:

- IPv4
- IPv6
- IPv4 VPN
- IPv6 VPN
- labeled unicast IPv4
- labeled unicast IPv6
- EVPN
- IPv4 multicast
- IPv6 multicast
- IPv4 VPN multicast
- IPv6 VPN multicast

When configured to **false**, the router does not consider next-hop self routes belonging to the preceding address families as having an unresolved next hop if the BFD session goes down.

Introduced 23.7.R1

Platforms All

block-prefix-sid *boolean*

Synopsis Block the prefix SID attribute

Context **configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* block-prefix-sid *boolean*

Tree block-prefix-sid

Description When configured to **true**, all prefix SID attributes are removed from all routes exchanged between EBGP and IBGP peers covered by the scope of the command. Locally-imposed prefix SID attributes are also removed.

When configured to **false**, all prefix SID attributes are propagated without restriction.

A change of this configuration causes the affected BGP sessions to flap.

Default false

Introduced 19.10.R1

Platforms All

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capability-negotiation *boolean*

Synopsis	Enable capability negotiation
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* capability-negotiation *boolean*
Tree	capability-negotiation
Introduced	16.0.R1
Platforms	All

client-reflect *boolean*

Synopsis	Allow cluster RR to advertise routes to its clients
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* client-reflect *boolean*
Tree	client-reflect
Introduced	16.0.R1
Platforms	All

cluster

Synopsis	Enter the **cluster** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* cluster
Tree	cluster
Introduced	16.0.R1
Platforms	All

allow-local-fallback *boolean*

Synopsis	Allow fallback to RR topology
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* cluster allow-local-fallback *boolean*
Tree	allow-local-fallback
Description	When configured to **true**, this command allows the RR to advertise the best BGP path from its own topology location when there are no reachable routes from the client's ORR location. The ORR location must be specified before this command can be set to **true**. When configured to **false**, this command no route is advertised to the client.
Default	false

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Introduced	16.0.R1
Platforms	All

cluster-id *string*

Synopsis	Route reflector cluster ID
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* cluster cluster-id *string*
Tree	cluster-id
Introduced	16.0.R1
Platforms	All

orr-location *number*

Synopsis	Optimal route reflection location for the cluster
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* cluster orr-location *number*
Tree	orr-location
Description	This command configures an ORR location ID. If a cluster ID is also specified, the clients in that cluster receive routes optimal for that specific location. With optimal route reflection, the best path advertised to a client takes location ID into account. If the tie-break for best path (or Add-Paths) comes down to next-hop IGP cost, the IGP costs will be calculated relative to the specified location. In the SR OS implementation, the IGP costs from arbitrary ORR locations are calculated using OSPF, OSPFv3, IS-IS, or BGP-LS information in the TE DB.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

connect-retry *number*

Synopsis	BGP connect retry timer value
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* connect-retry *number*
Tree	connect-retry
Range	1 to 65535
Introduced	16.0.R1

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Platforms	All

damp-peer-oscillations

Synopsis	Enable the **damp-peer-oscillations** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* damp-peer-oscillations
Tree	damp-peer-oscillations
Introduced	16.0.R1
Platforms	All

error-interval *number*

Synopsis	Time after a reset that the session must be error-free
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* damp-peer-oscillations error-interval *number*
Tree	error-interval
Description	This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.
Range	0 to 2048
Default	30
Introduced	16.0.R1
Platforms	All

idle-hold-time

Synopsis	Enter the **idle-hold-time** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* damp-peer-oscillations idle-hold-time
Tree	idle-hold-time
Introduced	16.0.R1
Platforms	All

initial-wait *number*

Synopsis	Time session remains in idle state after stabilization

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Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* damp-peer-oscillations idle-hold-time initial-wait *number*
Tree	initial-wait
Range	0 to 2048
Default	0
Introduced	16.0.R1
Platforms	All

max-wait *number*

Synopsis	Maximum session idle time after repeated instability
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* damp-peer-oscillations idle-hold-time max-wait *number*
Tree	max-wait
Range	1 to 2048
Default	60
Introduced	16.0.R1
Platforms	All

second-wait *number*

Synopsis	Time that doubles after each repeated session failure
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* damp-peer-oscillations idle-hold-time second-wait *number*
Tree	second-wait
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	16.0.R1
Platforms	All

damping *boolean*

Synopsis	Use BGP route damping to reduce route flap

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Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* damping *boolean*
Tree	damping
Introduced	16.0.R1
Platforms	All

def-recv-evpn-encap *keyword*

Synopsis	Default EVPN encapsulation type
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* def-recv-evpn-encap *keyword*
Tree	def-recv-evpn-encap
Description	This command specifies the encapsulation type that BGP uses when an EVPN route is received without the Encapsulation Extended Community. When unconfigured, the setting for this command is inherited from the BGP group-level configuration.
Options	mpls, vxlan
Introduced	16.0.R1
Platforms	All

default-label-preference

Synopsis	Enter the **default-label-preference** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* default-label-preference
Tree	default-label-preference
Introduced	19.5.R1
Platforms	All

ebgp *number*

Synopsis	Default preference for EBGP
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* default-label-preference ebgp *number*
Tree	ebgp
Range	0 to 255
Introduced	19.5.R1

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Platforms	All

ibgp *number*

Synopsis	Default preference for IBGP
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* default-label-preference ibgp *number*
Tree	ibgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

default-preference

Synopsis	Enter the **default-preference** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* default-preference
Tree	default-preference
Introduced	19.5.R1
Platforms	All

ebgp *number*

Synopsis	Default preference for EBGP
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* default-preference ebgp *number*
Tree	ebgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

ibgp *number*

Synopsis	Default preference for IBGP
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* default-preference ibgp *number*
Tree	ibgp

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Range	0 to 255
Introduced	19.5.R1
Platforms	All

default-route-target *boolean*

Synopsis	Send default RTC route (zero prefix length) to peers
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* default-route-target *boolean*
Tree	default-route-target
Description	When configured to **true**, this command sends the default RTC route (zero prefix length) toward the selected peers. When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**. When this command inherits a value of **false**, a default RTC route is not sent.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

ebgp-default-reject-policy

Synopsis	Enable the **ebgp-default-reject-policy** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* ebgp-default-reject-policy
Tree	ebgp-default-reject-policy
Introduced	19.5.R1
Platforms	All

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export *boolean*

Synopsis	Enable default reject export policy for external peers
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* ebgp-default-reject-policy export *boolean*
Tree	export
Default	true
Introduced	19.5.R1
Platforms	All

import *boolean*

Synopsis	Enable default reject import policy for external peers
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* ebgp-default-reject-policy import *boolean*
Tree	import
Default	true
Introduced	19.5.R1
Platforms	All

egress-engineering

Synopsis	Enable the **egress-engineering** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* egress-engineering
Tree	egress-engineering
Introduced	21.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BGP egress engineering
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* egress-engineering admin-state *keyword*
Tree	admin-state
Description	This command administratively enables or disables egress engineering for the BGP. If enabled, peer node SIDs and peer adjacency SIDs are advertised in BGP-LS.

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Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	All

egress-peer-engineering-label-unicast *boolean*

Synopsis	Generate EPE label-unicast routes for neighbor
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* egress-peer-engineering-label-unicast *boolean*
Tree	egress-peer-engineering-label-unicast
Description	When configured to **true**, BGP generates a label-unicast route for the /32 or /128 prefix that corresponds to the BGP neighbor address. This route can be advertised to other routers to recursively resolve unlabeled BGP routes for AS external destinations. This supports the Egress Peer Engineering (EPE) use case.
Default	false
Introduced	22.2.R1
Platforms	All

enforce-first-as *boolean*

Synopsis	Enforce the configured peer AS value in received routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* enforce-first-as *boolean*
Tree	enforce-first-as
Description	When configured to **true** for an EBGP session, all routes received from an EBGP peer are checked to ensure that the most recent ASN in the AS_PATH attribute of each route matches the configured AS of the session. If there is not a match, the session is reset (if the **update-fault-tolerance** command in the **error-handling** context is set to **false**) or the session is left up but the route is treated as withdrawn (if **update-fault-tolerance** is set to **true**). This command does not flap an established session because it applies only to routes received after the command is issued. When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**. When this command inherits a value of **false**, received routes are not checked for compliance with the rule.
Introduced	16.0.R1
Platforms	All

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error-handling

Synopsis	Enter the **error-handling** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* error-handling
Tree	error-handling
Introduced	16.0.R1
Platforms	All

update-fault-tolerance *boolean*

Synopsis	Tolerate non-critical errors in UPDATE messages
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* error-handling update-fault-tolerance *boolean*
Tree	update-fault-tolerance
Description	When configured to **true**, non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset. When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**. When this command inherits a value of **false**, all errors trigger a session reset.
Introduced	16.0.R1
Platforms	All

export

Synopsis	Enable the **export** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* export
Tree	export
Description	Commands in this context specify route policies that control the handling of outbound routes transmitted to certain peers. Route policies are configured in the **configure policy-options** context. When this context is unconfigured, the policy association for the group is inherited from the BGP global-level configuration.
Introduced	16.0.R1
Platforms	All

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policy *(policy-expr-string | string)*

Synopsis	BGP export policy name
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* export policy *(policy-expr-string | string)*
Tree	policy
Description	This command specifies route policies that control the handling of outbound routes transmitted to certain peers. Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route. Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@," "start@variable@end"," @variable@end", or"start@variable@".
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

extended-nh-encoding

Synopsis	Enable the **extended-nh-encoding** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* extended-nh-encoding
Tree	extended-nh-encoding
Description	Commands in this context specify the address families enabled to advertise the capability to receive label IPv4 routes, VPN IPv4 routes, or IPv6 next hops from peers. The peers should not send such routes unless notification has been received of this capability. If the router receives an enabled address family route from a peer to which it did not advertise the necessary capability, the UPDATE message will be considered malformed. This causes either a session reset or treat-as-withdraw behavior depending on the error handling settings. When the context is unconfigured, command settings are inherited from the higher level BGP configuration.

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Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Advertise encoding capability for IPv4 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* extended-nh-encoding ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	19.5.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Advertise encoding capability for label-IPv4 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* extended-nh-encoding label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise encoding capability for VPN-IPv4 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* extended-nh-encoding vpn-ipv4 *boolean*
Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

family

Synopsis	Enable the **family** context

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Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family
Tree	family
Introduced	16.0.R1
Platforms	All

bgp-ls *boolean*

Synopsis	Advertise MP-BGP support for the BGP-LS address family
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family bgp-ls *boolean*
Tree	bgp-ls
Default	false
Introduced	16.0.R1
Platforms	All

evpn *boolean*

Synopsis	Advertise MP-BGP support for the EVPN address family
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family evpn *boolean*
Tree	evpn
Default	false
Introduced	16.0.R1
Platforms	All

flow-ipv4 *boolean*

Synopsis	Advertise support for the flowspec-IPv4 address family
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family flow-ipv4 *boolean*
Tree	flow-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

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flow-ipv6 *boolean*

Synopsis	Advertise support for the flowspec-IPv6 address family
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family flow-ipv6 *boolean*
Tree	flow-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

flow-vpn-ipv4 *boolean*

Synopsis	Advertise support for FlowSpec-VPN IPv4 address family
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family flow-vpn-ipv4 *boolean*
Tree	flow-vpn-ipv4
Default	false
Introduced	22.7.R1
Platforms	All

flow-vpn-ipv6 *boolean*

Synopsis	Advertise support for FlowSpec-VPN IPv6 address family
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family flow-vpn-ipv6 *boolean*
Tree	flow-vpn-ipv6
Default	false
Introduced	22.7.R1
Platforms	All

ipv4 *boolean*

Synopsis	Add support for the IPv4 address family
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family ipv4 *boolean*
Tree	ipv4
Default	false

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Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the IPv6 address family
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

l2-vpn *boolean*

Synopsis	Advertise MP-BGP support for the L2-VPN address family
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family l2-vpn *boolean*
Tree	l2-vpn
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Advertise support for the label-IPv4 address family
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Advertise support for the label-IPv6 address family

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Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family label-ipv6 *boolean*
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv4 *boolean*

Synopsis	Advertise support for the MCAST-IPv4 address family
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family mcast-ipv4 *boolean*
Tree	mcast-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv6 *boolean*

Synopsis	Advertise support for the MCAST-IPv6 address family
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family mcast-ipv6 *boolean*
Tree	mcast-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv4 *boolean*

Synopsis	Advertise support for the IPv4 VPN MCAST address family
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family mcast-vpn-ipv4 *boolean*
Tree	mcast-vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

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mcast-vpn-ipv6 *boolean*

Synopsis	Advertise support for the IPv6 VPN MCAST address family
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone* | *ipv6-address-with-zone)* family mcast-vpn-ipv6 *boolean*
Tree	mcast-vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mdt-safi *boolean*

Synopsis	Advertise MP-BGP support for MDT-SAFI address family
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone* | *ipv6-address-with-zone)* family mdt-safi *boolean*
Tree	mdt-safi
Default	false
Introduced	16.0.R1
Platforms	All

ms-pw *boolean*

Synopsis	Advertise support for multi-segment PW address family
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone* | *ipv6-address-with-zone)* family ms-pw *boolean*
Tree	ms-pw
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv4 *boolean*

Synopsis	Advertise support for the IPv4 MCAST VPN address family
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone* | *ipv6-address-with-zone)* family mvpn-ipv4 *boolean*
Tree	mvpn-ipv4

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Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv6 *boolean*

Synopsis	Advertise support for the IPv6 MCAST VPN address family
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family mvpn-ipv6 *boolean*
Tree	mvpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

route-target *boolean*

Synopsis	Advertise MP-BGP support for RT constraint routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family route-target *boolean*
Tree	route-target
Default	false
Introduced	16.0.R1
Platforms	All

sr-policy-ipv4 *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv4 family
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family sr-policy-ipv4 *boolean*
Tree	sr-policy-ipv4
Description	This command allows the router to advertise the capability for AFI1/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv4 destination.
Default	false
Introduced	16.0.R1
Platforms	All

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sr-policy-ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv6 family
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family sr-policy-ipv6 *boolean*
Tree	sr-policy-ipv6
Description	This command allows the router to advertise the capability for AFI2/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv6 destination.
Default	false
Introduced	19.10.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise MP-BGP support for IPv4 VPN address family
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family vpn-ipv4 *boolean*
Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Advertise MP-BGP support for IPv6 VPN address family
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family vpn-ipv6 *boolean*
Tree	vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

fast-external-failover *boolean*

Synopsis	Drop external BGP session immediately when link fails
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* fast-external-failover *boolean*

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Tree	fast-external-failover
Description	When this command inherits a value of **true**, the router drops an external BGP session on a single-hop route immediately when the local interface goes down. When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **true**. When configured to **false**, the BGP session remains up until the hold time expires.
Introduced	16.0.R1
Platforms	All

graceful-restart

Synopsis	Enable the **graceful-restart** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* graceful-restart
Tree	graceful-restart
Description	Commands in this context configure BGP graceful restart helper procedures for address families included in the GR capabilities of both peers. When this context is unconfigured, the command settings are inherited from the BGP group-level configuration.
Introduced	16.0.R1
Platforms	All

gr-notification *boolean*

Synopsis	Perform graceful restart procedures after NOTIFICATION
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* graceful-restart gr-notification *boolean*
Tree	gr-notification
Description	When configured to **true**, the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error. When configured to **false**, NOTIFICATION messages are not supported.
Default	false
Introduced	16.0.R1
Platforms	All

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long-lived

Synopsis	Enable the **long-lived** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* graceful-restart long-lived
Tree	long-lived
Description	Commands in this context configure the BGP Long-Lived Graceful-Restart (LLGR) procedures. LLGR, known informally as BGP persistence, is an extension of BGP GR that allows a session to stay down for a longer period of time. During this time, learned routes are marked and re-advertised as stale but they can continue to be used as routes of last resort. The LLGR handling of a session failure can be invoked immediately or it can be delayed until the end of the traditional GR restart window.
Introduced	16.0.R1
Platforms	All

advertise-stale-to-all-neighbors *boolean*

Synopsis	Advertise stale routes to all BGP peers
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* graceful-restart long-lived advertise-stale-to-all-neighbors *boolean*
Tree	advertise-stale-to-all-neighbors
Default	false
Introduced	16.0.R1
Platforms	All

advertised-stale-time *number*

Synopsis	Advertised long-lived stale time for LLGR routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* graceful-restart long-lived advertised-stale-time *number*
Tree	advertised-stale-time
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

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family [family-type] *keyword*

Synopsis	Enter the **family** list instance
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone* | *ipv6-address-with-zone)* graceful-restart long-lived family *keyword*
Tree	family
Introduced	16.0.R1
Platforms	All

[**family-type**] *keyword*

Synopsis	Family type for family-specific LLGR configuration
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone* | *ipv6-address-with-zone)* graceful-restart long-lived family *keyword*
Tree	family
Options	ipv4, vpn-ipv4, ipv6, vpn-ipv6, l2-vpn, flow-ipv4, route-target, flow-ipv6, label-ipv4, label-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertised-stale-time *number*

Synopsis	LLGR stale routes time for family override
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone* | *ipv6-address-with-zone)* graceful-restart long-lived family *keyword* advertised-stale-time *number*
Tree	advertised-stale-time
Description	This command configures the long-lived stale routes time that is advertised by the router in its LLGR capability. This command applies to all AFI/SAFI in the advertised LLGR capability with a family-specific override.
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

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helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* graceful-restart long-lived family *keyword* helper-override-stale-time *number*
Tree	helper-override-stale-time
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This is a family-specific override value.
Range	0 to 16777216
Default	16777216
Introduced	16.0.R1
Platforms	All

forwarding-bits-set *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* graceful-restart long-lived forwarding-bits-set *keyword*
Tree	forwarding-bits-set
Description	This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family. This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).
Options	none, all, non-fwd
Default	none
Introduced	16.0.R1
Platforms	All

helper-override-restart-time *number*

Synopsis	Locally-configured override for restart time
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* graceful-restart long-lived helper-override-restart-time *number*
Tree	helper-override-restart-time

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Description	This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.
Range	0 to 4095
Introduced	16.0.R1
Platforms	All

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* graceful-restart long-lived helper-override-stale-time *number*
Tree	helper-override-stale-time
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

without-no-export *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* graceful-restart long-lived without-no-export *boolean*
Tree	without-no-export
Description	When configured to **true**, LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0. When configured to **false**, LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.
Default	false

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Introduced	16.0.R1
Platforms	All

restart-time *number*

Synopsis	Restart time advertised by GR capability
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* graceful-restart restart-time *number*
Tree	restart-time
Range	0 to 4095
Default	300
Introduced	16.0.R1
Platforms	All

stale-routes-time *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* graceful-restart stale-routes-time *number*
Tree	stale-routes-time
Range	1 to 3600
Default	360
Introduced	16.0.R1
Platforms	All

group *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	BGP peer group
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* group *reference*
Tree	group
Reference	**configure** router *string* bgp group *string*
Notes	This element is mandatory.

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Introduced	16.0.R1
Platforms	All

hold-time

Synopsis	Enter the **hold-time** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	All

minimum-hold-time *number*

Synopsis	Minimum time BGP waits between successive messages
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* hold-time minimum-hold-time *number*
Tree	minimum-hold-time
Range	0 | 3 to 65536
Default	0
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Maximum hold time between successive messages
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* hold-time seconds *number*
Tree	seconds
Description	The BGP hold time specifies the maximum time BGP waits between successive messages (either keepalive or update) from its peer, before closing the connection. Even though the implementation allows setting the keepalive timer at the BGP neighbor level times separately, the configured keepalive timer is overridden by this value under the following circumstances: • If the specified hold time is less than the configured keepalive time, then the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed.

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- If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. This means that the connection with the peer is up permanently and no keepalive packets are sent to the peer.

When unconfigured, the command setting is inherited from the BGP group-level configuration.

Range	0 | 3 to 65535
Introduced	16.0.R1
Platforms	All

import

Synopsis	Enable the **import** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* import
Tree	import
Description	Commands in this context specify route policies that control the handling of inbound routes received from certain peers. Route policies are configured in the **configure policy-options** context. When this context is unconfigured, the policy association is inherited from the BGP group-level configuration.
Introduced	16.0.R1
Platforms	All

policy *(policy-expr-string | string)*

Synopsis	Names of the BGP import policies
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* import policy *(policy-expr-string | string)*
Tree	policy
Description	This command specifies route policies that control the handling of inbound routes received from certain peers. Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route. Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@," "start@variable@end"," @variable@end", or"start@variable@".

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String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

initial-send-delay-zero *boolean*

Synopsis	Send BGP updates as soon as the session comes up
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* initial-send-delay-zero *boolean*
Tree	initial-send-delay-zero
Description	When configured to **true**, BGP updates are sent as soon as the session comes up. When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**. When this command inherits a value of **false**, BGP waits to send UPDATE messages for the minimum route advertisement time after a session is established.
Introduced	16.0.R1
Platforms	All

keepalive *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* keepalive *number*
Tree	keepalive
Range	0 to 21845
Introduced	16.0.R1
Platforms	All

l2vpn-cisco-interop *boolean*

Synopsis	Allow translation from Cisco non-compliant NLRI format

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Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* l2vpn-cisco-interop *boolean*
Tree	l2vpn-cisco-interop
Default	false
Introduced	16.0.R1
Platforms	All

label-preference *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* label-preference *number*
Tree	label-preference
Range	1 to 255
Introduced	16.0.R1
Platforms	All

link-bandwidth

Synopsis	Enter the **link-bandwidth** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth
Tree	link-bandwidth
Introduced	16.0.R3
Platforms	All

accept-from-ebgp

Synopsis	Enable the **accept-from-ebgp** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth accept-from-ebgp
Tree	accept-from-ebgp
Introduced	16.0.R4
Platforms	All

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ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth accept-from-ebgp ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R4
Platforms	All

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth accept-from-ebgp ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth accept-from-ebgp label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth accept-from-ebgp label-ipv6 *boolean*
Tree	label-ipv6
Default	false

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Introduced	16.0.R4
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth accept-from-ebgp vpn-ipv4 *boolean*
Tree	vpn-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth accept-from-ebgp vpn-ipv6 *boolean*
Tree	vpn-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

add-to-received-ebgp

Synopsis	Enable the **add-to-received-ebgp** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth add-to-received-ebgp
Tree	add-to-received-ebgp
Introduced	16.0.R3
Platforms	All

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth add-to-received-ebgp ipv4 *boolean*

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Tree	ipv4
Default	false
Introduced	16.0.R3
Platforms	All

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth add-to-received-ebgp ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R3
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth add-to-received-ebgp label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R3
Platforms	All

label-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth add-to-received-ebgp label-ipv6 *boolean*
Tree	label-ipv6
Default	false
Introduced	16.0.R3
Platforms	All

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vpn-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth add-to-received-ebgp vpn-ipv4 *boolean*
Tree	vpn-ipv4
Default	false
Introduced	16.0.R3
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth add-to-received-ebgp vpn-ipv6 *boolean*
Tree	vpn-ipv6
Default	false
Introduced	16.0.R3
Platforms	All

aggregate-used-paths

Synopsis	Enable the **aggregate-used-paths** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth aggregate-used-paths
Tree	aggregate-used-paths
Introduced	16.0.R4
Platforms	All

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth aggregate-used-paths ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R4

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Platforms	All

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth aggregate-used-paths ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth aggregate-used-paths label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth aggregate-used-paths label-ipv6 *boolean*
Tree	label-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth aggregate-used-paths vpn-ipv4 *boolean*

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Tree	vpn-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth aggregate-used-paths vpn-ipv6 *boolean*
Tree	vpn-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

send-to-ebgp

Synopsis	Enable the **send-to-ebgp** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth send-to-ebgp
Tree	send-to-ebgp
Introduced	16.0.R4
Platforms	All

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth send-to-ebgp ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R4
Platforms	All

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ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth send-to-ebgp ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth send-to-ebgp label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth send-to-ebgp label-ipv6 *boolean*
Tree	label-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth send-to-ebgp vpn-ipv4 *boolean*
Tree	vpn-ipv4
Default	false

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Introduced	16.0.R4
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth send-to-ebgp vpn-ipv6 *boolean*
Tree	vpn-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

local-address *(ipv4-address-no-zone \| ipv6-address-no-zone \| interface-name)*

Synopsis	Local IP address used when communicating with BGP peers
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* local-address *(ipv4-address-no-zone | ipv6-address-no-zone | interface-name)*
Tree	local-address
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

local-as

Synopsis	Enter the **local-as** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* local-as
Tree	local-as
Introduced	16.0.R1
Platforms	All

as-number *number*

Synopsis	Local (or virtual) BGP AS number
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* local-as as-number *number*

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Tree	as-number
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

prepend-global-as *boolean*

Synopsis	Prepend global ASN when advertising routes to BGP peer
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* local-as prepend-global-as *boolean*
Tree	prepend-global-as
Description	When configured to **true**, the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer. When configured to **false**, the global ASN is not included in the AS_PATH attribute.
Default	true
Introduced	16.0.R1
Platforms	All

private *boolean*

Synopsis	Hide the local ASN in sent paths learned from peering
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* local-as private *boolean*
Tree	private
Description	When configured to **true**, the local AS number is only advertised to peers that use the local ASN for establishing BGP peering sessions. When configured to **false**, the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.
Default	false
Introduced	16.0.R1
Platforms	All

local-preference *number*

Synopsis	Default local preference if not in incoming routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* local-preference *number*

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Tree	local-preference
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

loop-detect *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* loop-detect *keyword*
Tree	loop-detect
Options	drop-peer, ignore-loop, off, discard-route
Introduced	16.0.R1
Platforms	All

loop-detect-threshold *number*

Synopsis	Threshold for the global ASN in a received AS path
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* loop-detect-threshold *number*
Tree	loop-detect-threshold
Range	0 to 15
Introduced	16.0.R6
Platforms	All

med-out *(number | keyword)*

Synopsis	Default MED attribute value to advertise to peers
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* med-out *(number | keyword)*
Tree	med-out
Max. Range	0 to 4294967295
Options	igp-cost
Introduced	16.0.R1
Platforms	All

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min-route-advertisement *number*

Synopsis	Minimum interval between successive prefix updates
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* min-route-advertisement *number*
Tree	min-route-advertisement
Range	1 to 255
Introduced	16.0.R1
Platforms	All

monitor

Synopsis	Enable the **monitor** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* monitor
Tree	monitor
Description	Commands in this context specify BMP-related configurations at the BGP neighbor level. When this context is unconfigured, the command settings are inherited from the BGP group-level configuration.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BMP monitoring
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* monitor admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

all-stations *boolean*

Synopsis	Send BMP messages to all configured stations

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Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* monitor all-stations *boolean*
Tree	all-stations
Description	When configured to **true**, this command specifies that BMP messages are to be sent to all configured BMP monitoring stations. When configured to **false**, the command is not used to indicate the stations which can receive BMP messages. The **station** command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.
Default	false
Introduced	16.0.R1
Platforms	All

route-monitoring

Synopsis	Enter the **route-monitoring** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* monitor route-monitoring
Tree	route-monitoring
Introduced	16.0.R1
Platforms	All

post-policy *boolean*

Synopsis	Allow post-policy route-monitoring messages to be sent
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* monitor route-monitoring post-policy *boolean*
Tree	post-policy
Default	false
Introduced	16.0.R1
Platforms	All

pre-policy *boolean*

Synopsis	Allow pre-policy route-monitoring messages to be sent
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* monitor route-monitoring pre-policy *boolean*
Tree	pre-policy

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Default	false
Introduced	16.0.R1
Platforms	All

station [station-name] *reference*

Synopsis	Add a list entry for **station**
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* monitor station *reference*
Tree	station
Description	This command configures the set of BMP monitoring stations for which BMP messages are to be sent.
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[**station-name**] *reference*

Synopsis	BMP monitoring station
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* monitor station *reference*
Tree	station
Reference	**configure** bmp station *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

multihop *number*

Synopsis	TTL in IP packet headers for EBGP peers multi-hops away
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* multihop *number*
Tree	multihop
Range	1 to 255
Introduced	16.0.R1

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Platforms All

multipath-eligible *boolean*

Synopsis Allow routes from this peer in multipath eligibility

Context **configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* multipath-eligible *boolean*

Tree multipath-eligible

Introduced 19.5.R1

Platforms All

next-hop-self *boolean*

Synopsis Advertise routes with local address as next-hop address

Context **configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* next-hop-self *boolean*

Tree next-hop-self

Description When configured to **true**, this command configures BGP to advertise routes to members of a group using a local address of the BGP instance as the BGP next-hop address.

Note that this command is set without exception, regardless of the route source (EBGP or IBGP) or its family. When used with VPN-IPv4 and VPN-IPv6 routes, the **configure router bgp rr-vpn-forwarding** command should also be configured.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, protocol standard behavior is applied to determine whether to set **next-hop-self** in advertised routes.

Introduced 16.0.R1

Platforms All

next-hop-unchanged

Synopsis Enable the **next-hop-unchanged** context

Context **configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* next-hop-unchanged

Tree next-hop-unchanged

Description Commands in this context specify the IP address families where the next hop remains unchanged when sending BGP routes to peers of the neighbor.

Introduced 16.0.R1

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Platforms	All

evpn *boolean*

Synopsis	Advertise EVPN routes with unchanged BGP next hop
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* next-hop-unchanged evpn *boolean*
Tree	evpn
Default	false
Introduced	20.2.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Advertise label-IPv4 routes with unchanged BGP next hop
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* next-hop-unchanged label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Advertise label-IPv6 routes with unchanged BGP next hop
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* next-hop-unchanged label-ipv6 *boolean*
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise VPN IPv4 routes with unchanged BGP next hop
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* next-hop-unchanged vpn-ipv4 *boolean*

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Tree	vpn-ipv4
Default	false
Introduced	20.2.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Advertise VPN IPv6 routes with unchanged BGP next hop
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* next-hop-unchanged vpn-ipv6 *boolean*
Tree	vpn-ipv6
Default	false
Introduced	20.2.R1
Platforms	All

origin-validation

Synopsis	Enable the **origin-validation** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* origin-validation
Tree	origin-validation
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable support for unlabeled unicast IPv4 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* origin-validation ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

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ipv6 *boolean*

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* origin-validation ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* origin-validation label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Enable support for labeled-unicast IPv6 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* origin-validation label-ipv6 *boolean*
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

outbound-route-filtering

Synopsis	Enable the **outbound-route-filtering** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* outbound-route-filtering
Tree	outbound-route-filtering
Description	Commands in this context configure the send and receive capabilities for Outbound Route Filtering (ORF).

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When this context is unconfigured, the command settings are inherited from the BGP group-level configuration.

Introduced 16.0.R1

Platforms All

extended-community

Synopsis Enable the **extended-community** context

Context **configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* outbound-route-filtering extended-community

Tree extended-community

Description Commands in this context configure the ORF send and receive capabilities based on Extended Communities.

When this context is unconfigured, the command settings are inherited from the group-level configuration.

Introduced 16.0.R1

Platforms All

accept-orf *boolean*

Synopsis Negotiate with peer to accept BGP ORF filters

Context **configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* outbound-route-filtering extended-community accept-orf *boolean*

Tree accept-orf

Description When configured to **true**, the receive capability in the BGP ORF is negotiated with a peer and ORF filters can be accepted from peers.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the accept capability in the BGP ORF is removed and any existing ORF filters that are currently in place are cleared.

Introduced 16.0.R1

Platforms All

send-orf

Synopsis Enable the **send-orf** context

Context **configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* outbound-route-filtering extended-community send-orf

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Tree	send-orf
Description	Commands in this context allow BGP to negotiate the send capability in the ORF negotiation with a peer. The send capability also causes the router to send a community filter, prefix filter, or AS path filter configured as an inbound filter on the BGP session to its peer as an ORF Action ADD. When this context is unconfigured, the command settings are inherited from the BGP group-level configuration.
Introduced	16.0.R1
Platforms	All

route-target [community-name] *string*

Synopsis	Add a list entry for **route-target**
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* outbound-route-filtering extended-community send-orf route-target *string*
Tree	route-target
Introduced	16.0.R1
Platforms	All

[**community-name**] *string*

Synopsis	Route target community name
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* outbound-route-filtering extended-community send-orf route-target *string*
Tree	route-target
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

passive *boolean*

Synopsis	Use passive mode for BGP communication
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* passive *boolean*
Tree	passive
Introduced	16.0.R1

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Platforms All

path-mtu-discovery *boolean*

Synopsis Enable path MTU discovery

Context **configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* path-mtu-discovery *boolean*

Tree path-mtu-discovery

Description When configured to **true**, Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.

When set to **true**, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.

When PMTUD is configured to **false** and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.

Introduced 16.0.R1

Platforms All

peer-as *number*

Synopsis Peer AS number

Context **configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* peer-as *number*

Tree peer-as

Description This command configures the autonomous system number for the peer. The peer AS number must be configured for each configured peer.

For EBGP peers, the peer AS number configured must be different from the autonomous system number configured for this router under the global level since the peer will be in a different autonomous system than this router.

For IBGP peers, the peer AS number must be the same as the autonomous system number of this router configured under the global level.

Range 1 to 4294967295

Introduced 16.0.R1

Platforms All

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peer-creation-type *keyword*

Synopsis	Peer creation type
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* peer-creation-type *keyword*
Tree	peer-creation-type
Options	static, dynamic, dynamic-if-remote, dynamic-if-local
Default	static
Introduced	16.0.R1
Platforms	All

peer-ip-tracking *boolean*

Synopsis	Enable BGP peer tracking
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* peer-ip-tracking *boolean*
Tree	peer-ip-tracking
Description	When configured to **true**, this command enables BGP peer tracking. Peer tracking should be used with caution. Peer tracking can tear a session down even if the loss of connectivity turns out to be short-lived (for example, while the IGP protocol is re-converging). Next-hop tracking, which is always enabled, handles temporary connectivity issues more effectively. When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**. When this command inherits a value of **false**, peer tracking is disabled.
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Route preference for routes learned from all peers
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* preference *number*
Tree	preference
Description	This command configures the route preference for routes learned from the configured peers.

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The lower the preference value, the higher the chance of the route being the active route. The router assigns BGP routes the highest default preference as compared to routes that are direct, static or learned via MPLS or OSPF.

When unconfigured, the command setting is inherited from the group-level configuration.

Range	1 to 255
Introduced	16.0.R1
Platforms	All

prefix-limit [family] *keyword*

Synopsis	Enter the **prefix-limit** list instance
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* prefix-limit *keyword*
Tree	prefix-limit
Introduced	16.0.R1
Platforms	All

[**family**] *keyword*

Synopsis	Address family to which the limit applies
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* prefix-limit *keyword*
Tree	prefix-limit
Options	ipv4, vpn-ipv4, ipv6, mcast-ipv4, vpn-ipv6, l2-vpn, mvpn-ipv4, mdt-safi, ms-pw, flow-ipv4, route-target, mcast-vpn-ipv4, mvpn-ipv6, flow-ipv6, evpn, mcast-ipv6, label-ipv4, label-ipv6, bgp-ls, mcast-vpn-ipv6, sr-policy-ipv4, sr-policy-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

hold-excess *number*

Synopsis	Percentage of maximum routes to install in route table
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* prefix-limit *keyword* hold-excess *number*
Tree	hold-excess

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Description	This command specifies the percentage of maximum routes that are allowed to be installed in the route table for the configured address family. If a peer within scope of the configuration exceeds the limit, the overflow routes are held in the BGP RIB as inactive routes and are ineligible for forwarding and advertisement to other peers. If the **post-import** command is configured to **true**, only routes not rejected by import policies count toward the limit. A BGP route in an overflow state is reconsidered for activation and reinstallation when an UPDATE message is received for the route. This command is mutually exclusive with the **idle-timeout** and **log-only** commands.
Range	1 to 100
Introduced	23.7.R1
Platforms	All

idle-timeout *number*

Synopsis	Time which BGP peering remains idle before reconnecting
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* prefix-limit *keyword* idle-timeout *number*
Tree	idle-timeout
Description	This command defines the idle time after an administrative take-down before BGP re-establishes a session and reconnects to a peer. When unconfigured, the command inherits the value from the group-level configuration.
Range	1 to 1024
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Send warning message at threshold instead of take-down
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* prefix-limit *keyword* log-only *boolean*
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

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maximum *number*

Synopsis	Maximum number of routes to be learned from a peer
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* prefix-limit *keyword* maximum *number*
Tree	maximum
Description	This command configures the maximum number of BGP routes than can be received from a peer before administrative action is taken.
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R2
Platforms	All

post-import *boolean*

Synopsis	Apply limit only to routes accepted by import policies
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* prefix-limit *keyword* post-import *boolean*
Tree	post-import
Default	false
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Percentage threshold that triggers a warning message
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* prefix-limit *keyword* threshold *number*
Tree	threshold
Range	1 to 100
Default	90
Introduced	16.0.R1
Platforms	All

remove-private

Synopsis	Enable the **remove-private** context

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Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* remove-private
Tree	remove-private
Introduced	16.0.R1
Platforms	All

limited *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* remove-private limited *boolean*
Tree	limited
Default	false
Introduced	16.0.R1
Platforms	All

replace *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* remove-private replace *boolean*
Tree	replace
Default	false
Introduced	19.10.R1
Platforms	All

skip-peer-as *boolean*

Synopsis	Keep private ASN if it is the same as the BGP peer ASN
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* remove-private skip-peer-as *boolean*
Tree	skip-peer-as
Default	false
Introduced	16.0.R1
Platforms	All

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segment-routing-v6

Synopsis	Enable the **segment-routing-v6** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* segment-routing-v6
Tree	segment-routing-v6
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

route-advertisement

Synopsis	Enable the **route-advertisement** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* segment-routing-v6 route-advertisement
Tree	route-advertisement
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

drop-routes-with-srv6-tlvs *boolean*

Synopsis	Drop BGP routes with SRv6 TLVs
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* segment-routing-v6 route-advertisement drop-routes-with-srv6-tlvs *boolean*
Tree	drop-routes-with-srv6-tlvs
Description	When configured to **true**, the router drops and does not advertise BGP routes (that belong to any address family) with SRv6 TLVs. When configured to **false**, the router advertises BGP routes with SRv6 TLVs.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

family [family-type] *keyword*

Synopsis	Enter the **family** list instance
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* segment-routing-v6 route-advertisement family *keyword*
Tree	family

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Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**family-type**] *keyword*

Synopsis	IP address type that SRv6 route attributes apply to
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* segment-routing-v6 route-advertisement family *keyword*
Tree	family
Options	ipv4, ipv6
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

strip-srv6-tlvs *boolean*

Synopsis	Strip SRv6 TLVs from BGP routes advertised to peers
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* segment-routing-v6 route-advertisement family *keyword* strip-srv6-tlvs *boolean*
Tree	strip-srv6-tlvs
Description	When configured to **true**, BGP routes that belong to the address family specified using the **family** command are advertised to peers with SRv6 TLVs removed. Locally or remotely added SRv6 TLVs can be removed. When configured to **false**, SRv6 TLVs are not stripped from BGP routes advertised to peers.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

selective-label-ipv4-install *boolean*

Synopsis	Enable selective download for BGP label-ipv4 routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* selective-label-ipv4-install *boolean*
Tree	selective-label-ipv4-install
Introduced	19.10.R1
Platforms	All

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send-communities

Synopsis	Enter the **send-communities** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* send-communities
Tree	send-communities
Introduced	16.0.R1
Platforms	All

extended *boolean*

Synopsis	Advertise the Extended Communities attribute to peers
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* send-communities extended *boolean*
Tree	extended
Description	When unconfigured, this command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **true**. When this command inherits a value of **true**, BGP extended communities are sent to peers in the Extended Communities attribute. When configured to **false**, all extended communities are removed from all routes advertised to BGP peers.
Introduced	16.0.R1
Platforms	All

large *boolean*

Synopsis	Advertise the Large Communities attribute to peers
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* send-communities large *boolean*
Tree	large
Description	When unconfigured, this command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **true**. When this command inherits a value of **true**, BGP large communities are sent to peers in the Large Communities attribute. When configured to **false**, all large communities are removed from all routes advertised to BGP peers.
Introduced	16.0.R1
Platforms	All

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standard *boolean*

Synopsis	Advertise the Communities attribute to peers
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* send-communities standard *boolean*
Tree	standard
Description	When unconfigured, this command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **true**. When this command inherits a value of **true**, BGP standard communities are sent to peers in the Communities attribute. When configured to **false**, all standard communities are removed from all routes advertised to BGP peers.
Introduced	16.0.R1
Platforms	All

send-default

Synopsis	Enable the **send-default** context
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* send-default
Tree	send-default
Introduced	19.7.R1
Platforms	All

export-policy *reference*

Synopsis	Export policy name
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* send-default export-policy *reference*
Tree	export-policy
Reference	**configure** policy-options policy-statement *string*
Introduced	19.7.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable IPv4 family type

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Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* send-default ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	19.7.R1
Platforms	All

ipv6 *boolean*

Synopsis	Enable IPv6 family type
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* send-default ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	19.7.R1
Platforms	All

split-horizon *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* split-horizon *boolean*
Tree	split-horizon
Description	When configured to **true**, this command enables the use of split-horizon. This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP. Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary. When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**. When this command inherits a value of **false**, the use of split-horizon is disabled.
Introduced	16.0.R1
Platforms	All

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tcp-mss *(number | keyword)*

Synopsis	TCP maximum segment size override
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* tcp-mss *(number | keyword)*
Tree	tcp-mss
Description	This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command). The configured value controls two properties of the TCP connection as follows: TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router. TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.
Range	384 to 9746
Options	ip-stack
Introduced	21.2.R1
Platforms	All

third-party-nexthop *boolean*

Synopsis	Apply third-party next-hop processing to EBGP peers
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* third-party-nexthop *boolean*
Tree	third-party-nexthop
Introduced	16.0.R1
Platforms	All

ttl-security *number*

Synopsis	Minimum TTL value for an incoming BGP packet
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* ttl-security *number*
Tree	ttl-security
Description	This command configures the minimum TTL value that BGP will accept from an incoming packet. A packet with a TTL value less than the minimum configured TTL value is discarded.

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When unconfigured, the command inherits the value of the group-level setting.

Range	1 to 255
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	BGP peer type
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* type *keyword*
Tree	type
Options	no-type, internal, external
Introduced	16.0.R1
Platforms	All

vpn-apply-export *boolean*

Synopsis	Apply base-instance BGP export policies to VPN routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* vpn-apply-export *boolean*
Tree	vpn-apply-export
Description	When configured to **true**, base-instance BGP export route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes. When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**. When this command inherits a value of **false**, the export policies are not applied.
Introduced	16.0.R1
Platforms	All

vpn-apply-import *boolean*

Synopsis	Apply base-instance BGP import policies to VPN routes
Context	**configure** router *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* vpn-apply-import *boolean*
Tree	vpn-apply-import
Description	When configured to **true**, base-instance BGP import route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes.

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When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the import policies are not applied.

Introduced 16.0.R1

Platforms All

neighbor-trust

Synopsis Enter the **neighbor-trust** context

Context **configure** router *string* bgp neighbor-trust

Tree neighbor-trust

Description Commands in this context enable a label security feature at an inter-AS boundary for the specified IP families.

This label security feature allows the configuration of a router, acting in a PE or in an ASBR role, to accept packets of VPN-IP or EVPN prefixes only from direct EBGP neighbors to which it advertised a service label.

The untrusted state identifies the participating interfaces. The router supports a maximum of 15 network interfaces that can participate in this feature.

At a high level, BGP tracks each direct EBGP neighbor over an untrusted interface and to which it sent a prefix label. For each of those prefixes, BGP programs a bit map in the ILM record that indicates, on a per-untrusted interface basis, whether the matching received packets must be forwarded or dropped.

Introduced 16.0.R4

Platforms All

evpn *boolean*

Synopsis Enable inter-AS label security for the EVPN family

Context **configure** router *string* bgp neighbor-trust evpn *boolean*

Tree evpn

Default false

Introduced 23.3.R1

Platforms All

vpn-ipv4 *boolean*

Synopsis Enable inter-AS label security for the VPN-IPv4 family

Context **configure** router *string* bgp neighbor-trust vpn-ipv4 *boolean*

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Tree	vpn-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Enable inter-AS label security for the VPN-IPv6 family
Context	**configure** router *string* bgp neighbor-trust vpn-ipv6 *boolean*
Tree	vpn-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

next-hop-resolution

Synopsis	Enter the **next-hop-resolution** context
Context	**configure** router *string* bgp next-hop-resolution
Tree	next-hop-resolution
Introduced	16.0.R1
Platforms	All

allow-unresolved-leaking *boolean*

Synopsis	Allow unresolved BGP routes to be leaked to VPRN routes
Context	**configure** router *string* bgp next-hop-resolution allow-unresolved-leaking *boolean*
Tree	allow-unresolved-leaking
Description	When configured to **true**, this command instructs BGP in the base router instance to allow its routes to be leaked to other (VPRN) BGP instances even if the routes to be leaked do not have a BGP next-hop that can be resolved by the base instance. When configured to **false**, VPRN cannot import a route.
Default	false
Introduced	19.10.R1
Platforms	All

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labeled-routes

Synopsis	Enter the **labeled-routes** context
Context	**configure** router *string* bgp next-hop-resolution labeled-routes
Tree	labeled-routes
Introduced	16.0.R1
Platforms	All

allow-static *boolean*

Synopsis	Allow static routes to resolve BGP next-hop
Context	**configure** router *string* bgp next-hop-resolution labeled-routes allow-static *boolean*
Tree	allow-static
Description	When configured to **true**, the BGP next-hop of label-IPv4, label-IPv6, VPN-IPv4, and VPN-IPv6 routes received from any EBGP or IBGP peer can be resolved using static routes, except for static default routes (0/0 and ::/0). A static route is less preferred than a local or interface route for resolving the BGP next-hop of labeled route but is more preferred than other IGP routes or tunnels. When configured to **false**, BGP next-hop resolution using static routes is not allowed. A label-IPv4 or label-IPv6 route can be resolved by a static blackhole route, even when this command is configured to **false**, but only if the static blackhole route is the longest prefix match (LPM) static route for the BGP next-hop address.
Default	false
Introduced	16.0.R1
Platforms	All

rr-use-route-table *boolean*

Synopsis	Use RTM to resolve BGP next-hop if TTM resolution fails
Context	**configure** router *string* bgp next-hop-resolution labeled-routes rr-use-route-table *boolean*
Tree	rr-use-route-table
Description	When configured to **true**, this command enables BGP to perform a lookup of IGP routes in the route table to resolve the BGP next-hop of label-IPv4 and label-IPv6 routes. This is useful for a Route Reflector (RR) that does not participate in tunnel signaling protocols such as LDP and RSVP and therefore, does not have tunnels to resolve the BGP next-hops of label-unicast routes. Disable route table installation (via the **route-table-install** command) before setting this command to **true**; otherwise, forwarding of label routes resolved in this way will be incorrect.

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When configured to **false**, RTM next-hop resolution is not enabled.

Default	false
Introduced	16.0.R1
Platforms	All

transport-tunnel

Synopsis	Enter the **transport-tunnel** context
Context	**configure** router *string* bgp next-hop-resolution labeled-routes transport-tunnel
Tree	transport-tunnel
Description	Commands in this context configure options for the next-hop resolution of BGP labeled routes (VPN-IP and labeled-unicast) using tunnels in TTM.
Introduced	16.0.R1
Platforms	All

family [family-type] *keyword*

Synopsis	Enter the **family** list instance
Context	**configure** router *string* bgp next-hop-resolution labeled-routes transport-tunnel family *keyword*
Tree	family
Introduced	16.0.R1
Platforms	All

[**family-type**] *keyword*

Synopsis	Address family type for tunnel selection
Context	**configure** router *string* bgp next-hop-resolution labeled-routes transport-tunnel family *keyword*
Tree	family
Options	vpn, label-ipv4, label-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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allow-flex-algo-fallback *boolean*

Synopsis	Enable flexible algorithm fallback
Context	**configure** router *string* bgp next-hop-resolution labeled-routes transport-tunnel family *keyword* allow-flex-algo-fallback *boolean*
Tree	allow-flex-algo-fallback
Description	When configured to **true**, a BGP router with a Flex-Algorithm action configured (via the **configure policy-options policy-statement entry action flex-algo** command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available**.** When configured to **false**, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.
Default	false
Introduced	20.10.R1
Platforms	All

enforce-strict-tunnel-tagging *boolean*

Synopsis	Consider only LSPs with an admin-tag for next hop
Context	**configure** router *string* bgp next-hop-resolution labeled-routes transport-tunnel family *keyword* enforce-strict-tunnel-tagging *boolean*
Tree	enforce-strict-tunnel-tagging
Description	When configured to **true**, the system only considers LSPs marked with an administrative tag for next-hop resolution. Untagged LSPs are not considered. When configured to **false**, matching admin-tagged RSVP or SR-TE LSPs are used in preference to other LSP types, whether tagged or untagged. If no eligible RSVP or SR-TE LSP exists, the system falls back to using tagged LSPs that are not explicitly excluded by a route admin tag policy and untagged LSPs of other types.
Default	false
Introduced	16.0.R1
Platforms	All

resolution *keyword*

Synopsis	Resolution mode for binding BGP routes to tunnel types
Context	**configure** router *string* bgp next-hop-resolution labeled-routes transport-tunnel family *keyword* resolution *keyword*
Tree	resolution
Options	none, filter, any

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Default	filter
Introduced	16.0.R1
Platforms	All

resolution-filter

Synopsis	Enter the **resolution-filter** context
Context	**configure** router *string* bgp next-hop-resolution labeled-routes transport-tunnel family *keyword* resolution-filter
Tree	resolution-filter
Introduced	16.0.R1
Platforms	All

bgp *boolean*

Synopsis	Use BGP tunneling for next-hop resolution
Context	**configure** router *string* bgp next-hop-resolution labeled-routes transport-tunnel family *keyword* resolution-filter bgp *boolean*
Tree	bgp
Description	When configured to **true**, this command enables the selection of BGP tunneling for next-hop resolution and specifies the IPv4 tunnels created by receiving BGP label-unicast IPv4 routes for /32 IPv4 prefixes. When configured to **false**, BGP tunneling for next-hop resolution is not enabled.
Introduced	16.0.R1
Platforms	All

ldp *boolean*

Synopsis	Use LDP tunneling for next-hop resolution
Context	**configure** router *string* bgp next-hop-resolution labeled-routes transport-tunnel family *keyword* resolution-filter ldp *boolean*
Tree	ldp
Description	When configured to **true**, this command enables the selection of LDP tunneling for next-hop resolution and specifies the LDP tunnels in the tunnel table corresponding to /32 IPv4 FECs and /128 IPv6 FECs. When configured to **false**, LDP tunneling for next-hop resolution is not enabled.
Default	true

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Introduced	16.0.R1
Platforms	All

mpls-fwd-policy *boolean*

Synopsis	Use MPLS forwarding policy for next-hop resolution
Context	**configure** router *string* bgp next-hop-resolution labeled-routes transport-tunnel family *keyword* resolution-filter mpls-fwd-policy *boolean*
Tree	mpls-fwd-policy
Default	false
Introduced	16.0.R4
Platforms	All

rib-api *boolean*

Synopsis	Use RIB API gRPC service for next-hop resolution
Context	**configure** router *string* bgp next-hop-resolution labeled-routes transport-tunnel family *keyword* resolution-filter rib-api *boolean*
Tree	rib-api
Default	false
Introduced	16.0.R4
Platforms	All

rsvp *boolean*

Synopsis	Use RSVP tunneling for next-hop resolution
Context	**configure** router *string* bgp next-hop-resolution labeled-routes transport-tunnel family *keyword* resolution-filter rsvp *boolean*
Tree	rsvp
Description	When configured to **true**, this command enables the selection of RSVP tunneling for next-hop resolution and specifies RSVP tunnels in a tunnel table to IPv4 destinations. This option allows BGP to use the best metric RSVP LSP to the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface of the remote BGP router. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID. When configured to **false**, this command disables the selection of RSVP tunneling for next-hop resolution.
Default	false

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Introduced	16.0.R1
Platforms	All

sr-isis *boolean*

Synopsis	Use IS-IS SR tunneling for next-hop resolution
Context	**configure** router *string* bgp next-hop-resolution labeled-routes transport-tunnel family *keyword* resolution-filter sr-isis *boolean*
Tree	sr-isis
Description	When configured to **true**, this command enables the selection of the Segment Routing (SR) tunnel type programmed by an IS-IS instance in the TTM for next-hop resolution of BGP routes and labeled routes. This command allows BGP to use the segment-routing tunnel in the tunnel table submitted by the lowest preference IS-IS instance or, in case of a tie, the lowest numbered IS-IS instance. When configured to **false**, the SR tunnel type programmed by an IS-IS instance in the TTM for next-hop resolution is not enabled for selection.
Default	false
Introduced	16.0.R1
Platforms	All

sr-ospf *boolean*

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	**configure** router *string* bgp next-hop-resolution labeled-routes transport-tunnel family *keyword* resolution-filter sr-ospf *boolean*
Tree	sr-ospf
Description	When configured to **true**, this command enables the selection of the Segment Routing (SR) tunnel type programmed by an OSPF instance in the TTM for next-hop resolution of BGP routes and labeled routes. This command allows BGP to use the segment routing tunnel in the tunnel table submitted by the lowest preference OSPF instance or, in case of a tie, the lowest numbered OSPF instance. When configured to **false**, the SR tunnel type programmed by an OSPF instance in the TTM for next-hop resolution is not enabled for selection.
Default	false
Introduced	16.0.R1
Platforms	All

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sr-ospf3 *boolean*

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
Context	**configure** router *string* bgp next-hop-resolution labeled-routes transport-tunnel family *keyword* resolution-filter sr-ospf3 *boolean*
Tree	sr-ospf3
Description	When configured to **true**, this command enables the selection of the IPv6 Segment Routing (SR) tunnel type programmed by an OSPFv3 instance in the TTMv6 for next-hop resolution of BGP routes and labeled routes. This command allows BGP to use the segment routing tunnel in the tunnel table submitted by the lowest preference OSPFv3 instance or, in case of a tie, the lowest numbered OSPFv3 instance. When configured to **false**, the SR tunnel type programmed by an OSPFv3 instance in the TTM for next-hop resolution is not enabled for selection.
Default	false
Introduced	16.0.R6
Platforms	All

sr-policy *boolean*

Synopsis	Use SR policies for next-hop resolution
Context	**configure** router *string* bgp next-hop-resolution labeled-routes transport-tunnel family *keyword* resolution-filter sr-policy *boolean*
Tree	sr-policy
Description	When configured to **true**, this command enables the use of segment routing policies to resolve the BGP next hop of certain BGP routes (depending on the context). The segment routing policies that are considered are statically configured in the local router or learned by BGP routes (AFI 1/SAFI 73). For a BGP route to be resolved by an SR policy, the highest numbered color extended community attached to BGP route must match the color of the SR policy. Next hop resolution of VPN-IP routes by SR policies is not supported. When configured to **false**, segment routing policies are not enabled for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

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sr-te *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	**configure** router *string* bgp next-hop-resolution labeled-routes transport-tunnel family *keyword* resolution-filter sr-te *boolean*
Tree	sr-te
Description	When configured to **true**, this command enables the selection of the Segment Routing (SR) tunnel type programmed by a traffic engineered (TE) instance in the TTM for next-hop resolution. In the case of multiple SR-TE tunnels with the same lowest metric, BGP selects the tunnel with the lowest tunnel ID. When configured to **false**, the SR tunnel type programmed by a TE instance in the TTM for next-hop resolution is not enabled for selection.
Default	false
Introduced	16.0.R1
Platforms	All

udp *boolean*

Synopsis	Use MPLS over UDP tunneling for next-hop resolution
Context	**configure** router *string* bgp next-hop-resolution labeled-routes transport-tunnel family *keyword* resolution-filter udp *boolean*
Tree	udp
Default	false
Introduced	16.0.R1
Platforms	All

use-bgp-routes

Synopsis	Enter the **use-bgp-routes** context
Context	**configure** router *string* bgp next-hop-resolution labeled-routes use-bgp-routes
Tree	use-bgp-routes
Introduced	21.2.R1
Platforms	All

label-ipv6-explicit-null *boolean*

Synopsis	Use BGP routes to resolve address family routes

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Context	**configure** router *string* bgp next-hop-resolution labeled-routes use-bgp-routes label-ipv6-explicit-null *boolean*
Tree	label-ipv6-explicit-null
Description	When configured to **true**, a labeled IPv6 route with the explicit-null label can be resolved by other routes, and also by unlabeled IPv4 routes and unlabeled IPv6 routes that are resolved by static routes, interface routes, or tunnels. Up to four levels of recursive resolution are supported when the top route is a labeled IPv6 route with an explicit-null label. When disabled, a labeled IPv6 route cannot be resolved by other labeled IPv6 routes. A labeled IPv6 route with a regular label (not explicit-null) is never resolved by other labeled IPv6 routes.
Default	false
Introduced	21.2.R1
Platforms	All

policy *reference*

Synopsis	Policy that filters routes for BGP next-hop resolution
Context	**configure** router *string* bgp next-hop-resolution policy *reference*
Tree	policy
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	All

shortcut-tunnel

Synopsis	Enter the **shortcut-tunnel** context
Context	**configure** router *string* bgp next-hop-resolution shortcut-tunnel
Tree	shortcut-tunnel
Description	Commands in this context configure the tunnel types that can be used to resolve unlabeled IPv4 and IPv6 BGP routes.
Introduced	16.0.R1
Platforms	All

family [family-type] *keyword*

Synopsis	Enter the **family** list instance

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Context	**configure** router *string* bgp next-hop-resolution shortcut-tunnel family *keyword*
Tree	family
Introduced	16.0.R1
Platforms	All

[**family-type**] *keyword*

Synopsis	Address family type for shortcut tunnel selection
Context	**configure** router *string* bgp next-hop-resolution shortcut-tunnel family *keyword*
Tree	family
Options	ipv4, ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

allow-flex-algo-fallback *boolean*

Synopsis	Enable flexible algorithm fallback
Context	**configure** router *string* bgp next-hop-resolution shortcut-tunnel family *keyword* allow-flex-algo-fallback *boolean*
Tree	allow-flex-algo-fallback
Description	When configured to **true**, a BGP router with a Flex-Algorithm action configured (via the **configure policy-options policy-statement entry action flex-algo** command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available**.** When configured to **false**, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.
Default	false
Introduced	20.10.R1
Platforms	All

disallow-igp *boolean*

Synopsis	Do not perform route table lookup to resolve BGP route
Context	**configure** router *string* bgp next-hop-resolution shortcut-tunnel family *keyword* disallow-igp *boolean*
Tree	disallow-igp

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Description	When configured to **true**, no attempt is made to resolve the IPv4 or IPv6 BGP route using route table lookup if no resolving tunnel can be found in the tunnel table. When configured to **false**, route table lookup can be performed if no resolving tunnel is found in the tunnel table.
Default	false
Introduced	16.0.R1
Platforms	All

enforce-strict-tunnel-tagging *boolean*

Synopsis	Consider only LSPs with an admin-tag for next hop
Context	**configure** router *string* bgp next-hop-resolution shortcut-tunnel family *keyword* enforce-strict-tunnel-tagging *boolean*
Tree	enforce-strict-tunnel-tagging
Description	When configured to **true**, the system only considers LSPs marked with an administrative tag for next-hop resolution. Untagged LSPs are not considered. When configured to **false**, matching admin-tagged RSVP or SR-TE LSPs are used in preference to other LSP types, whether tagged or untagged. If no eligible RSVP or SR-TE LSP exists, the system falls back to using tagged LSPs that are not explicitly excluded by a route admin tag policy and untagged LSPs of other types.
Default	false
Introduced	16.0.R1
Platforms	All

resolution *keyword*

Synopsis	Resolution mode for binding BGP routes to tunnel types
Context	**configure** router *string* bgp next-hop-resolution shortcut-tunnel family *keyword* resolution *keyword*
Tree	resolution
Options	none, filter, any
Default	none
Introduced	16.0.R1
Platforms	All

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resolution-filter

Synopsis	Enter the **resolution-filter** context
Context	**configure** router *string* bgp next-hop-resolution shortcut-tunnel family *keyword* resolution-filter
Tree	resolution-filter
Introduced	16.0.R1
Platforms	All

bgp *boolean*

Synopsis	Use BGP tunneling for next-hop resolution
Context	**configure** router *string* bgp next-hop-resolution shortcut-tunnel family *keyword* resolution-filter bgp *boolean*
Tree	bgp
Description	When configured to **true**, this command enables the selection of BGP tunneling for next-hop resolution and specifies the IPv4 tunnels created by receiving BGP label-unicast IPv4 routes for /32 IPv4 prefixes. When configured to **false**, BGP tunneling for next-hop resolution is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

ldp *boolean*

Synopsis	Use LDP tunneling for next-hop resolution
Context	**configure** router *string* bgp next-hop-resolution shortcut-tunnel family *keyword* resolution-filter ldp *boolean*
Tree	ldp
Description	When configured to **true**, BGP selects the LDP FEC that is the longest prefix match to the BGP next-hop address. When configured to **false**, LDP tunneling for next-hop resolution is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

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mpls-fwd-policy *boolean*

Synopsis	Use MPLS forwarding policy for next-hop resolution
Context	**configure** router *string* bgp next-hop-resolution shortcut-tunnel family *keyword* resolution-filter mpls-fwd-policy *boolean*
Tree	mpls-fwd-policy
Default	false
Introduced	16.0.R4
Platforms	All

rib-api *boolean*

Synopsis	Use RIB API gRPC service for next-hop resolution
Context	**configure** router *string* bgp next-hop-resolution shortcut-tunnel family *keyword* resolution-filter rib-api *boolean*
Tree	rib-api
Default	false
Introduced	16.0.R4
Platforms	All

rsvp *boolean*

Synopsis	Use RSVP tunneling for next-hop resolution
Context	**configure** router *string* bgp next-hop-resolution shortcut-tunnel family *keyword* resolution-filter rsvp *boolean*
Tree	rsvp
Description	When configured to **true**, this command enables the selection of RSVP tunneling for next-hop resolution and specifies RSVP tunnels in a tunnel table to IPv4 destinations. This option allows BGP to use the best metric RSVP LSP to the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface of the remote BGP router. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID. When configured to **false**, this command disables the selection of RSVP tunneling for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

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sr-isis *boolean*

Synopsis	Use IS-IS SR tunneling for next-hop resolution
Context	**configure** router *string* bgp next-hop-resolution shortcut-tunnel family *keyword* resolution-filter sr-isis *boolean*
Tree	sr-isis
Description	When configured to **true**, this command enables the selection of the Segment Routing (SR) tunnel type programmed by an IS-IS instance in the TTM for next-hop resolution of BGP routes and labeled routes. This command allows BGP to use the segment-routing tunnel in the tunnel table submitted by the lowest preference IS-IS instance or, in case of a tie, the lowest numbered IS-IS instance. When configured to **false**, the SR tunnel type programmed by an IS-IS instance in the TTM for next-hop resolution is not enabled for selection.
Default	false
Introduced	16.0.R1
Platforms	All

sr-ospf *boolean*

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	**configure** router *string* bgp next-hop-resolution shortcut-tunnel family *keyword* resolution-filter sr-ospf *boolean*
Tree	sr-ospf
Description	When configured to **true**, this command enables the selection of the Segment Routing (SR) tunnel type programmed by an OSPF instance in the TTM for next-hop resolution of BGP routes and labeled routes. This command allows BGP to use the segment routing tunnel in the tunnel table submitted by the lowest preference OSPF instance or, in case of a tie, the lowest numbered OSPF instance. When configured to **false**, the SR tunnel type programmed by an OSPF instance in the TTM for next-hop resolution is not enabled for selection.
Default	false
Introduced	16.0.R1
Platforms	All

sr-ospf3 *boolean*

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution

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Context	**configure** router *string* bgp next-hop-resolution shortcut-tunnel family *keyword* resolution-filter sr-ospf3 *boolean*
Tree	sr-ospf3
Description	When configured to **true**, this command enables the selection of the IPv6 Segment Routing (SR) tunnel type programmed by an OSPFv3 instance in the TTMv6 for next-hop resolution of BGP routes and labeled routes. This command allows BGP to use the segment routing tunnel in the tunnel table submitted by the lowest preference OSPFv3 instance or, in case of a tie, the lowest numbered OSPFv3 instance. When configured to **false**, the SR tunnel type programmed by an OSPFv3 instance in the TTM for next-hop resolution is not enabled for selection.
Default	false
Introduced	16.0.R6
Platforms	All

sr-policy *boolean*

Synopsis	Use SR policies for next-hop resolution
Context	**configure** router *string* bgp next-hop-resolution shortcut-tunnel family *keyword* resolution-filter sr-policy *boolean*
Tree	sr-policy
Description	When configured to **true**, this command enables the use of segment routing policies to resolve the BGP next hop of certain BGP routes (depending on the context). The segment routing policies that are considered are statically configured in the local router or learned by BGP routes (AFI 1/SAFI 73). For a BGP route to be resolved by an SR policy, the highest numbered color extended community attached to BGP route must match the color of the SR policy. When configured to **false**, segment routing policies are not enabled for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

sr-te *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	**configure** router *string* bgp next-hop-resolution shortcut-tunnel family *keyword* resolution-filter sr-te *boolean*
Tree	sr-te

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Description	When configured to **true**, this command enables the selection of the Segment Routing (SR) tunnel type programmed by a traffic engineered (TE) instance in the TTM for next-hop resolution. In the case of multiple SR-TE tunnels with the same lowest metric, BGP selects the tunnel with the lowest tunnel ID. When configured to **false**, the SR tunnel type programmed by a TE instance in the TTM for next-hop resolution is not enabled for selection.
Default	false
Introduced	16.0.R1
Platforms	All

use-bgp-routes *boolean*

Synopsis	Use BGP routes to resolve BGP next hops
Context	**configure** router *string* bgp next-hop-resolution use-bgp-routes *boolean*
Tree	use-bgp-routes
Description	This command enables the use of BGP routes to resolve BGP next hops. When this command is enabled, any unlabeled IPv4 or IPv6 BGP route received from a VPRN BGP peer becomes resolvable by up to four other BGP routes in order to resolve the route to a VPRN IP interface. A VPRN BGP route is not resolvable by another VPRN BGP route or by a BGP-VPN route. This command also allows unlabeled IPv4 or IPv6 BGP routes leaked from the GRT with unresolved next hops (in the GRT) to be resolvable by BGP-VPN routes (of the VPRN).
Default	false
Introduced	16.0.R1
Platforms	All

use-leaked-routes

Synopsis	Enter the **use-leaked-routes** context
Context	**configure** router *string* bgp next-hop-resolution use-leaked-routes
Tree	use-leaked-routes
Introduced	23.7.R1
Platforms	All

static *boolean*

Synopsis	Use leaked static routes to resolve BGP next hop

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Context	**configure** router *string* bgp next-hop-resolution use-leaked-routes static *boolean*
Tree	static
Description	When configured to **true**, the router allows any non-leaked unlabeled unicast IPv4 or IPv6 route in the BGP RIB to be resolved by a leaked static route with direct next hops. A BGP route resolved this way cannot resolve other routes (including BGP routes) and cannot be redistributed into non-BGP protocols, such as IGP. When configured to **false**, the router prevents the use of leaked static routes to resolve BGP routes.
Default	false
Introduced	23.7.R1
Platforms	All

vpn-family-policy *reference*

Synopsis	Policy to filter routes for next-hop resolution
Context	**configure** router *string* bgp next-hop-resolution vpn-family-policy *reference*
Tree	vpn-family-policy
Reference	**configure** policy-options policy-statement *string*
Introduced	20.5.R1
Platforms	All

weighted-ecmp *boolean*

Synopsis	Use weighted ECMP for next-hop tunnel selection for 6PE
Context	**configure** router *string* bgp next-hop-resolution weighted-ecmp *boolean*
Tree	weighted-ecmp
Description	When configured to **true**, this command enables weighted ECMP for next-hop tunnel selection for 6PE. When weighted ECMP is enabled, the RSVP-TE tunnel used to forward 6PE packets to the ECMP next hop that is chosen according to the outcome of the hash on the packet at the normalized load-balancing weight of the tunnel. When configured to **false**, weighted ECMP is disabled for next-hop tunnel selection for 6PE.
Default	false
Introduced	16.0.R1
Platforms	All

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optimal-route-reflection

Synopsis	Enter the **optimal-route-reflection** context
Context	**configure** router *string* bgp optimal-route-reflection
Tree	optimal-route-reflection
Introduced	16.0.R1
Platforms	All

location [location-id] *number*

Synopsis	Enter the **location** list instance
Context	**configure** router *string* bgp optimal-route-reflection location *number*
Tree	location
Description	Commands in this context configure the location ID for the route reflector. A BGP neighbor can be associated with a location if it is a route-reflector client. Up to three IPv4 addresses and three IPv6 addresses can be specified per location. If the TE DB is unable find a node in its topology database that matches a primary address of the location, it tries to find a node matching a secondary address. If this attempt also fails, the TE DB tries to find a node matching a tertiary address. The IP addresses specified for a location should be topologically “close” to a set of clients that should all receive the same optimal path for that location.
Introduced	16.0.R1
Platforms	All

[location-id] *number*

Synopsis	Optimal route reflection location ID
Context	**configure** router *string* bgp optimal-route-reflection location *number*
Tree	location
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

primary-ip-address *string*

Synopsis	Primary IPv4 address of the reference location for ORR

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Context	**configure** router *string* bgp optimal-route-reflection location *number* primary-ip-address *string*
Tree	primary-ip-address
Introduced	16.0.R1
Platforms	All

primary-ipv6-address *string*

Synopsis	Primary IPv6 address of the reference location for ORR
Context	**configure** router *string* bgp optimal-route-reflection location *number* primary-ipv6-address *string*
Tree	primary-ipv6-address
Introduced	16.0.R4
Platforms	All

secondary-ip-address *string*

Synopsis	Secondary IPv4 address of reference location for ORR
Context	**configure** router *string* bgp optimal-route-reflection location *number* secondary-ip-address *string*
Tree	secondary-ip-address
Introduced	16.0.R1
Platforms	All

secondary-ipv6-address *string*

Synopsis	Secondary IPv6 address of reference location for ORR
Context	**configure** router *string* bgp optimal-route-reflection location *number* secondary-ipv6-address *string*
Tree	secondary-ipv6-address
Introduced	16.0.R4
Platforms	All

tertiary-ip-address *string*

Synopsis	Tertiary IPv4 address of the reference location for ORR

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Context	**configure** router *string* bgp optimal-route-reflection location *number* tertiary-ip-address *string*
Tree	tertiary-ip-address
Introduced	16.0.R1
Platforms	All

tertiary-ipv6-address *string*

Synopsis	Tertiary IPv6 address of the reference location for ORR
Context	**configure** router *string* bgp optimal-route-reflection location *number* tertiary-ipv6-address *string*
Tree	tertiary-ipv6-address
Introduced	16.0.R4
Platforms	All

spf-wait

Synopsis	Enter the **spf-wait** context
Context	**configure** router *string* bgp optimal-route-reflection spf-wait
Tree	spf-wait
Description	Commands in this context specify the interval between consecutive SPF calculations performed by the TE DB in support of BGP optimal route reflection. The time components implement an exponential back-off algorithm. .
Introduced	16.0.R1
Platforms	All

initial-wait *number*

Synopsis	Initial SPF calculation delay after a topology change
Context	**configure** router *string* bgp optimal-route-reflection spf-wait initial-wait *number*
Tree	initial-wait
Range	1 to 300
Default	5
Introduced	16.0.R1
Platforms	All

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max-wait *number*

Synopsis	Maximum interval between consecutive SPF calculations
Context	**configure** router *string* bgp optimal-route-reflection spf-wait max-wait *number*
Tree	max-wait
Range	1 to 600
Default	60
Introduced	16.0.R1
Platforms	All

second-wait *number*

Synopsis	Delay between first and second SPF calculation
Context	**configure** router *string* bgp optimal-route-reflection spf-wait second-wait *number*
Tree	second-wait
Range	1 to 300
Default	15
Introduced	16.0.R1
Platforms	All

outbound-route-filtering

Synopsis	Enable the **outbound-route-filtering** context
Context	**configure** router *string* bgp outbound-route-filtering
Tree	outbound-route-filtering
Description	Commands in this context configure the send and receive capabilities for Outbound Route Filtering (ORF). When unconfigured, the ORF capabilities are not enabled.
Introduced	16.0.R1
Platforms	All

extended-community

Synopsis	Enable the **extended-community** context
Context	**configure** router *string* bgp outbound-route-filtering extended-community

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Tree	extended-community
Description	Commands in this context configure the ORF send and receive capabilities based on Extended Communities. When this context is unconfigured, the ORF capabilities for Extended Communities is not enabled.
Introduced	16.0.R1
Platforms	All

accept-orf *boolean*

Synopsis	Negotiate with peer to accept BGP ORF filters
Context	**configure** router *string* bgp outbound-route-filtering extended-community accept-orf *boolean*
Tree	accept-orf
Description	When configured to **true**, the receive capability in the BGP ORF is negotiated with a peer and ORF filters can be accepted from peers. When configured to **false**, the accept capability in the BGP ORF is removed and any existing ORF filters that are currently in place are cleared.
Default	false
Introduced	16.0.R1
Platforms	All

send-orf

Synopsis	Enable the **send-orf** context
Context	**configure** router *string* bgp outbound-route-filtering extended-community send-orf
Tree	send-orf
Description	Commands in this context allow BGP to negotiate the send capability in the ORF negotiation with a peer. The send capability also causes the router to send a community filter, prefix filter, or AS path filter configured as an inbound filter on the BGP session to its peer as an ORF Action ADD. When this context in unconfigured, ORF send capability is not enabled.
Introduced	16.0.R1
Platforms	All

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route-target [community-name] *string*

Synopsis	Add a list entry for **route-target**
Context	**configure** router *string* bgp outbound-route-filtering extended-community send-orf route-target *string*
Tree	route-target
Introduced	16.0.R1
Platforms	All

[**community-name**] *string*

Synopsis	Route target community name
Context	**configure** router *string* bgp outbound-route-filtering extended-community send-orf route-target *string*
Tree	route-target
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

override-tunnel-elc *boolean*

Synopsis	Enable entropy label capability on BGP tunnels
Context	**configure** router *string* bgp override-tunnel-elc *boolean*
Tree	override-tunnel-elc
Description	When configured to **true**, this command renders all far ends for BGP tunnels as entropy-label-capable, regardless of any received capability signaling. This ensures that the entropy label will be inserted on BGP tunnels in the absence of capability signaling support by the far end. This is a system-wide configuration, since efficient entropy label operation requires that all LSRs in a network support entropy labels. This command should be used with care, particularly in inter-AS use cases, as entropy label capability may differ between domains. When configured to **false**, this command disables all far ends for BGP tunnels as entropy-label-capable.
Default	false
Introduced	16.0.R1
Platforms	All

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path-mtu-discovery *boolean*

Synopsis	Enable Path MTU Discovery
Context	**configure** router *string* bgp path-mtu-discovery *boolean*
Tree	path-mtu-discovery
Description	When configured to **true**, Path MTU Discovery (PMTUD) is activated toward an IPv4 BGP neighbor. The Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, the device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value to accomodate the IP MTU constraint. When configured to **false**, PMTUD is disabled and there is no TCP MSS configuration to associate with a BGP neighbor (in either the BGP configuration or the first-hop IP interface configuration). The router advertises a TCP MSS option of only 1024 bytes, limiting the received TCP segments to that size.
Default	false
Introduced	16.0.R1
Platforms	All

peer-ip-tracking *boolean*

Synopsis	Enable BGP peer tracking
Context	**configure** router *string* bgp peer-ip-tracking *boolean*
Tree	peer-ip-tracking
Default	false
Introduced	16.0.R1
Platforms	All

peer-tracking-policy *reference*

Synopsis	Policy for BGP peer tracking on router instance
Context	**configure** router *string* bgp peer-tracking-policy *reference*
Tree	peer-tracking-policy
Description	This command specifies the name of a policy statement to use with the BGP peer-tracking function on BGP sessions where peer tracking is enabled. When unconfigured, the default peer-tracking policy allows any type of route to match the neighbor IP address except aggregate routes and LDP shortcut routes.

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Peer tracking should be used with caution. The peer-tracking policy should only permit one of direct-interface or direct routes to be advertised to a BGP peer. Advertising both routes causes the best route to oscillate.

Reference **configure** policy-options policy-statement *string*

Introduced 16.0.R1

Platforms All

preference *number*

Synopsis Route preference for routes learned from all peers

Context **configure** router *string* bgp preference *number*

Tree preference

Description This command configures the route preference for routes learned from the configured peers.

The lower the preference value, the higher the chance of the route being the active route. The router assigns BGP routes the highest default preference as compared to routes that are direct, static or learned via MPLS or OSPF.

Range 1 to 255

Default 170

Introduced 16.0.R1

Platforms All

purge-timer *number*

Synopsis Maximum time before stale routes are purged

Context **configure** router *string* bgp purge-timer *number*

Tree purge-timer

Description This command configures the maximum time before stale routes are purged.

When a route refresh request is sent to a peer for VPN-IP routes received from that peer (in the RIB-IN), the routes are set to stale and the purge timer is started. If the routes are not updated (refreshed) before the purge timer expires, the routes are removed.

Range 1 to 60

Default 10

Introduced 16.0.R1

Platforms All

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rapid-update

Synopsis	Enter the **rapid-update** context
Context	**configure** router *string* bgp rapid-update
Tree	rapid-update
Description	Commands in this context specify the address families that are configured to support the rapid update functionality. The rapid update functionality overrides the remaining time on a peer's MRAI timer and immediately sends routes belonging the specified address families (and all other pending updates) to the peers receiving these routes.
Introduced	16.0.R1
Platforms	All

evpn *boolean*

Synopsis	Include EVPN address family routes
Context	**configure** router *string* bgp rapid-update evpn *boolean*
Tree	evpn
Default	false
Introduced	16.0.R1
Platforms	All

l2-vpn *boolean*

Synopsis	Include L2 VPN address family routes
Context	**configure** router *string* bgp rapid-update l2-vpn *boolean*
Tree	l2-vpn
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Include labeled IPv4 address family routes
Context	**configure** router *string* bgp rapid-update label-ipv4 *boolean*
Tree	label-ipv4
Default	false

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Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Include labeled IPv6 address family routes
Context	**configure** router *string* bgp rapid-update label-ipv6 *boolean*
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv4 *boolean*

Synopsis	Include multicast VPN IPv4 address family routes
Context	**configure** router *string* bgp rapid-update mcast-vpn-ipv4 *boolean*
Tree	mcast-vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv6 *boolean*

Synopsis	Include multicast VPN IPv6 address family routes
Context	**configure** router *string* bgp rapid-update mcast-vpn-ipv6 *boolean*
Tree	mcast-vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mdt-safi *boolean*

Synopsis	Include MDT SAFI address family routes
Context	**configure** router *string* bgp rapid-update mdt-safi *boolean*
Tree	mdt-safi

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Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv4 *boolean*

Synopsis	Include MVPN IPv4 address family routes
Context	**configure** router *string* bgp rapid-update mvpn-ipv4 *boolean*
Tree	mvpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv6 *boolean*

Synopsis	Include MVPN IPv6 address family routes
Context	**configure** router *string* bgp rapid-update mvpn-ipv6 *boolean*
Tree	mvpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Include VPN IPv4 address family routes
Context	**configure** router *string* bgp rapid-update vpn-ipv4 *boolean*
Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Include VPN IPv6 address family routes
Context	**configure** router *string* bgp rapid-update vpn-ipv6 *boolean*

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Tree	vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

rapid-withdrawal *boolean*

Synopsis	Send BGP withdrawal UPDATE messages immediately
Context	**configure** router *string* bgp rapid-withdrawal *boolean*
Tree	rapid-withdrawal
Description	When configured to **true**, UPDATE messages containing withdrawn NLRI are sent immediately to a peer without waiting for the MRAI timer to expire. UPDATE messages containing reachable NLRI continue to wait for the MRAI timer to expire, or for a rapid update trigger. When configured to **false**, withdrawal processing continues with the normal behavior.
Default	false
Introduced	16.0.R1
Platforms	All

remove-private

Synopsis	Enable the **remove-private** context
Context	**configure** router *string* bgp remove-private
Tree	remove-private
Introduced	16.0.R1
Platforms	All

limited *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	**configure** router *string* bgp remove-private limited *boolean*
Tree	limited
Default	false
Introduced	16.0.R1
Platforms	All

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replace *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	**configure** router *string* bgp remove-private replace *boolean*
Tree	replace
Default	false
Introduced	19.10.R1
Platforms	All

skip-peer-as *boolean*

Synopsis	Keep private ASN if AS-PATH contains eBGP peer's ASN
Context	**configure** router *string* bgp remove-private skip-peer-as *boolean*
Tree	skip-peer-as
Default	false
Introduced	16.0.R1
Platforms	All

rib-management

Synopsis	Enter the **rib-management** context
Context	**configure** router *string* bgp rib-management
Tree	rib-management
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** router *string* bgp rib-management ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

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leak-import

Synopsis	Enter the **leak-import** context
Context	**configure** router *string* bgp rib-management ipv4 leak-import
Tree	leak-import
Description	Commands in this context specify route policies that control the importation of leak-eligible routes from the BGP RIB of another routing instance into the unlabeled-IPv4 RIB of the base router. To leak a route from one routing instance to another, the origin and destination RIB types must be the same; for example, it is not possible to leak a route from an unlabeled-IPv4 RIB of a VPRN into the labeled-IPv4 RIB of the base router.
Introduced	16.0.R1
Platforms	All

policy *(policy-expr-string | string)*

Synopsis	Leak import policy name
Context	**configure** router *string* bgp rib-management ipv4 leak-import policy *(policy-expr-string | string)*
Tree	policy
Description	This command specifies one or more leak import policies. Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length	1 to 255
Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

route-table-import

Synopsis	Enter the **route-table-import** context
Context	**configure** router *string* bgp rib-management ipv4 route-table-import
Tree	route-table-import
Introduced	16.0.R1
Platforms	All

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policy-name *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	**configure** router *string* bgp rib-management ipv4 route-table-import policy-name *reference*
Tree	policy-name
Description	This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs. When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used. Aggregate routes are always imported into each RIB, independent of the specified policy. Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes. When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** router *string* bgp rib-management ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

leak-import

Synopsis	Enter the **leak-import** context
Context	**configure** router *string* bgp rib-management ipv6 leak-import
Tree	leak-import
Description	Commands in this context specify route policies that control the importation of leak-eligible routes from the BGP RIB of another routing instance into the unlabeled-IPv6 RIB of the base router. To leak a route from one routing instance to another, the origin and

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destination RIB types must be the same; for example, it is not possible to leak a route from an unlabeled-IPv4 RIB of a VPRN into the labeled-IPv4 RIB of the base router.

Introduced	16.0.R1
Platforms	All

policy *(policy-expr-string | string)*

Synopsis	Leak import policy name
Context	**configure** router *string* bgp rib-management ipv6 leak-import policy *(policy-expr-string | string)*
Tree	policy
Description	This command specifies one or more leak import policies. Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length	1 to 255
Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

route-table-import

Synopsis	Enter the **route-table-import** context
Context	**configure** router *string* bgp rib-management ipv6 route-table-import
Tree	route-table-import
Description	This command enables the context to specify the name of a route to control the importation of active routes from the IP route table into one of the BGP RIBs. If this command is configured, then routes dropped or rejected by the configured policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by this command then the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used. Aggregate routes are always imported into each RIB, independent of this command's policy. Route modifications specified in the actions of this command's policy are ignored and have no effect on the imported routes.

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If this command is not configured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.

Introduced 16.0.R1

Platforms All

policy-name *reference*

Synopsis Name of policy that controls route importation into RIB

Context **configure** router *string* bgp rib-management ipv6 route-table-import policy-name *reference*

Tree policy-name

Description This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.

When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.

Aggregate routes are always imported into each RIB, independent of the specified policy.

Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.

When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.

Reference **configure** policy-options policy-statement *string*

Introduced 16.0.R1

Platforms All

label-ipv4

Synopsis Enter the **label-ipv4** context

Context **configure** router *string* bgp rib-management label-ipv4

Tree label-ipv4

Introduced 16.0.R1

Platforms All

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leak-import

Synopsis	Enter the **leak-import** context
Context	**configure** router *string* bgp rib-management label-ipv4 leak-import
Tree	leak-import
Description	Commands in this context specify route policies that control the importation of leak-eligible routes from the BGP RIB of another routing instance into the labeled-IPv4 RIB of the base router. To leak a route from one routing instance to another, the origin and destination RIB types must be the same; for example, it is not possible to leak a route from an unlabeled-IPv4 RIB of a VPRN into the labeled-IPv4 RIB of the base router.
Introduced	16.0.R1
Platforms	All

policy *(policy-expr-string | string)*

Synopsis	Leak import policy name
Context	**configure** router *string* bgp rib-management label-ipv4 leak-import policy *(policy-expr-string | string)*
Tree	policy
Description	This command specifies one or more leak import policies. Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length	1 to 255
Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

route-table-import

Synopsis	Enter the **route-table-import** context
Context	**configure** router *string* bgp rib-management label-ipv4 route-table-import
Tree	route-table-import
Introduced	16.0.R1
Platforms	All

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policy-name *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	**configure** router *string* bgp rib-management label-ipv4 route-table-import policy-name *reference*
Tree	policy-name
Description	This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs. When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used. Aggregate routes are always imported into each RIB, independent of the specified policy. Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes. When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	All

label-ipv6

Synopsis	Enter the **label-ipv6** context
Context	**configure** router *string* bgp rib-management label-ipv6
Tree	label-ipv6
Introduced	16.0.R1
Platforms	All

route-table-import

Synopsis	Enter the **route-table-import** context
Context	**configure** router *string* bgp rib-management label-ipv6 route-table-import
Tree	route-table-import
Introduced	16.0.R1
Platforms	All

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policy-name *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	**configure** router *string* bgp rib-management label-ipv6 route-table-import policy-name *reference*
Tree	policy-name
Description	This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs. When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used. Aggregate routes are always imported into each RIB, independent of the specified policy. Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes. When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	All

route-table-install *boolean*

Synopsis	Install all IPv4 and IPv6 BGP routes in FIB and RTM
Context	**configure** router *string* bgp route-table-install *boolean*
Tree	route-table-install
Default	true
Introduced	16.0.R1
Platforms	All

route-target-list [community-name] *string*

Synopsis	Add a list entry for **route-target-list**
Context	**configure** router *string* bgp route-target-list *string*
Tree	route-target-list
Description	This command specifies a route target to be accepted from or advertised to peers.

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This command is only applicable if the router is a route-reflector server.

Introduced 16.0.R1

Platforms All

[**community-name**] *string*

Synopsis Route target community name

Context **configure** router *string* bgp route-target-list *string*

Tree route-target-list

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

router-id *string*

Synopsis Router ID for the BGP instance in the AS

Context **configure** router *string* bgp router-id *string*

Tree router-id

Description This command specifies the router ID to be used with the BGP instance.

Changing the BGP router ID on an active BGP instance causes the BGP instance to restart with the new router ID.

When an SR OS is configured with an IPv6-only BOF and no IPv4 system interface address, explicitly-defined IPv4 router IDs are required for BGP as there is no mechanism to derive the router ID from an IPv6 system interface address.

Introduced 16.0.R1

Platforms All

rr-vpn-forwarding *boolean*

Synopsis Allow route reflector to forward VPN-IP routes

Context **configure** router *string* bgp rr-vpn-forwarding *boolean*

Tree rr-vpn-forwarding

Description When configured to **true**, the route reflector resolves VPN-IPv4 and VPN-IPv6 routes, sets itself as the next hop, and generates new labels for all the resolved routes.

During this process, all received VPN-IP routes, regardless of route target, are imported into the dummy VRF, where the BGP next hops are resolved. The routes are resolved to

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next-hop-self, and BGP allocates new VPRN service-label values for the routes, which are then advertised to peers.

The **transport-tunnel** command under the **configure router bgp next-hop-resolution labeled-routes** context determines what types of tunnels are eligible to resolve the next hops. If a received VPN-IP route from IBGP peer X is resolved and selected as the best path so that it can be re-advertised to an IBGP peer Y, and the BGP next-hop is modified toward peer Y (by using the **next-hop-self** command in Y's group or neighbor context or by using a next-hop action in an export policy applied to Y), BGP allocates a new VPRN service label value for the route, signals that new label value to Y, and programs the IOM to do the corresponding label swap operation. The supported combinations of X and Y are outlined below:

- from X (client) to Y (client)
- from X (client) to Y (non-client)
- from X (non-client) to Y (client)

When configured to **false**, the routes are re-advertised without signaling new VPRN labels, even if the BGP next hop is changed.

Nokia recommends setting this command to **false** for scaling and convergence reasons.

Default	false
Introduced	16.0.R1
Platforms	All

segment-routing

Synopsis	Enter the **segment-routing** context
Context	**configure** router *string* bgp segment-routing
Tree	segment-routing
Description	Commands in this context configure options related to BGP segment routing (including prefix SID support).
Introduced	19.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of segment routing
Context	**configure** router *string* bgp segment-routing admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.10.R1

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Platforms	All

prefix-sid-range

Synopsis	Enable the **prefix-sid-range** context
Context	**configure** router *string* bgp segment-routing prefix-sid-range
Tree	prefix-sid-range
Introduced	19.10.R1
Platforms	All

global

Synopsis	Allow label allocation from entire SRBG space
Context	**configure** router *string* bgp segment-routing prefix-sid-range global
Tree	global
Notes	The following elements are part of a choice: **global** or (**max-index** and **start-label**).
Introduced	19.10.R1
Platforms	All

max-index *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Last label value available in contiguous range
Context	**configure** router *string* bgp segment-routing prefix-sid-range max-index *number*
Tree	max-index
Range	0 to 524287
Default	1
Notes	The following elements are part of a choice: **global** or (**max-index** and **start-label**).
Introduced	19.10.R1
Platforms	All

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start-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	First label value available in a contiguous range
Context	**configure** router *string* bgp segment-routing prefix-sid-range start-label *number*
Tree	start-label
Range	0 to 524287
Default	0
Notes	The following elements are part of a choice: **global** or (**max-index** and **start-label**).
Introduced	19.10.R1
Platforms	All

segment-routing-v6

Synopsis	Enable the **segment-routing-v6** context
Context	**configure** router *string* bgp segment-routing-v6
Tree	segment-routing-v6
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

family [family-type] *keyword*

Synopsis	Enter the **family** list instance
Context	**configure** router *string* bgp segment-routing-v6 family *keyword*
Tree	family
Description	Commands in this context configure family-specific behavior for processing prefix SID attributes containing SRv6 TLVs.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**family-type**] *keyword*

Synopsis	IP address type that SRv6 route attributes apply to
Context	**configure** router *string* bgp segment-routing-v6 family *keyword*

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Tree	family
Options	ipv4, ipv6
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

add-srv6-tlvs

Synopsis	Enable the **add-srv6-tlvs** context
Context	**configure** router *string* bgp segment-routing-v6 family *keyword* add-srv6-tlvs
Tree	add-srv6-tlvs
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

locator-name *reference*

Synopsis	SRv6 locator name
Context	**configure** router *string* bgp segment-routing-v6 family *keyword* add-srv6-tlvs locator-name *reference*
Tree	locator-name
Reference	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance locator *reference*
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

micro-segment-locator-name *reference*

Synopsis	Micro-segment SRv6 locator name
Context	**configure** router *string* bgp segment-routing-v6 family *keyword* add-srv6-tlvs micro-segment-locator-name *reference*
Tree	micro-segment-locator-name
Description	This command adds a prefix SID attribute containing an SRv6 TLV to routes that belong to the family and that are redistributed from another protocol to BGP. This command also adds a prefix SID attribute with SRv6 TLV to BGP routes that are received from other peers without the SRv6 TLV and that are propagated to other peers with next-hop-self applied.

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Reference	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance micro-segment-locator *reference*
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

ignore-received-srv6-tlvs *boolean*

Synopsis	Ignore SRv6 TLVs for received routes
Context	**configure** router *string* bgp segment-routing-v6 family *keyword* ignore-received-srv6-tlvs *boolean*
Tree	ignore-received-srv6-tlvs
Description	When configured to **true**, if a route of the family is received with a prefix SID attribute carrying an SRv6 TLV, the SRv6 TLV is ignored and the route resolution is based on the BGP next-hop only. When configured to **false**, if a route of the family is received with a prefix SID attribute carrying an SRv6 TLV, the SRv6 TLV is processed. Such a route is resolved only if its BGP next-hop is reachable and the locator prefix is reachable. The datapath programming and IGP cost to reach the next-hop (used by the BGP decision process) is based on the route to the locator prefix.
Default	true
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

resolution *keyword*

Synopsis	Resolution options for routes
Context	**configure** router *string* bgp segment-routing-v6 family *keyword* resolution *keyword*
Tree	resolution
Options	route-table, tunnel-table, fallback-tunnel-to-route-table
Default	route-table
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

source-address *string*

Synopsis	Source address used in SRv6 packet
Context	**configure** router *string* bgp segment-routing-v6 source-address *string*

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Tree	source-address
Description	When configured, this command specifies the source IPv6 address used in the SA field of the outer IPv6 header of the SRv6 encapsulated packet. When not configured, the source IPv6 address is inherited from the configuration of the global default address in the **router "base" segment-routing segment-routing-v6 source-address** context. A source IPv6 address must be configured in this context or in the base router context. The system does not check if the address entered is a valid local address.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

selective-label-ip *keyword*

Synopsis	Label IP routes installed for local use on NHS router
Context	**configure** router *string* bgp selective-label-ip *keyword*
Tree	selective-label-ip
Description	This command enables selective installation of labeled unicast routes for resolution by local services and IP shortcuts on a labeled unicast Next-hop=self router. This command is supported for labeled unicast for both IPv4 and IPv6 routes. The **no-install** option installs labeled IP routes that are required by services. This option conserves labeled route table space in addition to RTM table space on BGP-LU next-hop-self route reflectors. The **route-table-install-only** option ensures that the labeled unicast routes are installed in the RTM in full. When **no-install** is specified, the download of labeled unicast routes for NHLFE resolution by services continues.
Options	no-install, route-table-install-only
Introduced	22.10.R1
Platforms	All

selective-label-ip-prioritization *boolean*

Synopsis	Enable BGP selective prioritization for labeled routes
Context	**configure** router *string* bgp selective-label-ip-prioritization *boolean*
Tree	selective-label-ip-prioritization
Description	When this command is set to **true**, every labeled IPv4 and IPv6 route that is received and potentially usable by a local service is automatically prioritized for fast control plane reconvergence. When the reachability of a BGP next-hop changes, the labeled IPv4 and IPv6 routes are updated into the route table first, along with other routes manually tagged as high priority by import policies. A /32 or /128 labeled unicast route (and associated BGP-LU tunnel) is determined to be potentially usable by a local service if one of the following conditions applies:

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- the route matches the far-end address of a user-provisioned SDP of a Layer 2 service and the SDP is configured to use BGP tunnels as transport
- the route matches the BGP next-hop address of a BGP-EVPN or IP VPN route, and this VPN route is either imported into a local service or readvertised by the router acting as a next-hop-self route reflector or a model-B ASBR

When this command is set to **false,** selective-label IP prioritization for BGP is not used.

Default	false
Introduced	21.10.R1
Platforms	All

selective-label-ipv4-install *boolean*

Synopsis	Enable selective download for BGP label-ipv4 routes
Context	**configure** router *string* bgp selective-label-ipv4-install *boolean*
Tree	selective-label-ipv4-install
Default	false
Introduced	19.10.R1
Platforms	All

send-communities

Synopsis	Enter the **send-communities** context
Context	**configure** router *string* bgp send-communities
Tree	send-communities
Introduced	16.0.R1
Platforms	All

extended *boolean*

Synopsis	Advertise the Extended Communities attribute to peers
Context	**configure** router *string* bgp send-communities extended *boolean*
Tree	extended
Default	true
Introduced	16.0.R1
Platforms	All

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large *boolean*

Synopsis	Advertise the Large Communities attribute to peers
Context	**configure** router *string* bgp send-communities large *boolean*
Tree	large
Default	true
Introduced	16.0.R1
Platforms	All

standard *boolean*

Synopsis	Advertise the Communities attribute to peers
Context	**configure** router *string* bgp send-communities standard *boolean*
Tree	standard
Default	true
Introduced	16.0.R1
Platforms	All

send-default

Synopsis	Enter the **send-default** context
Context	**configure** router *string* bgp send-default
Tree	send-default
Introduced	19.7.R1
Platforms	All

export-policy *reference*

Synopsis	Export policy name
Context	**configure** router *string* bgp send-default export-policy *reference*
Tree	export-policy
Reference	**configure** policy-options policy-statement *string*
Introduced	19.7.R1
Platforms	All

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ipv4 *boolean*

Synopsis	Enable IPv4 family type
Context	**configure** router *string* bgp send-default ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	19.7.R1
Platforms	All

ipv6 *boolean*

Synopsis	Enable IPv6 family type
Context	**configure** router *string* bgp send-default ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	19.7.R1
Platforms	All

split-horizon *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	**configure** router *string* bgp split-horizon *boolean*
Tree	split-horizon
Description	When configured to **true**, this command enables the use of split-horizon. This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP. Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary. When configured to **false**, the use of split-horizon is disabled.
Default	false
Introduced	16.0.R1
Platforms	All

sr-policy-import *boolean*

Synopsis	Import all segment routing policies into the BGP RIB

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Context	**configure** router *string* bgp sr-policy-import *boolean*
Tree	sr-policy-import
Description	When configured to **true**, statically-configured non-local segment routing policies from the segment routing database are imported into the BGP RIB so that they can be advertised as originated routes toward BGP peers supporting segment routing policies (**sr-policy-ipv4** IP family type). When configured to **false**, the SR policies are not imported into the BGP RIB.
Default	false
Introduced	16.0.R1
Platforms	All

subconfed-vpn-forwarding *boolean*

Synopsis	Allow subconfed route resolution, next hop and labels
Context	**configure** router *string* bgp subconfed-vpn-forwarding *boolean*
Tree	subconfed-vpn-forwarding
Description	When this is set to **true**, the base router BGP instance retains all received VPN-IPv4 and VPN-IPv6 routes, including those with route targets not matching any VRF import policy of any locally configured VPRN. In addition, when the base router BGP is configured to apply a **next-hop-self** command to a peer of any type (EBGP, IBGP, or confed-EBGP), VPN-IPv4 and VPN-IPv6 routes are advertised to the peer with a new BGP label, next hop, and label-swap forwarding entry. These behaviors described above are applied when the **enable-inter-as-vpn** or **enable-rr-vpn-forwarding** commands are enabled in the **configure router bgp context**, in the same BGP instance. This applies regardless of whether the base router has a confederation configuration. When this command is set to **false**, subconfederation VPN forwarding is not used.
Default	false
Introduced	21.10.R1
Platforms	All

tcp-mss *number*

Synopsis	TCP maximum segment size override
Context	**configure** router *string* bgp tcp-mss *number*
Tree	tcp-mss
Description	This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command). The configured value controls two properties of the TCP connection as follows:

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TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.

TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.

Range	384 to 9746
Introduced	21.2.R1
Platforms	All

third-party-nexthop *boolean*

Synopsis	Apply third-party next-hop processing to EBGP peers
Context	**configure** router *string* bgp third-party-nexthop *boolean*
Tree	third-party-nexthop
Description	When configured to **true**, this command enables the router to send third-party next hop to EBGP peers in the same subnet as the source peer. The address family of the transport must match the address family of the route. When an IPv4 or IPv6 route is received from one EBGP peer and advertised to another EBGP peer in the same IP subnet, the BGP next hop is left unchanged. When configured to **false**, third-party next-hop processing is disabled and the next hop carries the IP address of the interface used to establish the TCP connection to the peer.
Default	false
Introduced	16.0.R1
Platforms	All

vpn-apply-export *boolean*

Synopsis	Apply base-instance BGP export policies to VPN routes
Context	**configure** router *string* bgp vpn-apply-export *boolean*
Tree	vpn-apply-export
Description	When configured to **true**, base-instance BGP export route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes. When configured to **false**, the export policies are not applied.
Default	false
Introduced	16.0.R1
Platforms	All

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vpn-apply-import *boolean*

Synopsis	Apply base-instance import route policies to VPN routes
Context	**configure** router *string* bgp vpn-apply-import *boolean*
Tree	vpn-apply-import
Description	When configured to **true**, base-instance BGP import route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes. When configured to **false**, the import policies are not applied.
Default	false
Introduced	16.0.R1
Platforms	All

bier

Synopsis	Enable the **bier** context
Context	**configure** router *string* bier
Tree	bier
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BIER
Context	**configure** router *string* bier admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

bfd-liveness *keyword*

Synopsis	BIER next-hops with BFD enabled
Context	**configure** router *string* bier bfd-liveness *keyword*
Tree	bfd-liveness

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Options	ipv4
Max. Instances	1
Introduced	21.7.R1
Platforms	All

fast-reroute *boolean*

Synopsis	Enable BIER Fast Reroute
Context	**configure** router *string* bier fast-reroute *boolean*
Tree	fast-reroute
Default	false
Introduced	21.7.R1
Platforms	All

template [template-name] *string*

Synopsis	Enter the **template** list instance
Context	**configure** router *string* bier template *string*
Tree	template
Description	Commands in this context create a BIER template to be assigned to IGP.
Introduced	19.5.R1
Platforms	All

[**template-name**] *string*

Synopsis	BIER template name
Context	**configure** router *string* bier template *string*
Tree	template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the BIER template
Context	**configure** router *string* bier template *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

sub-domain [start] *number* end *number*

Synopsis	Enter the **sub-domain** list instance
Context	**configure** router *string* bier template *string* sub-domain *number* end *number*
Tree	sub-domain
Introduced	19.5.R1
Platforms	All

[**start**] *number*

Synopsis	Lower bound of sub-domain range
Context	**configure** router *string* bier template *string* sub-domain *number* end *number*
Tree	sub-domain
Range	0 to 255
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

end *number*

Synopsis	Upper bound of sub-domain range
Context	**configure** router *string* bier template *string* sub-domain *number* end *number*
Tree	sub-domain
Range	0 to 255
Notes	This element is part of a list key.
Introduced	19.5.R1

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Platforms	All

bfr-id *number*

Synopsis	BIER ID for the sub-domain
Context	**configure** router *string* bier template *string* sub-domain *number* end *number* bfr-id *number*
Tree	bfr-id
Range	1 to 4096
Introduced	19.5.R1
Platforms	All

multi-topology *keyword*

Synopsis	Multi-topology for the sub-domain
Context	**configure** router *string* bier template *string* sub-domain *number* end *number* multi-topology *keyword*
Tree	multi-topology
Options	ipv4-unicast, ipv6-unicast, ipv4-multicast, ipv6-multicast
Default	ipv4-unicast
Introduced	19.5.R1
Platforms	All

prefix *string*

Synopsis	IP address used as BFR prefix
Context	**configure** router *string* bier template *string* sub-domain *number* end *number* prefix *string*
Tree	prefix
Description	This command specifies the IP address to be used as the BFR prefix. The prefix can be a loopback interface or system IP address.
Default	0.0.0.0
Introduced	19.5.R1
Platforms	All

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class-forwarding *boolean*

Synopsis	Allow class-based forwarding over IGP shortcuts
Context	**configure** router *string* class-forwarding *boolean*
Tree	class-forwarding
Description	When configured to **true**, this command enables class-based forwarding (CBF) over IGP shortcuts. Weighted ECMP, at the transport-tunnel level of BGP prefixes over IGP shortcuts, and the CBF feature on a per-BGP next-hop basis are mutually exclusive. When configured to **false**, class-based forwarding (CBF) over IGP shortcuts is disabled.
Default	false
Introduced	16.0.R1
Platforms	All

confederation

Synopsis	Enter the **confederation** context
Context	**configure** router *string* confederation
Tree	confederation
Description	Commands in this context configure members that are to be part of a confederation. Creating confederation autonomous systems within as AS can be used to reduce the number of IBGP sessions required within an AS.
Introduced	16.0.R1
Platforms	All

confed-as-num *number*

Synopsis	Confederation AS number
Context	**configure** router *string* confederation confed-as-num *number*
Tree	confed-as-num
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

members [as-number] *number*

Synopsis	Add a list entry for **members**

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Context	**configure** router *string* confederation members *number*
Tree	members
Max. Instances	256
Introduced	16.0.R1
Platforms	All

[**as-number**] *number*

Synopsis	Confederation member AS number
Context	**configure** router *string* confederation members *number*
Tree	members
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** router *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dhcp-server

Synopsis	Enter the **dhcp-server** context
Context	**configure** router *string* dhcp-server
Tree	dhcp-server
Introduced	16.0.R1
Platforms	All

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dhcpv4 [name] *string*

Synopsis	Enter the **dhcpv4** list instance
Context	**configure** router *string* dhcp-server dhcpv4 *string*
Tree	dhcpv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	DHCP server name
Context	**configure** router *string* dhcp-server dhcpv4 *string*
Tree	dhcpv4
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCP server
Context	**configure** router *string* dhcp-server dhcpv4 *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** router *string* dhcp-server dhcpv4 *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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failover

Synopsis	Enter the **failover** context
Context	**configure** router *string* dhcp-server dhcpv4 *string* failover
Tree	failover
Description	Commands in this context define DHCP failover where two DHCP servers manage the same pool of addresses, enabling them to share the load to assign leases for pool and provide backup for each in the event of network outages.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	**configure** router *string* dhcp-server dhcpv4 *string* failover admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	**configure** router *string* dhcp-server dhcpv4 *string* failover ignore-mclt-on-takeover *boolean*
Tree	ignore-mclt-on-takeover
Description	When configured to **true**, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire. When configured to **false**, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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maximum-client-lead-time *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	**configure** router *string* dhcp-server dhcpv4 *string* failover maximum-client-lead-time *number*
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

partner-down-delay *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	**configure** router *string* dhcp-server dhcpv4 *string* failover partner-down-delay *number*
Tree	partner-down-delay
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Units	seconds
Default	86399

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer [address] *reference*

Synopsis	Enter the **peer** list instance
Context	**configure** router *string* dhcp-server dhcpv4 *string* failover peer *reference*
Tree	peer
Description	Commands in this context define the peer-related parameters for DHCP failover. DHCP leases can be synchronized at the level of the DHCP server or pool. The pair of synchronizing servers or pools is identified by a tag. The synchronization information is carried over the Multi-Chassis Synchronization (MCS) link between the two peers. The MCS link is a logical IP or MPLS link. MCS runs over TCP port 45067, using either data traffic or keepalives to detect failure on the communication link between the two nodes. In the absence of any MCS data traffic for more than 0.5 seconds, MCS sends its own keepalive to the peer. If a reply is not received within 3 seconds, MCS declares its operational state as down and the DB sync state as out-of-sync. MCS consequently notifies its clients, including the DHCP server. It can take up to 3 seconds before the DHCP client realizes that the inter-chassis link has failed. The link failure does not necessarily imply the same failed state for the access links. It is possible, although unlikely, that both access links are operational while the inter-chassis communication link is broken. In this case, the two redundant nodes can become isolated from each other in the network. For this reason, it is important that the MCS link be highly redundant.
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**address**] *reference*

Synopsis	IP address of the failover peer
Context	**configure** router *string* dhcp-server dhcpv4 *string* failover peer *reference*
Tree	peer
Reference	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)*
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	**configure** router *string* dhcp-server dhcpv4 *string* failover peer *reference* sync-tag *string*
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

startup-wait-time *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	**configure** router *string* dhcp-server dhcpv4 *string* failover startup-wait-time *number*
Tree	startup-wait-time
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

force-renews *boolean*

Synopsis	Send FORCERENEW messages to force renewals of leases

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Context	**configure** router *string* dhcp-server dhcpv4 *string* force-renews *boolean*
Tree	force-renews
Description	When configured to **true**, FORCERENEW messages are enabled for DHCP.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-hold

Synopsis	Enter the **lease-hold** context
Context	**configure** router *string* dhcp-server dhcpv4 *string* lease-hold
Tree	lease-hold
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

additional-scenarios

Synopsis	Enter the **additional-scenarios** context
Context	**configure** router *string* dhcp-server dhcpv4 *string* lease-hold additional-scenarios
Tree	additional-scenarios
Description	Commands in this context configure additional types of leases or triggers that cause the system to hold up leases.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

internal-lease-ipsec *boolean*

Synopsis	Apply the lease hold timer to local IPsec clients
Context	**configure** router *string* dhcp-server dhcpv4 *string* lease-hold additional-scenarios internal-lease-ipsec *boolean*
Tree	internal-lease-ipsec
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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solicited-release *boolean*

Synopsis	Apply lease hold timer for solicited releases
Context	**configure** router *string* dhcp-server dhcpv4 *string* lease-hold additional-scenarios solicited-release *boolean*
Tree	solicited-release
Description	This command enables the server to hold up a lease even for a solicited release, for example, when the server receives a normal DHCP release message.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis	Lease hold time
Context	**configure** router *string* dhcp-server dhcpv4 *string* lease-hold time *number*
Tree	time
Range	1 to 631152000
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool [pool-name] *string*

Synopsis	Enter the **pool** list instance
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string*
Tree	pool
Description	Commands in this context configure a DHCP address pool on the router.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**pool-name**] *string*

Synopsis	DHCP server pool name
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string*
Tree	pool

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String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the **failover** context
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* failover
Tree	failover
Description	Commands in this context define DHCP failover where two DHCP servers manage the same pool of addresses, enabling them to share the load to assign leases for pool and provide backup for each in the event of network outages.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* failover admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* failover ignore-mclt-on-takeover *boolean*
Tree	ignore-mclt-on-takeover
Description	When configured to **true**, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire. When configured to **false**, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-client-lead-time *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* failover maximum-client-lead-time *number*
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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partner-down-delay *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* failover partner-down-delay *number*
Tree	partner-down-delay
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Units	seconds
Default	86399
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer [address] *reference*

Synopsis	Enter the **peer** list instance
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* failover peer *reference*
Tree	peer
Description	Commands in this context configure peer-related parameters for DHCP failover. DHCP leases can be synchronized at the level of the DHCP server or pool. The pair of synchronizing servers or pools is identified by a tag. The synchronization information is carried over the Multi-Chassis Synchronization (MCS) link between the two peers. The MCS link is a logical IP or MPLS link. MCS runs over TCP port 45067, using either data traffic or keepalives to detect failure on the communication link between the two nodes. In the absence of any MCS data traffic for more than 0.5 seconds, MCS sends its own keepalive to the peer. If a reply is not received within 3 seconds, MCS declares its operational state as down and the DB sync state as out-of-sync. MCS consequently notifies its clients, including the DHCP server. It can take up to 3 seconds before the DHCP client realizes that the inter-chassis link has failed. The link failure does not necessarily imply the same failed state for the access links. It is possible, although unlikely, that both access links are operational while the inter-chassis communication link is broken. In this case, the two redundant nodes can become

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	isolated from each other in the network. For this reason, it is important that the MCS link be highly redundant.
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**address**] *reference*

Synopsis	IP address of the failover peer
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* failover peer *reference*
Tree	peer
Reference	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* failover peer *reference* sync-tag *string*
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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startup-wait-time *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* failover startup-wait-time *number*
Tree	startup-wait-time
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-lease-time *number*

Synopsis	Maximum lease time
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* max-lease-time *number*
Tree	max-lease-time
Range	10 to 315446399
Units	seconds
Default	864000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-lease-time *number*

Synopsis	Minimum lease time
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* min-lease-time *number*
Tree	min-lease-time
Range	10 to 315446399
Units	seconds

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Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

minimum-free

Synopsis	Enter the **minimum-free** context
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* minimum-free
Tree	minimum-free
Description	Commands in this context specify the minimum number of free addresses in this pool.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

absolute *number*

Synopsis	Minimum number of free addresses in this pool or subnet
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* minimum-free absolute *number*
Tree	absolute
Range	0 to 255
Default	1
Notes	The following elements are part of a choice: **absolute** or **percent**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event-when-depleted *boolean*

Synopsis	Generate notification when addresses are depleted
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* minimum-free event-when-depleted *boolean*
Tree	event-when-depleted
Description	When configured to **true**, a system-generated event is generated when all available addresses in the pool or subnet of a local DHCP server are depleted. When configured to **false**, no action is taken when all available addresses in the pool or subnet of a local DHCP server are depleted.
Default	false

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

percent *number*

Synopsis	Minimum free addresses as a percentage
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* minimum-free percent *number*
Tree	percent
Range	0 to 100
Default	1
Notes	The following elements are part of a choice: **absolute** or **percent**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nak-non-matching-subnet *boolean*

Synopsis	Send NAK if no match for request address pool range
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* nak-non-matching-subnet *boolean*
Tree	nak-non-matching-subnet
Description	When configured to **true**, a NAK response when the local DHCPv4 server receives a DHCP request with option 50 (the client is trying to request a previously allocated message). If the address-allocation algorithm uses a pool that does not contain the requested address, the system returns the DHCP NAK. When configured to **false** or unconfigured, the system drops the DHCP packet.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

offer-time *number*

Synopsis	Time interval during which a DHCP offer remains valid
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* offer-time *number*
Tree	offer-time
Range	10 to 600

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Units	seconds
Default	60
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the **options** context
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* options
Tree	options
Description	Commands in this context define DHCPv4 pool options.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [number] *(number | keyword)*

Synopsis	Enter the **option** list instance
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* options option *(number | keyword)*
Tree	option
Description	This command configures DHCP options at the pool level. The pool options can be overruled by the value of the same option in the local user database.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**number**] *(number | keyword)*

Synopsis	DHCP option to send identification strings to client
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* options option *(number | keyword)*
Tree	option
Range	1 to 254
Options	subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* options option *(number | keyword)* ascii-string *string*
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option specified as time duration
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* options option *(number | keyword)* duration *number*
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Remove DHCP option from configuration
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* options option *(number | keyword)* empty
Tree	empty
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R4

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* options option *(number | keyword)* hex-string *string*
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4-address *string*

Synopsis	DHCP option specified as a list of IPv4 addresses
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* options option *(number | keyword)* ipv4-address *string*
Tree	ipv4-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**. This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

netbios-node-type *keyword*

Synopsis	DHCP option specified as a NetBIOS node type
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* options option *(number | keyword)* netbios-node-type *keyword*
Tree	netbios-node-type
Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subnet [ipv4-prefix] *string*

Synopsis	Enter the **subnet** list instance
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* subnet *string*
Tree	subnet
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**ipv4-prefix**] *string*

Synopsis	IPv4 prefix for the subnet
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* subnet *string*
Tree	subnet
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address-range [start] *string* end *string*

Synopsis	Enter the **address-range** list instance
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* address-range *string* end *string*
Tree	address-range
Description	This command configures the range of IP addresses to be served from the pool subnet. The range includes all the IP addresses between the specified start and end addresses, other than specifically excluded addresses. The start and end addresses must be unique within the subnet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**start**] *string*

Synopsis	Lower bound of the IP address range

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Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* address-range *string* end *string*
Tree	address-range
Description	This command specifies the start of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *string*

Synopsis	Upper bound of the IP address range
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* address-range *string* end *string*
Tree	address-range
Description	This command specifies the end of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover-control-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Failover control type for this range
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* address-range *string* end *string* failover-control-type *keyword*
Tree	failover-control-type
Options	local, remote, access-driven
Default	local
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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drain *boolean*

Synopsis	Prevent new lease assignment from this subnet
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* drain *boolean*
Tree	drain
Description	When configured to **true**, new leases cannot be assigned and existing leases are kept up until they are released. When configured to **false**, the subnet is active and new leases can be assigned.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

exclude-addresses [start] *string* end *string*

Synopsis	Add a list entry for **exclude-addresses**
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* exclude-addresses *string* end *string*
Tree	exclude-addresses
Description	This command configures an IP address to be excluded from the pool of IP addresses in the subnet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**start**] *string*

Synopsis	Lower bound of the IP address range
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* exclude-addresses *string* end *string*
Tree	exclude-addresses
Description	This command specifies the start of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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end *string*

Synopsis	Upper bound of the IP address range
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* exclude-addresses *string* end *string*
Tree	exclude-addresses
Description	This command specifies the end of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-declined *number*

Synopsis	Maximum number of declined addresses allowed
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* maximum-declined *number*
Tree	maximum-declined
Max. Range	0 to 4294967295
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

minimum-free

Synopsis	Enter the **minimum-free** context
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* minimum-free
Tree	minimum-free
Description	Commands in this context specify the minimum number of free addresses in this pool.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

absolute *number*

Synopsis	Minimum number of free addresses in this pool or subnet

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Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* minimum-free absolute *number*
Tree	absolute
Range	0 to 255
Default	1
Notes	The following elements are part of a choice: **absolute** or **percent**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event-when-depleted *boolean*

Synopsis	Generate notification when addresses are depleted
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* minimum-free event-when-depleted *boolean*
Tree	event-when-depleted
Description	When configured to **true**, a system-generated event is generated when all available addresses in the pool or subnet of a local DHCP server are depleted. When configured to **false**, no action is taken when all available addresses in the pool or subnet of a local DHCP server are depleted.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

percent *number*

Synopsis	Minimum free addresses as a percentage
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* minimum-free percent *number*
Tree	percent
Range	0 to 100
Default	1
Notes	The following elements are part of a choice: **absolute** or **percent**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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options

Synopsis	Enter the **options** context
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* options
Tree	options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [number] *(number | keyword)*

Synopsis	Enter the **option** list instance
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* options option *(number | keyword)*
Tree	option
Description	This command configures DHCP options at the pool subnet level. The options can be overruled by the value of the same option in the local user database.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**number**] *(number | keyword)*

Synopsis	DHCP option to send identification strings to client
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* options option *(number | keyword)*
Tree	option
Range	1 to 254
Options	subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* options option *(number | keyword)* ascii-string *string*

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Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option specified as time
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* options option *(number | keyword)* duration *number*
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* options option *(number | keyword)* empty
Tree	empty
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* options option *(number | keyword)* hex-string *string*
Tree	hex-string

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String Length	1 to 256
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4-address *string*

Synopsis	DHCP option specified as a list of IPv4 addresses
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* options option *(number | keyword)* ipv4-address *string*
Tree	ipv4-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**. This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

netbios-node-type *keyword*

Synopsis	DHCP option specified as a NetBIOS node type
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* options option *(number | keyword)* netbios-node-type *keyword*
Tree	netbios-node-type
Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool-selection

Synopsis	Enter the **pool-selection** context
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool-selection
Tree	pool-selection

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-gi-address

Synopsis	Enable the **use-gi-address** context
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool-selection use-gi-address
Tree	use-gi-address
Description	Commands in this context configure gateway interface (GI) address matching. When configured, the pool can be used for address matching even if a subnet is not found. If the local user database name is not used, addresses are provided only by GI. If a user must be blocked from getting an address, the server maps to a local user database and configures the user with no address. A pool can include multiple subnets. Since the GI is shared by multiple subnets in a subscriber interface, the pool can provide IP addresses from any of the subnets included when the GI is matched to one of its subnets. This allows a pool to be created that represents a sub-net.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scope *keyword*

Synopsis	GI address-matching scope
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool-selection use-gi-address scope *keyword*
Tree	scope
Options	subnet, pool
Default	subnet
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-pool-from-client

Synopsis	Enable the **use-pool-from-client** context
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool-selection use-pool-from-client
Tree	use-pool-from-client
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delimiter *string*

Synopsis	Delimiter to combine primary and secondary pool names
Context	**configure** router *string* dhcp-server dhcpv4 *string* pool-selection use-pool-from-client delimiter *string*
Tree	delimiter
Description	This command configures a single ASCII character that separates the pool names in DHCP vendor-specific option 82, which identifies the address pool to be used for this client.
String Length	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

Synopsis	Local user database for authentication
Context	**configure** router *string* dhcp-server dhcpv4 *string* user-db *reference*
Tree	user-db
Reference	**configure** subscriber-mgmt local-user-db *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-identification *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	User identification method for the DHCP server
Context	**configure** router *string* dhcp-server dhcpv4 *string* user-identification *keyword*
Tree	user-identification
Options	mac-circuit-id, duid, interface-id, interface-id-link-local, client-id, mac, circuit-id, remote-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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dhcpv6 [name] *string*

Synopsis	Enter the **dhcpv6** list instance
Context	**configure** router *string* dhcp-server dhcpv6 *string*
Tree	dhcpv6
Description	Commands in this context configure DHCPv6 parameters.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	DHCP server name
Context	**configure** router *string* dhcp-server dhcpv6 *string*
Tree	dhcpv6
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCP server
Context	**configure** router *string* dhcp-server dhcpv6 *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-provisioned *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Auto-provision the pools of this server

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Context	**configure** router *string* dhcp-server dhcpv6 *string* auto-provisioned *boolean*
Tree	auto-provisioned
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

defaults

Synopsis	Enter the **defaults** context
Context	**configure** router *string* dhcp-server dhcpv6 *string* defaults
Tree	defaults
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the **options** context
Context	**configure** router *string* dhcp-server dhcpv6 *string* defaults options
Tree	options
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [number] *(number | keyword)*

Synopsis	Enter the **option** list instance
Context	**configure** router *string* dhcp-server dhcpv6 *string* defaults options option *(number | keyword)*
Tree	option
Description	This command configures DHCP options at the pool level. The pool options defined here can be overruled by the value of the same option in the local user database.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**number**] *(number | keyword)*

Synopsis	DHCP option to send as identification string

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Context	**configure** router *string* dhcp-server dhcpv6 *string* defaults options option *(number | keyword)*
Tree	option
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	**configure** router *string* dhcp-server dhcpv6 *string* defaults options option *(number | keyword)* ascii-string *string*
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-string *string*

Synopsis	DHCP option specified as a domain name
Context	**configure** router *string* dhcp-server dhcpv6 *string* defaults options option *(number | keyword)* domain-string *string*
Tree	domain-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option specified as time

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Context	**configure** router *string* dhcp-server dhcpv6 *string* defaults options option *(number | keyword)* duration *number*
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
Context	**configure** router *string* dhcp-server dhcpv6 *string* defaults options option *(number | keyword)* empty
Tree	empty
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	**configure** router *string* dhcp-server dhcpv6 *string* defaults options option *(number | keyword)* hex-string *string*
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses

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Context	**configure** router *string* dhcp-server dhcpv6 *string* defaults options option *(number | keyword)* ipv6-address *string*
Tree	ipv6-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**. This element is ordered by the user.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime *number*

Synopsis	Time this lease remains preferred
Context	**configure** router *string* dhcp-server dhcpv6 *string* defaults preferred-lifetime *number*
Tree	preferred-lifetime
Description	This command configures the preferred lifetime of the IPv6 lease address or prefix. When the preferred lifetime expires, any derived addresses are deprecated. The preferred lifetime must be less than or equal to the valid lifetime. Each address or prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address/prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).
Range	300 to 315446399
Units	seconds
Default	3600
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rebind-time *number*

Synopsis	Rebind time for the lease
Context	**configure** router *string* dhcp-server dhcpv6 *string* defaults rebind-time *number*
Tree	rebind-time

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Description	This command configures the rebind time, known as T2, at which the client contacts the addressing authority to extend the lifetimes of its leases. The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew or reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses or prefixes currently assigned to the IA in its renew message. Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured rebind timer value should always be less than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.
Range	0 to 1209600
Units	seconds
Default	2880
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

renew-time *number*

Synopsis	Renew time for the lease
Context	**configure** router *string* dhcp-server dhcpv6 *string* defaults renew-time *number*
Tree	renew-time
Description	This command configures the renew time, known as T1, at which the client makes a transition to the lease-renewal state. The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew/reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses/prefixes currently assigned to the IA in its renew message. Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured renew timer value should always be shorter than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.
Range	0 to 604800
Units	seconds
Default	1800
Introduced	16.0.R4

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *number*

Synopsis	Time for the lease to remain valid
Context	**configure** router *string* dhcp-server dhcpv6 *string* defaults valid-lifetime *number*
Tree	valid-lifetime
Description	This command configures a valid lifetime for a DHCPv6 lease address or prefix. The valid lifetime is the length of time an address and prefix remains in the valid state. The valid lifetime must be greater than or equal to the preferred lifetime. When the valid lifetime expires, the address and prefix becomes invalid and must not be used in communications. RFC 2461 recommends a default value of 30 days. Each address and prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address and prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).
Range	300 to 315446399
Units	seconds
Default	86400
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** router *string* dhcp-server dhcpv6 *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the **failover** context
Context	**configure** router *string* dhcp-server dhcpv6 *string* failover

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Tree	failover
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	**configure** router *string* dhcp-server dhcpv6 *string* failover admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	**configure** router *string* dhcp-server dhcpv6 *string* failover ignore-mclt-on-takeover *boolean*
Tree	ignore-mclt-on-takeover
Description	When configured to **true**, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire. When configured to **false**, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-client-lead-time *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease

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Context	**configure** router *string* dhcp-server dhcpv6 *string* failover maximum-client-lead-time *number*
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

partner-down-delay *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	**configure** router *string* dhcp-server dhcpv6 *string* failover partner-down-delay *number*
Tree	partner-down-delay
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Units	seconds
Default	86399
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer [address] *reference*

Synopsis	Enter the **peer** list instance
Context	**configure** router *string* dhcp-server dhcpv6 *string* failover peer *reference*

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Tree	peer
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**address**] *reference*

Synopsis	IP address of the failover peer
Context	**configure** router *string* dhcp-server dhcpv6 *string* failover peer *reference*
Tree	peer
Reference	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	**configure** router *string* dhcp-server dhcpv6 *string* failover peer *reference* sync-tag *string*
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

startup-wait-time *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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Synopsis	Time between initialization and assuming active role
Context	**configure** router *string* dhcp-server dhcpv6 *string* failover startup-wait-time *number*
Tree	startup-wait-time
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-rapid-commit *boolean*

Synopsis	Ignore Rapid Commit option
Context	**configure** router *string* dhcp-server dhcpv6 *string* ignore-rapid-commit *boolean*
Tree	ignore-rapid-commit
Description	When configured to **true**, the server ignores the Rapid Commit option sent by the client and uses the regular message exchange.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-id-mapping *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Map hosts within interface-to-prefix combinations
Context	**configure** router *string* dhcp-server dhcpv6 *string* interface-id-mapping *boolean*
Tree	interface-id-mapping
Description	When configured to **true**, this command specifies an interface-mapping method that uses a combination of unique /64 prefixes and interface IDs. A /64 prefix is allocated to each interface ID, and all clients with the same interface ID are assigned an address from the prefix. This method is used for bridging clients in the same local loop and SAP, so that sharing the prefix allows communication to stay local. For SLAAC-based

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	assignment, downstream neighbor discovery is automatically enabled to resolve the assigned address.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-hold

Synopsis	Enter the **lease-hold** context
Context	**configure** router *string* dhcp-server dhcpv6 *string* lease-hold
Tree	lease-hold
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

additional-scenarios

Synopsis	Enter the **additional-scenarios** context
Context	**configure** router *string* dhcp-server dhcpv6 *string* lease-hold additional-scenarios
Tree	additional-scenarios
Description	Commands in this context configure additional types of leases or triggers that cause the system to hold up leases.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

internal-lease-ipsec *boolean*

Synopsis	Apply the lease hold timer to local IPsec clients
Context	**configure** router *string* dhcp-server dhcpv6 *string* lease-hold additional-scenarios internal-lease-ipsec *boolean*
Tree	internal-lease-ipsec
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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solicited-release *boolean*

Synopsis	Apply lease hold timer for solicited releases
Context	**configure** router *string* dhcp-server dhcpv6 *string* lease-hold additional-scenarios solicited-release *boolean*
Tree	solicited-release
Description	This command enables the server to hold up a lease even for a solicited release, for example, when the server receives a normal DHCP release message.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis	Lease hold time
Context	**configure** router *string* dhcp-server dhcpv6 *string* lease-hold time *number*
Tree	time
Range	1 to 631152000
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-query *boolean*

Synopsis	Handle and reply to lease query messages
Context	**configure** router *string* dhcp-server dhcpv6 *string* lease-query *boolean*
Tree	lease-query
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool [pool-name] *string*

Synopsis	Enter the **pool** list instance
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string*
Tree	pool

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**pool-name**] *string*

Synopsis	DHCP server pool name
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string*
Tree	pool
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delegated-prefix

Synopsis	Enter the **delegated-prefix** context
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* delegated-prefix
Tree	delegated-prefix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

length *number*

Synopsis	Prefix length for pool if unspecified by client
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* delegated-prefix length *number*
Tree	length
Range	48 to 127
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum *number*

Synopsis	Maximum delegated prefix length for this pool

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Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* delegated-prefix maximum *number*
Tree	maximum
Range	48 to 127
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

minimum *number*

Synopsis	Minimum delegated prefix length for this pool
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* delegated-prefix minimum *number*
Tree	minimum
Range	48 to 127
Default	48
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

exclude-prefix [ipv6-prefix] *string*

Synopsis	Add a list entry for **exclude-prefix**
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* exclude-prefix *string*
Tree	exclude-prefix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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[**ipv6-prefix**] *string*

Synopsis	IPv6 prefix to be excluded from available pool prefixes
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* exclude-prefix *string*
Tree	exclude-prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the **failover** context
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* failover
Tree	failover
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* failover admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* failover ignore-mclt-on-takeover *boolean*
Tree	ignore-mclt-on-takeover

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Description	When configured to **true**, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire. When configured to **false**, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-client-lead-time *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* failover maximum-client-lead-time *number*
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

partner-down-delay *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* failover partner-down-delay *number*

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Tree	partner-down-delay
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Units	seconds
Default	86399
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer [address] *reference*

Synopsis	Enter the **peer** list instance
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* failover peer *reference*
Tree	peer
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**address**] *reference*

Synopsis	IP address of the failover peer
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* failover peer *reference*
Tree	peer
Reference	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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sync-tag *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* failover peer *reference* sync-tag *string*
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

startup-wait-time *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* failover startup-wait-time *number*
Tree	startup-wait-time
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the **options** context
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* options

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Tree	options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [number] *(number | keyword)*

Synopsis	Enter the **option** list instance
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* options option *(number | keyword)*
Tree	option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**number**] *(number | keyword)*

Synopsis	DHCP option to send as identification string
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* options option *(number | keyword)*
Tree	option
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* options option *(number | keyword)* ascii-string *string*
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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domain-string *string*

Synopsis	DHCP option specified as a domain name
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* options option *(number | keyword)* domain-string *string*
Tree	domain-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option specified as time
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* options option *(number | keyword)* duration *number*
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* options option *(number | keyword)* empty
Tree	empty
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* options option *(number | keyword)* hex-string *string*
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* options option *(number | keyword)* ipv6-address *string*
Tree	ipv6-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**. This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix [ipv6-prefix] *string*

Synopsis	Enter the **prefix** list instance
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix *string*
Tree	prefix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**ipv6-prefix**] *string*

Synopsis	IPv6 prefix to be excluded from available pool prefixes

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Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix *string*
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drain *boolean*

Synopsis	No new leases can be assigned
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* drain *boolean*
Tree	drain
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover-control-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Failover control type for this range
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* failover-control-type *keyword*
Tree	failover-control-type
Options	local, remote, access-driven
Default	local
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the **options** context
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* options
Tree	options
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [number] *(number | keyword)*

Synopsis	Enter the **option** list instance
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* options option *(number | keyword)*
Tree	option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**number**] *(number | keyword)*

Synopsis	DHCP option to send as identification string
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* options option *(number | keyword)*
Tree	option
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* options option *(number | keyword)* ascii-string *string*
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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domain-string *string*

Synopsis	DHCP option specified as a domain name
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* options option *(number | keyword)* domain-string *string*
Tree	domain-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option specified as time
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* options option *(number | keyword)* duration *number*
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* options option *(number | keyword)* empty
Tree	empty
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* options option *(number | keyword)* hex-string *string*
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* options option *(number | keyword)* ipv6-address *string*
Tree	ipv6-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**. This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime *number*

Synopsis	Time this lease remains preferred
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* preferred-lifetime *number*
Tree	preferred-lifetime
Description	This command configures the preferred lifetime of the IPv6 lease address or prefix. When the preferred lifetime expires, any derived addresses are deprecated. The preferred lifetime must be less than or equal to the valid lifetime. Each address or prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue

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	to use the address/prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).
Range	300 to 315446399
Units	seconds
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length-threshold [prefix-length] *number*

Synopsis	Enter the **prefix-length-threshold** list instance
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* prefix-length-threshold *number*
Tree	prefix-length-threshold
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**prefix-length**] *number*

Synopsis	Delegated prefix length for pool thresholds
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* prefix-length-threshold *number*
Tree	prefix-length-threshold
Range	1 to 128
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

absolute *number*

Synopsis	Minimum number of free prefixes for this prefix length
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* prefix-length-threshold *number* absolute *number*
Tree	absolute

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Range	1 to 4294967295
Notes	The following elements are part of a choice: **absolute** or **percent**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event-when-depleted *boolean*

Synopsis	Generate a notification when this pool is depleted
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* prefix-length-threshold *number* event-when-depleted *boolean*
Tree	event-when-depleted
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

percent *number*

Synopsis	Minimum percentage of free prefixes for prefix length
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* prefix-length-threshold *number* percent *number*
Tree	percent
Range	1 to 100
Notes	The following elements are part of a choice: **absolute** or **percent**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-type

Synopsis	Enter the **prefix-type** context
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* prefix-type
Tree	prefix-type
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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pd *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allocate IA-PD prefixes from this prefix pool
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* prefix-type pd *boolean*
Tree	pd
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-host *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allocate IA-NA or SLAAC prefixes from this prefix pool
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* prefix-type wan-host *boolean*
Tree	wan-host
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rebind-time *number*

Synopsis	Rebind time for the lease
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* rebind-time *number*
Tree	rebind-time
Description	This command configures the rebind time, known as T2, at which the client contacts the addressing authority to extend the lifetimes of its leases. The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew or reply message exchange to extend the lifetimes of any addresses in the IA.

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The client includes an IA option with all addresses or prefixes currently assigned to the IA in its renew message.

Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured rebind timer value should always be less than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.

Range	0 to 1209600
Units	seconds
Default	2880
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

renew-time *number*

Synopsis	Renew time for the lease
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* renew-time *number*
Tree	renew-time
Description	This command configures the renew time, known as T1, at which the client makes a transition to the lease-renewal state. The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew/reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses/prefixes currently assigned to the IA in its renew message. Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured renew timer value should always be shorter than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.
Range	0 to 604800
Units	seconds
Default	1800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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valid-lifetime *number*

Synopsis	Time for the lease to remain valid
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* valid-lifetime *number*
Tree	valid-lifetime
Description	This command configures a valid lifetime for a DHCPv6 lease address or prefix. The valid lifetime is the length of time an address and prefix remains in the valid state. The valid lifetime must be greater than or equal to the preferred lifetime. When the valid lifetime expires, the address and prefix becomes invalid and must not be used in communications. RFC 2461 recommends a default value of 30 days. Each address and prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address and prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).
Range	300 to 315446399
Units	seconds
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length-threshold [prefix-length] *number*

Synopsis	Enter the **prefix-length-threshold** list instance
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix-length-threshold *number*
Tree	prefix-length-threshold
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**prefix-length**] *number*

Synopsis	Delegated prefix length for pool thresholds

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Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix-length-threshold *number*
Tree	prefix-length-threshold
Range	1 to 128
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event-when-depleted *boolean*

Synopsis	Generate a notification when this pool is depleted
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix-length-threshold *number* event-when-depleted *boolean*
Tree	event-when-depleted
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

minimum-free-percent *number*

Synopsis	Percentage of free prefixes for this prefix length
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool *string* prefix-length-threshold *number* minimum-free-percent *number*
Tree	minimum-free-percent
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool-selection

Synopsis	Enter the **pool-selection** context
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool-selection
Tree	pool-selection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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use-link-address

Synopsis	Enable the **use-link-address** context
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool-selection use-link-address
Tree	use-link-address
Description	This command configures the local pool selection for DHCPv6 address or prefix assignment to use the link address. When configured, the selected pool contains a prefix covering the link address.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scope *keyword*

Synopsis	Scope of the IP address selection
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool-selection use-link-address scope *keyword*
Tree	scope
Options	subnet, pool
Default	subnet
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-pool-from-client

Synopsis	Enable the **use-pool-from-client** context
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool-selection use-pool-from-client
Tree	use-pool-from-client
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delimiter *string*

Synopsis	Delimiter to combine primary and secondary pool names
Context	**configure** router *string* dhcp-server dhcpv6 *string* pool-selection use-pool-from-client delimiter *string*
Tree	delimiter

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Description	This command configures a single ASCII character that separates the pool names in DHCP vendor-specific option 82, which identifies the address pool to be used for this client.
String Length	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server-id

Synopsis	Enter the **server-id** context
Context	**configure** router *string* dhcp-server dhcpv6 *string* server-id
Tree	server-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-enterprise

Synopsis	Enter the **duid-enterprise** context
Context	**configure** router *string* dhcp-server dhcpv6 *string* server-id duid-enterprise
Tree	duid-enterprise
Notes	The following elements are part of a choice: **duid-enterprise** or **duid-link-local**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DUID enterprise server ID specified as an ASCII string
Context	**configure** router *string* dhcp-server dhcpv6 *string* server-id duid-enterprise ascii-string *string*
Tree	ascii-string
String Length	1 to 58
Notes	The following elements are part of a choice: **ascii-string** or **hex-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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hex-string *string*

Synopsis	DUID enterprise server ID specified as a hex string
Context	**configure** router *string* dhcp-server dhcpv6 *string* server-id duid-enterprise hex-string *string*
Tree	hex-string
String Length	1 to 118
Notes	The following elements are part of a choice: **ascii-string** or **hex-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-link-local

Synopsis	Derive DUID server ID from a system link-layer address
Context	**configure** router *string* dhcp-server dhcpv6 *string* server-id duid-link-local
Tree	duid-link-local
Notes	The following elements are part of a choice: **duid-enterprise** or **duid-link-local**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-identification *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	User identification method for the DHCP server
Context	**configure** router *string* dhcp-server dhcpv6 *string* user-identification *keyword*
Tree	user-identification
Options	mac-circuit-id, duid, interface-id, interface-id-link-local, client-id, mac, circuit-id, remote-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dns

Synopsis	Enter the **dns** context
Context	**configure** router *string* dns

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Tree	dns
Introduced	20.2.R1
Platforms	All

redirect-vprn

Synopsis	Enter the **redirect-vprn** context
Context	**configure** router *string* dns redirect-vprn
Tree	redirect-vprn
Description	Commands in this context configure DNS resolution of all packets through the VPRN DNS server. The VPRN DNS server must be configured before using the commands in this context. If the VPRN DNS server is not configured, all packet resolution fails.
Introduced	20.2.R1
Platforms	All

service [service-name] *reference*

Synopsis	Enter the **service** list instance
Context	**configure** router *string* dns redirect-vprn service *reference*
Tree	service
Max. Instances	1
Introduced	20.2.R1
Platforms	All

[**service-name**] *reference*

Synopsis	Administrative service name
Context	**configure** router *string* dns redirect-vprn service *reference*
Tree	service
Reference	**configure** service vprn *string*
Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	All

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preference *number*

Synopsis	Service preference
Context	**configure** router *string* dns redirect-vprn service *reference* preference *number*
Tree	preference
Range	0 to 255
Introduced	20.2.R1
Platforms	All

ecmp *number*

Synopsis	Maximum equal-cost routes for routing table instance
Context	**configure** router *string* ecmp *number*
Tree	ecmp
Description	This command configures ECMP and defines the number of routes for path sharing. ECMP can be used only for routes learned with the same preference and the same protocol. If available ECMP routes at the best preference exceed the maximum ECMP routes allowed, the system selects the route using the following criteria: **1.** The system selects the lowest next hop router ID. **2.** If the next hop goes to the same neighbor, the system selects the next hop with the lowest interface index.
Range	1 to 64
Default	1
Introduced	16.0.R1
Platforms	All

entropy-label *boolean*

Synopsis	Use entropy label
Context	**configure** router *string* entropy-label *boolean*
Tree	entropy-label
Description	When configured to **true**, this command enables the use of entropy labels. The entropy label and indicator (EL/ELI) are inserted on relevant packets. Applicable packets are those for which at least one LSP in the stack at the far end has advertised the entropy-label capability. These LSPs are in LDP or RSVP tunnels used by an IGP

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or BGP shortcut. If the tunnel is of type RSVP, the entropy-label capability must also be enabled under the **configure router mpls** or **configure router mpls lsp** context.

This command also results in other traffic that is forwarded over an LDP or RSVP LSP for which this router is the LER, and for which there is no explicit service endpoint on this router, to have the EL/ELI enabled, subject to the LSP far-end advertising entropy-label-capability. An example of such traffic includes packets arriving on a stitched LDP LSP forwarded over an RSVP LSP.

The entropy label and the hash label features are mutually exclusive. The entropy label cannot be configured on a spoke SDP or service where the hash label feature has already been configured.

When configured to **false**, the use of entropy labels is disabled.

Default	false
Introduced	16.0.R1
Platforms	All

fib-priority *keyword*

Synopsis	FIB priority for VPRN BGP routes
Context	**configure** router *string* fib-priority *keyword*
Tree	fib-priority
Options	standard, high
Default	standard
Introduced	16.0.R1
Platforms	All

fib-telemetry *boolean*

Synopsis	Collect extra state information
Context	**configure** router *string* fib-telemetry *boolean*
Tree	fib-telemetry
Default	false
Introduced	16.0.R4
Platforms	All

firewall

Synopsis	Enter the **firewall** context

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Context	**configure** router *string* firewall
Tree	firewall
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

domain [name] *string*

Synopsis	Enter the **domain** list instance
Context	**configure** router *string* firewall domain *string*
Tree	domain
Max. Instances	1024
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Firewall domain name
Context	**configure** router *string* firewall domain *string*
Tree	domain
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the firewall domain
Context	**configure** router *string* firewall domain *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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dhcpv6-server

Synopsis	Enter the **dhcpv6-server** context
Context	**configure** router *string* firewall domain *string* dhcpv6-server
Tree	dhcpv6-server
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DHCPv6 server name
Context	**configure** router *string* firewall domain *string* dhcpv6-server name *string*
Tree	name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router name
Context	**configure** router *string* firewall domain *string* dhcpv6-server router-instance *string*
Tree	router-instance
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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nat-group *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group for this domain
Context	**configure** router *string* firewall domain *string* nat-group *reference*
Tree	nat-group
Reference	**configure** isa nat-group *number*
Notes	The following elements are part of a mandatory choice: **nat-group** or **wlan-gw-group**.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix [ip-prefix] *string*

Synopsis	Enter the **prefix** list instance
Context	**configure** router *string* firewall domain *string* prefix *string*
Tree	prefix
Max. Instances	4096
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**ip-prefix**] *string*

Synopsis	IP prefix and prefix length for the domain firewall
Context	**configure** router *string* firewall domain *string* prefix *string*
Tree	prefix
Description	This command configures a prefix for which firewall functionality applies within the domain. Prefixes cannot be shared or duplicated across multiple domains in the same routing context. A domain can contain multiple prefixes.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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description *string*

Synopsis	Text description
Context	**configure** router *string* firewall domain *string* prefix *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	WLAN GW group used for NAT
Context	**configure** router *string* firewall domain *string* wlan-gw-group *reference*
Tree	wlan-gw-group
Reference	**configure** isa wlan-gw-group *number*
Notes	The following elements are part of a mandatory choice: **nat-group** or **wlan-gw-group**.
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

flowspec

Synopsis	Enter the **flowspec** context
Context	**configure** router *string* flowspec
Tree	flowspec
Description	This command configures the maximum number of flowspec routes, or rules, that can be entered in the auto-created embedded filter, fSpec-X. Flowspec filter entries are placed in an ingress IP filter policy in this router from the filter range between the configured offset plus 1 (embedding offset plus 1) and the value of this command (embedding offset plus **ip-filter-max-size** or **ipv6-filter-max-size**). The sum of the maximum-size value and the highest offset in any IP filter that embeds flowspec rules from this routing instance (excluding filters that embed at offset 262143) must not exceed 262143. The maximum size can be adjusted up or down at any time. If the current number of flowspec rules is greater than the new maximum, the extra rules are removed

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immediately but retained in the BGP RIB. If the limit is increased, new rules are embedded only as they are received in new BGP updates.

Introduced 16.0.R1

Platforms All

filter-cam-type *keyword*

Synopsis Filter policy type for FlowSpec embedding

Context **configure** router *string* flowspec filter-cam-type *keyword*

Tree filter-cam-type

Description This command specifies the filter type that is required to embed FlowSpec entries. The filter type defines the match criteria that are available in the filter policy.

Options normal, packet-length

Default normal

Introduced 20.7.R1

Platforms All

ip-filter-max-size *number*

Synopsis Maximum number of flowspec rule entries in IPv4 filter

Context **configure** router *string* flowspec ip-filter-max-size *number*

Tree ip-filter-max-size

Description This command configures the maximum number of IPv4 flowspec routes, or rules, that can be entered in the auto-created embedded filter, fSpec-X. Flowspec filter entries embedded in a filter policy in this routing instance will use filter entries from the range between the embedding offset and (offset + ip-filter-max-size – 1).

The sum of the maximum-size value and the highest offset in any IPv4 filter that embeds IPv4 flowspec rules from this routing instance (excluding filters that embed at offset 262143) must not exceed 262143.

The maximum size can be adjusted up or down at any time. If the current number of IPv4 flowspec rules is greater than the new maximum, the extra rules are removed immediately but retained in the BGP RIB. If the limit is increased, new rules are programmed only as they are received in new BGP updates.

Range 0 to 262143

Default 512

Introduced 16.0.R1

Platforms All

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ipv6-filter-max-size *number*

Synopsis	Maximum number of flowspec rule entries in IPv6 filter
Context	**configure** router *string* flowspec ipv6-filter-max-size *number*
Tree	ipv6-filter-max-size
Description	This command configures the maximum number of IPv6 flowspec routes or rules that can be embedded into an ingress IPv6 filter policy for a specified routing instance. Flowspec filter entries embedded in a filter policy in this routing instance will use filter entries from the range between the embedding offset and (offset + ip-filter-max-size – 1). The sum of the maximum-size value and the highest offset in any IPv6 filter that embeds IPv6 flowspec rules from this routing instance (excluding filters that embed at offset 262143) must not exceed 262143. The maximum size can be adjusted up or down at any time. If the current number of IPv6 flowspec rules is greater than the new maximum, the extra rules are removed immediately but retained in the BGP RIB. If the limit is increased, new rules are programmed only as they are received in new BGP updates.
Range	0 to 262143
Default	512
Introduced	16.0.R1
Platforms	All

gtm

Synopsis	Enter the **gtm** context
Context	**configure** router *string* gtm
Tree	gtm
Introduced	19.5.R1
Platforms	All

mvpn *boolean*

Synopsis	Enable the configuration of MVPN-related parameters
Context	**configure** router *string* gtm mvpn *boolean*
Tree	mvpn
Default	false
Introduced	19.5.R1
Platforms	All

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provider-tunnel

Synopsis	Enter the **provider-tunnel** context
Context	**configure** router *string* gtm provider-tunnel
Tree	provider-tunnel
Introduced	19.5.R1
Platforms	All

inclusive

Synopsis	Enter the **inclusive** context
Context	**configure** router *string* gtm provider-tunnel inclusive
Tree	inclusive
Introduced	19.5.R1
Platforms	All

rsvp

Synopsis	Enable the **rsvp** context
Context	**configure** router *string* gtm provider-tunnel inclusive rsvp
Tree	rsvp
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of P2MP RSVP as provider tunnel
Context	**configure** router *string* gtm provider-tunnel inclusive rsvp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

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lsp-template *reference*

Synopsis	LSP template name
Context	**configure** router *string* gtm provider-tunnel inclusive rsvp lsp-template *reference*
Tree	lsp-template
Reference	**configure** router *string* mpls lsp-template *string*
Introduced	19.5.R1
Platforms	All

selective

Synopsis	Enter the **selective** context
Context	**configure** router *string* gtm provider-tunnel selective
Tree	selective
Introduced	19.5.R1
Platforms	All

data-delay-interval *number*

Synopsis	Delay before a PBR switches traffic to selective tunnel
Context	**configure** router *string* gtm provider-tunnel selective data-delay-interval *number*
Tree	data-delay-interval
Range	3 to 180
Default	3
Introduced	19.5.R1
Platforms	All

data-threshold

Synopsis	Enter the **data-threshold** context
Context	**configure** router *string* gtm provider-tunnel selective data-threshold
Tree	data-threshold
Introduced	19.5.R1
Platforms	All

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group-prefix [ip-group-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **group-prefix** list instance
Context	**configure** router *string* gtm provider-tunnel selective data-threshold group-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	group-prefix
Introduced	19.5.R1
Platforms	All

[**ip-group-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Multicast group-prefix
Context	**configure** router *string* gtm provider-tunnel selective data-threshold group-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

pe-threshold-add *number*

Synopsis	Number of receiver PBRs to create S-PMSI
Context	**configure** router *string* gtm provider-tunnel selective data-threshold group-prefix *(ipv4-prefix | ipv6-prefix)* pe-threshold-add *number*
Tree	pe-threshold-add
Range	1 to 65535
Default	65535
Introduced	19.5.R1
Platforms	All

pe-threshold-delete *number*

Synopsis	Number of receiver PBRs to delete S-PMSI
Context	**configure** router *string* gtm provider-tunnel selective data-threshold group-prefix *(ipv4-prefix | ipv6-prefix)* pe-threshold-delete *number*
Tree	pe-threshold-delete
Range	2 to 65535

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Default	65535
Introduced	19.5.R1
Platforms	All

threshold *number*

Synopsis	Threshold for a group prefix
Context	**configure** router *string* gtm provider-tunnel selective data-threshold group-prefix *(ipv4-prefix | ipv6-prefix)* threshold *number*
Tree	threshold
Range	1 to 4294967294
Units	kilobps
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

maximum-p2mp-spmsi *number*

Synopsis	Maximum number of RSVP P2MP or LDP P2MP S-PMSI tunnels
Context	**configure** router *string* gtm provider-tunnel selective maximum-p2mp-spmsi *number*
Tree	maximum-p2mp-spmsi
Range	1 to 4000
Default	10
Introduced	19.5.R1
Platforms	All

rsvp

Synopsis	Enable the **rsvp** context
Context	**configure** router *string* gtm provider-tunnel selective rsvp
Tree	rsvp
Introduced	19.5.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of P2MP RSVP as provider tunnel
Context	**configure** router *string* gtm provider-tunnel selective rsvp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

lsp-template *reference*

Synopsis	LSP template name
Context	**configure** router *string* gtm provider-tunnel selective rsvp lsp-template *reference*
Tree	lsp-template
Reference	**configure** router *string* mpls lsp-template *string*
Introduced	19.5.R1
Platforms	All

gtp

Synopsis	Enter the **gtp** context
Context	**configure** router *string* gtp
Tree	gtp
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

s11

Synopsis	Enter the **s11** context
Context	**configure** router *string* gtp s11
Tree	s11
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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interface [interface-name] *reference*

Synopsis	Enter the **interface** list instance
Context	**configure** router *string* gtp s11 interface *reference*
Tree	interface
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**interface-name**] *reference*

Synopsis	Name for the S11 interface
Context	**configure** router *string* gtp s11 interface *reference*
Tree	interface
Reference	**configure** router *string* interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

apn-policy *reference*

Synopsis	Access point name policy for the S11 interface
Context	**configure** router *string* gtp s11 interface *reference* apn-policy *reference*
Tree	apn-policy
Reference	**configure** subscriber-mgmt gtp apn-policy *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile-map

Synopsis	Enter the **peer-profile-map** context
Context	**configure** router *string* gtp s11 peer-profile-map
Tree	peer-profile-map
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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prefix [peer-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **prefix** list instance
Context	**configure** router *string* gtp s11 peer-profile-map prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**peer-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP prefix and prefix length for the subnet
Context	**configure** router *string* gtp s11 peer-profile-map prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile *reference*

Synopsis	GTP peer profile associated with the address prefix
Context	**configure** router *string* gtp s11 peer-profile-map prefix *(ipv4-prefix | ipv6-prefix)* peer-profile *reference*
Tree	peer-profile
Reference	**configure** subscriber-mgmt gtp peer-profile *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

upf-data-endpoint

Synopsis	Enable the **upf-data-endpoint** context
Context	**configure** router *string* gtp upf-data-endpoint
Tree	upf-data-endpoint
Description	Commands in this context configure a GTP - User Plane (GTP-U) endpoint used by BNG CUPS FWA sessions.
Introduced	21.2.R1

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Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

fpe *reference*

Synopsis	FPE used to encapsulate and decapsulate GTP-U traffic
Context	**configure** router *string* gtp upf-data-endpoint fpe *reference*
Tree	fpe
Reference	**configure** fwd-path-ext fpe *number*
Notes	This element is mandatory.
Introduced	21.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface *reference*

Synopsis	Interface on which the GTP-U packets terminate
Context	**configure** router *string* gtp upf-data-endpoint interface *reference*
Tree	interface
Reference	**configure** router *string* interface *string*
Notes	This element is mandatory.
Introduced	21.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

uplink

Synopsis	Enable the **uplink** context
Context	**configure** router *string* gtp uplink
Tree	uplink
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

apn *string*

Synopsis	Network identifier part of the APN for the uplink
Context	**configure** router *string* gtp uplink apn *string*
Tree	apn

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String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

pdn-type *keyword*

Synopsis	Default PDN to be signaled in GTP
Context	**configure** router *string* gtp uplink pdn-type *keyword*
Tree	pdn-type
Options	ipv4, ipv6, ipv4v6
Default	ipv4
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile-map

Synopsis	Enter the **peer-profile-map** context
Context	**configure** router *string* gtp uplink peer-profile-map
Tree	peer-profile-map
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix [peer-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **prefix** list instance
Context	**configure** router *string* gtp uplink peer-profile-map prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**peer-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP prefix and prefix length for the subnet
Context	**configure** router *string* gtp uplink peer-profile-map prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile *reference*

Synopsis	GTP peer profile associated with the address prefix
Context	**configure** router *string* gtp uplink peer-profile-map prefix *(ipv4-prefix | ipv6-prefix)* peer-profile *reference*
Tree	peer-profile
Reference	**configure** subscriber-mgmt gtp peer-profile *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp-tunneling *boolean*

Synopsis	Allow tunneling of ICMP reply packets over MPLS LSPs
Context	**configure** router *string* icmp-tunneling *boolean*
Tree	icmp-tunneling
Default	false
Introduced	16.0.R1
Platforms	All

igmp

Synopsis	Enable the **igmp** context
Context	**configure** router *string* igmp
Tree	igmp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of IGMP

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Context	**configure** router *string* igmp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

forwarding-group-interface forwarding-service *string* group-interface-name *reference*

Synopsis	Enter the **forwarding-group-interface** list instance
Context	**configure** router *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference*
Tree	forwarding-group-interface
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

forwarding-service *string*

Synopsis	Forwarding service for the subscriber interface
Context	**configure** router *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference*
Tree	forwarding-group-interface
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface-name *reference*

Synopsis	Group interface name
Context	**configure** router *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference*
Tree	forwarding-group-interface
Reference	**configure** service vprn *string* subscriber-interface *string* group-interface *string*
Notes	This element is part of a list key.
Introduced	21.7.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of IGMP
Context	**configure** router *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	**configure** router *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* import-policy *reference*
Tree	import-policy
Description	This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option. When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).
Reference	**configure** policy-options policy-statement *string*
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	**configure** router *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* maximum-number-group-sources *number*
Tree	maximum-number-group-sources
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than

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the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.

Range	1 to 32000
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	**configure** router *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 16000
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	**configure** router *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* maximum-number-sources *number*
Tree	maximum-number-sources
Range	1 to 1000
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mcac

Synopsis	Enter the **mcac** context
Context	**configure** router *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* mcac
Tree	mcac
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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bandwidth

Synopsis	Enter the **bandwidth** context
Context	**configure** router *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* mcac bandwidth
Tree	bandwidth
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mandatory *(number | keyword)*

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	**configure** router *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* mcac bandwidth mandatory *(number | keyword)*
Tree	mandatory
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

total *(number | keyword)*

Synopsis	Maximum allowed bandwidth
Context	**configure** router *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* mcac bandwidth total *(number | keyword)*
Tree	total
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy

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Context	**configure** router *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* mcac interface-policy *reference*
Tree	interface-policy
Reference	**configure** mcac interface-policy *string*
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	Multicast CAC policy name
Context	**configure** router *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* mcac policy *reference*
Tree	policy
Description	This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment. Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode. If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect. Hierarchical MCAC (HMCAC) is supported on two levels simultaneously: • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).
Reference	**configure** mcac policy *string*
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** router *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* query-interval *number*
Tree	query-interval
Range	2 to 1024

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Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	**configure** router *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* query-last-member-interval *number*
Tree	query-last-member-interval
Range	1 to 1023
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	**configure** router *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* query-response-interval *number*
Tree	query-response-interval
Range	1 to 1023
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-source-address *string*

Synopsis	Source address for IGMP queries
Context	**configure** router *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* query-source-address *string*
Tree	query-source-address
Description	This command configures the query source IP address for the group interface. This IP address overrides the source IP address configured at the router level.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	**configure** router *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* router-alert-check *boolean*
Tree	router-alert-check
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-hosts-only *boolean*

Synopsis	Allow IGMP traffic from known hosts only
Context	**configure** router *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* sub-hosts-only *boolean*
Tree	sub-hosts-only
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subnet-check *boolean*

Synopsis	Allow subnet checking
Context	**configure** router *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* subnet-check *boolean*
Tree	subnet-check
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis	IGMP protocol version
Context	**configure** router *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* version *keyword*
Tree	version
Options	1, 2, 3

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Default	3
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-if-query-source-address *string*

Synopsis	Default query-source address for all group interfaces
Context	**configure** router *string* igmp group-if-query-source-address *string*
Tree	group-if-query-source-address
Introduced	16.0.R1
Platforms	All

group-interface [group-interface-name] *reference*

Synopsis	Enter the **group-interface** list instance
Context	**configure** router *string* igmp group-interface *reference*
Tree	group-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**group-interface-name**] *reference*

Synopsis	Group interface name
Context	**configure** router *string* igmp group-interface *reference*
Tree	group-interface
Reference	**configure** service ies *string* subscriber-interface *string* group-interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of IGMP
Context	**configure** router *string* igmp group-interface *reference* admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	**configure** router *string* igmp group-interface *reference* import-policy *reference*
Tree	import-policy
Description	This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option. When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	**configure** router *string* igmp group-interface *reference* maximum-number-group-sources *number*
Tree	maximum-number-group-sources
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface

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Context	**configure** router *string* igmp group-interface *reference* maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	**configure** router *string* igmp group-interface *reference* maximum-number-sources *number*
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mcac

Synopsis	Enter the **mcac** context
Context	**configure** router *string* igmp group-interface *reference* mcac
Tree	mcac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bandwidth

Synopsis	Enter the **bandwidth** context
Context	**configure** router *string* igmp group-interface *reference* mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mandatory *(number | keyword)*

Synopsis	Pre-reserved bandwidth for all mandatory channels

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Context	**configure** router *string* igmp group-interface *reference* mcac bandwidth mandatory *(number | keyword)*
Tree	mandatory
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

total *(number | keyword)*

Synopsis	Maximum allowed bandwidth
Context	**configure** router *string* igmp group-interface *reference* mcac bandwidth total *(number | keyword)*
Tree	total
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	**configure** router *string* igmp group-interface *reference* mcac interface-policy *reference*
Tree	interface-policy
Reference	**configure** mcac interface-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	Multicast CAC policy name
Context	**configure** router *string* igmp group-interface *reference* mcac policy *reference*
Tree	policy

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Description	This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment. Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode. If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect. Hierarchical MCAC (HMCAC) is supported on two levels simultaneously: • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).
Reference	**configure** mcac policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** router *string* igmp group-interface *reference* query-interval *number*
Tree	query-interval
Range	2 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	**configure** router *string* igmp group-interface *reference* query-last-member-interval *number*
Tree	query-last-member-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	**configure** router *string* igmp group-interface *reference* query-response-interval *number*
Tree	query-response-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-source-address *string*

Synopsis	Source address for IGMP queries
Context	**configure** router *string* igmp group-interface *reference* query-source-address *string*
Tree	query-source-address
Description	This command configures the query source IP address for the group interface. This IP address overrides the source IP address configured at the router level.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	**configure** router *string* igmp group-interface *reference* router-alert-check *boolean*
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-hosts-only *boolean*

Synopsis	Allow IGMP traffic from known hosts only
Context	**configure** router *string* igmp group-interface *reference* sub-hosts-only *boolean*
Tree	sub-hosts-only
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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subnet-check *boolean*

Synopsis	Allow subnet checking
Context	**configure** router *string* igmp group-interface *reference* subnet-check *boolean*
Tree	subnet-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis	IGMP protocol version
Context	**configure** router *string* igmp group-interface *reference* version *keyword*
Tree	version
Options	1, 2, 3
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface [ip-interface-name] *string*

Synopsis	Enter the **interface** list instance
Context	**configure** router *string* igmp interface *string*
Tree	interface
Introduced	16.0.R1
Platforms	All

[**ip-interface-name**] *string*

Synopsis	IP interface name
Context	**configure** router *string* igmp interface *string*
Tree	interface
Description	This command configures the interface name, which must be unique within the group of defined IP interfaces for the context. If the IP interface name does not exist or does not have an IP address configured, an error message is returned. If the IP interface exists in a different area, it is moved to this area.

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	An interface name cannot be in the form of an IP address.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of IGMP
Context	**configure** router *string* igmp interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	**configure** router *string* igmp interface *string* import-policy *reference*
Tree	import-policy
Description	This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option. When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	All

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	**configure** router *string* igmp interface *string* maximum-number-group-sources *number*
Tree	maximum-number-group-sources

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Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	All

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	**configure** router *string* igmp interface *string* maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	**configure** router *string* igmp interface *string* maximum-number-sources *number*
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

mcac

Synopsis	Enter the **mcac** context
Context	**configure** router *string* igmp interface *string* mcac
Tree	mcac
Introduced	16.0.R1
Platforms	All

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bandwidth

Synopsis	Enter the **bandwidth** context
Context	**configure** router *string* igmp interface *string* mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	All

mandatory *(number | keyword)*

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	**configure** router *string* igmp interface *string* mcac bandwidth mandatory *(number | keyword)*
Tree	mandatory
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

total *(number | keyword)*

Synopsis	Maximum allowed bandwidth
Context	**configure** router *string* igmp interface *string* mcac bandwidth total *(number | keyword)*
Tree	total
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	**configure** router *string* igmp interface *string* mcac interface-policy *reference*
Tree	interface-policy

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Reference	**configure** mcac interface-policy *string*
Introduced	16.0.R1
Platforms	All

mc-constraints

Synopsis	Enter the **mc-constraints** context
Context	**configure** router *string* igmp interface *string* mcac mc-constraints
Tree	mc-constraints
Introduced	16.0.R1
Platforms	All

level [level-id] *number*

Synopsis	Enter the **level** list instance
Context	**configure** router *string* igmp interface *string* mcac mc-constraints level *number*
Tree	level
Description	Commands in this context configure the amount of bandwidth available within a given bundle for MC traffic for a specified level.
Introduced	16.0.R1
Platforms	All

[**level-id**] *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	**configure** router *string* igmp interface *string* mcac mc-constraints level *number*
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Bandwidth available for this level

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Context	**configure** router *string* igmp interface *string* mcac mc-constraints level *number* bandwidth *number*
Tree	bandwidth
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

number-down [number-lag-port-down] *number*

Synopsis	Enter the **number-down** list instance
Context	**configure** router *string* igmp interface *string* mcac mc-constraints number-down *number*
Tree	number-down
Description	Commands in this context configure the number of ports down along with level for the MCAC policy on the interface.
Introduced	16.0.R1
Platforms	All

[**number-lag-port-down**] *number*

Synopsis	Number of ports that are down in this LAG link
Context	**configure** router *string* igmp interface *string* mcac mc-constraints number-down *number*
Tree	number-down
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level ID to associate with number of down LAG ports
Context	**configure** router *string* igmp interface *string* mcac mc-constraints number-down *number* level *number*
Tree	level

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Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

use-lag-port-weight *boolean*

Synopsis	Use LAG port weight in calculating MCAC constraints
Context	**configure** router *string* igmp interface *string* mcac mc-constraints use-lag-port-weight *boolean*
Tree	use-lag-port-weight
Description	When configured to **true**, port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.
Default	false
Introduced	16.0.R1
Platforms	All

policy *reference*

Synopsis	Multicast CAC policy name
Context	**configure** router *string* igmp interface *string* mcac policy *reference*
Tree	policy
Description	This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment. Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode. If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect. Hierarchical MCAC (HMCAC) is supported on two levels simultaneously: • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the

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policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).

Reference	**configure** mcac policy *string*
Introduced	16.0.R1
Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** router *string* igmp interface *string* query-interval *number*
Tree	query-interval
Range	2 to 1024
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	**configure** router *string* igmp interface *string* query-last-member-interval *number*
Tree	query-last-member-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	**configure** router *string* igmp interface *string* query-response-interval *number*
Tree	query-response-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	All

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redundant-mcast *boolean*

Synopsis	Use interface as a redundant-pair member for multicast
Context	**configure** router *string* igmp interface *string* redundant-mcast *boolean*
Tree	redundant-mcast
Default	false
Introduced	16.0.R1
Platforms	All

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	**configure** router *string* igmp interface *string* router-alert-check *boolean*
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	All

ssm-translate

Synopsis	Enter the **ssm-translate** context
Context	**configure** router *string* igmp interface *string* ssm-translate
Tree	ssm-translate
Description	Commands in this context configure a group range that is translated to SSM (S,G) entries. If a static entry needs to be created, it is translated from an IGMPv1 or v2 request to an SSM join message.
Introduced	16.0.R1
Platforms	All

group-range start *string* end *string*

Synopsis	Enter the **group-range** list instance
Context	**configure** router *string* igmp interface *string* ssm-translate group-range start *string* end *string*
Tree	group-range
Description	Commands in this context configure the range of IP addresses that is translated to SSM (S,G) entries.

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Introduced	16.0.R1
Platforms	All

start *string*

Synopsis	Lower bound of the IP address group range
Context	**configure** router *string* igmp interface *string* ssm-translate group-range start *string* end *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *string*

Synopsis	Upper bound of the IP address group range
Context	**configure** router *string* igmp interface *string* ssm-translate group-range start *string* end *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [source-address] *string*

Synopsis	Add a list entry for **source**
Context	**configure** router *string* igmp interface *string* ssm-translate group-range start *string* end *string* source *string*
Tree	source
Min. Instances	1
Introduced	16.0.R1
Platforms	All

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[**source-address**] *string*

Synopsis	Source IP address of multicast channel sending data
Context	**configure** router *string* igmp interface *string* ssm-translate group-range start *string* end *string* source *string*
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

static

Synopsis	Enter the **static** context
Context	**configure** router *string* igmp interface *string* static
Tree	static
Description	Commands in this context configure the testing of multicast forwarding on an interface without a receiver host.
Introduced	16.0.R1
Platforms	All

group [group-address] *string*

Synopsis	Enter the **group** list instance
Context	**configure** router *string* igmp interface *string* static group *string*
Tree	group
Description	Commands in this context configure a static multicast group as either a starg (*,G), or one or more SSM (S,G) records. IGMP static group memberships are used to test multicast forwarding without a receiver host. When a static IGMP group is configured, data is forwarded to an interface without receiving membership reports from host members. When the group entries are configured on point-to-point links that connect routers to a rendezvous point (RP), the static IGMP group entries do not generate join messages toward the RP.
Introduced	16.0.R1
Platforms	All

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[**group-address**] *string*

Synopsis	Group address of static IGMP multicast channel
Context	**configure** router *string* igmp interface *string* static group *string*
Tree	group
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [source-address] *string*

Synopsis	Add a list entry for **source**
Context	**configure** router *string* igmp interface *string* static group *string* source *string*
Tree	source
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R1
Platforms	All

[**source-address**] *string*

Synopsis	Source IP address of multicast channel sending data
Context	**configure** router *string* igmp interface *string* static group *string* source *string*
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	Add a starg (*,G) address entry for the group range
Context	**configure** router *string* igmp interface *string* static group *string* starg
Tree	starg
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R2

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Platforms	All

group-range start *string* end *string* step *string*

Synopsis	Enter the **group-range** list instance
Context	**configure** router *string* igmp interface *string* static group-range start *string* end *string* step *string*
Tree	group-range
Description	Commands in this context configure the ranges of IP addresses for the static groups.
Introduced	16.0.R1
Platforms	All

start *string*

Synopsis	IP address for the start of the static group range
Context	**configure** router *string* igmp interface *string* static group-range start *string* end *string* step *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *string*

Synopsis	IP address for the end of the static group range
Context	**configure** router *string* igmp interface *string* static group-range start *string* end *string* step *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

step *string*

Synopsis	Step interval in the group-range address

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Context	**configure** router *string* igmp interface *string* static group-range start *string* end *string* step *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [source-address] *string*

Synopsis	Add a list entry for **source**
Context	**configure** router *string* igmp interface *string* static group-range start *string* end *string* step *string* source *string*
Tree	source
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R1
Platforms	All

[**source-address**] *string*

Synopsis	Source IP address of multicast channel sending data
Context	**configure** router *string* igmp interface *string* static group-range start *string* end *string* step *string* source *string*
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	Add a starg (*,G) address entry for the group range
Context	**configure** router *string* igmp interface *string* static group-range start *string* end *string* step *string* starg
Tree	starg
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R2
Platforms	All

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subnet-check *boolean*

Synopsis	Allow subnet checking
Context	**configure** router *string* igmp interface *string* subnet-check *boolean*
Tree	subnet-check
Default	true
Introduced	16.0.R1
Platforms	All

version *keyword*

Synopsis	IGMP protocol version
Context	**configure** router *string* igmp interface *string* version *keyword*
Tree	version
Options	1, 2, 3
Default	3
Introduced	16.0.R1
Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** router *string* igmp query-interval *number*
Tree	query-interval
Description	This command configures the timing of the host-query messages that solicit group membership information. The messages are sent to the all-systems multicast group address, 224.0.0.1.
Range	2 to 1024
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages

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Context	**configure** router *string* igmp query-last-member-interval *number*
Tree	query-last-member-interval
Description	This command configures the timing of the query-message interval, defining the interval for leave-group messages among others. The lower the interval that is configured, the faster the detection of the loss of the last member of a group.
Range	1 to 1023
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	**configure** router *string* igmp query-response-interval *number*
Tree	query-response-interval
Range	1 to 1023
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	**configure** router *string* igmp robust-count *number*
Tree	robust-count
Description	This command configures the level of expected packet loss on a subnet. If a subnet anticipates losses, this value can be increased.
Range	2 to 10
Default	2
Introduced	16.0.R1
Platforms	All

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ssm-translate

Synopsis	Enter the **ssm-translate** context
Context	**configure** router *string* igmp ssm-translate
Tree	ssm-translate
Description	Commands in this context configure a group range that is translated to SSM (S,G) entries. If a static entry needs to be created, it is translated from an IGMPv1 or v2 request to an SSM join message.
Introduced	16.0.R1
Platforms	All

group-range start *string* end *string*

Synopsis	Enter the **group-range** list instance
Context	**configure** router *string* igmp ssm-translate group-range start *string* end *string*
Tree	group-range
Description	Commands in this context configure the range of IP addresses that is translated to SSM (S,G) entries.
Introduced	16.0.R1
Platforms	All

start *string*

Synopsis	Lower bound of the IP address group range
Context	**configure** router *string* igmp ssm-translate group-range start *string* end *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *string*

Synopsis	Upper bound of the IP address group range
Context	**configure** router *string* igmp ssm-translate group-range start *string* end *string*
Tree	group-range
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	All

source [source-address] *string*

Synopsis	Add a list entry for **source**
Context	**configure** router *string* igmp ssm-translate group-range start *string* end *string* source *string*
Tree	source
Min. Instances	1
Introduced	16.0.R1
Platforms	All

[**source-address**] *string*

Synopsis	Source IP address of multicast channel sending data
Context	**configure** router *string* igmp ssm-translate group-range start *string* end *string* source *string*
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

tunnel-interface

Synopsis	Enter the **tunnel-interface** context
Context	**configure** router *string* igmp tunnel-interface
Tree	tunnel-interface
Introduced	16.0.R1
Platforms	All

ldp-p2mp-root [p2mp-id] *reference* sender-address *reference*

Synopsis	Enter the **ldp-p2mp-root** list instance

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Context	**configure** router *string* igmp tunnel-interface ldp-p2mp-root *reference* sender-address *reference*
Tree	ldp-p2mp-root
Description	Commands in this context configure the LDP parameters for the IGMP P2MP LSP tunnel.
Introduced	16.0.R1
Platforms	All

[**p2mp-id**] *reference*

Synopsis	RSVP P2MP LSP ID
Context	**configure** router *string* igmp tunnel-interface ldp-p2mp-root *reference* sender-address *reference*
Tree	ldp-p2mp-root
Reference	**configure** router *string* tunnel-interface ldp-p2mp-root *number* sender-address *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

sender-address *reference*

Synopsis	System address of the ingress LER for the P2MP RSVP LSP
Context	**configure** router *string* igmp tunnel-interface ldp-p2mp-root *reference* sender-address *reference*
Tree	ldp-p2mp-root
Reference	**configure** router *string* tunnel-interface ldp-p2mp-root *number* sender-address *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of IGMP
Context	**configure** router *string* igmp tunnel-interface ldp-p2mp-root *reference* sender-address *reference* admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

static

Synopsis	Enter the **static** context
Context	**configure** router *string* igmp tunnel-interface ldp-p2mp-root *reference* sender-address *reference* static
Tree	static
Description	Commands in this context configure static multicast receiver hosts on a tunnel interface associated with an RSVP P2MP LSP. When a static IGMP group is configured, data is forwarded to an interface without receiving membership reports from host members.
Introduced	16.0.R1
Platforms	All

group [group-address] *string*

Synopsis	Enter the **group** list instance
Context	**configure** router *string* igmp tunnel-interface ldp-p2mp-root *reference* sender-address *reference* static group *string*
Tree	group
Description	Commands in this context configure a static multicast group as either a starg (*,G), or one or more SSM (S,G) records. Static multicast group joins can be assigned to a tunnel interface associated with an RSVP P2MP LSP. A given <*,G> or <S,G> can only be associated with a single tunnel interface. A multicast packet which is received on an interface and which succeeds the RPF check for the source address will be replicated and forwarded to all OIFs which correspond to the branches of the P2MP LSP. The packet is sent on each OIF with the label stack indicated in the NHLFE of this OIF. The packets will also be replicated and forwarded natively on all OIFs which have received IGMP or PIM joins for this <S,G>. The multicast packet can be received over a PIM or IGMP interface which can be an IES interface, a spoke SDP terminated IES interface, or a network interface.
Introduced	16.0.R1
Platforms	All

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[**group-address**] *string*

Synopsis	Group address of static IGMP multicast channel
Context	**configure** router *string* igmp tunnel-interface ldp-p2mp-root *reference* sender-address *reference* static group *string*
Tree	group
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [source-address] *string*

Synopsis	Add a list entry for **source**
Context	**configure** router *string* igmp tunnel-interface ldp-p2mp-root *reference* sender-address *reference* static group *string* source *string*
Tree	source
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R1
Platforms	All

[**source-address**] *string*

Synopsis	Source IP address of multicast channel sending data
Context	**configure** router *string* igmp tunnel-interface ldp-p2mp-root *reference* sender-address *reference* static group *string* source *string*
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	Add a starg (*,G) address entry for the group range

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Context	**configure** router *string* igmp tunnel-interface ldp-p2mp-root *reference* sender-address *reference* static group *string* starg
Tree	starg
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R2
Platforms	All

rsvp-p2mp-root [lsp-name] *reference*

Synopsis	Enter the **rsvp-p2mp-root** list instance
Context	**configure** router *string* igmp tunnel-interface rsvp-p2mp-root *reference*
Tree	rsvp-p2mp-root
Description	Commands in this context configure the RSVP parameters for the IGMP P2MP LSP tunnel.
Introduced	16.0.R1
Platforms	All

[**lsp-name**] *reference*

Synopsis	LSP name for the RSVP P2MP LSP
Context	**configure** router *string* igmp tunnel-interface rsvp-p2mp-root *reference*
Tree	rsvp-p2mp-root
Reference	**configure** router *string* tunnel-interface rsvp-p2mp-root *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of IGMP
Context	**configure** router *string* igmp tunnel-interface rsvp-p2mp-root *reference* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable

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Introduced	16.0.R1
Platforms	All

static

Synopsis	Enter the **static** context
Context	**configure** router *string* igmp tunnel-interface rsvp-p2mp-root *reference* static
Tree	static
Description	Commands in this context configure static multicast receiver hosts on a tunnel interface associated with an RSVP P2MP LSP. When a static IGMP group is configured, data is forwarded to an interface without receiving membership reports from host members.
Introduced	16.0.R1
Platforms	All

group [group-address] *string*

Synopsis	Enter the **group** list instance
Context	**configure** router *string* igmp tunnel-interface rsvp-p2mp-root *reference* static group *string*
Tree	group
Introduced	16.0.R1
Platforms	All

[**group-address**] *string*

Synopsis	Group address of static IGMP multicast channel
Context	**configure** router *string* igmp tunnel-interface rsvp-p2mp-root *reference* static group *string*
Tree	group
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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source [source-address] *string*

Synopsis	Add a list entry for **source**
Context	**configure** router *string* igmp tunnel-interface rsvp-p2mp-root *reference* static group *string* source *string*
Tree	source
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R1
Platforms	All

[**source-address**] *string*

Synopsis	Source IP address of multicast channel sending data
Context	**configure** router *string* igmp tunnel-interface rsvp-p2mp-root *reference* static group *string* source *string*
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	Add a starg (*,G) address entry for the group range
Context	**configure** router *string* igmp tunnel-interface rsvp-p2mp-root *reference* static group *string* starg
Tree	starg
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R2
Platforms	All

interface [interface-name] *string*

Synopsis	Enter the **interface** list instance
Context	**configure** router *string* interface *string*
Tree	interface
Introduced	16.0.R1

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Platforms	All

[**interface-name**] *string*

Synopsis	Router interface name
Context	**configure** router *string* interface *string*
Tree	interface
Description	This command specifies the name of the router interface. When a user enters a new name, the system creates a new logical interface and the context changes to that interface for more command processing. When an existing interface name is entered, the user enters the router interface context for editing and configuration. Nokia recommends using names that are meaningful and unique to remove ambiguity when displaying the state associated with IP interfaces either via show commands or model-driven interfaces. See "Router configuration overview" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide* for more information about the interface name.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	**configure** router *string* interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

cflowd-parameters

Synopsis	Enter the **cflowd-parameters** context
Context	**configure** router *string* interface *string* cflowd-parameters
Tree	cflowd-parameters
Description	Commands in this context configure cflowd parameters for the associated IP interfaces.

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Introduced	16.0.R1
Platforms	All

sampling [sampling-type] *keyword*

Synopsis	Enter the **sampling** list instance
Context	**configure** router *string* interface *string* cflowd-parameters sampling *keyword*
Tree	sampling
Description	Commands in this context configure cflowd sampling behavior, which configures the collection of traffic flow samples for analysis for this IP interface.
Introduced	16.0.R1
Platforms	All

[**sampling-type**] *keyword*

Synopsis	Traffic sampling type
Context	**configure** router *string* interface *string* cflowd-parameters sampling *keyword*
Tree	sampling
Description	This command configures the type of traffic to be sampled on the associated IP interface.
Options	unicast, multicast, both
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

direction *keyword*

Synopsis	Direction of traffic for cflowd sampling
Context	**configure** router *string* interface *string* cflowd-parameters sampling *keyword* direction *keyword*
Tree	direction
Description	This command configures the direction in which sampling occurs on the associated IP interfaces.
Options	ingress-only, egress-only, both
Default	ingress-only
Introduced	16.0.R1

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Platforms	All

sample-profile *(keyword | number)*

Synopsis	Sample profile ID
Context	**configure** router *string* interface *string* cflowd-parameters sampling *keyword* sample-profile *(keyword | number)*
Tree	sample-profile
Description	This command defines the sampling rate profile associated with this interface.
Max. Range	0 to 4294967295
Options	1
Introduced	19.5.R1
Platforms	All

type *keyword*

Synopsis	Type of cflowd analysis
Context	**configure** router *string* interface *string* cflowd-parameters sampling *keyword* type *keyword*
Tree	type
Description	This command configures the cflowd sampling type on the associated IP interface.
Options	acl, interface
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

cpu-protection *reference*

Synopsis	CPU protection policy ID for the interface
Context	**configure** router *string* interface *string* cpu-protection *reference*
Tree	cpu-protection
Description	This command assigns an existing CPU protection policy to the associated interface. For these interface types, the per-source rate limit is not applicable. If no CPU-protection policy is assigned to an interface, the default policy is used to limit the overall rate.
Reference	**configure** system security cpu-protection policy *number*

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** router *string* interface *string* description *string*
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

dist-cpu-protection *reference*

Synopsis	DCP policy name for interface
Context	**configure** router *string* interface *string* dist-cpu-protection *reference*
Tree	dist-cpu-protection
Description	This command configures a Distributed CPU Protection (DCP) policy for the associated IP interface or SAP. The user can only assign a valid created DCP policy to a SAP or network interface (this rule does not apply to templates such as an MSAP policy). If the operator does not assign a DCP policy to a router interface, the system uses the default network DCP policy. See "Distributed CPU protection" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR System Management Guide* for more information.
Reference	**configure** system security dist-cpu-protection policy *string*
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** router *string* interface *string* egress
Tree	egress
Description	Commands in this context configure egress network filter policies for the IP interface. The system does not filter unless an operator defines a filter.
Introduced	16.0.R1

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Platforms	All

filter

Synopsis	Enter the **filter** context
Context	**configure** router *string* interface *string* egress filter
Tree	filter
Description	Commands in this context configure the names of the egress IPv4 and IPv6 network filter policies for the interface. Filter policies control packet forwarding and dropping based on IP match criteria.
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** router *string* interface *string* egress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** router *string* interface *string* egress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the **eth-cfm** context
Context	**configure** router *string* interface *string* eth-cfm
Tree	eth-cfm

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Description	Commands in this context configure the Ethernet CFM parameters for the associated IP interface.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*

Synopsis	Enter the **mep** list instance
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Description	Commands in this context configure an 802.1ag Maintenance Endpoint (MEP) instance.
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string* association *string*
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the **alarm-notification** context
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification
Tree	alarm-notification
Description	Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm. Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-alarm-time *number*
Tree	fng-alarm-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-reset-time *number*
Tree	fng-reset-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis	Generate CCM messages
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm *boolean*
Tree	ccm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-ltm-priority *number*
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-padding-size *number*
Tree	ccm-padding-size
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU. This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through **configure eth-cfm domain association ccm-interval)** is less than 1 second.
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-tlv-ignore *keyword*

Synopsis	TLV to ignore on reception
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-tlv-ignore *keyword*
Tree	ccm-tlv-ignore
Description	This command configures the receiving MEP to ignore the specified TLVs in the CCM PDU. The ignored TLVs are reported as absent and have no impact on the MEP state machine. When unconfigured, the MEP processes all the recognized TLVs.
Options	interface-status, port-status

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Max. Instances	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-fc-stats

Synopsis	Enter the **collect-lmm-fc-stats** context
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* collect-lmm-fc-stats
Tree	collect-lmm-fc-stats
Description	Commands in this context configure per forwarding class (FC) LMM information collection. The commands **fc-in-profile** and **fc** in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively. This command and the **collect-lmm-stats** command are mutually exclusive when there is entity resource contention.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc *keyword*

Synopsis	Forwarding class name for profile-unaware counter
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* collect-lmm-fc-stats fc *keyword*
Tree	fc
Description	This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter. An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the **fc-in-profile** command under the **collect-lmm-fc-stats** context. When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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fc-in-profile *keyword*

Synopsis	Forwarding class name for profile-aware counter
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* collect-lmm-fc-stats fc-in-profile *keyword*
Tree	fc-in-profile
Description	This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter. An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the **fc** command under the **collect-lmm-fc-stats** context. When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* collect-lmm-stats *boolean*
Tree	collect-lmm-stats
Description	When configured to **true**, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings. The **show eth-cfm collect-lmm-stats** command displays entities that have been enabled to collect transit and receive counters. When configured to **false**, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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description *string*

Synopsis	Text description
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the **eth-test** context
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the **oam eth-cfm eth-test** command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test bit-error-threshold *number*
Tree	bit-error-threshold
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis	Enter the **test-pattern** context

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Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern crc-tlv *boolean*
Tree	crc-tlv
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern pattern *keyword*
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

facility-fault *boolean*

Synopsis	Allow the facility MEP to generate a network action
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* facility-fault *boolean*
Tree	facility-fault

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Description	When configured to **true**, the system facility MEP responds to a fault with a network-actionable function instead of just reporting the defect condition. When configured to **false**, the system monitors transmissions and reports fault conditions.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the **grace** context
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the **eth-ed** context
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed max-rx-defect-window *number*
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed priority *number*
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed rx-eth-ed *boolean*
Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed tx-eth-ed *boolean*
Tree	tx-eth-ed
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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eth-vsm-grace

Synopsis	Enter the **eth-vsm-grace** context
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace rx-eth-vsm-grace *boolean*
Tree	rx-eth-vsm-grace
Description	When configured to **true**, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to **false**, the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace tx-eth-vsm-grace *boolean*
Tree	tx-eth-vsm-grace
Description	When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards. The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

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When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lbm-svc-act-responder *boolean*

Synopsis Process service activation streams in ETH-CFM LBM

Context **configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* lbm-svc-act-responder *boolean*

Tree lbm-svc-act-responder

Description When configured to **true**, the router enables the MEP to process service activation streams encapsulated in ETH-CFM LBM frames that are directed to it.

When configured to **false**, this command reverts to MEP LBM standard processing.

There is interaction between this command and the **tools perform service id loopback eth** command. Nokia recommends that either the **lbm-svc act-responder** or the **tools perform service id loopback eth** command be used within a service. If both commands must be configured, and the target reflection point is the MAC Swap Loopback function, the inbound stream of data must not include ETH-CFM traffic that is equal to or lower than the domain level of any configured MEP that would otherwise extract and process the ETH-CFM message.

See "Promiscuous ETH-LBM mode of operation" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR Services Overview Guide* for more information.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis Lowest priority defect for fault alarm generation

Context **configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* low-priority-defect *keyword*

Tree low-priority-defect

Description This command specifies the lowest priority defect that generates a fault alarm and also configures the fault state of the MEP that causes a network reaction.

Options all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon

Default mac-rem-err-xcon

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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mac-address *string*

Synopsis	MAC address of the MEP
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* mac-address *string*
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	**configure** router *string* interface *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* one-way-delay-threshold *number*
Tree	one-way-delay-threshold
Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

flavor *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Network interface flavor
Context	**configure** router *string* interface *string* flavor *keyword*
Tree	flavor
Options	regular – Regular network interface pdn – PDN interface unnumbered-mpls-tp – Unnumbered MPLS-TP interface
Default	regular

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Introduced	16.0.R1
Platforms	All

gre-termination *boolean*

Synopsis	Terminate GRE packets on primary subnet of interface
Context	**configure** router *string* interface *string* gre-termination *boolean*
Tree	gre-termination
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

hold-time

Synopsis	Enter the **hold-time** context
Context	**configure** router *string* interface *string* hold-time
Tree	hold-time
Description	Commands in this context configure the interface-level up and down hold timers for the associated IP interface.
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** router *string* interface *string* hold-time ipv4
Tree	ipv4
Description	Commands in this context configure the interface-level IPv4 hold timers for the associated IP interface.
Introduced	16.0.R1
Platforms	All

down

Synopsis	Enter the **down** context
Context	**configure** router *string* interface *string* hold-time ipv4 down

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Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the **init-only** command.
Introduced	16.0.R1
Platforms	All

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	**configure** router *string* interface *string* hold-time ipv4 down init-only *boolean*
Tree	init-only
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Down hold time for the IP interface
Context	**configure** router *string* interface *string* hold-time ipv4 down seconds *number*
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

up

Synopsis	Enter the **up** context
Context	**configure** router *string* interface *string* hold-time ipv4 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.

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Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Up hold time for the IP interface
Context	**configure** router *string* interface *string* hold-time ipv4 up seconds *number*
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** router *string* interface *string* hold-time ipv6
Tree	ipv6
Description	Commands in this context configure the interface-level IPv6 hold timers for the associated IP interface.
Introduced	16.0.R1
Platforms	All

down

Synopsis	Enter the **down** context
Context	**configure** router *string* interface *string* hold-time ipv6 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the **init-only** command.
Introduced	16.0.R1
Platforms	All

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init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	**configure** router *string* interface *string* hold-time ipv6 down init-only *boolean*
Tree	init-only
Description	When configured to **true**, the system applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Down hold time for the IP interface
Context	**configure** router *string* interface *string* hold-time ipv6 down seconds *number*
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

up

Synopsis	Enter the **up** context
Context	**configure** router *string* interface *string* hold-time ipv6 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Up hold time for the IP interface
Context	**configure** router *string* interface *string* hold-time ipv6 up seconds *number*
Tree	seconds

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Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

if-attribute

Synopsis	Enter the **if-attribute** context
Context	**configure** router *string* interface *string* if-attribute
Tree	if-attribute
Description	Commands in this context configure attributes of the IP interface.
Introduced	16.0.R1
Platforms	All

admin-group *reference*

Synopsis	Administrative group name for the interface
Context	**configure** router *string* interface *string* if-attribute admin-group *reference*
Tree	admin-group
Reference	**configure** routing-options if-attribute admin-group *string*
Max. Instances	32
Introduced	16.0.R1
Platforms	All

delay

Synopsis	Enter the **delay** context
Context	**configure** router *string* interface *string* if-attribute delay
Tree	delay
Introduced	20.7.R1
Platforms	All

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delay-selection *keyword*

Synopsis	Delay source advertised by IGP for the interface
Context	**configure** router *string* interface *string* if-attribute delay delay-selection *keyword*
Tree	delay-selection
Options	static, dynamic, static-preferred, dynamic-preferred
Default	static-preferred
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dynamic

Synopsis	Enter the **dynamic** context
Context	**configure** router *string* interface *string* if-attribute delay dynamic
Tree	dynamic
Description	Commands in this context configure dynamic link delay measurement options for the interface.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

measurement-template *reference*

Synopsis	Link delay measurement template for the interface
Context	**configure** router *string* interface *string* if-attribute delay dynamic measurement-template *reference*
Tree	measurement-template
Reference	**configure** test-oam link-measurement measurement-template *string*
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

twamp-light

Synopsis	Enter the **twamp-light** context
Context	**configure** router *string* interface *string* if-attribute delay dynamic twamp-light
Tree	twamp-light
Introduced	21.7.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** router *string* interface *string* if-attribute delay dynamic twamp-light ipv4
Tree	ipv4
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of IPv4 TWAMP Light packets
Context	**configure** router *string* interface *string* if-attribute delay dynamic twamp-light ipv4 admin-state *keyword*
Tree	admin-state
Description	This command specifies the administrative state of the IPv4 encapsulated TWAMP Light measurement packets.
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

destination *string*

Synopsis	TWAMP Light measurement packet destination IPv4 address
Context	**configure** router *string* interface *string* if-attribute delay dynamic twamp-light ipv4 destination *string*
Tree	destination
Description	This command specifies the unicast destination address to be associated with the IPv4 TWAMP Light measurement packet.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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source *string*

Synopsis	TWAMP Light measurement packets source IPv4 address
Context	**configure** router *string* interface *string* if-attribute delay dynamic twamp-light ipv4 source *string*
Tree	source
Description	This command specifies the unicast source address to be associated with the IPv4 TWAMP Light measurement packet.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** router *string* interface *string* if-attribute delay dynamic twamp-light ipv6
Tree	ipv6
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of IPv6 TWAMP Light packets
Context	**configure** router *string* interface *string* if-attribute delay dynamic twamp-light ipv6 admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

destination *string*

Synopsis	TWAMP Light measurement packet destination IPv6 address
Context	**configure** router *string* interface *string* if-attribute delay dynamic twamp-light ipv6 destination *string*
Tree	destination

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Description	This command specifies the unicast destination address to be associated with the IPv6 TWAMP Light measurement packet. Globally routable and Link Local addressing is supported.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source *string*

Synopsis	TWAMP Light measurement packets source IPv6 address
Context	**configure** router *string* interface *string* if-attribute delay dynamic twamp-light ipv6 source *string*
Tree	source
Description	This command specifies the unicast source address to be associated with the IPv6 TWAMP Light measurement packet. Globally routable and Link Local addressing is supported.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

static *number*

Synopsis	Unidirectional link delay static information
Context	**configure** router *string* interface *string* if-attribute delay static *number*
Tree	static
Description	This command configures the unidirectional link delay. By default there is no configured delay, and the link delay metric TLV is pruned in the IGP.
Range	1 to 16777214
Units	microseconds
Introduced	20.7.R1
Platforms	All

srlg-group [name] *reference*

Synopsis	Add a list entry for **srlg-group**
Context	**configure** router *string* interface *string* if-attribute srlg-group *reference*
Tree	srlg-group
Description	Commands in this context add a list entry for a Shared Risk Link Group (SRLG) that can be associated with an IP or MPLS interface to tag IP or MPLS interfaces that share a

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specific outcome with the same identifier. For example, an SRLG group identifier could represent all links that use separate fibers but are carried in the same fiber conduit.

The name and identifier of each SRLG group must be configured locally on each router before the user configures the SRLG membership of an interface. A maximum of 1024 SRLGs can be configured per system. The user can apply SRLGs to an IES, VPRN, network IP, or MPLS interface. A maximum of 64 SRLGs can be applied to an interface.

See "Shared Risk Link Groups" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR MPLS Guide* for more information about SRLGs.

Introduced	16.0.R1
Platforms	All

[**name**] *reference*

Synopsis	SRLG name
Context	**configure** router *string* interface *string* if-attribute srlg-group *reference*
Tree	srlg-group
Reference	**configure** routing-options if-attribute srlg-group *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the **ingress** context
Context	**configure** router *string* interface *string* ingress
Tree	ingress
Description	Commands in this context configure ingress network filter policies for the IP interface. If an ingress filter is not defined, the system performs no filtering.
Introduced	16.0.R1
Platforms	All

destination-class-lookup *boolean*

Synopsis	Enable BGP destination class lookup
Context	**configure** router *string* interface *string* ingress destination-class-lookup *boolean*
Tree	destination-class-lookup

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Description	When configured to **true**, the router performs a destination class lookup. This command is supported on FP3-based cards and later and is used in combination with the **destination-class** match criterion for an IP filter policy to filter egress traffic based on BGP destination classes. When configured to **false**, destination class lookup is not enabled.
Default	false
Introduced	20.7.R1
Platforms	All

filter

Synopsis	Enter the **filter** context
Context	**configure** router *string* interface *string* ingress filter
Tree	filter
Description	Commands in this context associate an IP filter policy with an IP interface. Filter policies control packet forwarding and dropping based on IP match criteria.
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** router *string* interface *string* ingress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** router *string* interface *string* ingress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	All

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policy-accounting *reference*

Synopsis	Policy accounting template applied to the interface
Context	**configure** router *string* interface *string* ingress policy-accounting *reference*
Tree	policy-accounting
Reference	**configure** routing-options policy-accounting policy-acct-template *string*
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

ingress-stats *boolean*

Synopsis	Collect ingress statistics
Context	**configure** router *string* interface *string* ingress-stats *boolean*
Tree	ingress-stats
Description	When configured to **true**, the router configures the collection of IPv4 and IPv6 offered packets and octets. This only applies to IP statistics, not to uRPF statistics. Octet statistics for IPv4 and IPv6 bytes at IP interfaces include the Layer 2 frame overhead. When configured to **false**, the router does not collect the statistics.
Default	false
Introduced	16.0.R1
Platforms	All

ip-mtu *number*

Synopsis	Interface IP MTU
Context	**configure** router *string* interface *string* ip-mtu *number*
Tree	ip-mtu
Description	This command configures the IP maximum transmit unit (packet) for the associated router IP interface. The operational IP MTU used for the interface is based on the configured IP MTU and the port MTU of the port bound to this interface; that is, the operational MTU is set to the lesser of the values configured by this command and the port MTU value less the Ethernet header size. If the interface supports IPv6 packets, this command must be set to at least 1280, in accordance with RFC 2460 *Internet Protocol, Version 6 (IPv6) Specification*.
Range	512 to 9786

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Units	bytes
Introduced	16.0.R1
Platforms	All

ipsec

Synopsis	Enable the **ipsec** context
Context	**configure** router *string* interface *string* ipsec
Tree	ipsec
Description	Commands in this context configure an IPsec secured interface.
Introduced	22.7.R1
Platforms	VSR

admin-state *keyword*

Synopsis	Administrative state of IPsec secured interface
Context	**configure** router *string* interface *string* ipsec admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	22.7.R1
Platforms	VSR

ip-exception *reference*

Synopsis	IP exception filter
Context	**configure** router *string* interface *string* ipsec ip-exception *reference*
Tree	ip-exception
Description	This command configures the IP exception filter for the secured interface. All ingress traffic matching the specified filter bypasses IPsec processing.
Reference	**configure** filter ip-exception *string*
Introduced	22.7.R1
Platforms	VSR

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ipsec-tunnel [name] *string*

Synopsis	Enter the **ipsec-tunnel** list instance
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string*
Tree	ipsec-tunnel
Description	Commands in this context configure IPsec tunnels used to secure traffic forwarded over the interface.
Introduced	22.7.R1
Platforms	VSR

[**name**] *string*

Synopsis	IPsec tunnel name
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string*
Tree	ipsec-tunnel
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

admin-state *keyword*

Synopsis	Administrative state of the IPsec tunnel
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	22.7.R1
Platforms	VSR

bfd

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **bfd** context

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Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* bfd
Tree	bfd
Introduced	22.7.R1
Platforms	VSR

bfd-designate *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Designate IPsec tunnel to carry BFD traffic
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* bfd bfd-designate *boolean*
Tree	bfd-designate
Default	false
Introduced	22.7.R1
Platforms	VSR

bfd-liveness

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **bfd-liveness** context
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* bfd bfd-liveness
Tree	bfd-liveness
Description	Commands in this context configure a BFD session to provide a heart-beat mechanism for a specified IPsec tunnel. There can be only one BFD session assigned to any given IPsec tunnel, but there can be multiple IPsec tunnels using the same BFD session. BFD controls the state of the association tunnel. If the BFD session goes down, the system brings down the associated non-designated IPsec tunnel.
Introduced	22.7.R1
Platforms	VSR

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dest-ip *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination address used for the BFD session
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* bfd bfd-liveness dest-ip *string*
Tree	dest-ip
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

interface *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the interface used by the BFD session
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* bfd bfd-liveness interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

service-name *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* bfd bfd-liveness service-name *string*
Tree	service-name

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Description	This command configures the name of the service where BFD traffic is forwarded to.
String Length	1 to 64
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

clear-df-bit *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reset the DF bit to 0 in all payload IP packets
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* clear-df-bit *boolean*
Tree	clear-df-bit
Description	When configured to **true**, the DF bit is set to 0 in all payload IP packets associated with the IPsec tunnel, before any potential fragmentation occurs.
Default	false
Introduced	22.7.R1
Platforms	VSR

copy-traffic-class-upon-decapsulation *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable traffic class copy upon decapsulation
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* copy-traffic-class-upon-decapsulation *boolean*
Tree	copy-traffic-class-upon-decapsulation
Description	When configured to **true**, the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private).
Default	false
Introduced	22.7.R1
Platforms	VSR

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description *string*

Synopsis	Text description
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* description *string*
Tree	description
String Length	1 to 80
Introduced	22.7.R1
Platforms	VSR

encapsulated-ip-mtu *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum size of the encapsulated tunnel packet
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* encapsulated-ip-mtu *number*
Tree	encapsulated-ip-mtu
Description	This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

icmp-generation

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **icmp-generation** context
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* icmp-generation
Tree	icmp-generation
Description	Commands in this context configure settings for ICMPv4 message generation.

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Introduced	22.7.R1
Platforms	VSR

frag-required

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **frag-required** context
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* icmp-generation frag-required
Tree	frag-required
Description	Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Introduced	22.7.R1
Platforms	VSR

admin-state *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending ICMP messages
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* icmp-generation frag-required admin-state *keyword*
Tree	admin-state
Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Options	enable, disable
Default	enable
Introduced	22.7.R1
Platforms	VSR

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interval *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending ICMP messages
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* icmp-generation frag-required interval *number*
Tree	interval
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Units	seconds
Default	10
Introduced	22.7.R1
Platforms	VSR

message-count *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMP messages that can be sent
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* icmp-generation frag-required message-count *number*
Tree	message-count
Description	This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	22.7.R1
Platforms	VSR

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icmp6-generation

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **icmp6-generation** context
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* icmp6-generation
Tree	icmp6-generation
Description	Commands in this context configure settings for ICMPv6 message generation.
Introduced	22.7.R1
Platforms	VSR

packet-too-big

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **packet-too-big** context
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* icmp6-generation packet-too-big
Tree	packet-too-big
Description	Commands in this context configure the parameters to send ICMPv6 PTB (Packet Too Big) messages on the private side. The system sends PTB messages if a received IPv6 packet on the private side is greater than 1280 bytes and it exceeds the private MTU of the tunnel. The private MTU for the tunnel is configured via the **configure router interface ipsec ipsec-tunnel ip-mtu** command for the interface.
Introduced	22.7.R1
Platforms	VSR

admin-state *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of Packet Too Big message sends

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Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* icmp6-generation packet-too-big admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	22.7.R1
Platforms	VSR

interval *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending Packet Too Big messages
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* icmp6-generation packet-too-big interval *number*
Tree	interval
Range	1 to 60
Units	seconds
Default	10
Introduced	22.7.R1
Platforms	VSR

message-count *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMPv6 PTB messages that can be sent
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* icmp6-generation packet-too-big message-count *number*
Tree	message-count
Description	This command configures the maximum number of PTB messages that can be sent during the configured interval.
Range	10 to 1000
Default	100

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Introduced	22.7.R1
Platforms	VSR

ip-mtu *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private MTU of the IPsec tunnel
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* ip-mtu *number*
Tree	ip-mtu
Description	This command specifies the private MTU of the IPsec tunnel. The private MTU is used to determine the need for fragmentation before encapsulation of the payload packet.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

key-exchange

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **key-exchange** context
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* key-exchange
Tree	key-exchange
Introduced	22.7.R1
Platforms	VSR

dynamic

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **dynamic** context

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Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic
Tree	dynamic
Notes	The following elements are part of a choice: **dynamic** or **manual**.
Introduced	22.7.R1
Platforms	VSR

auto-establish *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Attempt to establish a phase 1 exchange automatically
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic auto-establish *boolean*
Tree	auto-establish
Default	false
Introduced	22.7.R1
Platforms	VSR

cert

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **cert** context
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic cert
Tree	cert
Description	Commands in this context configure the attributes of the dynamic keying certificate.
Introduced	22.7.R1
Platforms	VSR

cert-profile *reference*

Synopsis	Certificate profile name

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Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic cert cert-profile *reference*
Tree	cert-profile
Reference	**configure** ipsec cert-profile *string*
Introduced	22.7.R1
Platforms	VSR

status-verify

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **status-verify** context
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic cert status-verify
Tree	status-verify
Description	Commands in this context configure attributes of Certificate Status Verification (CSV).
Introduced	22.7.R1
Platforms	VSR

default-result *keyword*

Synopsis	Default result for Certificate Status Verification
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic cert status-verify default-result *keyword*
Tree	default-result
Description	This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.
Options	revoked, good
Default	revoked
Introduced	22.7.R1
Platforms	VSR

primary *keyword*

Synopsis	Primary method of CSV to verify the revocation status

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Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic cert status-verify primary *keyword*
Tree	primary
Description	This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.
Options	crl, ocsp
Default	crl
Introduced	22.7.R1
Platforms	VSR

secondary *keyword*

Synopsis	Secondary method used to verify certificate revocation
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic cert status-verify secondary *keyword*
Tree	secondary
Description	This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.
Options	none, crl, ocsp
Default	none
Introduced	22.7.R1
Platforms	VSR

trust-anchor-profile *reference*

Synopsis	Trust anchor profile name
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic cert trust-anchor-profile *reference*
Tree	trust-anchor-profile
Reference	**configure** ipsec trust-anchor-profile *string*
Introduced	22.7.R1
Platforms	VSR

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id

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **id** context
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic id
Tree	id
Description	Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation. The default behavior depends on the local authentication method as follows: • Psk: local tunnel IP address • Cert-auth: subject of the local certificate
Introduced	22.7.R1
Platforms	VSR

fqdn *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN used as the local ID IKE type
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic id fqdn *string*
Tree	fqdn
String Length	1 to 255
Notes	The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.
Introduced	22.7.R1
Platforms	VSR

ipv4 *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 as the local ID type

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Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic id ipv4 *string*
Tree	ipv4
Notes	The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.
Introduced	22.7.R1
Platforms	VSR

ipv6 *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 used as the local IKE ID type
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic id ipv6 *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ipv6
Notes	The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.
Introduced	22.7.R1
Platforms	VSR

ike-policy *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IKE policy ID
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic ike-policy *reference*
Tree	ike-policy
Description	This command specifies the ID of the IKE policy used for IKE negotiation. The **ipsec-transport-mode-profile** configuration only supports IKEv2.
Reference	**configure** ipsec ike-policy *number*
Introduced	22.7.R1
Platforms	VSR

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ipsec-transform *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec transform IDs used by the dynamic key
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic ipsec-transform *reference*
Tree	ipsec-transform
Description	This command specifies IPsec transform IDs used for CHILD_SA negotiation.
Reference	**configure** ipsec ipsec-transform *number*
Max. Instances	4
Introduced	22.7.R1
Platforms	VSR

pre-shared-key *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pre-shared key for authentication
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic pre-shared-key *string*
Tree	pre-shared-key
String Length	1 to 115
Introduced	22.7.R1
Platforms	VSR

manual

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **manual** context

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Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* key-exchange manual
Tree	manual
Description	Commands in this context configure settings for manually configured security associations for the IPsec tunnel.
Notes	The following elements are part of a choice: **dynamic** or **manual**.
Introduced	22.7.R1
Platforms	VSR

keys [security-association] *number* direction *keyword*

Synopsis	Enter the **keys** list instance
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword*
Tree	keys
Description	Commands in this context configure the security association list for the tunnel.
Introduced	22.7.R1
Platforms	VSR

[**security-association**] *number*

Synopsis	SA entry ID
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword*
Tree	keys
Range	1 to 16
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

direction *keyword*

Synopsis	Direction of the IPsec tunnel
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword*
Tree	keys
Options	inbound, outbound

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Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

authentication-key *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the authentication algorithm
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword* authentication-key *string*
Tree	authentication-key
String Length	1 to 130
Introduced	22.7.R1
Platforms	VSR

encryption-key *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the encryption algorithm
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword* encryption-key *string*
Tree	encryption-key
String Length	1 to 66
Introduced	22.7.R1
Platforms	VSR

ipsec-transform *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

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Synopsis	Transform entry used by manual SAs
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword* ipsec-transform *reference*
Tree	ipsec-transform
Reference	**configure** ipsec ipsec-transform *number*
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

spi *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SPI of inbound and outbound packets
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword* spi *number*
Tree	spi
Description	This command specifies the Security Parameter Index (SPI) used to look up the instruction to verify and decrypt the incoming IPsec packets when the direction is inbound. When the direction is outbound, the SPI is used in the encoding of the outgoing packets. The remote node can use the SPI to look up the instruction to verify and decrypt the packet.
Range	256 to 16383
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

local-gateway-address-override *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPsec tunnel endpoint address

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Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* local-gateway-address-override *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	local-gateway-address-override
Description	This command configures the local IPsec tunnel endpoint address. This overrides the default endpoint address, which is the interface address.
Introduced	22.7.R1
Platforms	VSR

max-history-key-records

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **max-history-key-records** context
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* max-history-key-records
Tree	max-history-key-records
Description	Commands in this context configure the settings for recording historical IPsec keys.
Introduced	22.7.R1
Platforms	VSR

esp *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of recent records
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* max-history-key-records esp *number*
Tree	esp
Range	1 to 48
Introduced	22.7.R1
Platforms	VSR

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ike *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of historical IKE key records
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* max-history-key-records ike *number*
Tree	ike
Range	1 to 3
Introduced	22.7.R1
Platforms	VSR

pmtu-discovery-aging *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Aging out time of the learned path MTU
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* pmtu-discovery-aging *number*
Tree	pmtu-discovery-aging
Description	This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation.
Range	900 to 3600
Units	seconds
Default	900
Introduced	22.7.R1
Platforms	VSR

private-sap *number*

WARNING:
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WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Private SAP ID
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* private-sap *number*
Tree	private-sap
Range	0 to 4094
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

private-service *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Private service name
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* private-service *string*
Tree	private-service
Description	This command configures the private service name. If unconfigured, the private service is the service where the secured interface resides.
String Length	1 to 64
Introduced	22.7.R1
Platforms	VSR

private-tcp-mss-adjust *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) adjustment

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Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* private-tcp-mss-adjust *number*
Tree	private-tcp-mss-adjust
Description	This command specifies the TCP MSS to adjust for the tunnel on the private side. When configured, the system may use the value to update the MSS option in the received TCP SYN packet on the private side.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

propagate-pmtu-v4 *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* propagate-pmtu-v4 *boolean*
Tree	propagate-pmtu-v4
Description	When configured to **true**, the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).
Default	true
Introduced	22.7.R1
Platforms	VSR

propagate-pmtu-v6 *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv6 hosts
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* propagate-pmtu-v6 *boolean*
Tree	propagate-pmtu-v6

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Description	When configured to **true**, the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).
Default	true
Introduced	22.7.R1
Platforms	VSR

public-tcp-mss-adjust *(number | keyword)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) on the public network
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* public-tcp-mss-adjust *(number | keyword)*
Tree	public-tcp-mss-adjust
Description	This command configures the MSS for the TCP traffic in an IPsec tunnel that is sent from the public network to the private network. The system may use this value to adjust or insert the MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Options	auto
Introduced	22.7.R1
Platforms	VSR

remote-gateway-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote IPsec tunnel endpoint address
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* remote-gateway-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	remote-gateway-address
Introduced	22.7.R1
Platforms	VSR

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replay-window *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Anti-replay window size
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* replay-window *number*
Tree	replay-window
Description	This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.
Range	32 | 64 | 128 | 256 | 512
Units	packets
Introduced	22.7.R1
Platforms	VSR

security-policy

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **security-policy** context
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* security-policy
Tree	security-policy
Description	Commands in this context specify a security policy used by the tunnel.
Introduced	22.7.R1
Platforms	VSR

id *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Security policy ID for use by the tunnel
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* security-policy id *number*

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Tree	id
Max. Range	0 to 4294967295
Introduced	22.7.R1
Platforms	VSR

strict-match *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable strict match of the security policy entry
Context	**configure** router *string* interface *string* ipsec ipsec-tunnel *string* security-policy strict-match *boolean*
Tree	strict-match
Description	When configured to **true**, this command enables strict match of the security policy entry. When a CREATE_CHILD exchange request is received for a static IPsec tunnel, and this request is not a rekey request, ISA matches the received TSi and TSr with the configured security policy. This can be a match only when a received TS (in TSi or TSr) address range matches exactly with the subnet in a security policy entry. If there is no match, the setup fails, and TS_UNACCEPTABLE is sent. If there is a match, but there is an existing CHILD_SA for the matched security policy, the setup fails, and NO_PROPOSAL_CHOSEN is sent. If there is a match, and there is not a CHILD_SA for the matched entry, the subnet is sent in the matched security policy entry as TSi and TSr, and the CHILD_SA is created.
Default	false
Introduced	22.7.R1
Platforms	VSR

ipv6-exception *reference*

Synopsis	IPv6 filter exception used to bypass encryption
Context	**configure** router *string* interface *string* ipsec ipv6-exception *reference*
Tree	ipv6-exception
Description	This command specifies the IPv6 filter exception for an IPsec-secured IPv6 interface. When an IPv6 filter exception is added, clear text packets that match the exception criteria in the IPv6 filter exception can ingress the interface, even when IPsec is enabled on the interface.

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Reference	**configure** filter ipv6-exception *string*
Introduced	22.7.R1
Platforms	VSR

public-sap *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Public SAP ID
Context	**configure** router *string* interface *string* ipsec public-sap *number*
Tree	public-sap
Range	0 to 4094
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

tunnel-group *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tunnel group ID
Context	**configure** router *string* interface *string* ipsec tunnel-group *reference*
Tree	tunnel-group
Reference	**configure** isa tunnel-group *number*
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** router *string* interface *string* ipv4

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Tree	ipv4
Introduced	16.0.R1
Platforms	All

allow-directed-broadcasts *boolean*

Synopsis	Forward directed broadcasts
Context	**configure** router *string* interface *string* ipv4 allow-directed-broadcasts *boolean*
Tree	allow-directed-broadcasts
Description	When configured to **true**, the router forwards packets received on a local router interface to the subnet broadcast address of another IP interface. When configured to **false**, this router does not allow directed broadcasts and the packets are discarded. Allowing directed broadcasts is a well-known mechanism used for denial-of-service attacks.
Default	false
Introduced	16.0.R1
Platforms	All

bfd

Synopsis	Enter the **bfd** context
Context	**configure** router *string* interface *string* ipv4 bfd
Tree	bfd
Description	Commands in this context configure the Bidirectional Forwarding Detection (BFD) settings for the associated IP interface.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	**configure** router *string* interface *string* ipv4 bfd admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable

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Introduced	16.0.R1
Platforms	All

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	**configure** router *string* interface *string* ipv4 bfd echo-receive *number*
Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	**configure** router *string* interface *string* ipv4 bfd multiplier *number*
Tree	multiplier
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	16.0.R1
Platforms	All

receive *number*

Synopsis	BFD receive interval over this interface
Context	**configure** router *string* interface *string* ipv4 bfd receive *number*
Tree	receive
Description	This command specifies the receive interval for the BFD session. On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.
Range	10 to 100000
Units	milliseconds

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Default	100
Introduced	16.0.R1
Platforms	All

transmit-interval *number*

Synopsis	BFD transmit interval over this interface
Context	**configure** router *string* interface *string* ipv4 bfd transmit-interval *number*
Tree	transmit-interval
Description	This command configures the transmit intervals. On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Local termination point for the BFD session
Context	**configure** router *string* interface *string* ipv4 bfd type *keyword*
Tree	type
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: • **auto** (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the **cpm-np**. • **cpm-np** – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems. • **fp** – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.
Options	cpm-np, auto, fp
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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dhcp

Synopsis	Enter the **dhcp** context
Context	**configure** router *string* interface *string* ipv4 dhcp
Tree	dhcp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of DHCP
Context	**configure** router *string* interface *string* ipv4 dhcp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** router *string* interface *string* ipv4 dhcp description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

gi-address *string*

Synopsis	GI address for the DHCP relay
Context	**configure** router *string* interface *string* ipv4 dhcp gi-address *string*
Tree	gi-address
Description	This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay. By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the

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	group interface DHCP context or subscriber interface DHCP context for DHCP to function.
Introduced	16.0.R1
Platforms	All

option-82

Synopsis	Enter the **option-82** context
Context	**configure** router *string* interface *string* ipv4 dhcp option-82
Tree	option-82
Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	16.0.R1
Platforms	All

action *keyword*

Synopsis	Action to take with received DHCP Option 82
Context	**configure** router *string* interface *string* ipv4 dhcp option-82 action *keyword*
Tree	action
Options	replace, drop, keep
Default	keep
Introduced	16.0.R1
Platforms	All

circuit-id

Synopsis	Enter the **circuit-id** context
Context	**configure** router *string* interface *string* ipv4 dhcp option-82 circuit-id
Tree	circuit-id
Introduced	16.0.R1
Platforms	All

ascii-tuple

Synopsis	Use the ASCII-encoded tuple for the circuit ID

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Context	**configure** router *string* interface *string* ipv4 dhcp option-82 circuit-id ascii-tuple
Tree	ascii-tuple
Notes	The following elements are part of a choice: **ascii-tuple**, **if-name**, **ifindex**, **none**, **port-id**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	All

if-name

Synopsis	Use the interface name for the circuit ID
Context	**configure** router *string* interface *string* ipv4 dhcp option-82 circuit-id if-name
Tree	if-name
Notes	The following elements are part of a choice: **ascii-tuple**, **if-name**, **ifindex**, **none**, **port-id**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	All

ifindex

Synopsis	Use the interface index for the circuit ID
Context	**configure** router *string* interface *string* ipv4 dhcp option-82 circuit-id ifindex
Tree	ifindex
Notes	The following elements are part of a choice: **ascii-tuple**, **if-name**, **ifindex**, **none**, **port-id**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	All

none

Synopsis	Do not include the circuit ID
Context	**configure** router *string* interface *string* ipv4 dhcp option-82 circuit-id none
Tree	none
Notes	The following elements are part of a choice: **ascii-tuple**, **if-name**, **ifindex**, **none**, **port-id**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	All

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port-id

Synopsis	Use the port ID for the circuit ID
Context	**configure** router *string* interface *string* ipv4 dhcp option-82 circuit-id port-id
Tree	port-id
Notes	The following elements are part of a choice: **ascii-tuple**, **if-name**, **ifindex**, **none**, **port-id**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	All

vlan-ascii-tuple

Synopsis	Include the VLAN ID and dot1p bits in the ASCII tuple
Context	**configure** router *string* interface *string* ipv4 dhcp option-82 circuit-id vlan-ascii-tuple
Tree	vlan-ascii-tuple
Description	When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet. When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty.
Notes	The following elements are part of a choice: **ascii-tuple**, **if-name**, **ifindex**, **none**, **port-id**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	All

remote-id

Synopsis	Enter the **remote-id** context
Context	**configure** router *string* interface *string* ipv4 dhcp option-82 remote-id
Tree	remote-id
Description	Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).
Introduced	16.0.R1
Platforms	All

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ascii-string *string*

Synopsis	User-defined ASCII string for the remote ID
Context	**configure** router *string* interface *string* ipv4 dhcp option-82 remote-id ascii-string *string*
Tree	ascii-string
String Length	1 to 32
Notes	The following elements are part of a choice: **ascii-string**, **mac**, or **none**.
Introduced	16.0.R1
Platforms	All

mac

Synopsis	Use the MAC address for the remote ID
Context	**configure** router *string* interface *string* ipv4 dhcp option-82 remote-id mac
Tree	mac
Notes	The following elements are part of a choice: **ascii-string**, **mac**, or **none**.
Introduced	16.0.R1
Platforms	All

none

Synopsis	Do not include the remote ID
Context	**configure** router *string* interface *string* ipv4 dhcp option-82 remote-id none
Tree	none
Notes	The following elements are part of a choice: **ascii-string**, **mac**, or **none**.
Introduced	16.0.R1
Platforms	All

vendor-specific-option

Synopsis	Enter the **vendor-specific-option** context
Context	**configure** router *string* interface *string* ipv4 dhcp option-82 vendor-specific-option
Tree	vendor-specific-option
Description	Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.
Introduced	16.0.R1

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Platforms	All

client-mac-address *boolean*

Synopsis	Send the MAC address in the VSO
Context	**configure** router *string* interface *string* ipv4 dhcp option-82 vendor-specific-option client-mac-address *boolean*
Tree	client-mac-address
Default	false
Introduced	16.0.R1
Platforms	All

pool-name *boolean*

Synopsis	Send the pool name in the VSO
Context	**configure** router *string* interface *string* ipv4 dhcp option-82 vendor-specific-option pool-name *boolean*
Tree	pool-name
Default	false
Introduced	16.0.R1
Platforms	All

port-id *boolean*

Synopsis	Send the port ID in the VSO
Context	**configure** router *string* interface *string* ipv4 dhcp option-82 vendor-specific-option port-id *boolean*
Tree	port-id
Default	false
Introduced	16.0.R1
Platforms	All

service-id *boolean*

Synopsis	Send the service ID in the Vendor Specific Option
Context	**configure** router *string* interface *string* ipv4 dhcp option-82 vendor-specific-option service-id *boolean*

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Tree	service-id
Default	false
Introduced	16.0.R1
Platforms	All

string *string*

Synopsis	User-defined ASCII string for the VSO
Context	**configure** router *string* interface *string* ipv4 dhcp option-82 vendor-specific-option string *string*
Tree	string
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

system-id *boolean*

Synopsis	Send the system ID in the VSO
Context	**configure** router *string* interface *string* ipv4 dhcp option-82 vendor-specific-option system-id *boolean*
Tree	system-id
Default	false
Introduced	16.0.R1
Platforms	All

python-policy *reference*

Synopsis	Python policy name
Context	**configure** router *string* interface *string* ipv4 dhcp python-policy *reference*
Tree	python-policy
Description	This command associates a Python policy name with the interface.
Reference	**configure** python python-policy *string*
Introduced	16.0.R1
Platforms	All

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relay-plain-bootp *boolean*

Synopsis	Relay plain BOOTP messages
Context	**configure** router *string* interface *string* ipv4 dhcp relay-plain-bootp *boolean*
Tree	relay-plain-bootp
Description	When configured to **true**, the system relays plain BOOTP messages. When configured to **false**, the system considers the plain BOOTP packets as malformed DHCP packets; therefore, the system does not relay the messages.
Default	false
Introduced	16.0.R1
Platforms	All

release-include-gi-address *boolean*

Synopsis	Include gateway IP address in DHCP Release messages
Context	**configure** router *string* interface *string* ipv4 dhcp release-include-gi-address *boolean*
Tree	release-include-gi-address
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *string*

Synopsis	IP addresses for DHCP server requests
Context	**configure** router *string* interface *string* ipv4 dhcp server *string*
Tree	server
Description	This command configures a list of servers that this interface forwards requests to. The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list.
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

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src-ip-addr *keyword*

Synopsis	Type of source address to use for DHCP relay
Context	**configure** router *string* interface *string* ipv4 dhcp src-ip-addr *keyword*
Tree	src-ip-addr
Options	auto, gi-address
Default	auto
Introduced	16.0.R1
Platforms	All

trusted *boolean*

Synopsis	Relay untrusted packets
Context	**configure** router *string* interface *string* ipv4 dhcp trusted *boolean*
Tree	trusted
Description	When configured to **true**, the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request. A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit. This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.
Default	false
Introduced	16.0.R1
Platforms	All

icmp

Synopsis	Enter the **icmp** context
Context	**configure** router *string* interface *string* ipv4 icmp
Tree	icmp
Description	Commands in this context configure Internet Control Message Protocol (ICMP) parameters on a network IP interface.
Introduced	16.0.R1
Platforms	All

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mask-reply *boolean*

Synopsis	Allow responses to ICMP mask requests on the interface
Context	**configure** router *string* interface *string* ipv4 icmp mask-reply *boolean*
Tree	mask-reply
Default	true
Introduced	16.0.R1
Platforms	All

param-problem

Synopsis	Enter the **param-problem** context
Context	**configure** router *string* interface *string* ipv4 icmp param-problem
Tree	param-problem
Description	Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sent Parameter Problem messages
Context	**configure** router *string* interface *string* ipv4 icmp param-problem admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum number of Parameter Problem messages to send
Context	**configure** router *string* interface *string* ipv4 icmp param-problem number *number*
Tree	number
Range	10 to 1000
Default	100

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Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit number of Parameter Problem messages
Context	**configure** router *string* interface *string* ipv4 icmp param-problem seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

redirects

Synopsis	Enter the **redirects** context
Context	**configure** router *string* interface *string* ipv4 icmp redirects
Tree	redirects
Description	Commands in this context configure the settings for ICMP redirect messages generated by the interface. The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sending ICMP redirect messages
Context	**configure** router *string* interface *string* ipv4 icmp redirects admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

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number *number*

Synopsis	Maximum number of ICMP redirect messages to send
Context	**configure** router *string* interface *string* ipv4 icmp redirects number *number*
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit the number of ICMP redirect messages
Context	**configure** router *string* interface *string* ipv4 icmp redirects seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

ttl-expired

Synopsis	Enter the **ttl-expired** context
Context	**configure** router *string* interface *string* ipv4 icmp ttl-expired
Tree	ttl-expired
Description	Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sending TTL expired messages
Context	**configure** router *string* interface *string* ipv4 icmp ttl-expired admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum number of TTL expired messages to send
Context	**configure** router *string* interface *string* ipv4 icmp ttl-expired number *number*
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit the number of TTL expired messages
Context	**configure** router *string* interface *string* ipv4 icmp ttl-expired seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

unreachables

Synopsis	Enter the **unreachables** context
Context	**configure** router *string* interface *string* ipv4 icmp unreachables
Tree	unreachables
Description	Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.
Introduced	16.0.R1

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Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sending unreachable messages
Context	**configure** router *string* interface *string* ipv4 icmp unreachables admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum number of unreachable messages to send
Context	**configure** router *string* interface *string* ipv4 icmp unreachables number *number*
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time to limit the number of ICMP unreachable messages
Context	**configure** router *string* interface *string* ipv4 icmp unreachables seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

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ip-helper-address *string*

Synopsis	IP address of the target UDP broadcast gateway
Context	**configure** router *string* interface *string* ipv4 ip-helper-address *string*
Tree	ip-helper-address
Description	This command configures the redirection of broadcast UDP packets received on the associated interface to the specified helper gateway address, and then to the gateway.
Introduced	16.0.R1
Platforms	All

local-dhcp-server *reference*

Synopsis	DHCP server for the interface
Context	**configure** router *string* interface *string* ipv4 local-dhcp-server *reference*
Tree	local-dhcp-server
Reference	**configure** router *string* dhcp-server dhcpv4 *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-discovery

Synopsis	Enter the **neighbor-discovery** context
Context	**configure** router *string* interface *string* ipv4 neighbor-discovery
Tree	neighbor-discovery
Introduced	16.0.R1
Platforms	All

learn-unsolicited *boolean*

Synopsis	Learn new entries from any received NA message
Context	**configure** router *string* interface *string* ipv4 neighbor-discovery learn-unsolicited *boolean*
Tree	learn-unsolicited
Description	When configured to **true**, the router can learn neighbor entries from received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited (S) flag set. The command can be enabled for global addresses, link-local addresses, or for both.

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When configured to **false**, the router follows standard behavior for learning neighbor entries.

- If an unsolicited NA (regardless of the S flag) is received from a neighbor that is not yet in the Neighbor Discovery (ND) cache, the NA is ignored.
- If an NS, RS, RA, or Redirect message with a Link Layer Address (MAC) is received from a neighbor that is not yet in the ND cache, a new neighbor entry is created in the cache to store the received Link Layer MAC. The neighbor is put in the STALE state.

Default false

Introduced 16.0.R1

Platforms All

limit

Synopsis Enter the **limit** context

Context **configure** router *string* interface *string* ipv4 neighbor-discovery limit

Tree limit

Description Commands in this context configure the maximum number of dynamic neighbor entries that can be learned on the interface

When the number of entries reaches the threshold (the configured percentage) of this limit, the system sends an SNMP trap.

When the limit is exceeded, the system learns no new entries until an entry expires and traffic to these destinations is dropped. Already learned entries are refreshed.

Introduced 16.0.R1

Platforms All

log-only *boolean*

Synopsis Generate log entries only if limit is reached

Context **configure** router *string* interface *string* ipv4 neighbor-discovery limit log-only *boolean*

Tree log-only

Default false

Introduced 16.0.R1

Platforms All

max-entries *number*

Synopsis Maximum number of entries learned on an IP interface

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Context	**configure** router *string* interface *string* ipv4 neighbor-discovery limit max-entries *number*
Tree	max-entries
Range	0 to 524288
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Threshold value that triggers a warning message
Context	**configure** router *string* interface *string* ipv4 neighbor-discovery limit threshold *number*
Tree	threshold
Range	1 to 100
Units	percent
Default	90
Introduced	16.0.R1
Platforms	All

local-proxy-arp *boolean*

Synopsis	Enable local proxy ARP on interface
Context	**configure** router *string* interface *string* ipv4 neighbor-discovery local-proxy-arp *boolean*
Tree	local-proxy-arp
Description	When configured to **true**, the router enables local proxy ARP on the interface. When configured to **false**, the router does not respond to ARP requests for addresses on the same subnet.
Introduced	16.0.R1
Platforms	All

proactive-refresh *boolean*

Synopsis	Send a single refresh message before entry timeout
Context	**configure** router *string* interface *string* ipv4 neighbor-discovery proactive-refresh *boolean*
Tree	proactive-refresh
Description	When configured to **true**, the router always sends a refresh message 30 seconds before the timeout of the entry (a single refresh message with no retries).

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When configured to **false**, the router marks an entry as stale 30 seconds before age-out, and the router only sends an ARP request to refresh the entry if the IOM receives traffic that uses it. Then, the IOM asks the ARP application to send a refresh message. With ARP proactive refresh enabled, the ARP module sends a refresh message regardless of the IOM receiving traffic.

Default	false
Introduced	16.0.R1
Platforms	All

proxy-arp-policy *reference*

Synopsis	Proxy ARP policy name
Context	**configure** router *string* interface *string* ipv4 neighbor-discovery proxy-arp-policy *reference*
Tree	proxy-arp-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

remote-proxy-arp *boolean*

Synopsis	Enable remote proxy ARP on the interface
Context	**configure** router *string* interface *string* ipv4 neighbor-discovery remote-proxy-arp *boolean*
Tree	remote-proxy-arp
Default	false
Introduced	16.0.R1
Platforms	All

retry-timer *number*

Synopsis	ARP retry interval
Context	**configure** router *string* interface *string* ipv4 neighbor-discovery retry-timer *number*
Tree	retry-timer

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Range	1 to 300
Units	deciseconds
Default	50
Introduced	16.0.R1
Platforms	All

static-neighbor [ipv4-address] *string*

Synopsis	Enter the **static-neighbor** list instance
Context	**configure** router *string* interface *string* ipv4 neighbor-discovery static-neighbor *string*
Tree	static-neighbor
Description	Commands in this context configure a static ARP entry that associates an IP address with a MAC address for the core router instance.
Introduced	16.0.R1
Platforms	All

[**ipv4-address**] *string*

Synopsis	IPv4 address that corresponds to the physical address
Context	**configure** router *string* interface *string* ipv4 neighbor-discovery static-neighbor *string*
Tree	static-neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

mac-address *string*

Synopsis	MAC address for the static neighbor
Context	**configure** router *string* interface *string* ipv4 neighbor-discovery static-neighbor *string* mac-address *string*
Tree	mac-address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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static-neighbor-unnumbered

Synopsis	Enable the **static-neighbor-unnumbered** context
Context	**configure** router *string* interface *string* ipv4 neighbor-discovery static-neighbor-unnumbered
Tree	static-neighbor-unnumbered
Description	Commands in this context configure the static ARP MAC for an unnumbered interface. This entry overrides the dynamic ARP entry on the unnumbered interface.
Introduced	16.0.R1
Platforms	All

mac-address *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MAC address for the static neighbor
Context	**configure** router *string* interface *string* ipv4 neighbor-discovery static-neighbor-unnumbered mac-address *string*
Tree	mac-address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout for an ARP entry learned on the interface
Context	**configure** router *string* interface *string* ipv4 neighbor-discovery timeout *number*
Tree	timeout
Description	This command configures the minimum time an ARP entry learned on the IP interface is stored in the ARP table. ARP entries are automatically refreshed when an ARP request or gratuitous ARP is seen by an IP host. Otherwise, the ARP entry is aged from the ARP table.
Range	0 to 65535
Units	seconds
Default	14400
Introduced	16.0.R1

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Platforms	All

primary

Synopsis	Enable the **primary** context
Context	**configure** router *string* interface *string* ipv4 primary
Tree	primary
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Primary IPv4 address assigned to the interface
Context	**configure** router *string* interface *string* ipv4 primary address *string*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

broadcast *keyword*

Synopsis	Broadcast address format
Context	**configure** router *string* interface *string* ipv4 primary broadcast *keyword*
Tree	broadcast
Description	This command overrides the default broadcast address that the IP interface uses when sourcing IP broadcasts. This command does not affect the type of broadcasts the IP interface can receive. The IP interface can receive either the local broadcast or the valid subnet broadcast address sent by a host.
Options	all-ones, host-ones
Default	host-ones
Introduced	16.0.R1
Platforms	All

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gre-termination *boolean*

Synopsis	Enable GRE termination
Context	**configure** router *string* interface *string* ipv4 primary gre-termination *boolean*
Tree	gre-termination
Description	When configured to **true**, the router terminates MPLS-over-GRE and IP-over-GRE packets for destination IP addresses from a user-defined subnet. The user defines a subnet for the termination of GRE packets by executing this command on a numbered network IP interface or a loopback interface.
Default	false
Introduced	19.10.R1
Platforms	VSR

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	**configure** router *string* interface *string* ipv4 primary prefix-length *number*
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

track-srrp *number*

Synopsis	SRRP instance whose state is tracked on this IP address
Context	**configure** router *string* interface *string* ipv4 primary track-srrp *number*
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

qos-route-lookup *keyword*

Synopsis	QoS route lookup of ingress IP packets
Context	**configure** router *string* interface *string* ipv4 qos-route-lookup *keyword*
Tree	qos-route-lookup

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Options	destination, source
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

secondary [address] *string*

Synopsis	Enter the **secondary** list instance
Context	**configure** router *string* interface *string* ipv4 secondary *string*
Tree	secondary
Introduced	16.0.R1
Platforms	All

[**address**] *string*

Synopsis	Secondary IPv4 address assigned to the interface
Context	**configure** router *string* interface *string* ipv4 secondary *string*
Tree	secondary
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

broadcast *keyword*

Synopsis	Broadcast address format
Context	**configure** router *string* interface *string* ipv4 secondary *string* broadcast *keyword*
Tree	broadcast
Description	This command overrides the default broadcast address that the IP interface uses when sourcing IP broadcasts. This command does not affect the type of broadcasts the IP interface can receive. The IP interface can receive either the local broadcast or the valid subnet broadcast address sent by a host.
Options	all-ones, host-ones
Default	host-ones
Introduced	16.0.R1
Platforms	All

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igp-inhibit *boolean*

Synopsis	Disable the running IGP from recognizing secondary IP
Context	**configure** router *string* interface *string* ipv4 secondary *string* igp-inhibit *boolean*
Tree	igp-inhibit
Description	When configured to **true**, the running IGP does not recognize the secondary IP address as a local interface.
Default	false
Introduced	16.0.R1
Platforms	All

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	**configure** router *string* interface *string* ipv4 secondary *string* prefix-length *number*
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

track-srrp *number*

Synopsis	SRRP instance whose state is tracked on this IP address
Context	**configure** router *string* interface *string* ipv4 secondary *string* track-srrp *number*
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

tcp-mss *number*

Synopsis	TCP maximum segment size for the interface
Context	**configure** router *string* interface *string* ipv4 tcp-mss *number*
Tree	tcp-mss

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Range	384 to 9746
Introduced	16.0.R1
Platforms	All

unnumbered

Synopsis	Enter the **unnumbered** context
Context	**configure** router *string* interface *string* ipv4 unnumbered
Tree	unnumbered
Description	Commands in this context configure an IP interface as an unnumbered interface and specify the IP address to use for the interface. An operator can configure unnumbered interfaces to conserve IP addresses.
Introduced	16.0.R1
Platforms	All

ip-address *string*

Synopsis	IP address to associate with unnumbered IP interface
Context	**configure** router *string* interface *string* ipv4 unnumbered ip-address *string*
Tree	ip-address
Notes	The following elements are part of a choice: **ip-address**, **ip-int-name**, or **system**.
Introduced	16.0.R1
Platforms	All

ip-int-name *string*

Synopsis	Unnumbered IP interface name
Context	**configure** router *string* interface *string* ipv4 unnumbered ip-int-name *string*
Tree	ip-int-name
String Length	1 to 32
Notes	The following elements are part of a choice: **ip-address**, **ip-int-name**, or **system**.
Introduced	16.0.R1
Platforms	All

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system

Synopsis	Use system IP address for the unnumbered IP interface
Context	**configure** router *string* interface *string* ipv4 unnumbered system
Tree	system
Notes	The following elements are part of a choice: **ip-address**, **ip-int-name**, or **system**.
Introduced	16.0.R1
Platforms	All

urpf-check

Synopsis	Enable the **urpf-check** context
Context	**configure** router *string* interface *string* ipv4 urpf-check
Tree	urpf-check
Introduced	16.0.R1
Platforms	All

ignore-default *boolean*

Synopsis	Ignore default routes when performing a uRPF check
Context	**configure** router *string* interface *string* ipv4 urpf-check ignore-default *boolean*
Tree	ignore-default
Description	When configured to **true**, the router ignores default routes while performing a uRPF check to determine the validity of incoming packets. When configured to **false**, default routes are considered eligible.
Default	false
Introduced	16.0.R1
Platforms	All

mode *keyword*

Synopsis	Unicast RPF check mode
Context	**configure** router *string* interface *string* ipv4 urpf-check mode *keyword*
Tree	mode
Options	strict, loose, strict-no-ecmp
Default	strict

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Introduced	16.0.R1
Platforms	All

vrrp [virtual-router-id] *number*

Synopsis	Enter the **vrrp** list instance
Context	**configure** router *string* interface *string* ipv4 vrrp *number*
Tree	vrrp
Description	Commands in this context configure a VRRP virtual router instance. A virtual router is defined by its Virtual Router Identifier (VRID) and a set of IP addresses.
Introduced	16.0.R1
Platforms	All

[**virtual-router-id**] *number*

Synopsis	Virtual Router Identifier (VRID) for the IP interface
Context	**configure** router *string* interface *string* ipv4 vrrp *number*
Tree	vrrp
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of VRRP
Context	**configure** router *string* interface *string* ipv4 vrrp *number* admin-state *keyword*
Tree	admin-state
Description	The command determines the administrative state of non-owner virtual router instances. Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes. When **disabled**, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.

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Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.

An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the **admin-state** command within the parent IP interface node which administratively disables the IP interface.

Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Password for simple text authentication
Context	**configure** router *string* interface *string* ipv4 vrrp *number* authentication-key *string*
Tree	authentication-key
Description	This command optionally assigns a simple text password authentication key to generate master VRRP advertisement messages and validate received VRRP advertisement messages. If this command is re-executed with a different password key defined, the new key immediately replaces the old key. This command may be executed at any time.
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

backup *string*

Synopsis	Virtual router IP addresses for the interface
Context	**configure** router *string* interface *string* ipv4 vrrp *number* backup *string*
Tree	backup
Description	This command associates virtual router IP addresses with those of the parental IP interface. This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance. Non-owner virtual router instances create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.

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For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is advertising to backup virtual routers receiving the messages. The specified *unicast-ipv4-address* must be equal to one of the existing IP addresses in the parental IP interface (primary or secondary) or this command fails.

See "Owner and non-owner VRRP" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide* for more information about owner and non-owner virtual router instances.

Max. Instances	16
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enable the **bfd-liveness** context
Context	**configure** router *string* interface *string* ipv4 vrrp *number* bfd-liveness
Tree	bfd-liveness
Description	Commands in this context assign a Bidirectional Forwarding Detection (BFD) session to a specific VRRP or SRRP instance. This BFD session provides a heartbeat mechanism that speeds up the transition of the standby VRRP router to an active state. If the associated BFD session fails, the VRRP routers immediately send a VRRP advertisement message. In addition, the standby VRRP routers transition to a master state to speed up convergence. The VRRP election process takes place based on the advertisement messages sent by all VRRP routers. Only one BFD session can be assigned to any VRRP or SRRP instance, but multiple SRRP or VRRP sessions can use the same BFD session.
Introduced	16.0.R1
Platforms	All

dest-ip *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination IP address to use for BFD session
Context	**configure** router *string* interface *string* ipv4 vrrp *number* bfd-liveness dest-ip *string*
Tree	dest-ip

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

interface-name *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
Context	**configure** router *string* interface *string* ipv4 vrrp *number* bfd-liveness interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

service-name *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	**configure** router *string* interface *string* ipv4 vrrp *number* bfd-liveness service-name *string*
Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

init-delay *number*

Synopsis	VRRP initialization delay timer
Context	**configure** router *string* interface *string* ipv4 vrrp *number* init-delay *number*

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Tree	init-delay
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

mac *string*

Synopsis	Virtual MAC address to use in ARP responses
Context	**configure** router *string* interface *string* ipv4 vrrp *number* mac *string*
Tree	mac
Description	This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID. Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address. Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with *unicast-mac-address* as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with *unicast-mac-address* as the source MAC. An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.
Introduced	16.0.R1
Platforms	All

master-int-inherit *boolean*

Synopsis	Allow master instance to dictate the master down timer
Context	**configure** router *string* interface *string* ipv4 vrrp *number* master-int-inherit *boolean*
Tree	master-int-inherit
Description	When configured to **true**, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.

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When configured to **false**, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.

Introduced 16.0.R1

Platforms All

message-interval *number*

Synopsis Interval for sending VRRP advertisement messages

Context **configure** router *string* interface *string* ipv4 vrrp *number* message-interval *number*

Tree message-interval

Description This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.

The usage of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the **master-int-inherit** command:

- When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The **master-int-inherit** command has no effect when operating as master.
- When a non-owner is in the backup state with **master-int-inherit** disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.
- When a non-owner is in the backup state with **master-int-inherit** enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.

Range 1 to 2559

Units deciseconds

Default 10

Introduced 16.0.R1

Platforms All

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monitor-oper-group *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VRRP instance to follow a specified operational group
Context	**configure** router *string* interface *string* ipv4 vrrp *number* monitor-oper-group *reference*
Tree	monitor-oper-group
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.
Reference	**configure** service oper-group *string*
Introduced	22.2.R1
Platforms	All

ntp-reply *boolean*

Synopsis	Allow processing of NTP requests
Context	**configure** router *string* interface *string* ipv4 vrrp *number* ntp-reply *boolean*
Tree	ntp-reply
Description	When configured to **true**, the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router. When configured to **false**, the router does not process NTP requests.
Default	false
Introduced	20.2.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group name associated with the VRRP
Context	**configure** router *string* interface *string* ipv4 vrrp *number* oper-group *reference*
Tree	oper-group
Description	This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master

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router (MR), the operational group is up. The operational group is down for all other VRRP states.

Reference	**configure** service oper-group *string*
Introduced	16.0.R1
Platforms	All

owner *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate the virtual router instance as owner
Context	**configure** router *string* interface *string* ipv4 vrrp *number* owner *boolean*
Tree	owner
Description	When configured to **true**, the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router. When configured to **false**, this virtual router instance is designated as a non-owner.
Default	false
Introduced	16.0.R1
Platforms	All

passive *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Suppress the processing of VRRP advertisement messages
Context	**configure** router *string* interface *string* ipv4 vrrp *number* passive *boolean*
Tree	passive
Description	When configured to **true**, the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).

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When configured to **false**, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.

Default false

Introduced 16.0.R1

Platforms All

ping-reply *boolean*

Synopsis Allow non-owner master to reply to ICMP echo requests

Context **configure** router *string* interface *string* ipv4 vrrp *number* ping-reply *boolean*

Tree ping-reply

Description When configured to **true**, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).

When configured to **false**, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.

Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.

Default false

Introduced 16.0.R1

Platforms All

policy *reference*

Synopsis VRRP priority control policy

Context **configure** router *string* interface *string* ipv4 vrrp *number* policy *reference*

Tree policy

Description This command configures a VRRP priority control policy to associate with the virtual router instance.

VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.

An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the **priority** command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.

For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.

Reference **configure** vrrp policy *number*

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Introduced	16.0.R1
Platforms	All

preempt *boolean*

Synopsis	Allow the VRRP to override an existing non-owner master
Context	**configure** router *string* interface *string* ipv4 vrrp *number* preempt *boolean*
Tree	preempt
Description	When configured to **true**, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router. When configured to **false**, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.
Default	true
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Base priority for the VRRP
Context	**configure** router *string* interface *string* ipv4 vrrp *number* priority *number*
Tree	priority
Description	This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process. The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

ssh-reply *boolean*

Synopsis	Allow the non-owner master to reply to SSH requests
Context	**configure** router *string* interface *string* ipv4 vrrp *number* ssh-reply *boolean*

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Tree	ssh-reply
Description	When configured to **true**, the router allows the non-owner master to reply to SSH requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the SSH request. SSH cannot be disabled at the management security level (either on the parental IP interface or on the SSH source host address). When configure to **false**, SSH requests to non-owner master virtual IP addresses are silently discarded.
Default	false
Introduced	16.0.R1
Platforms	All

standby-forwarding *boolean*

Synopsis	Allow standby router to forward traffic
Context	**configure** router *string* interface *string* ipv4 vrrp *number* standby-forwarding *boolean*
Tree	standby-forwarding
Description	When configured to **true**, the standby router forwards all traffic. When configured to **false**, the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.
Default	false
Introduced	16.0.R1
Platforms	All

telnet-reply *boolean*

Synopsis	Allow non-owner master to reply to Telnet requests
Context	**configure** router *string* interface *string* ipv4 vrrp *number* telnet-reply *boolean*
Tree	telnet-reply
Description	When configured to **true**, the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address). When configured to **false**, the router silently discards Telnet requests sent to non-owner master virtual IP addresses.
Default	false
Introduced	16.0.R1
Platforms	All

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traceroute-reply *boolean*

Synopsis	Allow non-owner master to reply to traceroute requests
Context	**configure** router *string* interface *string* ipv4 vrrp *number* traceroute-reply *boolean*
Tree	traceroute-reply
Description	When configured to **true**, the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance. When configured to **false**, the router silently discards traceroute requests sent to non-owner master virtual IP addresses. Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).
Default	false
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enable the **ipv6** context
Context	**configure** router *string* interface *string* ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

address [ipv6-address] *string*

Synopsis	Enter the **address** list instance
Context	**configure** router *string* interface *string* ipv6 address *string*
Tree	address
Description	Commands in this context assign an IPv6 address to the interface. A global IPv6 address and *prefix-length* combined create a locally configured interface IPv6 prefix and subnet. The defined global IP prefix must be unique within the context of a routing instance. It cannot overlap with any other existing global IP prefix defined on another IP interface within the same routing context. This overlap restriction is not applicable for IPv6 host addresses configured on loopback interfaces. For example, an IPv6 loopback host address configured on a loopback interface may overlap with another prefix subnet configured on another IP interface within the same routing context.
Introduced	16.0.R1

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Platforms	All

[**ipv6-address**] *string*

Synopsis	IPv6 address assigned to the interface
Context	**configure** router *string* interface *string* ipv6 address *string*
Tree	address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

duplicate-address-detection *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable Duplicate Address Detection
Context	**configure** router *string* interface *string* ipv6 address *string* duplicate-address-detection *boolean*
Tree	duplicate-address-detection
Description	When configured to **true**, the router enables Duplicate Address Detection (DAD). When configured to **false**, the router disables DAD and sets the address to preferred, even if there is a duplicated address.
Default	true
Introduced	16.0.R1
Platforms	All

eui-64 *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Form IPv6 address from prefix and 64-bit interface ID
Context	**configure** router *string* interface *string* ipv6 address *string* eui-64 *boolean*
Tree	eui-64

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Description	When configured to **true**, the router forms a complete IPv6 address from the supplied prefix and 64-bit interface identifier. The 64-bit interface identifier is derived from the MAC address on Ethernet interfaces. For interfaces without a MAC address, for example POS interfaces, use the base MAC address of the chassis.
Default	false
Introduced	16.0.R1
Platforms	All

prefix-length *number*

Synopsis	IPv6 address prefix length
Context	**configure** router *string* interface *string* ipv6 address *string* prefix-length *number*
Tree	prefix-length
Range	4 to 128
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

primary-preference *number*

Synopsis	Index assigned to the IPv6 address of the interface
Context	**configure** router *string* interface *string* ipv6 address *string* primary-preference *number*
Tree	primary-preference
Description	This command assigns a primary preference index to an IPv6 address of the interface to enforce the order in which the address is used by control plane protocols and applications that require a fixed address of the interface, such as LDP and Segment Routing. In cases where a fixed address is required when originating packets from the interface, the IPv6 address with the lowest primary preference index is selected. If the selected address is removed, the next IPv6 address with the next lowest primary preference index is selected. If this index is not specified for the IPv6 address, the system assigns the next available index value to the address. The address index space is unique across all addresses of a given interface.
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

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track-srrp *number*

Synopsis	SRRP ID whose state is tracked on this IP address
Context	**configure** router *string* interface *string* ipv6 address *string* track-srrp *number*
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

bfd

Synopsis	Enter the **bfd** context
Context	**configure** router *string* interface *string* ipv6 bfd
Tree	bfd
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	**configure** router *string* interface *string* ipv6 bfd admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	**configure** router *string* interface *string* ipv6 bfd echo-receive *number*
Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

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multiplier *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	**configure** router *string* interface *string* ipv6 bfd multiplier *number*
Tree	multiplier
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	16.0.R1
Platforms	All

receive *number*

Synopsis	BFD receive interval over this interface
Context	**configure** router *string* interface *string* ipv6 bfd receive *number*
Tree	receive
Description	This command specifies the receive interval for the BFD session. On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

transmit-interval *number*

Synopsis	BFD transmit interval over this interface
Context	**configure** router *string* interface *string* ipv6 bfd transmit-interval *number*
Tree	transmit-interval
Description	This command configures the transmit intervals. On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.
Range	10 to 100000

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Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Local termination point for the BFD session
Context	**configure** router *string* interface *string* ipv6 bfd type *keyword*
Tree	type
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: • **auto** (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the **cpm-np**. • **cpm-np** – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems. • **fp** – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.
Options	cpm-np, auto, fp
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

duplicate-address-detection *boolean*

Synopsis	Enable Duplicate Address Detection
Context	**configure** router *string* interface *string* ipv6 duplicate-address-detection *boolean*
Tree	duplicate-address-detection
Description	When configured to **true**, the router enables Duplicate Address Detection (DAD) on the interface. When configured to **false**, the router disables DAD on a per-interface basis. This prevents the router from performing a DAD check on the interface. All IPv6 addresses on an interface with DAD disabled, immediately enter a preferred state, without checking for uniqueness on the interface. This is useful for interfaces that enter a looped state during troubleshooting and are operationally disabled when the loop is detected, requiring manual intervention to clear the DAD violation.

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Default	true
Introduced	16.0.R1
Platforms	All

forward-ipv4-packets *boolean*

Synopsis	Forward unencapsulated IPv4 packets
Context	**configure** router *string* interface *string* ipv6 forward-ipv4-packets *boolean*
Tree	forward-ipv4-packets
Description	When configured to **true**, the router can use an IPv6-only interface, with no configured IPv4 addresses, to forward IPv4 packets that originate or terminate locally. The interface reports that its IPv4 operational state is up if its IPv6 operational state is up. Not all protocols observe the interface as up from an IPv4 perspective. This command mostly supports BGP routing use cases; see RFC 5549 for details. When configured to **false**, the router prevents IPv4 packets from being forwarded if there are no configured IPv4 subnets.
Default	false
Introduced	19.5.R1
Platforms	All

icmp6

Synopsis	Enter the **icmp6** context
Context	**configure** router *string* interface *string* ipv6 icmp6
Tree	icmp6
Introduced	16.0.R1
Platforms	All

packet-too-big

Synopsis	Enter the **packet-too-big** context
Context	**configure** router *string* interface *string* ipv6 icmp6 packet-too-big
Tree	packet-too-big
Description	Commands in this context configure limiting the number of ICMPv6 Packet Too Big messages.
Introduced	16.0.R1

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Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Packet Too Big message sends
Context	**configure** router *string* interface *string* ipv6 icmp6 packet-too-big admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number of Packet Too big Messages issued per time frame
Context	**configure** router *string* interface *string* ipv6 icmp6 packet-too-big number *number*
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit Packet Too Big messages
Context	**configure** router *string* interface *string* ipv6 icmp6 packet-too-big seconds *number*
Tree	seconds
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

param-problem

Synopsis	Enter the **param-problem** context

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Context	**configure** router *string* interface *string* ipv6 icmp6 param-problem
Tree	param-problem
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Parameter Problem message sends
Context	**configure** router *string* interface *string* ipv6 icmp6 param-problem admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number used to limit ICMPv6 Parameter Problem messages
Context	**configure** router *string* interface *string* ipv6 icmp6 param-problem number *number*
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit ICMPv6 Parameter Problem messages
Context	**configure** router *string* interface *string* ipv6 icmp6 param-problem seconds *number*
Tree	seconds
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

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redirects

Synopsis	Enter the **redirects** context
Context	**configure** router *string* interface *string* ipv6 icmp6 redirects
Tree	redirects
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Redirect message sends
Context	**configure** router *string* interface *string* ipv6 icmp6 redirects admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number to limit ICMPv6 Redirect messages per time frame
Context	**configure** router *string* interface *string* ipv6 icmp6 redirects number *number*
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit ICMPv6 Redirect messages
Context	**configure** router *string* interface *string* ipv6 icmp6 redirects seconds *number*
Tree	seconds
Range	1 to 60
Default	10

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Introduced	16.0.R1
Platforms	All

time-exceeded

Synopsis	Enter the **time-exceeded** context
Context	**configure** router *string* interface *string* ipv6 icmp6 time-exceeded
Tree	time-exceeded
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Time Exceeded message sends
Context	**configure** router *string* interface *string* ipv6 icmp6 time-exceeded admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number to limit Time Exceeded messages per time frame
Context	**configure** router *string* interface *string* ipv6 icmp6 time-exceeded number *number*
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit ICMPv6 Time Exceeded messages
Context	**configure** router *string* interface *string* ipv6 icmp6 time-exceeded seconds *number*

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Tree	seconds
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

unreachables

Synopsis	Enter the **unreachables** context
Context	**configure** router *string* interface *string* ipv6 icmp6 unreachables
Tree	unreachables
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Unreachable message sends
Context	**configure** router *string* interface *string* ipv6 icmp6 unreachables admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number to limit Unreachable messages per time frame
Context	**configure** router *string* interface *string* ipv6 icmp6 unreachables number *number*
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

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seconds *number*

Synopsis	Time used to limit ICMPv6 Unreachable messages
Context	**configure** router *string* interface *string* ipv6 icmp6 unreachables seconds *number*
Tree	seconds
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

link-local-address

Synopsis	Enter the **link-local-address** context
Context	**configure** router *string* interface *string* ipv6 link-local-address
Tree	link-local-address
Description	Commands in this context configure the IPv6 link-local address that is used as a virtual SRRP IPv6 address by the master SRRP node. This address is sent in the Router Advertisements initiated by the master SRRP node. Clients use this address as IPv6 default-gateway. Both SRRP nodes, master and backup, must be configured with the same link-local address. Only one link-local address is allowed per interface. **Caution**: Removing a manually configured link-local address may impact routing protocols or static routes that have a dependency on that address. Nokia does not recommend removing a link-local address when there are active IPv6 subscriber hosts on an IES or VPRN interface.
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	IPv6 link-local address
Context	**configure** router *string* interface *string* ipv6 link-local-address address *string*
Tree	address
Introduced	16.0.R1
Platforms	All

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duplicate-address-detection *boolean*

Synopsis	Enable Duplicate Address Detection
Context	**configure** router *string* interface *string* ipv6 link-local-address duplicate-address-detection *boolean*
Tree	duplicate-address-detection
Description	When configured to **true**, the router enables Duplicate Address Detection (DAD) on the interface. When configured to **false**, the router disables DAD and sets the address to preferred, even if there is a duplicated address.
Default	true
Introduced	16.0.R1
Platforms	All

local-dhcp-server *reference*

Synopsis	DHCP server for the interface
Context	**configure** router *string* interface *string* ipv6 local-dhcp-server *reference*
Tree	local-dhcp-server
Description	This command instantiates a local DHCP server. A local DHCP server can serve multiple interfaces but is limited to the routing context in which it was created.
Reference	**configure** router *string* dhcp-server dhcpv6 *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-discovery

Synopsis	Enter the **neighbor-discovery** context
Context	**configure** router *string* interface *string* ipv6 neighbor-discovery
Tree	neighbor-discovery
Introduced	16.0.R1
Platforms	All

learn-unsolicited *keyword*

Synopsis	Type of entries learned from unsolicited NA messages

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Context	**configure** router *string* interface *string* ipv6 neighbor-discovery learn-unsolicited *keyword*
Tree	learn-unsolicited
Description	This command enables the ability to learn neighbor entries out of received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited flag set. When unconfigured, the router follows standard RFC 4861 behavior for learning of neighbor entries. The neighbor is put in the stale state. This is the standard RFC behavior.
Options	global, link-local, both
Introduced	16.0.R1
Platforms	All

limit

Synopsis	Enter the **limit** context
Context	**configure** router *string* interface *string* ipv6 neighbor-discovery limit
Tree	limit
Description	Commands in this context configure the maximum amount of dynamic IPv6 neighbor entries that can be learned on an IP interface. When the number of dynamic neighbor entries reaches the configured percentage of this limit the system sends an SNMP trap. When the limit is exceeded, no new entries are learned until an entry expires and traffic to these destinations is dropped. Entries that have already been learned are refreshed.
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Generate log entries when limit is reached
Context	**configure** router *string* interface *string* ipv6 neighbor-discovery limit log-only *boolean*
Tree	log-only
Description	When configured to **true**, the router sends the warning message at the specified threshold percentage or upon exceeding the specified limit. Entries that exceed the limit are learned. When configured to **false**, the router does not send the warning message.
Default	false
Introduced	16.0.R1
Platforms	All

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max-entries *number*

Synopsis	Maximum number of entries learned on an IP interface
Context	**configure** router *string* interface *string* ipv6 neighbor-discovery limit max-entries *number*
Tree	max-entries
Description	This command configures the maximum number of entries that can be learned on an IP interface. When unconfigured, no maximum limit is imposed.
Range	0 to 102400
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Threshold percentage that triggers a warning message
Context	**configure** router *string* interface *string* ipv6 neighbor-discovery limit threshold *number*
Tree	threshold
Range	1 to 100
Units	percent
Default	90
Introduced	16.0.R1
Platforms	All

local-proxy-nd *boolean*

Synopsis	Enable local proxy neighbor discovery on the interface
Context	**configure** router *string* interface *string* ipv6 neighbor-discovery local-proxy-nd *boolean*
Tree	local-proxy-nd
Description	When configured to **true**, the router enables local proxy neighbor discovery on the interface and replies to neighbor solicitation requests when both the hosts are on the same subnet. In this case, ICMP redirects are disabled. When configured to **false**, the router disables local proxy neighbor discovery on the interface and does not reply to neighbor solicitation requests if both the hosts are on the same subnet.
Default	false
Introduced	16.0.R1

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Platforms	All

proactive-refresh *keyword*

Synopsis	Proactive refresh of neighbor entries
Context	**configure** router *string* interface *string* ipv6 neighbor-discovery proactive-refresh *keyword*
Tree	proactive-refresh
Description	This command enables a proactive refresh of the neighbor entries. After the stale timer expires, the router sends an NUD message to the host (regardless of the existence of traffic to the IP address on the IOM), so the entry can be refreshed or removed.
Options	global, link-local, both
Introduced	16.0.R1
Platforms	All

proxy-nd-policy *reference*

Synopsis	Proxy Neighbor Discovery policy name for the interface
Context	**configure** router *string* interface *string* ipv6 neighbor-discovery proxy-nd-policy *reference*
Tree	proxy-nd-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

reachable-time *number*

Synopsis	Neighbor reachability detection timer
Context	**configure** router *string* interface *string* ipv6 neighbor-discovery reachable-time *number*
Tree	reachable-time
Range	30 to 3600
Introduced	16.0.R1
Platforms	All

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secure-nd

Synopsis	Enter the **secure-nd** context
Context	**configure** router *string* interface *string* ipv6 neighbor-discovery secure-nd
Tree	secure-nd
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Secure Neighbor Discovery
Context	**configure** router *string* interface *string* ipv6 neighbor-discovery secure-nd admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

allow-unsecured-msgs *boolean*

Synopsis	Accept unsecured messages
Context	**configure** router *string* interface *string* ipv6 neighbor-discovery secure-nd allow-unsecured-msgs *boolean*
Tree	allow-unsecured-msgs
Description	When configured to **true**, the router accepts unsecured messages. When Secure Neighbor Discovery (SeND) is enabled, only secure messages are accepted. When configured to **false**, the router disables the acceptance of unsecured messages.
Default	true
Introduced	16.0.R1
Platforms	All

public-key-min-bits *number*

Synopsis	Minimum acceptable key length for public keys in CGA

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Context	**configure** router *string* interface *string* ipv6 neighbor-discovery secure-nd public-key-min-bits *number*
Tree	public-key-min-bits
Range	512 to 1024
Default	1024
Introduced	16.0.R1
Platforms	All

security-parameter *number*

Synopsis	Security parameter used in the generation of a CGA
Context	**configure** router *string* interface *string* ipv6 neighbor-discovery secure-nd security-parameter *number*
Tree	security-parameter
Range	0 to 1
Default	1
Introduced	16.0.R1
Platforms	All

stale-time *number*

Synopsis	Time a Neighbor Discovery cache entry remains stale
Context	**configure** router *string* interface *string* ipv6 neighbor-discovery stale-time *number*
Tree	stale-time
Range	60 to 65535
Introduced	16.0.R1
Platforms	All

static-neighbor [ipv6-address] *string*

Synopsis	Enter the **static-neighbor** list instance
Context	**configure** router *string* interface *string* ipv6 neighbor-discovery static-neighbor *string*
Tree	static-neighbor
Description	Commands in this context configure an IPv6-to-MAC address mapping on the interface. Use this command if a directly attached IPv6 node does not support ICMPv6 neighbor discovery, or for some reason, a static address must be used. This command can only be used on Ethernet media.

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The IPv6 address must be on the subnet that was configured from the IPv6 **address** or a **link-local-address** commands.

Introduced 16.0.R1

Platforms All

[**ipv6-address**] *string*

Synopsis IPv6 address corresponding to the physical address

Context **configure** router *string* interface *string* ipv6 neighbor-discovery static-neighbor *string*

Tree static-neighbor

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

mac-address *string*

Synopsis MAC address for the static neighbor

Context **configure** router *string* interface *string* ipv6 neighbor-discovery static-neighbor *string* mac-address *string*

Tree mac-address

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

qos-route-lookup *keyword*

Synopsis QoS route lookup of ingress IP packets

Context **configure** router *string* interface *string* ipv6 qos-route-lookup *keyword*

Tree qos-route-lookup

Description This command enables QoS classification of the ingress IP packets on an interface based on the QoS information associated with routes in the forwarding table.

Options destination, source

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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tcp-mss *number*

Synopsis	TCP maximum segment size for the IPv6 interface
Context	**configure** router *string* interface *string* ipv6 tcp-mss *number*
Tree	tcp-mss
Range	1220 to 9726
Introduced	16.0.R1
Platforms	All

urpf-check

Synopsis	Enable the **urpf-check** context
Context	**configure** router *string* interface *string* ipv6 urpf-check
Tree	urpf-check
Introduced	16.0.R1
Platforms	All

ignore-default *boolean*

Synopsis	Ignore default route when performing a uRPF check
Context	**configure** router *string* interface *string* ipv6 urpf-check ignore-default *boolean*
Tree	ignore-default
Default	false
Introduced	16.0.R1
Platforms	All

mode *keyword*

Synopsis	Unicast RPF check mode
Context	**configure** router *string* interface *string* ipv6 urpf-check mode *keyword*
Tree	mode
Options	strict, loose, strict-no-ecmp
Default	strict
Introduced	16.0.R1
Platforms	All

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vrrp [virtual-router-id] *number*

Synopsis	Enter the **vrrp** list instance
Context	**configure** router *string* interface *string* ipv6 vrrp *number*
Tree	vrrp
Description	Commands in this context configure a VRRP virtual router instance. A virtual router is defined by its virtual router identifier (VRID) and a set of IP addresses.
Max. Instances	4
Introduced	16.0.R1
Platforms	All

[**virtual-router-id**] *number*

Synopsis	Virtual Router Identifier (VRID) for the IP interface
Context	**configure** router *string* interface *string* ipv6 vrrp *number*
Tree	vrrp
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of VRRP
Context	**configure** router *string* interface *string* ipv6 vrrp *number* admin-state *keyword*
Tree	admin-state
Description	The command determines the administrative state of non-owner virtual router instances. Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes. When **disabled**, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing. Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.

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An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the **admin-state** command within the parent IP interface node which administratively disables the IP interface.

Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

backup *string*

Synopsis	Virtual router IP addresses for the interface
Context	**configure** router *string* interface *string* ipv6 vrrp *number* backup *string*
Tree	backup
Description	This command associates router IPv6 virtual router IP addresses with those of the parental IP interface. This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance. Non-owner virtual router instance create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance. For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is representing to backup virtual routers receiving the messages. The specified IPv6 address must be equal to one of the existing parental IP addresses in the parental IP interface (primary or secondary) or this command fails. See "Owner and non-owner VRRP" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide* for more information about owner and non-owner virtual router instances.
Max. Instances	4
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enable the **bfd-liveness** context
Context	**configure** router *string* interface *string* ipv6 vrrp *number* bfd-liveness
Tree	bfd-liveness

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Description	Commands in this context assign a bidirectional forwarding detect (BFD) session to a specific VRRP or SRRP instance. This BFD session provides a heartbeat mechanism for use in speeding up the transition of the standby VRRP router to an active state. If the associated BFD session fails, the VRRP routers immediately send a VRRP Advertisement message. In addition, the standby VRRP routers transition to a Master state to speed convergence. The normal VRRP election process takes place based on the Advertisement messages sent by all VRRP routers. There can be only one BFD session assigned to any specific VRRP or SRRP instance, but there can be multiple SRRP or VRRP sessions using the same BFD session.
Introduced	16.0.R1
Platforms	All

dest-ip *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination address for the BFD session
Context	**configure** router *string* interface *string* ipv6 vrrp *number* bfd-liveness dest-ip *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	dest-ip
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

interface-name *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
Context	**configure** router *string* interface *string* ipv6 vrrp *number* bfd-liveness interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	This element is mandatory.

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Introduced	16.0.R1
Platforms	All

service-name *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	**configure** router *string* interface *string* ipv6 vrrp *number* bfd-liveness service-name *string*
Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

init-delay *number*

Synopsis	VRRP initialization delay timer
Context	**configure** router *string* interface *string* ipv6 vrrp *number* init-delay *number*
Tree	init-delay
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

mac *string*

Synopsis	Virtual MAC address to use in ARP responses
Context	**configure** router *string* interface *string* ipv6 vrrp *number* mac *string*
Tree	mac
Description	This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID. Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.

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Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with *unicast-mac-address* as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with *unicast-mac-address* as the source MAC.

An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.

Introduced 16.0.R1

Platforms All

master-int-inherit *boolean*

Synopsis Allow master instance to dictate the master down timer

Context **configure** router *string* interface *string* ipv6 vrrp *number* master-int-inherit *boolean*

Tree master-int-inherit

Description When configured to **true**, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.

When configured to **false**, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.

Introduced 16.0.R1

Platforms All

message-interval *number*

Synopsis Interval for sending VRRP advertisement messages

Context **configure** router *string* interface *string* ipv6 vrrp *number* message-interval *number*

Tree message-interval

Description This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.

The use of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the **master-int-inherit** command:

- When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar

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to an owner virtual router instance. The **master-int-inherit** command has no effect when operating as the master.

- When a non-owner is in the backup state with **master-int-inherit** disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.
- When a non-owner is in the backup state with **master-int-inherit** enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.

Range	10 to 4095
Units	centiseconds
Default	100
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VRRP instance to follow a specified operational group
Context	**configure** router *string* interface *string* ipv6 vrrp *number* monitor-oper-group *reference*
Tree	monitor-oper-group
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.
Reference	**configure** service oper-group *string*
Introduced	22.2.R1
Platforms	All

ntp-reply *boolean*

Synopsis	Allow processing of NTP requests
Context	**configure** router *string* interface *string* ipv6 vrrp *number* ntp-reply *boolean*

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Tree	ntp-reply
Description	When configured to **true**, the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router. When configured to **false**, the router does not process NTP requests.
Default	false
Introduced	20.2.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group name associated with the VRRP
Context	**configure** router *string* interface *string* ipv6 vrrp *number* oper-group *reference*
Tree	oper-group
Description	This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states.
Reference	**configure** service oper-group *string*
Introduced	16.0.R1
Platforms	All

owner *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate the virtual router instance as owner
Context	**configure** router *string* interface *string* ipv6 vrrp *number* owner *boolean*
Tree	owner
Description	When configured to **true**, the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router. When configured to **false**, this virtual router instance is designated as a non-owner.
Default	false
Introduced	16.0.R1

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Platforms	All

passive *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Suppress the processing of VRRP advertisement messages
Context	**configure** router *string* interface *string* ipv6 vrrp *number* passive *boolean*
Tree	passive
Description	When configured to **true**, the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down). When configured to **false**, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.
Default	false
Introduced	16.0.R1
Platforms	All

ping-reply *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	**configure** router *string* interface *string* ipv6 vrrp *number* ping-reply *boolean*
Tree	ping-reply
Description	When configured to **true**, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address). When configured to **false**, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded. Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.
Default	false
Introduced	16.0.R1
Platforms	All

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policy *reference*

Synopsis	VRRP priority control policy
Context	**configure** router *string* interface *string* ipv6 vrrp *number* policy *reference*
Tree	policy
Description	This command configures a VRRP priority control policy to associate with the virtual router instance. VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis. An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the **priority** command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value. For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.
Reference	**configure** vrrp policy *number*
Introduced	16.0.R1
Platforms	All

preempt *boolean*

Synopsis	Allow the VRRP to override an existing non-owner master
Context	**configure** router *string* interface *string* ipv6 vrrp *number* preempt *boolean*
Tree	preempt
Description	When configured to **true**, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router. When configured to **false**, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.
Default	true
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Base priority for the VRRP
Context	**configure** router *string* interface *string* ipv6 vrrp *number* priority *number*

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Tree	priority
Description	This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process. The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

standby-forwarding *boolean*

Synopsis	Allow standby router to forward traffic
Context	**configure** router *string* interface *string* ipv6 vrrp *number* standby-forwarding *boolean*
Tree	standby-forwarding
Description	When configured to **true**, the standby router forwards all traffic. When configured to **false**, the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.
Default	false
Introduced	16.0.R1
Platforms	All

telnet-reply *boolean*

Synopsis	Allow non-owner master to reply to Telnet requests
Context	**configure** router *string* interface *string* ipv6 vrrp *number* telnet-reply *boolean*
Tree	telnet-reply
Description	When configured to **true**, the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address). When configured to **false**, the router silently discards Telnet requests sent to non-owner master virtual IP addresses.
Default	false
Introduced	16.0.R1
Platforms	All

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traceroute-reply *boolean*

Synopsis	Allow non-owner master to reply to traceroute requests
Context	**configure** router *string* interface *string* ipv6 vrrp *number* traceroute-reply *boolean*
Tree	traceroute-reply
Description	When configured to **true**, the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance. When configured to **false**, the router silently discards traceroute requests sent to non-owner master virtual IP addresses. Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).
Default	false
Introduced	16.0.R1
Platforms	All

lag

Synopsis	Enter the **lag** context
Context	**configure** router *string* interface *string* lag
Tree	lag
Introduced	16.0.R1
Platforms	All

link-map-profile *number*

Synopsis	LAG link map profile for a SAP or network interface
Context	**configure** router *string* interface *string* lag link-map-profile *number*
Tree	link-map-profile
Description	This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration. If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.
Range	1 to 64
Introduced	16.0.R1
Platforms	All

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per-link-hash

Synopsis	Enter the **per-link-hash** context
Context	**configure** router *string* interface *string* lag per-link-hash
Tree	per-link-hash
Introduced	16.0.R1
Platforms	All

class *number*

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	**configure** router *string* interface *string* lag per-link-hash class *number*
Tree	class
Range	1 to 3
Default	1
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	**configure** router *string* interface *string* lag per-link-hash weight *number*
Tree	weight
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	All

ldp-sync-timer

Synopsis	Enter the **ldp-sync-timer** context
Context	**configure** router *string* interface *string* ldp-sync-timer
Tree	ldp-sync-timer
Description	Commands in this context set associated parameters for the synchronization of an IGP and LDP.

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Introduced	16.0.R1
Platforms	All

end-of-lib *boolean*

Synopsis	Terminate LDP synchronization timer
Context	**configure** router *string* interface *string* ldp-sync-timer end-of-lib *boolean*
Tree	end-of-lib
Description	This command configures the system to terminate the LDP synchronization timer early for a specific session to an LDP peer, if the IGP interface receives LDP End-of-LIB Typed Wildcard FEC messages for every FEC type negotiated.
Default	false
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time interval for the LDP synchronization timer
Context	**configure** router *string* interface *string* ldp-sync-timer seconds *number*
Tree	seconds
Range	1 to 1800
Introduced	16.0.R1
Platforms	All

load-balancing

Synopsis	Enter the **load-balancing** context
Context	**configure** router *string* interface *string* load-balancing
Tree	load-balancing
Description	Commands in this context configure interface per-flow load-balancing options that apply to traffic that enters this interface and that egresses over a LAG or ECMP. This is a per-interface setting. Load-balancing options enabled on the interface level overwrite options that can also be enabled on the system level.
Introduced	16.0.R1
Platforms	All

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flow-label-load-balancing *boolean*

Synopsis	Enable flow label load balancing
Context	**configure** router *string* interface *string* load-balancing flow-label-load-balancing *boolean*
Tree	flow-label-load-balancing
Description	When configured to **true**, the router enables load balancing in ECMP and LAG based on the output of a hash performed on the triplet (SA, DA, flow label) in the header of an IPv6 packet received on an IES, VPRN, R-VPLS, CSC, or network interface. When configured to **false**, the router disables load balancing in ECMP and LAG.
Default	false
Introduced	21.5.R1
Platforms	All

ip-load-balancing *keyword*

Synopsis	IP load-balancing algorithm
Context	**configure** router *string* interface *string* load-balancing ip-load-balancing *keyword*
Tree	ip-load-balancing
Description	This command specifies whether to include the source address, destination address, or both in LAG or ECMP hash on IP interfaces. Additionally, when the **l4-load-balancing** command is enabled, this command also includes the source or destination port in the hash inputs.
Options	both, destination, source, inner-ip
Default	both
Introduced	16.0.R3
Platforms	All

lsr-load-balancing *keyword*

Synopsis	LSR load-balancing algorithm
Context	**configure** router *string* interface *string* load-balancing lsr-load-balancing *keyword*
Tree	lsr-load-balancing
Description	This command specifies whether the IP header is used in the LAG and ECMP LSR hashing algorithm. This is the per-interface setting.
Options	lbl-only, lbl-ip, ip-only, eth-encap-ip, lbl-ip-l4-teid
Introduced	16.0.R1
Platforms	All

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spi-load-balancing *boolean*

Synopsis	Enable SPI use in hashing
Context	**configure** router *string* interface *string* load-balancing spi-load-balancing *boolean*
Tree	spi-load-balancing
Description	When configured to **true**, the router uses the Security Parameter Index (SPI) in hashing for ESP and AH encrypted IPv4 and IPv6 traffic. This is a per-interface setting.
Default	false
Introduced	16.0.R1
Platforms	All

teid-load-balancing *boolean*

Synopsis	Enable use of TEID in hashing
Context	**configure** router *string* interface *string* load-balancing teid-load-balancing *boolean*
Tree	teid-load-balancing
Default	false
Introduced	16.0.R1
Platforms	All

loopback

Synopsis	Use interface as a loopback interface
Context	**configure** router *string* interface *string* loopback
Tree	loopback
Description	When configured, this interface is used as a loopback interface. This command and the **vas-if-type** command are mutually exclusive.
Notes	The following elements are part of a choice: **loopback** or **port**.
Introduced	16.0.R1
Platforms	All

mac *string*

Synopsis	MAC address of the interface
Context	**configure** router *string* interface *string* mac *string*

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Tree	mac
Description	This command assigns a specific MAC address to an IP interface. Only one MAC address can be assigned to an IP interface. When multiple **mac** commands are entered, the last command overwrites the previous command.
Introduced	16.0.R1
Platforms	All

mac-accounting *boolean*

Synopsis	Enable MAC accounting functionality
Context	**configure** router *string* interface *string* mac-accounting *boolean*
Tree	mac-accounting
Description	When configured to **true**, the router enables MAC accounting functionality.
Default	false
Introduced	16.0.R1
Platforms	All

network-domains

Synopsis	Enter the **network-domains** context
Context	**configure** router *string* interface *string* network-domains
Tree	network-domains
Introduced	16.0.R4
Platforms	All

network-domain [domain-name] *reference*

Synopsis	Add a list entry for **network-domain**
Context	**configure** router *string* interface *string* network-domains network-domain *reference*
Tree	network-domain
Description	Commands in this context assign an interface to a network domain. The router then takes the network domain into account during SAP ingress queue allocation for VPLS SAP. The network domain association can only be done in the base routing context. An operator can associate a network domain with an interface without a physical port being specified, but the configuration has no effect until a corresponding port, or LAG, is defined.

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	Single interfaces can be associated with multiple network domains.
Max. Instances	5
Introduced	16.0.R4
Platforms	All

[**domain-name**] *reference*

Synopsis	Network domain name
Context	**configure** router *string* interface *string* network-domains network-domain *reference*
Tree	network-domain
Reference	**configure** router *string* network-domains network-domain *string*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

port *(port-and-encap | keyword)*

Synopsis	Port to bind to this interface
Context	**configure** router *string* interface *string* port *(port-and-encap | keyword)*
Tree	port
Description	This command creates an association between a logical IP interface and a physical port. An operator can also associate an interface with the system (loopback address).
String Length	1 to 45
Options	system
Notes	The following elements are part of a choice: **loopback** or **port**.
Introduced	16.0.R1
Platforms	All

ptp-hw-assist

Synopsis	Enter the **ptp-hw-assist** context
Context	**configure** router *string* interface *string* ptp-hw-assist
Tree	ptp-hw-assist
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the PTP time stamping assist
Context	**configure** router *string* interface *string* ptp-hw-assist admin-state *keyword*
Tree	admin-state
Description	This command controls the administrative state of port-based time stamping assist of PTP packets at the physical interface.This capability is supported on specific hardware. The command may be blocked if not all hardware has the required level of support. Only one interface per physical port can have ptp-hw-assist enabled. This feature cannot be enabled if the physical port supporting the interface is configured as a PTP port.
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

qos

Synopsis	Enter the **qos** context
Context	**configure** router *string* interface *string* qos
Tree	qos
Description	Commands in this context associate a network QoS policy with a network IP interface. Only one network QoS policy can be associated with an IP interface at one time. Attempts to associate a second QoS policy return an error.
Introduced	16.0.R1
Platforms	All

egress-instance *number*

Synopsis	Port egress queue group instance for this interface
Context	**configure** router *string* interface *string* qos egress-instance *number*
Tree	egress-instance
Description	This command specifies which instance to associate with this specific network IP interface since multiple instances of the same egress queue-group can be applied to the same port.

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Range	1 to 65535
Introduced	16.0.R1
Platforms	All

egress-port-redirect-group *reference*

Synopsis	QoS queue group name
Context	**configure** router *string* interface *string* qos egress-port-redirect-group *reference*
Tree	egress-port-redirect-group
Description	This command configures the egress queue group used for all egress forwarding-class redirections specified within the network QoS policy ID. The specified queue group name must exist as an egress queue group applied to the egress context of the port associated with the IP interface.
Reference	**configure** qos queue-group-templates egress queue-group *string*
Introduced	16.0.R1
Platforms	All

ingress-fp-redirect-group *reference*

Synopsis	Forwarding plane queue group policy for the interface
Context	**configure** router *string* interface *string* qos ingress-fp-redirect-group *reference*
Tree	ingress-fp-redirect-group
Description	This command configures the ingress queue-group used for all ingress forwarding-class redirections specified within the network QoS policy ID. The specified queue group name must exist as an ingress queue group applied to the ingress context of the forwarding plane associated with the IP interface.
Reference	**configure** qos queue-group-templates ingress queue-group *string*
Introduced	16.0.R1
Platforms	All

ingress-instance *number*

Synopsis	Forwarding plane ingress queue group for this interface
Context	**configure** router *string* interface *string* qos ingress-instance *number*
Tree	ingress-instance

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Description	This command configures which instance to associate with this specific network IP interface. An operator can apply multiple instances of the same ingress queue group to the same forwarding plane.
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

network-policy *reference*

Synopsis	Network policy name associated with a network interface
Context	**configure** router *string* interface *string* qos network-policy *reference*
Tree	network-policy
Description	This command associates an existing network policy name with the IP interface.
Reference	**configure** qos network *string*
Introduced	16.0.R1
Platforms	All

strip-label *boolean*

Synopsis	Strip all MPLS labels before PBR processing
Context	**configure** router *string* interface *string* strip-label *boolean*
Tree	strip-label
Description	When configured to **true**, the router forces packets to be stripped of all (maximum 5) MPLS labels before the packets are handed over for possible filter (PBR) processing. This command is supported on: • optical ports for the 7750 SR and 7450 ESS • IOM3 XP cards for the 7750 SR and 7450 ESS • null/dot1q encaps • network ports • IPv4 • IPv6
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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tos-marking-state *keyword*

Synopsis	TOS marking state
Context	**configure** router *string* interface *string* tos-marking-state *keyword*
Tree	tos-marking-state
Description	This command configures the ToS marking state. This command is used to alter the default trusted state to a non-trusted state. When configured to **trusted** or default, the ToS field is not remarked by egress network IP interfaces unless the egress network IP interface has the remark-trusted state set, in which case the egress network interface treats all VPRN and network IP interfaces as untrusted. When configured to **untrusted**, all egress network IP interfaces remark IP packets received on the network interface according to the egress marking defintions on each network interface.
Options	trusted, untrusted
Default	trusted
Introduced	16.0.R1
Platforms	All

untrusted

Synopsis	Enable the **untrusted** context
Context	**configure** router *string* interface *string* untrusted
Tree	untrusted
Description	Commands in this context configure the untrusted state for a network IP interface. The untrusted state identifies the participating interfaces in the label security feature for prefixes of a VPN family at an inter-AS boundary. The router supports a maximum of 15 network interfaces that can participate in this feature. The user normally applies this command to an inter-AS interface. PIP keeps track of the untrusted status of each interface.
Introduced	16.0.R4
Platforms	All

default-forwarding *keyword*

Synopsis	Default action for selective ILM
Context	**configure** router *string* interface *string* untrusted default-forwarding *keyword*
Tree	default-forwarding

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Description This command specifies the default forwarding behavior of labeled packets received on this interface.

This command sets the default behavior for an untrusted interface in the datapath and for all ILMs. When enabling the label security for VPN IPv4 or VPN IPv6 prefixes, BGP programs the data path to provide an exception to the normal way of forwarding away from the default for those VPRN ILMs.

When the default behavior is to forward packets, the router checks labeled packets in the normal way against the table of programmed ILMs to decide if packets are dropped or forwarded in a GRT, a VRF, or a L2 service context.

When the specified behavior is to drop packets, all labeled packets received on the interface are automatically dropped.

Options forward, drop

Default forward

Introduced 16.0.R4

Platforms All

urpf-selected-vprns *boolean*

Synopsis Enable uRPF checking of incoming traffic on interface

Context **configure** router *string* interface *string* urpf-selected-vprns *boolean*

Tree urpf-selected-vprns

Description When configured to **true**, the router performs uRPF checks of incoming traffic on the network interface for the following:

- Packets associated with the global routing table (base router) context
- Packets associated with VPRNs that have enabled the uRPF check using the **configure service vprn network ingress urpf-check** command

When configured to **false**, the router performs uRPF checks for all ingress traffic on the network interface (associated with the base router and all VPRNs) based on the IPv4 and IPv6 **urpf-check** command configuration options of the network interface.

Default false

Introduced 16.0.R1

Platforms All

vas-if-type *keyword*

Synopsis VAS interface type

Context **configure** router *string* interface *string* vas-if-type *keyword*

Tree vas-if-type

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Description	This command configures the type of a Value Added Service (VAS) facing interface. This command and **loopback** command
Options	to-from-access, to-from-network, to-from-both
Introduced	16.0.R1
Platforms	All

ipsec

Synopsis	Enter the **ipsec** context
Context	**configure** router *string* ipsec
Tree	ipsec
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-chassis-shunt-interface [name] *string*

Synopsis	Enter the **multi-chassis-shunt-interface** list instance
Context	**configure** router *string* ipsec multi-chassis-shunt-interface *string*
Tree	multi-chassis-shunt-interface
Description	This command configures the multi-chassis shunting interface name for the peer.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Multi-chassis shunt interface name
Context	**configure** router *string* ipsec multi-chassis-shunt-interface *string*
Tree	multi-chassis-shunt-interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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next-hop

Synopsis	Enter the **next-hop** context
Context	**configure** router *string* ipsec multi-chassis-shunt-interface *string* next-hop
Tree	next-hop
Description	Commands in this context configure the next hop for shunting over the interface.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Next hop address for the shunting interface
Context	**configure** router *string* ipsec multi-chassis-shunt-interface *string* next-hop address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	address
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-chassis-shunting-profile [name] *string*

Synopsis	Enter the **multi-chassis-shunting-profile** list instance
Context	**configure** router *string* ipsec multi-chassis-shunting-profile *string*
Tree	multi-chassis-shunting-profile
Max. Instances	64
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Multi-chassis shunting profile name
Context	**configure** router *string* ipsec multi-chassis-shunting-profile *string*
Tree	multi-chassis-shunting-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.5.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer [ip-address] *reference*

Synopsis	Enter the **peer** list instance
Context	**configure** router *string* ipsec multi-chassis-shunting-profile *string* peer *reference*
Tree	peer
Max. Instances	3
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**ip-address**] *reference*

Synopsis	Peer address
Context	**configure** router *string* ipsec multi-chassis-shunting-profile *string* peer *reference*
Tree	peer
Reference	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)*
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-chassis-shunt-interface *reference*

Synopsis	Multi-chassis shunt interface
Context	**configure** router *string* ipsec multi-chassis-shunting-profile *string* peer *reference* multi-chassis-shunt-interface *reference*
Tree	multi-chassis-shunt-interface
Description	This command configures the shunting interface name for the peer.
Reference	**configure** router *string* ipsec multi-chassis-shunt-interface *string*
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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security-policy [id] *number*

Synopsis	Enter the **security-policy** list instance
Context	**configure** router *string* ipsec security-policy *number*
Tree	security-policy
Introduced	22.7.R1
Platforms	VSR

[**id**] *number*

Synopsis	IPsec security policy ID
Context	**configure** router *string* ipsec security-policy *number*
Tree	security-policy
Range	1 to 32768
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** router *string* ipsec security-policy *number* entry *number*
Tree	entry
Introduced	22.7.R1
Platforms	VSR

[**entry-id**] *number*

Synopsis	IPsec security policy entry ID
Context	**configure** router *string* ipsec security-policy *number* entry *number*
Tree	entry
Range	1 to 16
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

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local-ip

Synopsis	Enter the **local-ip** context
Context	**configure** router *string* ipsec security-policy *number* entry *number* local-ip
Tree	local-ip
Description	Commands in this context configure the local (from the VPN) IPv4 prefix/mask for the policy entry. The system evaluates the local IP as the source IP when traffic is examined in the direction of the flows from private to public and as the destination IP when traffic flows from public to private.
Introduced	22.7.R1
Platforms	VSR

address *string*

Synopsis	Destination IPv4 address of the aggregate route
Context	**configure** router *string* ipsec security-policy *number* entry *number* local-ip address *string*
Tree	address
Notes	The following elements are part of a choice: **address** or **any**.
Introduced	22.7.R1
Platforms	VSR

any *boolean*

Synopsis	Use any IP address
Context	**configure** router *string* ipsec security-policy *number* entry *number* local-ip any *boolean*
Tree	any
Default	false
Notes	The following elements are part of a choice: **address** or **any**.
Introduced	22.7.R1
Platforms	VSR

local-ipv6

Synopsis	Enter the **local-ipv6** context

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Context	**configure** router *string* ipsec security-policy *number* entry *number* local-ipv6
Tree	local-ipv6
Description	Commands in this context configure the local (from the VPN) IPv6 prefix/mask for the policy entry. The system evaluates the local IP as the source IP when traffic is examined in the direction of the flows from private to public and as the destination IP when traffic flows from public to private.
Introduced	22.7.R1
Platforms	VSR

address *string*

Synopsis	Destination IPv6 address of the aggregate route
Context	**configure** router *string* ipsec security-policy *number* entry *number* local-ipv6 address *string*
Tree	address
Notes	The following elements are part of a choice: **address** or **any**.
Introduced	22.7.R1
Platforms	VSR

any *boolean*

Synopsis	Use any IP address
Context	**configure** router *string* ipsec security-policy *number* entry *number* local-ipv6 any *boolean*
Tree	any
Default	false
Notes	The following elements are part of a choice: **address** or **any**.
Introduced	22.7.R1
Platforms	VSR

remote-ip

Synopsis	Enter the **remote-ip** context
Context	**configure** router *string* ipsec security-policy *number* entry *number* remote-ip
Tree	remote-ip

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Description	Commands in this context configure the remote (from the tunnel) IP prefix/mask for the policy entry. The system evaluates the remote IP as the source IP when traffic flows public to private and as the destination IP when traffic flows from private to public.
Introduced	22.7.R1
Platforms	VSR

address *string*

Synopsis	Destination IPv4 address of the aggregate route
Context	**configure** router *string* ipsec security-policy *number* entry *number* remote-ip address *string*
Tree	address
Notes	The following elements are part of a choice: **address** or **any**.
Introduced	22.7.R1
Platforms	VSR

any *boolean*

Synopsis	Use any IP address
Context	**configure** router *string* ipsec security-policy *number* entry *number* remote-ip any *boolean*
Tree	any
Default	false
Notes	The following elements are part of a choice: **address** or **any**.
Introduced	22.7.R1
Platforms	VSR

remote-ipv6

Synopsis	Enter the **remote-ipv6** context
Context	**configure** router *string* ipsec security-policy *number* entry *number* remote-ipv6
Tree	remote-ipv6
Description	Commands in this context configure the remote (from the tunnel) IPv6 prefix/mask for the policy entry. The system evaluates the remote IP as the source IP when traffic flows from public to private and as the destination IP when traffic flows from private to public.

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Introduced	22.7.R1
Platforms	VSR

address *string*

Synopsis	Destination IPv6 address of the aggregate route
Context	**configure** router *string* ipsec security-policy *number* entry *number* remote-ipv6 address *string*
Tree	address
Notes	The following elements are part of a choice: **address** or **any**.
Introduced	22.7.R1
Platforms	VSR

any *boolean*

Synopsis	Use any IP address
Context	**configure** router *string* ipsec security-policy *number* entry *number* remote-ipv6 any *boolean*
Tree	any
Default	false
Notes	The following elements are part of a choice: **address** or **any**.
Introduced	22.7.R1
Platforms	VSR

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** router *string* ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

neighbor-discovery

Synopsis	Enter the **neighbor-discovery** context
Context	**configure** router *string* ipv6 neighbor-discovery

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Tree	neighbor-discovery
Introduced	16.0.R1
Platforms	All

reachable-time *number*

Synopsis	Neighbor reachability detection timer
Context	**configure** router *string* ipv6 neighbor-discovery reachable-time *number*
Tree	reachable-time
Range	30 to 3600
Default	30
Introduced	16.0.R1
Platforms	All

stale-time *number*

Synopsis	Neighbor discovery cache entry stale time
Context	**configure** router *string* ipv6 neighbor-discovery stale-time *number*
Tree	stale-time
Range	60 to 65535
Default	14400
Introduced	16.0.R1
Platforms	All

router-advertisement

Synopsis	Enter the **router-advertisement** context
Context	**configure** router *string* ipv6 router-advertisement
Tree	router-advertisement
Introduced	16.0.R1
Platforms	All

dns-options

Synopsis	Enable the **dns-options** context

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Context	**configure** router *string* ipv6 router-advertisement dns-options
Tree	dns-options
Introduced	16.0.R1
Platforms	All

rdnss-lifetime *(keyword | number)*

Synopsis	Maximum time over which the RDNSS address is valid
Context	**configure** router *string* ipv6 router-advertisement dns-options rdnss-lifetime *(keyword | number)*
Tree	rdnss-lifetime
Description	This command specifies the maximum time that the RDNSS address is used for name resolution by the client.
Range	0 | 4 to 3600
Units	seconds
Options	infinite
Default	infinite
Introduced	16.0.R1
Platforms	All

server *string*

Synopsis	RAs that are forwarded to IPv6 DNS servers
Context	**configure** router *string* ipv6 router-advertisement dns-options server *string*
Tree	server
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

interface [ip-int-name] *string*

Synopsis	Enter the **interface** list instance
Context	**configure** router *string* ipv6 router-advertisement interface *string*
Tree	interface

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Introduced	16.0.R1
Platforms	All

[**ip-int-name**] *string*

Synopsis	Router interface name
Context	**configure** router *string* ipv6 router-advertisement interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of router advertisement
Context	**configure** router *string* ipv6 router-advertisement interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

current-hop-limit *number*

Synopsis	Hop limit advertised in RA messages
Context	**configure** router *string* ipv6 router-advertisement interface *string* current-hop-limit *number*
Tree	current-hop-limit
Range	0 to 255
Default	64
Introduced	16.0.R1
Platforms	All

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dns-options

Synopsis	Enable the **dns-options** context
Context	**configure** router *string* ipv6 router-advertisement interface *string* dns-options
Tree	dns-options
Introduced	16.0.R1
Platforms	All

include-rdnss *boolean*

Synopsis	Include the RDNSS option in the RA
Context	**configure** router *string* ipv6 router-advertisement interface *string* dns-options include-rdnss *boolean*
Tree	include-rdnss
Default	true
Introduced	16.0.R1
Platforms	All

rdnss-lifetime *(number | keyword)*

Synopsis	Maximum time over which the RDNSS address 25 is valid
Context	**configure** router *string* ipv6 router-advertisement interface *string* dns-options rdnss-lifetime *(number | keyword)*
Tree	rdnss-lifetime
Range	0 | 4 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	All

server *string*

Synopsis	RAs that are forwarded to IPv6 DNS servers
Context	**configure** router *string* ipv6 router-advertisement interface *string* dns-options server *string*
Tree	server

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Max. Instances	4
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

managed-configuration *boolean*

Synopsis	Set the managed address configuration flag
Context	**configure** router *string* ipv6 router-advertisement interface *string* managed-configuration *boolean*
Tree	managed-configuration
Default	false
Introduced	16.0.R1
Platforms	All

max-advertisement-interval *number*

Synopsis	Maximum time between sending advertisement messages
Context	**configure** router *string* ipv6 router-advertisement interface *string* max-advertisement-interval *number*
Tree	max-advertisement-interval
Range	4 to 1800
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	All

min-advertisement-interval *number*

Synopsis	Minimum interval between router advertisement messages
Context	**configure** router *string* ipv6 router-advertisement interface *string* min-advertisement-interval *number*
Tree	min-advertisement-interval
Range	3 to 1350
Units	seconds

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Default	200
Introduced	16.0.R1
Platforms	All

mtu *number*

Synopsis	MTU for sending packets to the router
Context	**configure** router *string* ipv6 router-advertisement interface *string* mtu *number*
Tree	mtu
Range	1280 to 9800
Introduced	16.0.R1
Platforms	All

other-stateful-configuration *boolean*

Synopsis	Set the other configuration flag
Context	**configure** router *string* ipv6 router-advertisement interface *string* other-stateful-configuration *boolean*
Tree	other-stateful-configuration
Default	false
Introduced	16.0.R1
Platforms	All

prefix [ipv6-prefix] *string*

Synopsis	Enter the **prefix** list instance
Context	**configure** router *string* ipv6 router-advertisement interface *string* prefix *string*
Tree	prefix
Max. Instances	254
Introduced	16.0.R1
Platforms	All

[**ipv6-prefix**] *string*

Synopsis	IPv6 address prefix

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Context	**configure** router *string* ipv6 router-advertisement interface *string* prefix *string*
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

autonomous *boolean*

Synopsis	Set the autonomous flag value
Context	**configure** router *string* ipv6 router-advertisement interface *string* prefix *string* autonomous *boolean*
Tree	autonomous
Default	true
Introduced	16.0.R1
Platforms	All

on-link *boolean*

Synopsis	Use prefix for on-link determination
Context	**configure** router *string* ipv6 router-advertisement interface *string* prefix *string* on-link *boolean*
Tree	on-link
Default	true
Introduced	16.0.R1
Platforms	All

preferred-lifetime *(keyword | number)*

Synopsis	Remaining time that the prefix remains preferred
Context	**configure** router *string* ipv6 router-advertisement interface *string* prefix *string* preferred-lifetime *(keyword | number)*
Tree	preferred-lifetime
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	604800

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Introduced	16.0.R1
Platforms	All

valid-lifetime *(keyword | number)*

Synopsis	Remaining time in which the prefix is still valid
Context	**configure** router *string* ipv6 router-advertisement interface *string* prefix *string* valid-lifetime *(keyword | number)*
Tree	valid-lifetime
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	2592000
Introduced	16.0.R1
Platforms	All

reachable-time *number*

Synopsis	Time the router is reachable by other hosts or nodes
Context	**configure** router *string* ipv6 router-advertisement interface *string* reachable-time *number*
Tree	reachable-time
Range	0 to 3600000
Units	milliseconds
Default	0
Introduced	16.0.R1
Platforms	All

retransmit-time *number*

Synopsis	Time to advertise neighbor advertisement messages
Context	**configure** router *string* ipv6 router-advertisement interface *string* retransmit-time *number*
Tree	retransmit-time
Range	0 to 1800000
Units	milliseconds

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Default	0
Introduced	16.0.R1
Platforms	All

router-lifetime *number*

Synopsis	Lifetime value in neighbor advertisement messages
Context	**configure** router *string* ipv6 router-advertisement interface *string* router-lifetime *number*
Tree	router-lifetime
Range	0 | 4 to 9000
Units	seconds
Default	1800
Introduced	16.0.R1
Platforms	All

use-virtual-mac *boolean*

Synopsis	Use VRRP virtual MAC address for advertisement message
Context	**configure** router *string* ipv6 router-advertisement interface *string* use-virtual-mac *boolean*
Tree	use-virtual-mac
Default	false
Introduced	16.0.R1
Platforms	All

ipv6-te-router-id

Synopsis	Enter the **ipv6-te-router-id** context
Context	**configure** router *string* ipv6-te-router-id
Tree	ipv6-te-router-id
Introduced	19.10.R1
Platforms	All

interface *reference*

Synopsis	Network IP interface name to obtain IP address

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Context	**configure** router *string* ipv6-te-router-id interface *reference*
Tree	interface
Description	This command specifies the interface name from which to obtain the IP address to use as the IPv6 TE Router ID. This router ID uniquely identifies the router to other routers as IPv6 TE capable in an IGP TE domain. IS-IS advertises this information using the IPv6 TE Router ID TLV.
Reference	**configure** router *string* interface *string*
Introduced	19.10.R1
Platforms	All

isa-service-chaining

Synopsis	Enable the **isa-service-chaining** context
Context	**configure** router *string* isa-service-chaining
Tree	isa-service-chaining
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group [id] *number*

Synopsis	Add a list entry for **nat-group**
Context	**configure** router *string* isa-service-chaining nat-group *number*
Tree	nat-group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	ISA NAT group/ISA WLAN GW group ID for the EVPN pools
Context	**configure** router *string* isa-service-chaining nat-group *number*
Tree	nat-group
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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vxlan-vtep-range

Synopsis	Enable the **vxlan-vtep-range** context
Context	**configure** router *string* isa-service-chaining vxlan-vtep-range
Tree	vxlan-vtep-range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	End address of the VXLAN VTEP range
Context	**configure** router *string* isa-service-chaining vxlan-vtep-range end *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	end
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Start address of the VXLAN VTEP range
Context	**configure** router *string* isa-service-chaining vxlan-vtep-range start *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	start
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isis [isis-instance] *number*

Synopsis	Enter the **isis** list instance
Context	**configure** router *string* isis *number*
Tree	isis
Introduced	16.0.R1
Platforms	All

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[**isis-instance**] *number*

Synopsis	Instance ID for the IS-IS instance
Context	**configure** router *string* isis *number*
Tree	isis
Range	0 to 127
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the IS-IS instance
Context	**configure** router *string* isis *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

advertise-passive-only *boolean*

Synopsis	Advertise prefixes that belong to passive interfaces
Context	**configure** router *string* isis *number* advertise-passive-only *boolean*
Tree	advertise-passive-only
Default	false
Introduced	16.0.R1
Platforms	All

advertise-router-capability *keyword*

Synopsis	Router capabilities advertisement to neighbors
Context	**configure** router *string* isis *number* advertise-router-capability *keyword*
Tree	advertise-router-capability
Options	area, as

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Introduced	16.0.R1
Platforms	All

advertise-tunnel-link *boolean*

Synopsis	Allow use of forwarding adjacency
Context	**configure** router *string* isis *number* advertise-tunnel-link *boolean*
Tree	advertise-tunnel-link
Default	false
Introduced	16.0.R1
Platforms	All

all-l1isis *string*

Synopsis	Destination MAC address for all L1 IS-IS routers
Context	**configure** router *string* isis *number* all-l1isis *string*
Tree	all-l1isis
Default	01:80:C2:00:00:14
Introduced	16.0.R1
Platforms	All

all-l2isis *string*

Synopsis	Destination MAC address for all L2 IS-IS routers
Context	**configure** router *string* isis *number* all-l2isis *string*
Tree	all-l2isis
Default	01:80:C2:00:00:15
Introduced	16.0.R1
Platforms	All

area-address *string*

Synopsis	Area address portion of the NSAP address
Context	**configure** router *string* isis *number* area-address *string*
Tree	area-address

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String Length	2 to 38
Max. Instances	3
Introduced	16.0.R1
Platforms	All

authentication-check *boolean*

Synopsis	Perform authentication check to reject mismatch PDUs
Context	**configure** router *string* isis *number* authentication-check *boolean*
Tree	authentication-check
Default	true
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Authentication key to verify PDUs sent from neighbors
Context	**configure** router *string* isis *number* authentication-key *string*
Tree	authentication-key
String Length	1 to 366
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	Keychain used to sign and authenticate
Context	**configure** router *string* isis *number* authentication-keychain *reference*
Tree	authentication-keychain
Reference	**configure** system security keychains keychain *string*
Introduced	16.0.R3
Platforms	All

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authentication-type *keyword*

Synopsis	Authentication type
Context	**configure** router *string* isis *number* authentication-type *keyword*
Tree	authentication-type
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

csnp-authentication *boolean*

Synopsis	Authenticate individual IS-IS packets of the CSNP type
Context	**configure** router *string* isis *number* csnp-authentication *boolean*
Tree	csnp-authentication
Default	true
Introduced	16.0.R1
Platforms	All

database-export

Synopsis	Enable the **database-export** context
Context	**configure** router *string* isis *number* database-export
Tree	database-export
Introduced	16.0.R1
Platforms	All

bgp-ls-identifier

Synopsis	Enable the **bgp-ls-identifier** context
Context	**configure** router *string* isis *number* database-export bgp-ls-identifier
Tree	bgp-ls-identifier
Introduced	16.0.R1
Platforms	All

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value *number*

Synopsis	BGP-LS identifier sent in the BGP-LS NLRI
Context	**configure** router *string* isis *number* database-export bgp-ls-identifier value *number*
Tree	value
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R1
Platforms	All

igp-identifier *number*

Synopsis	Unique ID of the IGP instance in the BGP-LS NLRI
Context	**configure** router *string* isis *number* database-export igp-identifier *number*
Tree	igp-identifier
Max. Range	0 to 18446744073709551615
Introduced	16.0.R1
Platforms	All

default-route-tag *number*

Synopsis	Route tag for the default route
Context	**configure** router *string* isis *number* default-route-tag *number*
Tree	default-route-tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

entropy-label

Synopsis	Enter the **entropy-label** context
Context	**configure** router *string* isis *number* entropy-label
Tree	entropy-label
Introduced	16.0.R1
Platforms	All

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override-tunnel-elc *boolean*

Synopsis	Enable override of received ELC advertisements
Context	**configure** router *string* isis *number* entropy-label override-tunnel-elc *boolean*
Tree	override-tunnel-elc
Default	false
Introduced	16.0.R1
Platforms	All

export-limit

Synopsis	Enable the **export-limit** context
Context	**configure** router *string* isis *number* export-limit
Tree	export-limit
Introduced	16.0.R1
Platforms	All

log-percent *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	**configure** router *string* isis *number* export-limit log-percent *number*
Tree	log-percent
Range	1 to 100
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	**configure** router *string* isis *number* export-limit number *number*
Tree	number
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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export-policy *reference*

Synopsis	Export policies that determine exported routes
Context	**configure** router *string* isis *number* export-policy *reference*
Tree	export-policy
Description	This command configures export routing policies for the routes exported from the routing table to IS-IS. If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied. If the **aggregate** command is also configured in the **configure router** context, the aggregation is applied before the export policy is applied. Routing policies are created in the **configure router policy-options** context.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

flexible-algorithms

Synopsis	Enter the **flexible-algorithms** context
Context	**configure** router *string* isis *number* flexible-algorithms
Tree	flexible-algorithms
Description	Commands in this context configure IS-IS parameters for flexible algorithm participation.
Introduced	20.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of flexible algorithm support
Context	**configure** router *string* isis *number* flexible-algorithms admin-state *keyword*
Tree	admin-state

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Description	This command specifies the administrative state of the support of flexible algorithm IGP LSDB extensions.
Options	enable, disable
Default	disable
Introduced	20.7.R1
Platforms	All

advertise-admin-group *keyword*

Synopsis	Administrative group TLV to advertise
Context	**configure** router *string* isis *number* flexible-algorithms advertise-admin-group *keyword*
Tree	advertise-admin-group
Description	This command configures the type of Administrative Group TLV the router advertises as an IGP link attribute. This command is configured for this IGP instance.
Options	prefer-ag, eag-only, ag-eag
Default	prefer-ag
Introduced	23.3.R1
Platforms	All

flex-algo [flex-algo-id] *number*

Synopsis	Enter the **flex-algo** list instance
Context	**configure** router *string* isis *number* flexible-algorithms flex-algo *number*
Tree	flex-algo
Description	Commands in this context configure an IS-IS flexible algorithm. When flexible algorithm is configured in an IS-IS instance, the IS-IS instance is configured for all levels (Level 1 and Level 2).
Max. Instances	7
Introduced	20.7.R1
Platforms	All

[**flex-algo-id**] *number*

Synopsis	Flexible algorithm ID
Context	**configure** router *string* isis *number* flexible-algorithms flex-algo *number*

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Tree	flex-algo
Range	128 to 255
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

advertise *reference*

Synopsis	Flexible Algorithm Definition advertisement
Context	**configure** router *string* isis *number* flexible-algorithms flex-algo *number* advertise *reference*
Tree	advertise
Description	This command enables the advertisement of a locally configured Flexible Algorithm Definition (FAD). The winning FAD that a router uses must be consistent with the winning FAD on all other routers, which avoids routing loops and traffic blackholing. The winning FAD is selected using a tiebreaker algorithm that first selects the highest advertised FAD priority followed by the highest system ID.
Reference	**configure** routing-options flexible-algorithm-definitions flex-algo *string*
Introduced	20.7.R1
Platforms	All

loopfree-alternate

Synopsis	Enable the **loopfree-alternate** context
Context	**configure** router *string* isis *number* flexible-algorithms flex-algo *number* loopfree-alternate
Tree	loopfree-alternate
Introduced	20.7.R1
Platforms	All

micro-loop-avoidance

Synopsis	Enable the **micro-loop-avoidance** context
Context	**configure** router *string* isis *number* flexible-algorithms flex-algo *number* micro-loop-avoidance
Tree	micro-loop-avoidance

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Introduced	21.7.R1
Platforms	All

participate *boolean*

Synopsis	Allow participation in the Flexible Algorithm
Context	**configure** router *string* isis *number* flexible-algorithms flex-algo *number* participate *boolean*
Tree	participate
Description	When configured to **true**, the router advertises the capability to participate in a flexible algorithm within the IS-IS Router Capability TLV. A router only advertises participation when the winning FAD can be supported, which includes segment routing support. When configured to **false**, flexible algorithm participation is not enabled.
Default	false
Introduced	20.7.R1
Platforms	All

graceful-restart

Synopsis	Enable the **graceful-restart** context
Context	**configure** router *string* isis *number* graceful-restart
Tree	graceful-restart
Introduced	16.0.R1
Platforms	All

helper-mode *boolean*

Synopsis	Enable the Graceful Restart helper for IS-IS
Context	**configure** router *string* isis *number* graceful-restart helper-mode *boolean*
Tree	helper-mode
Default	true
Introduced	16.0.R1
Platforms	All

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hello-authentication *boolean*

Synopsis	Authenticate Hello type IS-IS protocol packets
Context	**configure** router *string* isis *number* hello-authentication *boolean*
Tree	hello-authentication
Default	true
Introduced	16.0.R1
Platforms	All

hello-padding *keyword*

Synopsis	IS-IS Hello message padding
Context	**configure** router *string* isis *number* hello-padding *keyword*
Tree	hello-padding
Options	adaptive, loose, strict, none
Introduced	16.0.R1
Platforms	All

ignore-attached-bit *boolean*

Synopsis	Ignore attached bit on received Layer 1 LSPs
Context	**configure** router *string* isis *number* ignore-attached-bit *boolean*
Tree	ignore-attached-bit
Default	false
Introduced	16.0.R1
Platforms	All

ignore-lsp-errors *boolean*

Synopsis	Ignore LSP packets with errors
Context	**configure** router *string* isis *number* ignore-lsp-errors *boolean*
Tree	ignore-lsp-errors
Default	false
Introduced	16.0.R1
Platforms	All

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ignore-narrow-metric *boolean*

Synopsis	Ignore links with narrow metrics
Context	**configure** router *string* isis *number* ignore-narrow-metric *boolean*
Tree	ignore-narrow-metric
Default	false
Introduced	16.0.R1
Platforms	All

igp-shortcut

Synopsis	Enter the **igp-shortcut** context
Context	**configure** router *string* isis *number* igp-shortcut
Tree	igp-shortcut
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of RSVP-TE or SR-TE shortcut
Context	**configure** router *string* isis *number* igp-shortcut admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

allow-sr-over-srte *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable SR over SR-TE LSPs
Context	**configure** router *string* isis *number* igp-shortcut allow-sr-over-srte *boolean*
Tree	allow-sr-over-srte

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Description	When configured to **true**, the router only allows SR-MPLS SRv4 and SRv6 IGP shortcuts to use SR-TE LSPs with **allow-sr-over-srte** explicitly enabled with an adjacency SID as top SID in the SR-TE LSP. IPv4 and IPv6 addresses can use all available SR-TE LSPs as IGP shortcuts regardless of the explicit **allow-sr-over-srte** configuration. Under ECMP, when this command is configured to **true**, preference is given to the SR-TE LSPs with **allow-sr-over-srte** explicitly configured over the LSPs that do not have **allow-sr-over-srte** configured.
Default	false
Introduced	23.3.R1
Platforms	All

tunnel-next-hop

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **tunnel-next-hop** context
Context	**configure** router *string* isis *number* igp-shortcut tunnel-next-hop
Tree	tunnel-next-hop
Introduced	16.0.R1
Platforms	All

family [family-type] *keyword*

Synopsis	Enter the **family** list instance
Context	**configure** router *string* isis *number* igp-shortcut tunnel-next-hop family *keyword*
Tree	family
Introduced	16.0.R1
Platforms	All

[**family-type**] *keyword*

Synopsis	Address family type for tunnel next hop
Context	**configure** router *string* isis *number* igp-shortcut tunnel-next-hop family *keyword*
Tree	family
Options	ipv4, ipv6, srv4, srv6

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

resolution *keyword*

Synopsis	Resolution mode for IGP shortcut tunnels
Context	**configure** router *string* isis *number* igp-shortcut tunnel-next-hop family *keyword* resolution *keyword*
Tree	resolution
Options	none, filter, any, match-family-ip
Default	none
Introduced	16.0.R1
Platforms	All

resolution-filter

Synopsis	Enter the **resolution-filter** context
Context	**configure** router *string* isis *number* igp-shortcut tunnel-next-hop family *keyword* resolution-filter
Tree	resolution-filter
Introduced	16.0.R1
Platforms	All

rsvp *boolean*

Synopsis	Use RSVP tunneling for next-hop resolution
Context	**configure** router *string* isis *number* igp-shortcut tunnel-next-hop family *keyword* resolution-filter rsvp *boolean*
Tree	rsvp
Default	false
Introduced	16.0.R1
Platforms	All

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sr-te *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	**configure** router *string* isis *number* igp-shortcut tunnel-next-hop family *keyword* resolution-filter sr-te *boolean*
Tree	sr-te
Default	false
Introduced	16.0.R1
Platforms	All

iid-tlv *boolean*

Synopsis	Use IID TLVs with IS-IS multi-instance
Context	**configure** router *string* isis *number* iid-tlv *boolean*
Tree	iid-tlv
Default	false
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy names for routes from IGP to route table
Context	**configure** router *string* isis *number* import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

interface [interface-name] *string*

Synopsis	Enter the **interface** list instance
Context	**configure** router *string* isis *number* interface *string*
Tree	interface

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Introduced	16.0.R1
Platforms	All

[**interface-name**] *string*

Synopsis	Router interface name
Context	**configure** router *string* isis *number* interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adjacency-set [id] *reference*

Synopsis	Add a list entry for **adjacency-set**
Context	**configure** router *string* isis *number* interface *string* adjacency-set *reference*
Tree	adjacency-set
Introduced	16.0.R1
Platforms	All

[**id**] *reference*

Synopsis	Adjacency set ID
Context	**configure** router *string* isis *number* interface *string* adjacency-set *reference*
Tree	adjacency-set
Reference	**configure** router *string* isis *number* segment-routing adjacency-set *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the IS-IS interface
Context	**configure** router *string* isis *number* interface *string* admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enter the **bfd-liveness** context
Context	**configure** router *string* isis *number* interface *string* bfd-liveness
Tree	bfd-liveness
Description	Commands in this context enable the use of bidirectional forwarding (BFD) to control IPv4 and IPv6 adjacencies. Enabling BFD on an IPv4 or IPv6 protocol interface ties the protocol interface state to the BFD session state between the local and remote nodes. BFD must be enabled on the applicable IP interface.
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enable the **ipv4** context
Context	**configure** router *string* isis *number* interface *string* bfd-liveness ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

include-bfd-tlv *boolean*

Synopsis	Enable IS-IS BFD TLVs on the interface
Context	**configure** router *string* isis *number* interface *string* bfd-liveness ipv4 include-bfd-tlv *boolean*
Tree	include-bfd-tlv
Default	false
Introduced	16.0.R1
Platforms	All

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ipv6

Synopsis	Enable the **ipv6** context
Context	**configure** router *string* isis *number* interface *string* bfd-liveness ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

include-bfd-tlv *boolean*

Synopsis	Enable IS-IS BFD TLVs on the interface
Context	**configure** router *string* isis *number* interface *string* bfd-liveness ipv6 include-bfd-tlv *boolean*
Tree	include-bfd-tlv
Default	false
Introduced	16.0.R1
Platforms	All

csnp-interval *number*

Synopsis	Time interval between successive CSN PDUs sent
Context	**configure** router *string* isis *number* interface *string* csnp-interval *number*
Tree	csnp-interval
Range	1 to 65535
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

default-instance *boolean*

Synopsis	Allow non-MI capable router to establish an adjacency
Context	**configure** router *string* isis *number* interface *string* default-instance *boolean*
Tree	default-instance
Default	false
Introduced	16.0.R1

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Platforms	All

flex-algo [flex-algo-id] *number*

Synopsis	Enter the **flex-algo** list instance
Context	**configure** router *string* isis *number* interface *string* flex-algo *number*
Tree	flex-algo
Max. Instances	7
Introduced	20.7.R1
Platforms	All

[**flex-algo-id**] *number*

Synopsis	Flexible algorithm ID
Context	**configure** router *string* isis *number* interface *string* flex-algo *number*
Tree	flex-algo
Range	128 to 255
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

ipv4-node-sid

Synopsis	Enable the **ipv4-node-sid** context
Context	**configure** router *string* isis *number* interface *string* flex-algo *number* ipv4-node-sid
Tree	ipv4-node-sid
Introduced	20.7.R1
Platforms	All

index *number*

Synopsis	Node SID index for this interface
Context	**configure** router *string* isis *number* interface *string* flex-algo *number* ipv4-node-sid index *number*
Tree	index

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Range	0 to 4294967295
Notes	The following elements are part of a choice: **index** or **label**.
Introduced	20.7.R1
Platforms	All

label *number*

Synopsis	Label value for the node SID
Context	**configure** router *string* isis *number* interface *string* flex-algo *number* ipv4-node-sid label *number*
Tree	label
Range	1 to 4294967295
Notes	The following elements are part of a choice: **index** or **label**.
Introduced	20.7.R1
Platforms	All

ipv6-node-sid

Synopsis	Enable the **ipv6-node-sid** context
Context	**configure** router *string* isis *number* interface *string* flex-algo *number* ipv6-node-sid
Tree	ipv6-node-sid
Introduced	20.7.R1
Platforms	All

index *number*

Synopsis	Node SID index for this interface
Context	**configure** router *string* isis *number* interface *string* flex-algo *number* ipv6-node-sid index *number*
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: **index** or **label**.
Introduced	20.7.R1
Platforms	All

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label *number*

Synopsis	Label value for the node SID
Context	**configure** router *string* isis *number* interface *string* flex-algo *number* ipv6-node-sid label *number*
Tree	label
Range	1 to 4294967295
Notes	The following elements are part of a choice: **index** or **label**.
Introduced	20.7.R1
Platforms	All

hello-authentication *boolean*

Synopsis	Authenticate Hello type IS-IS protocol packets
Context	**configure** router *string* isis *number* interface *string* hello-authentication *boolean*
Tree	hello-authentication
Default	true
Introduced	16.0.R1
Platforms	All

hello-authentication-key *string*

Synopsis	Authentication key or hash string for Hello PDUs
Context	**configure** router *string* isis *number* interface *string* hello-authentication-key *string*
Tree	hello-authentication-key
String Length	1 to 366
Introduced	16.0.R1
Platforms	All

hello-authentication-keychain *reference*

Synopsis	Authentication keychain to use for the session
Context	**configure** router *string* isis *number* interface *string* hello-authentication-keychain *reference*
Tree	hello-authentication-keychain
Reference	**configure** system security keychains keychain *string*

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Introduced	16.0.R3
Platforms	All

hello-authentication-type *keyword*

Synopsis	Hello authentication type
Context	**configure** router *string* isis *number* interface *string* hello-authentication-type *keyword*
Tree	hello-authentication-type
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

hello-padding *keyword*

Synopsis	Padding on IS-IS Hello packets
Context	**configure** router *string* isis *number* interface *string* hello-padding *keyword*
Tree	hello-padding
Options	adaptive, loose, strict, none
Introduced	16.0.R1
Platforms	All

interface-type *keyword*

Synopsis	Interface type to broadcast, point-to-point, or to be default
Context	**configure** router *string* isis *number* interface *string* interface-type *keyword*
Tree	interface-type
Options	point-to-point, broadcast
Introduced	16.0.R1
Platforms	All

ipv4-adjacency-sid

Synopsis	Enable the **ipv4-adjacency-sid** context
Context	**configure** router *string* isis *number* interface *string* ipv4-adjacency-sid
Tree	ipv4-adjacency-sid

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Introduced	16.0.R1
Platforms	All

label *number*

Synopsis	Adjacency SID label
Context	**configure** router *string* isis *number* interface *string* ipv4-adjacency-sid label *number*
Tree	label
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

ipv4-multicast *boolean*

Synopsis	Enable IPv4 multicast routing for the interface
Context	**configure** router *string* isis *number* interface *string* ipv4-multicast *boolean*
Tree	ipv4-multicast
Default	true
Introduced	16.0.R1
Platforms	All

ipv4-node-sid

Synopsis	Enable the **ipv4-node-sid** context
Context	**configure** router *string* isis *number* interface *string* ipv4-node-sid
Tree	ipv4-node-sid
Introduced	16.0.R1
Platforms	All

clear-n-flag *boolean*

Synopsis	Clear the node-sid flag (N-flag)
Context	**configure** router *string* isis *number* interface *string* ipv4-node-sid clear-n-flag *boolean*
Tree	clear-n-flag
Default	false

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Introduced	16.0.R1
Platforms	All

index *number*

Synopsis	Node SID index for this interface
Context	**configure** router *string* isis *number* interface *string* ipv4-node-sid index *number*
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: **index** or **label**.
Introduced	16.0.R1
Platforms	All

label *number*

Synopsis	Label value for the node SID
Context	**configure** router *string* isis *number* interface *string* ipv4-node-sid label *number*
Tree	label
Range	1 to 4294967295
Notes	The following elements are part of a choice: **index** or **label**.
Introduced	16.0.R1
Platforms	All

ipv6-adjacency-sid

Synopsis	Enable the **ipv6-adjacency-sid** context
Context	**configure** router *string* isis *number* interface *string* ipv6-adjacency-sid
Tree	ipv6-adjacency-sid
Introduced	16.0.R1
Platforms	All

label *number*

Synopsis	Adjacency SID label
Context	**configure** router *string* isis *number* interface *string* ipv6-adjacency-sid label *number*

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Tree	label
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

ipv6-multicast *boolean*

Synopsis	Enable IPv6 multicast routing for the interface
Context	**configure** router *string* isis *number* interface *string* ipv6-multicast *boolean*
Tree	ipv6-multicast
Default	true
Introduced	16.0.R1
Platforms	All

ipv6-node-sid

Synopsis	Enable the **ipv6-node-sid** context
Context	**configure** router *string* isis *number* interface *string* ipv6-node-sid
Tree	ipv6-node-sid
Introduced	16.0.R1
Platforms	All

clear-n-flag *boolean*

Synopsis	Clear the node-sid flag (N-flag)
Context	**configure** router *string* isis *number* interface *string* ipv6-node-sid clear-n-flag *boolean*
Tree	clear-n-flag
Default	false
Introduced	16.0.R1
Platforms	All

index *number*

Synopsis	Node SID index for this interface
Context	**configure** router *string* isis *number* interface *string* ipv6-node-sid index *number*

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Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: **index** or **label**.
Introduced	16.0.R1
Platforms	All

label *number*

Synopsis	Label value for the node SID
Context	**configure** router *string* isis *number* interface *string* ipv6-node-sid label *number*
Tree	label
Range	1 to 4294967295
Notes	The following elements are part of a choice: **index** or **label**.
Introduced	16.0.R1
Platforms	All

ipv6-unicast *boolean*

Synopsis	Enable IPv6 unicast routing for the interface
Context	**configure** router *string* isis *number* interface *string* ipv6-unicast *boolean*
Tree	ipv6-unicast
Default	true
Introduced	16.0.R1
Platforms	All

level [level-number] *keyword*

Synopsis	Enter the **level** list instance
Context	**configure** router *string* isis *number* interface *string* level *keyword*
Tree	level
Max. Instances	2
Introduced	16.0.R1
Platforms	All

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[**level-number**] *keyword*

Synopsis	ISIS protocol level number
Context	**configure** router *string* isis *number* interface *string* level *keyword*
Tree	level
Options	1, 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

hello-authentication-key *string*

Synopsis	Authentication key for Hello PDUs
Context	**configure** router *string* isis *number* interface *string* level *keyword* hello-authentication-key *string*
Tree	hello-authentication-key
Description	This command configures the authentication key (password) for Hello PDUs. Both the Hello authentication key and the Hello authentication type on a segment must match. If both IS-IS and Hello authentication are configured, Hello messages are validated using Hello authentication. If only IS-IS authentication is configured, it is used to authenticate all IS-IS (including Hello) protocol PDUs.
String Length	1 to 366
Introduced	16.0.R1
Platforms	All

hello-authentication-keychain *reference*

Synopsis	Authentication keychain to use for the session
Context	**configure** router *string* isis *number* interface *string* level *keyword* hello-authentication-keychain *reference*
Tree	hello-authentication-keychain
Reference	**configure** system security keychains keychain *string*
Introduced	16.0.R3
Platforms	All

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hello-authentication-type *keyword*

Synopsis	Hello authentication enabled on the context
Context	**configure** router *string* isis *number* interface *string* level *keyword* hello-authentication-type *keyword*
Tree	hello-authentication-type
Description	This command enables Hello authentication at the level context. Both the Hello authentication key and the Hello authentication type on a segment must match. The Hello **authentication-key** statement must also be included.
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

hello-interval *number*

Synopsis	Interval between Hello messages sent on this level
Context	**configure** router *string* isis *number* interface *string* level *keyword* hello-interval *number*
Tree	hello-interval
Range	1 to 20000
Units	seconds
Default	9
Introduced	16.0.R1
Platforms	All

hello-multiplier *number*

Synopsis	Hello messages missed from neighbor before router declares adjacency down
Context	**configure** router *string* isis *number* interface *string* level *keyword* hello-multiplier *number*
Tree	hello-multiplier
Range	2 to 100
Default	3
Introduced	16.0.R1
Platforms	All

hello-padding *keyword*

Synopsis	Padding on IS-IS Hello packets

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Context	**configure** router *string* isis *number* interface *string* level *keyword* hello-padding *keyword*
Tree	hello-padding
Options	adaptive, loose, strict, none
Introduced	16.0.R1
Platforms	All

ipv4-multicast-metric *number*

Synopsis	IS-IS interface metric applied for IPv4 multicast
Context	**configure** router *string* isis *number* interface *string* level *keyword* ipv4-multicast-metric *number*
Tree	ipv4-multicast-metric
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

ipv6-multicast-metric *number*

Synopsis	IS-IS interface metric applied for IPv6 multicast
Context	**configure** router *string* isis *number* interface *string* level *keyword* ipv6-multicast-metric *number*
Tree	ipv6-multicast-metric
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

ipv6-unicast-metric *number*

Synopsis	IS-IS interface metric applied for IPv6 unicast
Context	**configure** router *string* isis *number* interface *string* level *keyword* ipv6-unicast-metric *number*
Tree	ipv6-unicast-metric
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

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metric *number*

Synopsis	IS-IS interface metric applied for IPv4 unicast
Context	**configure** router *string* isis *number* interface *string* level *keyword* metric *number*
Tree	metric
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

passive *boolean*

Synopsis	Passive interface
Context	**configure** router *string* isis *number* interface *string* level *keyword* passive *boolean*
Tree	passive
Default	false
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Router to become the designated router on a multi-access network
Context	**configure** router *string* isis *number* interface *string* level *keyword* priority *number*
Tree	priority
Range	0 to 127
Default	64
Introduced	16.0.R1
Platforms	All

sd-offset *number*

Synopsis	Value of the signal degrade offset
Context	**configure** router *string* isis *number* interface *string* level *keyword* sd-offset *number*
Tree	sd-offset
Range	1 to 16777215
Introduced	16.0.R1

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Platforms	All

sf-offset *number*

Synopsis	Value of the signal fail offset
Context	**configure** router *string* isis *number* interface *string* level *keyword* sf-offset *number*
Tree	sf-offset
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

level-capability *keyword*

Synopsis	IS-IS levels for this interface
Context	**configure** router *string* isis *number* interface *string* level-capability *keyword*
Tree	level-capability
Options	1, 2, 1/2
Default	1/2
Introduced	16.0.R1
Platforms	All

load-balancing-weight *number*

Synopsis	Load balancing weight
Context	**configure** router *string* isis *number* interface *string* load-balancing-weight *number*
Tree	load-balancing-weight
Max. Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

loopfree-alternate

Synopsis	Enter the **loopfree-alternate** context
Context	**configure** router *string* isis *number* interface *string* loopfree-alternate
Tree	loopfree-alternate

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Introduced	16.0.R3
Platforms	All

exclude *boolean*

Synopsis	Enable/disable Loopfree Alternative at interface level.
Context	**configure** router *string* isis *number* interface *string* loopfree-alternate exclude *boolean*
Tree	exclude
Default	false
Introduced	16.0.R3
Platforms	All

policy-map

Synopsis	Enable the **policy-map** context
Context	**configure** router *string* isis *number* interface *string* loopfree-alternate policy-map
Tree	policy-map
Introduced	16.0.R3
Platforms	All

route-nh-template *reference*

Synopsis	Route next hop policy template name
Context	**configure** router *string* isis *number* interface *string* loopfree-alternate policy-map route-nh-template *reference*
Tree	route-nh-template
Reference	**configure** routing-options route-next-hop-policy template *string*
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

lsp-pacing-interval *number*

Synopsis	Interval for sending LSPs from interface
Context	**configure** router *string* isis *number* interface *string* lsp-pacing-interval *number*

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Tree	lsp-pacing-interval
Range	0 to 65535
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

mesh-group

Synopsis	Enable the **mesh-group** context
Context	**configure** router *string* isis *number* interface *string* mesh-group
Tree	mesh-group
Introduced	16.0.R1
Platforms	All

blocked

Synopsis	Prevent the interface from flooding LSPs
Context	**configure** router *string* isis *number* interface *string* mesh-group blocked
Tree	blocked
Notes	The following elements are part of a choice: **blocked** or **value**.
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Mesh group for the interface
Context	**configure** router *string* isis *number* interface *string* mesh-group value *number*
Tree	value
Range	1 to 2000000000
Notes	The following elements are part of a choice: **blocked** or **value**.
Introduced	16.0.R1
Platforms	All

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passive *boolean*

Synopsis	Passive interface
Context	**configure** router *string* isis *number* interface *string* passive *boolean*
Tree	passive
Default	false
Introduced	16.0.R1
Platforms	All

retransmit-interval *number*

Synopsis	Minimum time between LSP PDU retransmissions on point-to-point interface
Context	**configure** router *string* isis *number* interface *string* retransmit-interval *number*
Tree	retransmit-interval
Range	1 to 65535
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

sid-protection *boolean*

Synopsis	Allow adjacency SID protection by LFA and remote LFA
Context	**configure** router *string* isis *number* interface *string* sid-protection *boolean*
Tree	sid-protection
Default	true
Introduced	16.0.R1
Platforms	All

tag *number*

Synopsis	Route tag for IP address of interface
Context	**configure** router *string* isis *number* interface *string* tag *number*
Tree	tag
Range	1 to 4294967295
Introduced	16.0.R1

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Platforms	All

ipv4-multicast-routing *keyword*

Synopsis	IS-IS topology for IPv4 multicast routing
Context	**configure** router *string* isis *number* ipv4-multicast-routing *keyword*
Tree	ipv4-multicast-routing
Options	false, native, mt
Default	native
Introduced	16.0.R1
Platforms	All

ipv4-routing *boolean*

Synopsis	Support IPv4 routing for IS-IS instance
Context	**configure** router *string* isis *number* ipv4-routing *boolean*
Tree	ipv4-routing
Default	true
Introduced	16.0.R1
Platforms	All

ipv6-multicast-routing *keyword*

Synopsis	Topology to populate the IPv6 multicast RTM
Context	**configure** router *string* isis *number* ipv6-multicast-routing *keyword*
Tree	ipv6-multicast-routing
Options	false, native, mt
Introduced	16.0.R1
Platforms	All

ipv6-routing *keyword*

Synopsis	Routing topology for IPv6
Context	**configure** router *string* isis *number* ipv6-routing *keyword*
Tree	ipv6-routing

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Options	false, native, mt
Default	false
Introduced	16.0.R1
Platforms	All

ldp-over-rsvp *boolean*

Synopsis	Allow LDP over RSVP processing
Context	**configure** router *string* isis *number* ldp-over-rsvp *boolean*
Tree	ldp-over-rsvp
Default	false
Introduced	16.0.R1
Platforms	All

ldp-sync *boolean*

Synopsis	Use IGP-LDP synchronization feature on all interfaces participating in IS-IS routing protocol
Context	**configure** router *string* isis *number* ldp-sync *boolean*
Tree	ldp-sync
Default	true
Introduced	16.0.R1
Platforms	All

level [level-number] *keyword*

Synopsis	Enter the **level** list instance
Context	**configure** router *string* isis *number* level *keyword*
Tree	level
Max. Instances	2
Introduced	16.0.R1
Platforms	All

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[**level-number**] *keyword*

Synopsis	ISIS protocol level number
Context	**configure** router *string* isis *number* level *keyword*
Tree	level
Options	1, 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	**configure** router *string* isis *number* level *keyword* advertise-router-capability *boolean*
Tree	advertise-router-capability
Default	true
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Authentication key to verify PDUs sent on the interface
Context	**configure** router *string* isis *number* level *keyword* authentication-key *string*
Tree	authentication-key
Description	This command sets the authentication key used to verify PDUs sent by neighboring routers on the interface. Neighboring routers use passwords to authenticate PDUs sent from an interface. For authentication to work, both the authentication key and the authentication type on a segment must match. The **authentication-type** command must also be included.
String Length	1 to 366
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	Keychain used to sign and authenticate
Context	**configure** router *string* isis *number* level *keyword* authentication-keychain *reference*

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Tree	authentication-keychain
Reference	**configure** system security keychains keychain *string*
Introduced	16.0.R3
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type to be used
Context	**configure** router *string* isis *number* level *keyword* authentication-type *keyword*
Tree	authentication-type
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

bier

Synopsis	Enter the **bier** context
Context	**configure** router *string* isis *number* level *keyword* bier
Tree	bier
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BIER
Context	**configure** router *string* isis *number* level *keyword* bier admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

template *reference*

Synopsis	BIER template name

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Context	**configure** router *string* isis *number* level *keyword* bier template *reference*
Tree	template
Reference	**configure** router *string* bier template *string*
Introduced	16.0.R4
Platforms	All

csnp-authentication *boolean*

Synopsis	Enable authentication of CSNP IS-IS protocol packets
Context	**configure** router *string* isis *number* level *keyword* csnp-authentication *boolean*
Tree	csnp-authentication
Default	true
Introduced	16.0.R1
Platforms	All

database-export-exclude *boolean*

Synopsis	Exclude IGP link-state information of a specific IS-IS level from being exported into extended TE-DB
Context	**configure** router *string* isis *number* level *keyword* database-export-exclude *boolean*
Tree	database-export-exclude
Default	false
Introduced	16.0.R1
Platforms	All

default-ipv4-multicast-metric *number*

Synopsis	Default metric for IPv4 unicast
Context	**configure** router *string* isis *number* level *keyword* default-ipv4-multicast-metric *number*
Tree	default-ipv4-multicast-metric
Range	1 to 16777215
Default	10
Introduced	16.0.R1
Platforms	All

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default-ipv6-multicast-metric *number*

Synopsis	Default metric for IPv6 unicast
Context	**configure** router *string* isis *number* level *keyword* default-ipv6-multicast-metric *number*
Tree	default-ipv6-multicast-metric
Range	1 to 16777215
Default	10
Introduced	16.0.R1
Platforms	All

default-ipv6-unicast-metric *number*

Synopsis	Default metric for IPv6 unicast
Context	**configure** router *string* isis *number* level *keyword* default-ipv6-unicast-metric *number*
Tree	default-ipv6-unicast-metric
Range	1 to 16777215
Default	10
Introduced	16.0.R1
Platforms	All

default-metric *number*

Synopsis	Default metric
Context	**configure** router *string* isis *number* level *keyword* default-metric *number*
Tree	default-metric
Range	1 to 16777215
Default	10
Introduced	16.0.R1
Platforms	All

external-preference *number*

Synopsis	External route preference for IS-IS level
Context	**configure** router *string* isis *number* level *keyword* external-preference *number*
Tree	external-preference
Range	1 to 255

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Introduced	16.0.R1
Platforms	All

hello-authentication *boolean*

Synopsis	Authenticate Hello type IS-IS protocol packets
Context	**configure** router *string* isis *number* level *keyword* hello-authentication *boolean*
Tree	hello-authentication
Default	true
Introduced	16.0.R1
Platforms	All

hello-padding *keyword*

Synopsis	Padding on IS-IS Hello packets
Context	**configure** router *string* isis *number* level *keyword* hello-padding *keyword*
Tree	hello-padding
Options	adaptive, loose, strict, none
Introduced	16.0.R1
Platforms	All

loopfree-alternate-exclude *boolean*

Synopsis	Exclude interface participating in specific IS-IS level in SPF LFA computation
Context	**configure** router *string* isis *number* level *keyword* loopfree-alternate-exclude *boolean*
Tree	loopfree-alternate-exclude
Default	false
Introduced	16.0.R1
Platforms	All

lsp-mtu-size *number*

WARNING:
Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

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Synopsis	LSP MTU size
Context	**configure** router *string* isis *number* level *keyword* lsp-mtu-size *number*
Tree	lsp-mtu-size
Range	490 to 9778
Units	bytes
Default	1492
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	External route preference at level
Context	**configure** router *string* isis *number* level *keyword* preference *number*
Tree	preference
Range	1 to 255
Introduced	16.0.R1
Platforms	All

psnp-authentication *boolean*

Synopsis	Enable authentication on PSNP IS-IS protocol packets
Context	**configure** router *string* isis *number* level *keyword* psnp-authentication *boolean*
Tree	psnp-authentication
Default	true
Introduced	16.0.R1
Platforms	All

wide-metrics-only *boolean*

Synopsis	Use wide metrics advertisements in the LSPs
Context	**configure** router *string* isis *number* level *keyword* wide-metrics-only *boolean*
Tree	wide-metrics-only
Default	false
Introduced	16.0.R1
Platforms	All

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level-capability *keyword*

Synopsis	Routing level for instance
Context	**configure** router *string* isis *number* level-capability *keyword*
Tree	level-capability
Options	1, 2, 1/2
Default	1/2
Introduced	16.0.R1
Platforms	All

link-group [link-group-name] *string*

Synopsis	Enter the **link-group** list instance
Context	**configure** router *string* isis *number* link-group *string*
Tree	link-group
Introduced	16.0.R1
Platforms	All

[**link-group-name**] *string*

Synopsis	Link group name for the IS-IS protocol
Context	**configure** router *string* isis *number* link-group *string*
Tree	link-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** router *string* isis *number* link-group *string* description *string*
Tree	description
String Length	1 to 255
Introduced	16.0.R1

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Platforms	All

level [level-number] *keyword*

Synopsis	Enter the **level** list instance
Context	**configure** router *string* isis *number* link-group *string* level *keyword*
Tree	level
Max. Instances	2
Introduced	16.0.R1
Platforms	All

[**level-number**] *keyword*

Synopsis	ISIS protocol level number
Context	**configure** router *string* isis *number* link-group *string* level *keyword*
Tree	level
Options	1, 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

ipv4-multicast-metric-offset *number*

Synopsis	Offset value for the IPv4 multicast address family
Context	**configure** router *string* isis *number* link-group *string* level *keyword* ipv4-multicast-metric-offset *number*
Tree	ipv4-multicast-metric-offset
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

ipv4-unicast-metric-offset *number*

Synopsis	Offset value for the IPv4 unicast address family

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Context	**configure** router *string* isis *number* link-group *string* level *keyword* ipv4-unicast-metric-offset *number*
Tree	ipv4-unicast-metric-offset
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

ipv6-multicast-metric-offset *number*

Synopsis	Offset value for the IPv6 multicast address family
Context	**configure** router *string* isis *number* link-group *string* level *keyword* ipv6-multicast-metric-offset *number*
Tree	ipv6-multicast-metric-offset
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

ipv6-unicast-metric-offset *number*

Synopsis	Offset value for the IPv6 unicast address family
Context	**configure** router *string* isis *number* link-group *string* level *keyword* ipv6-unicast-metric-offset *number*
Tree	ipv6-unicast-metric-offset
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

member [interface-name] *reference*

Synopsis	Add a list entry for **member**
Context	**configure** router *string* isis *number* link-group *string* level *keyword* member *reference*
Tree	member
Max. Instances	8
Introduced	16.0.R1
Platforms	All

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[**interface-name**] *reference*

Synopsis	Router interface name for this link group
Context	**configure** router *string* isis *number* link-group *string* level *keyword* member *reference*
Tree	member
Reference	**configure** router *string* isis *number* interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

oper-members *number*

Synopsis	Minimum number of operational links
Context	**configure** router *string* isis *number* link-group *string* level *keyword* oper-members *number*
Tree	oper-members
Range	1 to 8
Introduced	16.0.R1
Platforms	All

revert-members *number*

Synopsis	Minimum number of operational links to return link group to normal state and remove offsets
Context	**configure** router *string* isis *number* link-group *string* level *keyword* revert-members *number*
Tree	revert-members
Range	1 to 8
Introduced	16.0.R1
Platforms	All

loopfree-alternate

Synopsis	Enable the **loopfree-alternate** context
Context	**configure** router *string* isis *number* loopfree-alternate
Tree	loopfree-alternate

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Introduced	16.0.R1
Platforms	All

augment-route-table *boolean*

Synopsis	Attach remote LFA information to RTM entries
Context	**configure** router *string* isis *number* loopfree-alternate augment-route-table *boolean*
Tree	augment-route-table
Description	When configured to **true**, this command enables IS-IS to attach remote LFA-specific information to RTM entries for use by protocols such as LDP. When configured to **false**, rLFA-specific information is not added to RTM entries.
Default	false
Introduced	19.10.R1
Platforms	All

exclude

Synopsis	Enter the **exclude** context
Context	**configure** router *string* isis *number* loopfree-alternate exclude
Tree	exclude
Introduced	16.0.R3
Platforms	All

prefix-policy *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	**configure** router *string* isis *number* loopfree-alternate exclude prefix-policy *reference*
Tree	prefix-policy
Description	This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation. An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.

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Introduced 16.0.R3

Platforms All

multi-homed-prefix

Synopsis Enable the **multi-homed-prefix** context

Context **configure** router *string* isis *number* loopfree-alternate multi-homed-prefix

Tree multi-homed-prefix

Description Commands in this context enable multihomed prefix LFA for IS-IS routes (IP FRR), SR-ISIS tunnels, and SRv6-ISIS tunnels.

This feature uses the multihomed prefix model described in RFC 8518 to compute a backup IP next hop using an alternate ABR or ASBR for external prefixes and to an alternate router owner for local anycast prefixes.

This feature further enhances the multihomed prefix backup path calculation beyond RFC 8518 with the addition of repair tunnels that make use of a PQ node or a P-Q set to reach the alternate exit ABR or ASBR of external prefixes or the alternate owner router of intra-area anycast prefixes.

The computed IP next hop-based backup path is added to IS-IS routes of external /32 prefixes or /128 prefixes and intra-area /32 or /128 anycast prefixes in the RTM if the prefix is not protected by the base LFA or if the user set leaf preference command option is configured to all. The user must enable the **configure routing-options ip-fast-reroute** command to have these backup paths programmed into the FIB in the datapath.

The computed IP next hop or repair tunnel-based backup path is also programmed for:

- SR-ISIS node SID tunnels of external /32 IPv4 prefixes and /128 IPv6 prefixes, and node SID tunnels of intra-area /32 IPv4 anycast prefixes and /128 anycast IPv6 prefixes, in both algorithm 0 and flexible-algorithms
- SRv6-ISIS locator routes and tunnels of external prefixes and of intra-area anycast prefixes of any size, in both algorithm 0 and flexible algorithm numbers.

As a result, an SR-TE LSP, an SR-MPLS policy, or an SRv6 policy which uses an SR-ISIS SID or an SRv6-ISIS SID of those same prefixes in its configured or computed SID list benefits from the multihomed prefix LFA protection.

Once the IP next-hop based multihomed prefix LFA is enabled, the extensions to compute an SR-TE repair tunnel for the multihomed prefix LFA in the case of SR-ISIS and SRv6-ISIS are automatically enabled if the user also enabled TI-LFA or Remote LFA. The computation reuses the SID list of the primary path or of the TI-LFA or Remote LFA backup path of the alternate ABR or ASBR or alternate owner router.

Introduced 22.7.R1

Platforms All

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preference *keyword*

Synopsis	Multihomed prefix LFA backup path preference
Context	**configure** router *string* isis *number* loopfree-alternate multi-homed-prefix preference *keyword*
Tree	preference
Options	none, all
Default	none
Introduced	22.7.R1
Platforms	All

remote-lfa

Synopsis	Enable the **remote-lfa** context
Context	**configure** router *string* isis *number* loopfree-alternate remote-lfa
Tree	remote-lfa
Introduced	16.0.R1
Platforms	All

max-pq-cost *number*

Synopsis	Maximum cost of destination node during reverse SPF calculation
Context	**configure** router *string* isis *number* loopfree-alternate remote-lfa max-pq-cost *number*
Tree	max-pq-cost
Max. Range	0 to 4294967295
Default	4261412864
Introduced	16.0.R1
Platforms	All

node-protect

Synopsis	Enable the **node-protect** context
Context	**configure** router *string* isis *number* loopfree-alternate remote-lfa node-protect
Tree	node-protect
Introduced	16.0.R4
Platforms	All

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max-pq-nodes *number*

Synopsis	Maximum number of PQ nodes found in the LFA SPFs
Context	**configure** router *string* isis *number* loopfree-alternate remote-lfa node-protect max-pq-nodes *number*
Tree	max-pq-nodes
Range	1 to 32
Default	16
Introduced	16.0.R4
Platforms	All

ti-lfa

Synopsis	Enable the **ti-lfa** context
Context	**configure** router *string* isis *number* loopfree-alternate ti-lfa
Tree	ti-lfa
Description	Commands in this context configure the Topology-Independent Loop-Free Alternate (TI-LFA) algorithm used in the LFA Shortest Path First (SPF) calculation for this IS-IS instance.
Introduced	16.0.R1
Platforms	All

max-sr-frr-labels *number*

Synopsis	Maximum number of labels the TI-LFA backup path can use
Context	**configure** router *string* isis *number* loopfree-alternate ti-lfa max-sr-frr-labels *number*
Tree	max-sr-frr-labels
Description	This command configures the maximum number of labels allowed in the segment list of the TI-LFA repair tunnel. A higher value results in better coverage by TI-LFA at the expense of increased packet encapsulation overhead. The TI-LFA algorithm uses this value to limit the search for the Q-node from the P-node on the post-convergence path.
Range	0 to 3
Default	2
Introduced	16.0.R1
Platforms	All

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max-srv6-frr-sids *number*

Synopsis	Maximum number of SIDs the TI-LFA backup path can use
Context	**configure** router *string* isis *number* loopfree-alternate ti-lfa max-srv6-frr-sids *number*
Tree	max-srv6-frr-sids
Description	This command configures the maximum number of SRv6 SIDs allowed in the segment list of the TI-LFA repair tunnel. A higher value results in better coverage by TI-LFA at the expense of increased packet encapsulation overhead. The TI-LFA algorithm uses this value to limit the search for the Q-node from the P-node on the post-convergence path
Range	0 to 3
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

node-protect

Synopsis	Enable the **node-protect** context
Context	**configure** router *string* isis *number* loopfree-alternate ti-lfa node-protect
Tree	node-protect
Introduced	16.0.R5
Platforms	All

lsp-lifetime *number*

WARNING:
Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	Amount of time during which an LSP is considered valid
Context	**configure** router *string* isis *number* lsp-lifetime *number*
Tree	lsp-lifetime
Range	350 to 65535
Units	seconds
Default	1200
Introduced	16.0.R1
Platforms	All

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lsp-minimum-remaining-lifetime *number*

Synopsis	Minimum value for the Remaining Lifetime of an LSP
Context	**configure** router *string* isis *number* lsp-minimum-remaining-lifetime *number*
Tree	lsp-minimum-remaining-lifetime
Range	350 to 65535
Units	seconds
Introduced	19.7.R1
Platforms	All

lsp-mtu-size *number*

WARNING:
Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	LSP MTU size
Context	**configure** router *string* isis *number* lsp-mtu-size *number*
Tree	lsp-mtu-size
Range	490 to 9778
Units	bytes
Default	1492
Introduced	16.0.R1
Platforms	All

lsp-refresh

Synopsis	Enter the **lsp-refresh** context
Context	**configure** router *string* isis *number* lsp-refresh
Tree	lsp-refresh
Introduced	16.0.R1
Platforms	All

half-lifetime *boolean*

Synopsis	Set the refresh interval to always be half the LSP lifetime
Context	**configure** router *string* isis *number* lsp-refresh half-lifetime *boolean*

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Tree	half-lifetime
Default	true
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Refresh timer interval
Context	**configure** router *string* isis *number* lsp-refresh interval *number*
Tree	interval
Range	150 to 65535
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	All

mru-mismatch-detection *boolean*

Synopsis	Enable detection of MRU mismatch
Context	**configure** router *string* isis *number* mru-mismatch-detection *boolean*
Tree	mru-mismatch-detection
Description	When configured to **true**, this command verifies that the received IS-IS Hello (IIH) packet size does not exceed the configured maximum port MTU size. The received IIH packet is dropped when its size exceeds the maximum port MTU size. When configured to **false**, the IS-IS router instance will not drop oversized IIH packets. By default, FP-based hardware can receive oversized packets but it will not originate them.
Default	false
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multi-topology

Synopsis	Enable the **multi-topology** context
Context	**configure** router *string* isis *number* multi-topology
Tree	multi-topology

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Introduced	16.0.R1
Platforms	All

ipv4-multicast *boolean*

Synopsis	Support IPv4 topology (MT3)
Context	**configure** router *string* isis *number* multi-topology ipv4-multicast *boolean*
Tree	ipv4-multicast
Default	false
Introduced	16.0.R1
Platforms	All

ipv6-multicast *boolean*

Synopsis	Support IPv6 topology (MT4)
Context	**configure** router *string* isis *number* multi-topology ipv6-multicast *boolean*
Tree	ipv6-multicast
Default	false
Introduced	16.0.R1
Platforms	All

ipv6-unicast *boolean*

Synopsis	Support multi-topology TLVs
Context	**configure** router *string* isis *number* multi-topology ipv6-unicast *boolean*
Tree	ipv6-unicast
Default	false
Introduced	16.0.R1
Platforms	All

multicast-import

Synopsis	Enter the **multicast-import** context
Context	**configure** router *string* isis *number* multicast-import
Tree	multicast-import

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Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Submit IPv4 routes into the multicast RPF of the RTM
Context	**configure** router *string* isis *number* multicast-import ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Submit IPv6 routes into the multicast RPF of the RTM
Context	**configure** router *string* isis *number* multicast-import ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

overload

Synopsis	Enable the **overload** context
Context	**configure** router *string* isis *number* overload
Tree	overload
Introduced	16.0.R1
Platforms	All

max-metric *boolean*

Synopsis	Advertise transit links with maximum metric instead of setting overload bit
Context	**configure** router *string* isis *number* overload max-metric *boolean*
Tree	max-metric
Default	false

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Introduced	16.0.R1
Platforms	All

overload-export-external *boolean*

Synopsis	Advertise the external routes when router is in overloaded
Context	**configure** router *string* isis *number* overload-export-external *boolean*
Tree	overload-export-external
Default	false
Introduced	16.0.R1
Platforms	All

overload-export-interlevel *boolean*

Synopsis	Advertise the inter-level routes when router is overloaded
Context	**configure** router *string* isis *number* overload-export-interlevel *boolean*
Tree	overload-export-interlevel
Default	false
Introduced	16.0.R1
Platforms	All

overload-fib-error-notify-only

Synopsis	Enable the **overload-fib-error-notify-only** context
Context	**configure** router *string* isis *number* overload-fib-error-notify-only
Tree	overload-fib-error-notify-only
Description	Commands in this context configure the IS-IS router to send a notification when an overload condition occurs while programming the FIB, instead of advertising the overload condition of the router in the IS-IS LSP. **Note**: Nokia recommends being careful using this command. When you configure the router not to advertise the IS-IS overload state in the IS-IS LSP, other routers are not instructed to take the overloaded router out of the IS-IS forwarding topology and this will cause suboptimal forwarding and non-deterministic behavior on the overloaded router. To avoid changing the default IS-IS overflow behavior, leave this command disabled. When this command is configured, the IS-IS router enters a suboptimal state where it sends only a notification trap; transit traffic can still use the router in this state.

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The IS-IS router tracks the segment routing prefix SIDs where FIB programming failed. With the **retry** command configured, the router retries programming the segment routing prefix SIDs in the FIB using this tracked information.

When this command is not configured, during normal operation, the system may force the router to enter an overload state because of a lack of FIB resources. In this state, the router is used to terminate traffic and is not used to transit traffic.

Introduced 23.7.R1

Platforms All

retry *number*

Synopsis Time to retry programming failed entries in the FIB

Context **configure** router *string* isis *number* overload-fib-error-notify-only retry *number*

Tree retry

Description This command configures the time the router uses to retry programming the failed entries in the FIB.

The **overload-fib-error-notify-only** command must be configured to use the retry timer. The removal of the **overload-fib-error-notify-only** configuration causes the system to program the failed entries in the FIB by triggering an immediate SPF.

Range 10 to 1800

Units seconds

Default 10

Introduced 23.7.R1

Platforms All

overload-on-boot

Synopsis Enable the **overload-on-boot** context

Context **configure** router *string* isis *number* overload-on-boot

Tree overload-on-boot

Introduced 16.0.R1

Platforms All

max-metric *boolean*

Synopsis Advertise transit links with maximum metric instead of setting overload bit

Context **configure** router *string* isis *number* overload-on-boot max-metric *boolean*

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Tree	max-metric
Default	false
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Time during which the router operates in overload state after reboot
Context	**configure** router *string* isis *number* overload-on-boot timeout *number*
Tree	timeout
Range	60 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

poi-tlv *boolean*

Synopsis	Purge Originator Identification TLV
Context	**configure** router *string* isis *number* poi-tlv *boolean*
Tree	poi-tlv
Default	false
Introduced	16.0.R1
Platforms	All

prefix-attributes-tlv *boolean*

Synopsis	Use IS-IS Prefix Attributes TLV to exchange extended IPv4 and IPv6 reachability information
Context	**configure** router *string* isis *number* prefix-attributes-tlv *boolean*
Tree	prefix-attributes-tlv
Default	false
Introduced	16.0.R1
Platforms	All

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prefix-limit

Synopsis	Enable the **prefix-limit** context
Context	**configure** router *string* isis *number* prefix-limit
Tree	prefix-limit
Introduced	16.0.R1
Platforms	All

limit *number*

Synopsis	Maximum number of prefixes for IS-IS instance
Context	**configure** router *string* isis *number* prefix-limit limit *number*
Tree	limit
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Send warning message when the prefix limit is reached
Context	**configure** router *string* isis *number* prefix-limit log-only *boolean*
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

overload-timeout *(number | keyword)*

Synopsis	Time in overload state when prefix limit is reached
Context	**configure** router *string* isis *number* prefix-limit overload-timeout *(number | keyword)*
Tree	overload-timeout
Range	1 to 1800
Units	seconds
Options	forever
Default	forever

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Introduced	16.0.R1
Platforms	All

warning-threshold *number*

Synopsis	Threshold value to trigger a warning message to be sent
Context	**configure** router *string* isis *number* prefix-limit warning-threshold *number*
Tree	warning-threshold
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	All

psnp-authentication *boolean*

Synopsis	Authenticate individual IS-IS protocol packets of partial sequence number PDU (PSNP) type
Context	**configure** router *string* isis *number* psnp-authentication *boolean*
Tree	psnp-authentication
Default	true
Introduced	16.0.R1
Platforms	All

reference-bandwidth *number*

Synopsis	Reference bandwidth for bandwidth relative costing
Context	**configure** router *string* isis *number* reference-bandwidth *number*
Tree	reference-bandwidth
Range	1 to 18446744073709551615
Units	kilobps
Introduced	16.0.R1
Platforms	All

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rib-priority

Synopsis	Enter the **rib-priority** context
Context	**configure** router *string* isis *number* rib-priority
Tree	rib-priority
Introduced	16.0.R1
Platforms	All

high

Synopsis	Enter the **high** context
Context	**configure** router *string* isis *number* rib-priority high
Tree	high
Introduced	16.0.R1
Platforms	All

prefix-list *reference*

Synopsis	List used to select routes processed at higher priority through OSPF route calculation process
Context	**configure** router *string* isis *number* rib-priority high prefix-list *reference*
Tree	prefix-list
Reference	**configure** policy-options prefix-list *string*
Notes	The following elements are part of a choice: **prefix-list** or **tag**.
Introduced	16.0.R1
Platforms	All

tag *number*

Synopsis	Tag value that is used to match IS-IS routes
Context	**configure** router *string* isis *number* rib-priority high tag *number*
Tree	tag
Range	1 to 4294967295
Notes	The following elements are part of a choice: **prefix-list** or **tag**.
Introduced	16.0.R1
Platforms	All

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router-id *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique router ID for the ISIS instance
Context	**configure** router *string* isis *number* router-id *string*
Tree	router-id
Introduced	16.0.R1
Platforms	All

segment-routing

Synopsis	Enter the **segment-routing** context
Context	**configure** router *string* isis *number* segment-routing
Tree	segment-routing
Introduced	16.0.R1
Platforms	All

adj-sid-hold *(number | keyword)*

Synopsis	Adjacency SID hold time
Context	**configure** router *string* isis *number* segment-routing adj-sid-hold *(number | keyword)*
Tree	adj-sid-hold
Description	This command configures a timer to hold the ILM or LTN of an adjacency SID following a failure of the adjacency.

When an adjacency to a neighbor fails, the following procedure is followed for both an LFA protected and the LFA unprotected SID of this adjacency in SR-MPLS. An adjacency can have both types of SIDs assigned by configuration. An LFA protected adjacency SID is eligible for LFA protection, however, the following procedure applies even if an LFA backup is not programmed at the time of the failure. An LFA unprotected adjacency SID is not eligible for LFA protection.

- IGP withdraws the advertisement of the link TLV as well as its adjacency SID sub-TLV.
- The adjacency SID hold timer starts.
- The LTN and ILM records of the adjacency are kept in the datapath for as long as the adjacency SID hold time is running. This allows packets to flow over the LFA backup

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path, when the adjacency is protected, and allows the ingress LER or PCE time to compute a new path of the SR-TE LSP after IGP converges.

- If the adjacency is restored while the adjacency SID hold timer is running, the timer is aborted, and the adjacency SID remains programmed in the datapath with the retained SID values. However, the backup NHLFE may change if a new LFA SPF runs while the adjacency SID hold timer running. An update to the backup NHLFE is performed immediately following the LFA SPF. In all cases, the adjacency keeps its assigned SID label value.
- If the adjacency SID hold timer expires before the adjacency is restored, the SID is deprogrammed from the datapath and the label returned into the common pool where it was drawn from. Users of the adjacency (for example, SR policy and SR-TE LSP) are also informed. When the adjacency is subsequently restored, it gets assigned its allocated static-label value or a new dynamic-label value.
- A new PG-ID is assigned each time an adjacency comes back up. This PG-ID is used by the ILM and LTN of the adjacency SID and of all downstream node SIDs that resolve to a next hop over this adjacency.

Range	1 to 1800
Units	seconds
Options	none
Default	15
Introduced	16.0.R1
Platforms	All

adjacency-set [id] *number*

Synopsis	Enter the **adjacency-set** list instance
Context	**configure** router *string* isis *number* segment-routing adjacency-set *number*
Tree	adjacency-set
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	Identifier for specified adjacency set
Context	**configure** router *string* isis *number* segment-routing adjacency-set *number*
Tree	adjacency-set
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

advertise *boolean*

Synopsis	Advertise the adjacency set when all links terminate on the same neighboring node
Context	**configure** router *string* isis *number* segment-routing adjacency-set *number* advertise *boolean*
Tree	advertise
Default	true
Introduced	16.0.R1
Platforms	All

family *keyword*

Synopsis	Address family for the adjacency set
Context	**configure** router *string* isis *number* segment-routing adjacency-set *number* family *keyword*
Tree	family
Options	ipv4, ipv6
Default	ipv4
Introduced	16.0.R1
Platforms	All

parallel *boolean*

Synopsis	Require all members of the adjacency set to terminate on the same neighboring node
Context	**configure** router *string* isis *number* segment-routing adjacency-set *number* parallel *boolean*
Tree	parallel
Default	true
Introduced	16.0.R1
Platforms	All

sid

Synopsis	Enable the **sid** context

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Context	**configure** router *string* isis *number* segment-routing adjacency-set *number* sid
Tree	sid
Introduced	16.0.R1
Platforms	All

label *number*

Synopsis	Adjacency SID label
Context	**configure** router *string* isis *number* segment-routing adjacency-set *number* sid label *number*
Tree	label
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

adjacency-sid

Synopsis	Enter the **adjacency-sid** context
Context	**configure** router *string* isis *number* segment-routing adjacency-sid
Tree	adjacency-sid
Introduced	22.7.R1
Platforms	All

allocate-dual-sids *boolean*

Synopsis	Allocate dual adjacency SIDs per interface
Context	**configure** router *string* isis *number* segment-routing adjacency-sid allocate-dual-sids *boolean*
Tree	allocate-dual-sids
Description	When configured to **true**, the router supports two SR-MPLS adjacency SIDs per interface. A protected and unprotected adjacency SID is instantiated and advertised. If an SR-MPLS adjacency SID already exists, an additional complementary (protected or unprotected) adjacency SID is created on the interface. When configured to **false**, the router disables the support of two SR-MPLS adjacency SIDs per interface.
Default	false
Introduced	22.7.R1

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Platforms	All

admin-state *keyword*

Synopsis	Administrative state of segment routing
Context	**configure** router *string* isis *number* segment-routing admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

class-forwarding *boolean*

Synopsis	Allow CBF with ECMP over RSVP-TE LSPs as IGP shortcuts
Context	**configure** router *string* isis *number* segment-routing class-forwarding *boolean*
Tree	class-forwarding
Description	When configured to **true**, this command enables Class-Based Forwarding (CBF) with ECMP for SR-ISIS resolved to RSVP-TE LSPs as IGP shortcuts. For CBF with ECMP to be effective, a class forwarding policy must be defined, as well as FC to set associations and RSVP-TE LSPs to set associations. When configured to **false**, CBF over IGP shortcuts is disabled.
Default	false
Introduced	20.2.R1
Platforms	All

egress-statistics

Synopsis	Enter the **egress-statistics** context
Context	**configure** router *string* isis *number* segment-routing egress-statistics
Tree	egress-statistics
Introduced	19.10.R1
Platforms	All

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adj-set *boolean*

Synopsis	Enable the allocation of statistics on adjacency sets
Context	**configure** router *string* isis *number* segment-routing egress-statistics adj-set *boolean*
Tree	adj-set
Description	When configured to **true**, this command enables the allocation of statistic indices to each adjacency set. All adjacencies of a set share the same statistics index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

adj-sid *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	**configure** router *string* isis *number* segment-routing egress-statistics adj-sid *boolean*
Tree	adj-sid
Description	When configured to **true**, this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

node-sid *boolean*

Synopsis	Enable the allocation of statistics on node SIDs
Context	**configure** router *string* isis *number* segment-routing egress-statistics node-sid *boolean*
Tree	node-sid
Default	false
Introduced	19.10.R1
Platforms	All

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entropy-label *boolean*

Synopsis	Enable processing of received ELC signaled in the IGP
Context	**configure** router *string* isis *number* segment-routing entropy-label *boolean*
Tree	entropy-label
Introduced	16.0.R1
Platforms	All

export-tunnel-table *keyword*

Synopsis	Tunnel table export policies to export tunneled routes
Context	**configure** router *string* isis *number* segment-routing export-tunnel-table *keyword*
Tree	export-tunnel-table
Options	ldp
Introduced	16.0.R1
Platforms	All

ingress-statistics

Synopsis	Enter the **ingress-statistics** context
Context	**configure** router *string* isis *number* segment-routing ingress-statistics
Tree	ingress-statistics
Introduced	19.10.R1
Platforms	All

adj-set *boolean*

Synopsis	Enable the allocation of statistics on adjacency sets
Context	**configure** router *string* isis *number* segment-routing ingress-statistics adj-set *boolean*
Tree	adj-set
Description	When configured to **true**, this command enables the allocation of statistic indices to each adjacency set. All adjacencies of a set share the same statistics index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1

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Platforms	All

adj-sid *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	**configure** router *string* isis *number* segment-routing ingress-statistics adj-sid *boolean*
Tree	adj-sid
Description	When configured to **true**, this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

node-sid *boolean*

Synopsis	Enable the allocation of statistics on node SIDs
Context	**configure** router *string* isis *number* segment-routing ingress-statistics node-sid *boolean*
Tree	node-sid
Default	false
Introduced	19.10.R1
Platforms	All

mapping-server

Synopsis	Enter the **mapping-server** context
Context	**configure** router *string* isis *number* segment-routing mapping-server
Tree	mapping-server
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the IS-IS mapping server

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Context	**configure** router *string* isis *number* segment-routing mapping-server admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

node-sid-map [sid-index] *number*

Synopsis	Enter the **node-sid-map** list instance
Context	**configure** router *string* isis *number* segment-routing mapping-server node-sid-map *number*
Tree	node-sid-map
Introduced	16.0.R1
Platforms	All

[**sid-index**] *number*

Synopsis	SID index of a mapping server Prefix-SID
Context	**configure** router *string* isis *number* segment-routing mapping-server node-sid-map *number*
Tree	node-sid-map
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

clear-n-flag *boolean*

Synopsis	Clear the node-sid flag (N-flag)
Context	**configure** router *string* isis *number* segment-routing mapping-server node-sid-map *number* clear-n-flag *boolean*
Tree	clear-n-flag
Default	false
Introduced	16.0.R1

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Platforms	All

ip-prefix *string*

Synopsis	Prefix of a mapping server Prefix-SID
Context	**configure** router *string* isis *number* segment-routing mapping-server node-sid-map *number* ip-prefix *string*
Tree	ip-prefix
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

level-capability *keyword*

Synopsis	Flags to assign in SID Label Binding TLV advertised by Segment Routing Mapping Server
Context	**configure** router *string* isis *number* segment-routing mapping-server node-sid-map *number* level-capability *keyword*
Tree	level-capability
Options	1, 2, 1/2
Default	1/2
Introduced	16.0.R1
Platforms	All

range *number*

Synopsis	Range of addresses and their associated prefix SIDs
Context	**configure** router *string* isis *number* segment-routing mapping-server node-sid-map *number* range *number*
Tree	range
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

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set-flags

Synopsis	Enter the **set-flags** context
Context	**configure** router *string* isis *number* segment-routing mapping-server node-sid-map *number* set-flags
Tree	set-flags
Introduced	16.0.R1
Platforms	All

bit-s *boolean*

Synopsis	SID Label Binding TLV to be flooded across the entire routing domain
Context	**configure** router *string* isis *number* segment-routing mapping-server node-sid-map *number* set-flags bit-s *boolean*
Tree	bit-s
Default	false
Introduced	16.0.R1
Platforms	All

maximum-sid-depth

Synopsis	Enter the **maximum-sid-depth** context
Context	**configure** router *string* isis *number* segment-routing maximum-sid-depth
Tree	maximum-sid-depth
Introduced	20.2.R1
Platforms	All

override-bmi *number*

Synopsis	Value to override the announced node MSD-BMI value
Context	**configure** router *string* isis *number* segment-routing maximum-sid-depth override-bmi *number*
Tree	override-bmi
Description	This command overrides the announced MSD node Base MPLS Imposition (BMI) value. The MSD-BMI value announced by a router can be used by recipients to understand the number of MPLS labels that can be imposed inclusive of all service, transport, or special labels.

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When unconfigured, the router announces the maximum supported BMI of the node assuming the most simple services and Layer 2 encapsulation.

Range	0 to 12
Introduced	20.2.R1
Platforms	All

override-erld *number*

Synopsis	Value to override the announced node MSD-ERLD value
Context	**configure** router *string* isis *number* segment-routing maximum-sid-depth override-erld *number*
Tree	override-erld
Description	This command configures the override Entropy Readable Label Depth (ERLD) Maximum Sid Depth (MSD) value. Information about the capability of each intermediate LSR of reading the maximum label stack depth is used by ingress LSRs to perform EL-based load balancing. When unconfigured, the router announces the node maximum supported ERLD assuming the most simple Layer 2 encapsulation.
Range	0 to 15
Introduced	20.2.R1
Platforms	All

micro-loop-avoidance

Synopsis	Enable the **micro-loop-avoidance** context
Context	**configure** router *string* isis *number* segment-routing micro-loop-avoidance
Tree	micro-loop-avoidance
Introduced	19.10.R1
Platforms	All

fib-delay *number*

Synopsis	FIB delay before programming new primary next-hops
Context	**configure** router *string* isis *number* segment-routing micro-loop-avoidance fib-delay *number*
Tree	fib-delay

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Description	This command specifies the delay time before programming the new next-hops for the SR tunnel.
Range	1 to 300
Units	deciseconds
Default	15
Introduced	19.10.R1
Platforms	All

prefix-sid-range

Synopsis	Enable the **prefix-sid-range** context
Context	**configure** router *string* isis *number* segment-routing prefix-sid-range
Tree	prefix-sid-range
Introduced	16.0.R1
Platforms	All

global

Synopsis	BGP global SR range allocation
Context	**configure** router *string* isis *number* segment-routing prefix-sid-range global
Tree	global
Description	When configured, the system allows BGP to allocate labels from the SRGB space, as defined under the **configure router mpls-labels sr-labels** context.
Notes	The following elements are part of a choice: **global** or (**max-index** and **start-label**).
Introduced	16.0.R1
Platforms	All

max-index *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound value for the local SID index
Context	**configure** router *string* isis *number* segment-routing prefix-sid-range max-index *number*
Tree	max-index

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Range	0 to 524287
Default	1
Notes	The following elements are part of a choice: **global** or (**max-index** and **start-label**).
Introduced	16.0.R1
Platforms	All

start-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound value for the local label offset
Context	**configure** router *string* isis *number* segment-routing prefix-sid-range start-label *number*
Tree	start-label
Range	0 to 524287
Default	0
Notes	The following elements are part of a choice: **global** or (**max-index** and **start-label**).
Introduced	16.0.R1
Platforms	All

srlb *reference*

Synopsis	Segment routing local block
Context	**configure** router *string* isis *number* segment-routing srlb *reference*
Tree	srlb
Reference	**configure** router *string* mpls-labels reserved-label-block *string*
Introduced	16.0.R1
Platforms	All

tunnel-mtu *number*

Synopsis	Tunnel MTU size
Context	**configure** router *string* isis *number* segment-routing tunnel-mtu *number*
Tree	tunnel-mtu

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Range	512 to 9786
Introduced	16.0.R1
Platforms	All

tunnel-table-pref *number*

Synopsis	Preference of SR tunnels created by the IGP instance
Context	**configure** router *string* isis *number* segment-routing tunnel-table-pref *number*
Tree	tunnel-table-pref
Description	This command configures the TTM preference of SR tunnels created by the IGP instance. This is used in the case of BGP shortcuts, VPRN auto-bind, or BGP transport tunnel when the new tunnel binding commands are configured to the **any** value which parses the TTM for tunnels in the protocol preference order. The user can choose to either go with the global TTM preference or list explicitly the tunnel types they want to use. When they list the tunnel types explicitly, the TTM preference is still used to select one type over the other. In both cases, a fallback to the next preferred tunnel type is performed if the selected one fails. Also, a reversion to a more preferred tunnel type is performed as soon as one is available. The segment routing module adds to TTM a SR tunnel entry for each resolved remote node SID prefix and programs the data path with the corresponding LTN with the push operation pointing to the primary and LFA backup NHLFEs. The default preference for SR tunnels in the TTM is set lower than LDP tunnels but higher than BGP tunnels to allow controlled migration of customers without disrupting their current deployment when they enable segment routing. The following is the setting of the default preference of the various tunnel types. This includes the preference of SR tunnels based on shortest path (referred to as **SR-ISIS** and **SR-OSPF**). The global default TTM preference for the tunnel types is as follows: • ROUTE_PREF_RSVP 7 • ROUTE_PREF_SR_TE 8 • ROUTE_PREF_LDP 9 • ROUTE_PREF_OSPF_TTM 10 • ROUTE_PREF_ISIS_TTM 11 • ROUTE_PREF_BGP_TTM 12 • ROUTE_PREF_GRE 255 The default value for SR-ISIS or SR-OSPF is the same regardless if one or more IS-IS or OSPF instances programmed a tunnel for the same prefix. The selection of a SR tunnel in this case will be based on lowest IGP instance-id. It is recommended to not set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.
Range	1 to 255

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Default	11
Introduced	16.0.R1
Platforms	All

segment-routing-v6

Synopsis	Enter the **segment-routing-v6** context
Context	**configure** router *string* isis *number* segment-routing-v6
Tree	segment-routing-v6
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

adj-sid-hold *(number | keyword)*

Synopsis	Adjacency SID hold time
Context	**configure** router *string* isis *number* segment-routing-v6 adj-sid-hold *(number | keyword)*
Tree	adj-sid-hold
Description	This command specifies the length of time the system holds the SRv6 adjacency route and tunnel entries programmed in datapath while the adjacency is down.

When an adjacency to a neighbor fails, the following procedure is followed for both an LFA protected and the LFA unprotected SID of this adjacency in SR-MPLS. An adjacency can have both types of SIDs assigned by configuration. An LFA protected adjacency SID is eligible for LFA protection, however, the following procedure applies even if an LFA backup is not programmed at the time of the failure. An LFA unprotected adjacency SID is not eligible for LFA protection.

- IGP withdraws the advertisement of the link TLV as well as its SRv6 End.X SID sub-TLV
- The adjacency SID hold timer starts.
- The route table, FIB, and tunnel table entries are kept for as long as the adjacency SID hold timer is running. This is allows packets to flow over the LFA backup path, if the adjacency is protected, and allows the ingress LER or PCE time to compute a new path of a SRv6 policy after IGP converges.
- If the adjacency is restored while the adjacency SID hold timer is running, the timer is aborted, and the adjacency SID remains programmed in the datapath with the retained SID values. However, the backup NHLFE may change when a new LFA SPF is run while the adjacency SID hold timer is running. An update to the backup NHLFE is performed immediately following the LFA SPF. In all cases, the adjacency keeps its assigned SID value.
- If the adjacency SID hold timer expires before the adjacency is restored, the SID is deprogrammed from the datapath and the SID value returned into the locator subnet where it was drawn from. Users of the adjacency (for example, SRv6 policy) are also

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informed. When the adjacency is subsequently restored, it gets assigned its allocated static SID value or a new dynamic SID value.

- A new PG-ID is assigned each time an adjacency comes back up. This PG-ID is used by tunnel of the local adjacency SID and of all remote locator routes that resolve to a next hop over this adjacency.

Each IS-IS instance runs a single timer per adjacency that IPv4 SR-MPLS, IPv6 SR-MPLS, and SRv6 adjacency SIDs share. When you enable both SR-MPLS (**configure router isis segment-routing**) and SRv6 (**configure router isis segment-routing-v6**) in the IS-IS instance, the system programs the higher of the two timer values for all SIDs on the adjacency.

Range	1 to 1800
Units	seconds
Options	none
Default	15
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis	Administrative state of segment routing SRv6
Context	**configure** router *string* isis *number* segment-routing-v6 admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

locator [locator-name] *reference*

Synopsis	Enter the **locator** list instance
Context	**configure** router *string* isis *number* segment-routing-v6 locator *reference*
Tree	locator
Description	This command adds a reference to a locator for each algorithm in this IS-IS instance. The same algorithm locator can be shared with other IGP instances and BGP instances in IP-VPN or EVPN.
Max. Instances	8
Introduced	21.5.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**locator-name**] *reference*

Synopsis	Locator name
Context	**configure** router *string* isis *number* segment-routing-v6 locator *reference*
Tree	locator
Reference	**configure** router *string* segment-routing segment-routing-v6 locator *string*
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

level [level-number] *keyword*

Synopsis	Enter the **level** list instance
Context	**configure** router *string* isis *number* segment-routing-v6 locator *reference* level *keyword*
Tree	level
Max. Instances	2
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**level-number**] *keyword*

Synopsis	ISIS protocol level number
Context	**configure** router *string* isis *number* segment-routing-v6 locator *reference* level *keyword*
Tree	level
Options	1, 2
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

metric *number*

Synopsis	IS-IS metric to advertise in the locator level list

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Context	**configure** router *string* isis *number* segment-routing-v6 locator *reference* level *keyword* metric *number*
Tree	metric
Range	1 to 16777215
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

level-capability *keyword*

Synopsis	IS-IS routing level capability
Context	**configure** router *string* isis *number* segment-routing-v6 locator *reference* level-capability *keyword*
Tree	level-capability
Description	This command configures the routing level capability for an instance of the IS-IS routing process. The level capability configured on the instance must match the level capability on the interface to form an adjacency.
Options	1, 2, 1/2
Default	1/2
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

multi-topology

Synopsis	Enter the **multi-topology** context
Context	**configure** router *string* isis *number* segment-routing-v6 locator *reference* multi-topology
Tree	multi-topology
Description	Commands in this context enable the use of a local SRv6 locator in an IS-IS IPv6 topology. A user can enable one or more locators in an IS-IS instance. Each locator can be enabled in a single topology of an IS-IS instance, topology 0 (MT0) or topology 2 (MT2). A local locator can be used in multiple IS-IS instances, but can only be assigned to at most one IPv6 topology independently within each IS-IS instance. Use the **configure router isis segment-routing-v6 admin-state** command to enable the processing of local and remote IPv6 prefixes and SRv6 locators in MT0 and MT2. In addition, to enable SRv6 forwarding in the MT0, MT2, or both topologies, set the **configure router isis ipv6-routing** command to **native**, the **configure router isis multi-topology ipv6-unicast** command to **true**, or both.
Introduced	22.5.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

mt0 *boolean*

Synopsis	Support standard topology (MT0)
Context	**configure** router *string* isis *number* segment-routing-v6 locator *reference* multi-topology mt0 *boolean*
Tree	mt0
Default	true
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

mt2 *boolean*

Synopsis	Support IPv6 routing topology (MT2)
Context	**configure** router *string* isis *number* segment-routing-v6 locator *reference* multi-topology mt2 *boolean*
Tree	mt2
Default	false
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

tag *number*

Synopsis	Route tag to advertise in the locator
Context	**configure** router *string* isis *number* segment-routing-v6 locator *reference* tag *number*
Tree	tag
Range	1 to 4294967295
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

micro-segment-locator [locator-name] *reference*

Synopsis	Enter the **micro-segment-locator** list instance
Context	**configure** router *string* isis *number* segment-routing-v6 micro-segment-locator *reference*

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Tree	micro-segment-locator
Max. Instances	8
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**locator-name**] *reference*

Synopsis	Micro-segment SRv6 locator name
Context	**configure** router *string* isis *number* segment-routing-v6 micro-segment-locator *reference*
Tree	micro-segment-locator
Reference	**configure** router *string* segment-routing segment-routing-v6 micro-segment-locator *string*
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

level [level-number] *keyword*

Synopsis	Enter the **level** list instance
Context	**configure** router *string* isis *number* segment-routing-v6 micro-segment-locator *reference* level *keyword*
Tree	level
Max. Instances	2
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**level-number**] *keyword*

Synopsis	ISIS protocol level number
Context	**configure** router *string* isis *number* segment-routing-v6 micro-segment-locator *reference* level *keyword*
Tree	level
Options	1, 2
Notes	This element is part of a list key.

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Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

metric *number*

Synopsis	IS-IS metric to advertise in the locator level list
Context	**configure** router *string* isis *number* segment-routing-v6 micro-segment-locator *reference* level *keyword* metric *number*
Tree	metric
Range	1 to 16777215
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

level-capability *keyword*

Synopsis	IS-IS routing level capability
Context	**configure** router *string* isis *number* segment-routing-v6 micro-segment-locator *reference* level-capability *keyword*
Tree	level-capability
Description	This command configures the routing level capability for an instance of the IS-IS routing process. The level capability configured on the instance must match the level capability on the interface to form an adjacency.
Options	1, 2, 1/2
Default	1/2
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

multi-topology

Synopsis	Enter the **multi-topology** context
Context	**configure** router *string* isis *number* segment-routing-v6 micro-segment-locator *reference* multi-topology
Tree	multi-topology
Description	Commands in this context enable the use of a local SRv6 locator in an IS-IS IPv6 topology. A user can enable one or more locators in an IS-IS instance. Each locator can be enabled in a single topology of an IS-IS instance, topology 0 (MT0) or topology 2

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(MT2). A local locator can be used in multiple IS-IS instances, but can only be assigned to at most one IPv6 topology independently within each IS-IS instance.

Use the **configure router isis segment-routing-v6 admin-state** command to enable the processing of local and remote IPv6 prefixes and SRv6 locators in MT0 and MT2. In addition, to enable SRv6 forwarding in the MT0, MT2, or both topologies, set the **configure router isis ipv6-routing** command to **native**, the **configure router isis multi-topology ipv6-unicast** command to **true**, or both.

Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

mt0 *boolean*

Synopsis	Support standard topology (MT0)
Context	**configure** router *string* isis *number* segment-routing-v6 micro-segment-locator *reference* multi-topology mt0 *boolean*
Tree	mt0
Default	true
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

mt2 *boolean*

Synopsis	Support IPv6 routing topology (MT2)
Context	**configure** router *string* isis *number* segment-routing-v6 micro-segment-locator *reference* multi-topology mt2 *boolean*
Tree	mt2
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

tag *number*

Synopsis	Route tag to advertise in the locator
Context	**configure** router *string* isis *number* segment-routing-v6 micro-segment-locator *reference* tag *number*
Tree	tag
Range	1 to 4294967295
Introduced	22.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

standard-multi-instance *boolean*

Synopsis	Enable RFC standards compliant multi-instance behavior
Context	**configure** router *string* isis *number* standard-multi-instance *boolean*
Tree	standard-multi-instance
Default	false
Introduced	16.0.R1
Platforms	All

strict-adjacency-check *boolean*

Synopsis	Enable strict checking of address families for IS-IS adjacencies
Context	**configure** router *string* isis *number* strict-adjacency-check *boolean*
Tree	strict-adjacency-check
Default	false
Introduced	16.0.R1
Platforms	All

summary-address [ip-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **summary-address** list instance
Context	**configure** router *string* isis *number* summary-address *(ipv4-prefix | ipv6-prefix)*
Tree	summary-address
Introduced	16.0.R1
Platforms	All

[**ip-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP prefix for the summary address
Context	**configure** router *string* isis *number* summary-address *(ipv4-prefix | ipv6-prefix)*
Tree	summary-address
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

algorithm *number*

Synopsis	Algorithm topology for the summary address
Context	**configure** router *string* isis *number* summary-address *(ipv4-prefix | ipv6-prefix)* algorithm *number*
Tree	algorithm
Range	0 | 128 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

level-capability *keyword*

Synopsis	IS-IS level for the summary address
Context	**configure** router *string* isis *number* summary-address *(ipv4-prefix | ipv6-prefix)* level-capability *keyword*
Tree	level-capability
Options	1, 2, 1/2
Default	1/2
Introduced	16.0.R1
Platforms	All

route-tag *number*

Synopsis	Route tag assigned to the summary address
Context	**configure** router *string* isis *number* summary-address *(ipv4-prefix | ipv6-prefix)* route-tag *number*
Tree	route-tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

suppress-attached-bit *boolean*

Synopsis	Allow IS-IS to suppress setting attached bit on LSPs

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Context	**configure** router *string* isis *number* suppress-attached-bit *boolean*
Tree	suppress-attached-bit
Default	false
Introduced	16.0.R1
Platforms	All

system-id *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	System ID
Context	**configure** router *string* isis *number* system-id *string*
Tree	system-id
String Length	14
Default	0000.0000.0000
Introduced	16.0.R1
Platforms	All

timers

Synopsis	Enter the **timers** context
Context	**configure** router *string* isis *number* timers
Tree	timers
Introduced	16.0.R1
Platforms	All

lsp-wait

Synopsis	Enter the **lsp-wait** context
Context	**configure** router *string* isis *number* timers lsp-wait
Tree	lsp-wait

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Introduced	16.0.R1
Platforms	All

lsp-initial-wait *number*

Synopsis	Initial LSP generation delay
Context	**configure** router *string* isis *number* timers lsp-wait lsp-initial-wait *number*
Tree	lsp-initial-wait
Range	10 to 100000
Units	milliseconds
Default	10
Introduced	16.0.R1
Platforms	All

lsp-max-wait *number*

Synopsis	Maximum time between two consecutive LSP occurrences
Context	**configure** router *string* isis *number* timers lsp-wait lsp-max-wait *number*
Tree	lsp-max-wait
Range	10 to 120000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

lsp-second-wait *number*

Synopsis	Delay between first and second LSP generation
Context	**configure** router *string* isis *number* timers lsp-wait lsp-second-wait *number*
Tree	lsp-second-wait
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

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spf-wait

Synopsis	Enter the **spf-wait** context
Context	**configure** router *string* isis *number* timers spf-wait
Tree	spf-wait
Introduced	16.0.R1
Platforms	All

spf-initial-wait *number*

Synopsis	Initial SPF calculation delay after topology change
Context	**configure** router *string* isis *number* timers spf-wait spf-initial-wait *number*
Tree	spf-initial-wait
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

spf-max-wait *number*

Synopsis	Maximum interval amid two consecutive SPF calculations
Context	**configure** router *string* isis *number* timers spf-wait spf-max-wait *number*
Tree	spf-max-wait
Range	10 to 120000
Units	milliseconds
Default	10000
Introduced	16.0.R1
Platforms	All

spf-second-wait *number*

Synopsis	Hold time between first and second SPF calculations
Context	**configure** router *string* isis *number* timers spf-wait spf-second-wait *number*
Tree	spf-second-wait

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Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

traffic-engineering *boolean*

Synopsis	Enable traffic engineering for the router
Context	**configure** router *string* isis *number* traffic-engineering *boolean*
Tree	traffic-engineering
Default	false
Introduced	16.0.R1
Platforms	All

traffic-engineering-options

Synopsis	Enter the **traffic-engineering-options** context
Context	**configure** router *string* isis *number* traffic-engineering-options
Tree	traffic-engineering-options
Introduced	19.10.R1
Platforms	All

advertise-delay *boolean*

Synopsis	Enable the advertisement of link delay for TE
Context	**configure** router *string* isis *number* traffic-engineering-options advertise-delay *boolean*
Tree	advertise-delay
Description	When configured to **true**, the router advertises link delay in the IGP LSDB within legacy Traffic Engineering (TE) attributes in IS-IS or within the Application-Specific Link Attribute (ASLA) when ASLA is enabled for SR-TE or RSVP-TE applications. When the **application-link-attributes legacy** command is configured for SR-TE or RSVP-TE, link delay is advertised as a legacy TE TLV with the ASLA legacy bit set. When configured to **false**, the router disables link delay advertisement.
Default	false
Introduced	22.10.R1

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Platforms	All

application-link-attributes

Synopsis	Enable the **application-link-attributes** context
Context	**configure** router *string* isis *number* traffic-engineering-options application-link-attributes
Tree	application-link-attributes
Introduced	19.10.R1
Platforms	All

legacy *boolean*

Synopsis	Advertise legacy TE attributes
Context	**configure** router *string* isis *number* traffic-engineering-options application-link-attributes legacy *boolean*
Tree	legacy
Description	When configured to **true**, the router supports the legacy mode of advertising TE attributes. When configured to **false**, legacy mode is disabled.
Default	false
Introduced	19.10.R1
Platforms	All

ipv6 *boolean*

Synopsis	Advertise IS-IS IPv6 Traffic Engineering
Context	**configure** router *string* isis *number* traffic-engineering-options ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	19.10.R1
Platforms	All

unicast-import

Synopsis	Enter the **unicast-import** context
Context	**configure** router *string* isis *number* unicast-import

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Tree	unicast-import
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Submit IPv4 routes into unicast RTM
Context	**configure** router *string* isis *number* unicast-import ipv4 *boolean*
Tree	ipv4
Default	true
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Submit IPv6 routes into unicast RTM
Context	**configure** router *string* isis *number* unicast-import ipv6 *boolean*
Tree	ipv6
Default	true
Introduced	16.0.R1
Platforms	All

l2tp

Synopsis	Enter the **l2tp** context
Context	**configure** router *string* l2tp
Tree	l2tp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of L2TP
Context	**configure** router *string* l2tp admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

avp-hiding *keyword*

Synopsis	Attribute of the Value Pair (AVP) hiding algorithm
Context	**configure** router *string* l2tp avp-hiding *keyword*
Tree	avp-hiding
Options	sensitive, always
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

challenge *boolean*

Synopsis	Use challenge-response authentication
Context	**configure** router *string* l2tp challenge *boolean*
Tree	challenge
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destruct-timeout *number*

Synopsis	Destruction timeout
Context	**configure** router *string* l2tp destruct-timeout *number*
Tree	destruct-timeout
Range	60 to 86400
Units	seconds
Default	60
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ethernet-tunnel

Synopsis	Enter the **ethernet-tunnel** context
Context	**configure** router *string* l2tp ethernet-tunnel
Tree	ethernet-tunnel
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reconnect-timeout *(number | keyword)*

Synopsis	Timeout for a session setup retry
Context	**configure** router *string* l2tp ethernet-tunnel reconnect-timeout *(number | keyword)*
Tree	reconnect-timeout
Range	10 to 3600
Units	seconds
Options	infinite
Default	infinite
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

exclude-avps

Synopsis	Enter the **exclude-avps** context
Context	**configure** router *string* l2tp exclude-avps
Tree	exclude-avps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

calling-number *boolean*

Synopsis	Calling Number AVP to exclude
Context	**configure** router *string* l2tp exclude-avps calling-number *boolean*
Tree	calling-number
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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initial-rx-lcp-conf-req *boolean*

Synopsis	Exclude the Initial Received LCP CONFREQ AVP
Context	**configure** router *string* l2tp exclude-avps initial-rx-lcp-conf-req *boolean*
Tree	initial-rx-lcp-conf-req
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the **failover** context
Context	**configure** router *string* l2tp failover
Tree	failover
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-max-session-lifetime *number*

Synopsis	Subset of sessions that this system attempts to synchronize in the Session State Synchronization phase
Context	**configure** router *string* l2tp failover recovery-max-session-lifetime *number*
Tree	recovery-max-session-lifetime
Range	2 to 4294967295
Units	centiseconds
Default	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-method *keyword*

Synopsis	Recovery method of the sequence numbers after failover
Context	**configure** router *string* l2tp failover recovery-method *keyword*
Tree	recovery-method
Options	mcs, recovery-tunnel

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Default	mcs
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-time *number*

Synopsis	Time requested from the L2TP peer before assuming failover as failed
Context	**configure** router *string* l2tp failover recovery-time *number*
Tree	recovery-time
Range	0 to 900
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-srrp [id] *reference*

Synopsis	Enter the **track-srrp** list instance
Context	**configure** router *string* l2tp failover track-srrp *reference*
Tree	track-srrp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**id**] *reference*

Synopsis	SRRP instance ID for multi-chassis redundancy failover
Context	**configure** router *string* l2tp failover track-srrp *reference*
Tree	track-srrp
Reference	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)* sync track-srrp *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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peer *reference*

Synopsis	Multi-chassis peer address
Context	**configure** router *string* l2tp failover track-srrp *reference* peer *reference*
Tree	peer
Reference	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*

Synopsis	Synchronization tag on the multi-chassis peer
Context	**configure** router *string* l2tp failover track-srrp *reference* sync-tag *string*
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group [tunnel-group-name] *string*

Synopsis	Enter the **group** list instance
Context	**configure** router *string* l2tp group *string*
Tree	group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**tunnel-group-name**] *string*

Synopsis	Tunnel group name
Context	**configure** router *string* l2tp group *string*
Tree	group
String Length	1 to 63
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the L2TP tunnel group
Context	**configure** router *string* l2tp group *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

avp-hiding *keyword*

Synopsis	The AVP hiding algorithm
Context	**configure** router *string* l2tp group *string* avp-hiding *keyword*
Tree	avp-hiding
Options	never, sensitive, always
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

challenge *keyword*

Synopsis	Enable use of challenge-response authentication
Context	**configure** router *string* l2tp group *string* challenge *keyword*
Tree	challenge
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** router *string* l2tp group *string* description *string*

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Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destruct-timeout *number*

Synopsis	Destruction timeout
Context	**configure** router *string* l2tp group *string* destruct-timeout *number*
Tree	destruct-timeout
Range	60 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ethernet-tunnel

Synopsis	Enter the **ethernet-tunnel** context
Context	**configure** router *string* l2tp group *string* ethernet-tunnel
Tree	ethernet-tunnel
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reconnect-timeout *(number | keyword)*

Synopsis	Timeout for a session setup retry at group level
Context	**configure** router *string* l2tp group *string* ethernet-tunnel reconnect-timeout *(number | keyword)*
Tree	reconnect-timeout
Range	10 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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failover

Synopsis	Enter the **failover** context
Context	**configure** router *string* l2tp group *string* failover
Tree	failover
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-method *keyword*

Synopsis	Recovery method of the sequence numbers after failover
Context	**configure** router *string* l2tp group *string* failover recovery-method *keyword*
Tree	recovery-method
Options	mcs, recovery-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-time *number*

Synopsis	Time requested from the L2TP peer before assuming failover as failed
Context	**configure** router *string* l2tp group *string* failover recovery-time *number*
Tree	recovery-time
Range	0 to 900
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hello-interval *(number | keyword)*

Synopsis	Hello interval
Context	**configure** router *string* l2tp group *string* hello-interval *(number | keyword)*
Tree	hello-interval
Range	10 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

idle-timeout *(number | keyword)*

Synopsis	Idle timeout
Context	**configure** router *string* l2tp group *string* idle-timeout *(number | keyword)*
Tree	idle-timeout
Range	0 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2tpv3

Synopsis	Enter the **l2tpv3** context
Context	**configure** router *string* l2tp group *string* l2tpv3
Tree	l2tpv3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cookie-length *(number | keyword)*

Synopsis	Cookie field length
Context	**configure** router *string* l2tp group *string* l2tpv3 cookie-length *(number | keyword)*
Tree	cookie-length
Range	4 | 8
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

digest-type *keyword*

Synopsis	Hashing algorithm that calculates the message digest
Context	**configure** router *string* l2tp group *string* l2tpv3 digest-type *keyword*

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Tree	digest-type
Options	none, md5, sha1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nonce-length *number*

Synopsis	Length for the local L2TPv3 nonce (random number)
Context	**configure** router *string* l2tp group *string* l2tpv3 nonce-length *number*
Tree	nonce-length
Range	0 | 16 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	L2TPv3 password
Context	**configure** router *string* l2tp group *string* l2tpv3 password *string*
Tree	password
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

private-tcp-mss-adjust *(number | keyword)*

Synopsis	TCP maximum segment size (MSS) on private network
Context	**configure** router *string* l2tp group *string* l2tpv3 private-tcp-mss-adjust *(number | keyword)*
Tree	private-tcp-mss-adjust
Range	512 to 9000
Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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public-tcp-mss-adjust *(number | keyword)*

Synopsis	TCP Maximum Segment Size (MSS) on public network
Context	**configure** router *string* l2tp group *string* l2tpv3 public-tcp-mss-adjust *(number | keyword)*
Tree	public-tcp-mss-adjust
Range	512 to 9000
Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pw-cap-list

Synopsis	Enter the **pw-cap-list** context
Context	**configure** router *string* l2tp group *string* l2tpv3 pw-cap-list
Tree	pw-cap-list
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ethernet *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Advertise Ethernet pseudowire type
Context	**configure** router *string* l2tp group *string* l2tpv3 pw-cap-list ethernet *boolean*
Tree	ethernet
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ethernet-vlan *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Advertise Ethernet VLAN pseudowire type
Context	**configure** router *string* l2tp group *string* l2tpv3 pw-cap-list ethernet-vlan *boolean*
Tree	ethernet-vlan
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rem-router-id *string*

Synopsis	Filter on remote router ID
Context	**configure** router *string* l2tp group *string* l2tpv3 rem-router-id *string*
Tree	rem-router-id
Default	0.0.0.0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-password-change *boolean*

Synopsis	Enable tracking of password changes
Context	**configure** router *string* l2tp group *string* l2tpv3 track-password-change *boolean*
Tree	track-password-change
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lac

Synopsis	Enter the **lac** context
Context	**configure** router *string* l2tp group *string* lac
Tree	lac
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

df-bit *keyword*

Synopsis	DF (do not fragment) bit in data traffic transmitted as LAC
Context	**configure** router *string* l2tp group *string* lac df-bit *keyword*
Tree	df-bit
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lns

Synopsis	Enter the **lns** context
Context	**configure** router *string* l2tp group *string* lns
Tree	lns
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lns-group *reference*

Synopsis	ISA LNS group
Context	**configure** router *string* l2tp group *string* lns lns-group *reference*
Tree	lns-group
Reference	**configure** isa lns-group *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

load-balance-method *keyword*

Synopsis	New sessions for L2TP ISA MDA
Context	**configure** router *string* l2tp group *string* lns load-balance-method *keyword*
Tree	load-balance-method
Options	per-session, per-tunnel
Default	per-session

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mlppp

Synopsis	Enter the **mlppp** context
Context	**configure** router *string* l2tp group *string* lns mlppp
Tree	mlppp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of MLPPP in the L2TP tunnel group
Context	**configure** router *string* l2tp group *string* lns mlppp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

endpoint

Synopsis	Enter the **endpoint** context
Context	**configure** router *string* l2tp group *string* lns mlppp endpoint
Tree	endpoint
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

ip *(ipv4-address | keyword)*

Synopsis	Endpoint ID as an IP address
Context	**configure** router *string* l2tp group *string* lns mlppp endpoint ip *(ipv4-address | keyword)*
Tree	ip
Options	system

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Notes	The following elements are part of a choice: **ip** or **mac**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

mac *(mac-address | keyword)*

Synopsis	Endpoint ID as a MAC address
Context	**configure** router *string* l2tp group *string* lns mlppp endpoint mac *(mac-address | keyword)*
Tree	mac
Options	system
Notes	The following elements are part of a choice: **ip** or **mac**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

interleave *boolean*

Synopsis	Enable link fragmentation and interleaving
Context	**configure** router *string* l2tp group *string* lns mlppp interleave *boolean*
Tree	interleave
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

max-fragment-delay *(number | keyword)*

Synopsis	Maximum fragment delay caused by transmission on a link
Context	**configure** router *string* l2tp group *string* lns mlppp max-fragment-delay *(number | keyword)*
Tree	max-fragment-delay
Range	5 to 1000
Units	milliseconds
Options	no-fragmentation
Default	no-fragmentation
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

max-links *number*

Synopsis	Maximum MLPPP links
Context	**configure** router *string* l2tp group *string* lns mlppp max-links *number*
Tree	max-links
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

reassembly-timeout *number*

Synopsis	Reassembly timeout
Context	**configure** router *string* l2tp group *string* lns mlppp reassembly-timeout *number*
Tree	reassembly-timeout
Range	100 | 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

short-sequence-numbers *boolean*

Synopsis	Request a peer to send short sequence numbers
Context	**configure** router *string* l2tp group *string* lns mlppp short-sequence-numbers *boolean*
Tree	short-sequence-numbers
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

ppp

Synopsis	Enter the **ppp** context

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Context	**configure** router *string* l2tp group *string* lns ppp
Tree	ppp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication *keyword*

Synopsis	PPP authentication protocol to negotiate
Context	**configure** router *string* l2tp group *string* lns ppp authentication *keyword*
Tree	authentication
Options	pap, chap, pref-chap, pref-pap
Default	pref-chap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication-policy *string*

Synopsis	Authentication policy when a DHCP message is received
Context	**configure** router *string* l2tp group *string* lns ppp authentication-policy *string*
Tree	authentication-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

chap-challenge-length

Synopsis	Enter the **chap-challenge-length** context
Context	**configure** router *string* l2tp group *string* lns ppp chap-challenge-length
Tree	chap-challenge-length
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the PPP CHAP challenge length

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Context	**configure** router *string* l2tp group *string* lns ppp chap-challenge-length end *number*
Tree	end
Range	8 to 64
Units	octets
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of the PPP CHAP challenge length
Context	**configure** router *string* l2tp group *string* lns ppp chap-challenge-length start *number*
Tree	start
Range	8 to 64
Units	octets
Default	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-group-interface

Synopsis	Enter the **default-group-interface** context
Context	**configure** router *string* l2tp group *string* lns ppp default-group-interface
Tree	default-group-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface *string*

Synopsis	Group interface
Context	**configure** router *string* l2tp group *string* lns ppp default-group-interface interface *string*
Tree	interface
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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service-name *string*

Synopsis	Administrative service name
Context	**configure** router *string* l2tp group *string* lns ppp default-group-interface service-name *string*
Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipcp-subnet-negotiation *boolean*

Synopsis	Allow IPCP subnet negotiation for PPPoE hosts
Context	**configure** router *string* l2tp group *string* lns ppp ipcp-subnet-negotiation *boolean*
Tree	ipcp-subnet-negotiation
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keepalive

Synopsis	Enter the **keepalive** context
Context	**configure** router *string* l2tp group *string* lns ppp keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	PPP keepalive interval
Context	**configure** router *string* l2tp group *string* lns ppp keepalive interval *number*
Tree	interval
Range	10 to 300
Units	seconds
Default	30

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multiplier *number*

Synopsis	PPP keepalive multiplier
Context	**configure** router *string* l2tp group *string* lns ppp keepalive multiplier *number*
Tree	multiplier
Range	1 to 5
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lcp-force-ack-accm *boolean*

Synopsis	Force acknowledgement of the LCP Asynchronous Control Character Map (ACCM) option
Context	**configure** router *string* l2tp group *string* lns ppp lcp-force-ack-accm *boolean*
Tree	lcp-force-ack-accm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lcp-ignore-magic-numbers *boolean*

Synopsis	Check magic number in echo request and reply messages
Context	**configure** router *string* l2tp group *string* lns ppp lcp-ignore-magic-numbers *boolean*
Tree	lcp-ignore-magic-numbers
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtu *number*

Synopsis	Maximum PPP MTU size
Context	**configure** router *string* l2tp group *string* lns ppp mtu *number*

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Tree	mtu
Range	512 to 9212
Units	octets
Default	1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

proxy-authentication *boolean*

Synopsis	Use authentication AVPs that are received from LAC
Context	**configure** router *string* l2tp group *string* lns ppp proxy-authentication *boolean*
Tree	proxy-authentication
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

proxy-lcp *boolean*

Synopsis	Proxy LCP AVPs that are received from LAC
Context	**configure** router *string* l2tp group *string* lns ppp proxy-lcp *boolean*
Tree	proxy-lcp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reject-disabled-ncp *boolean*

Synopsis	Force LCP Protocol Reject for IPv6CP Configure Request
Context	**configure** router *string* l2tp group *string* lns ppp reject-disabled-ncp *boolean*
Tree	reject-disabled-ncp
Default	false
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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user-db *string*

Synopsis	Local user database for PPP PAP and CHAP authentication
Context	**configure** router *string* l2tp group *string* lns ppp user-db *string*
Tree	user-db
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-address *string*

Synopsis	Local address
Context	**configure** router *string* l2tp group *string* local-address *string*
Tree	local-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-name *string*

Synopsis	Local host name used to distinguish tunnels
Context	**configure** router *string* l2tp group *string* local-name *string*
Tree	local-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-estab *number*

Synopsis	Maximum retries for established tunnels
Context	**configure** router *string* l2tp group *string* max-retries-estab *number*
Tree	max-retries-estab
Range	2 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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max-retries-not-estab *number*

Synopsis	Maximum retries for unestablished tunnels
Context	**configure** router *string* l2tp group *string* max-retries-not-estab *number*
Tree	max-retries-not-estab
Range	2 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	Password between L2TP LAC and LNS
Context	**configure** router *string* l2tp group *string* password *string*
Tree	password
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

protocol *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Protocol version
Context	**configure** router *string* l2tp group *string* protocol *keyword*
Tree	protocol
Options	v2, v3, v3draft
Default	v2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy *reference*

Synopsis	RADIUS accounting policy
Context	**configure** router *string* l2tp group *string* radius-accounting-policy *reference*
Tree	radius-accounting-policy

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Reference	**configure** aaa radius l2tp-accounting-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

receive-window-size *number*

Synopsis	L2TP receive window size
Context	**configure** router *string* l2tp group *string* receive-window-size *number*
Tree	receive-window-size
Range	4 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-assign-method *keyword*

Synopsis	Session assignment method
Context	**configure** router *string* l2tp group *string* session-assign-method *keyword*
Tree	session-assign-method
Options	existing-first, weighted, weighted-random
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *(number | keyword)*

Synopsis	Session limit
Context	**configure** router *string* l2tp group *string* session-limit *(number | keyword)*
Tree	session-limit
Range	1 to 250000
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tunnel [tunnel-name] *string*

Synopsis	Enter the **tunnel** list instance

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Context	**configure** router *string* l2tp group *string* tunnel *string*
Tree	tunnel
Max. Instances	31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**tunnel-name**] *string*

Synopsis	Tunnel name
Context	**configure** router *string* l2tp group *string* tunnel *string*
Tree	tunnel
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the L2TP tunnel
Context	**configure** router *string* l2tp group *string* tunnel *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-establish *boolean*

Synopsis	Allow the tunnel to be automatically set up by the system
Context	**configure** router *string* l2tp group *string* tunnel *string* auto-establish *boolean*
Tree	auto-establish
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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avp-hiding *keyword*

Synopsis	The AVP hiding algorithm
Context	**configure** router *string* l2tp group *string* tunnel *string* avp-hiding *keyword*
Tree	avp-hiding
Options	never, sensitive, always
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

challenge *keyword*

Synopsis	Enable use of challenge-response authentication
Context	**configure** router *string* l2tp group *string* tunnel *string* challenge *keyword*
Tree	challenge
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** router *string* l2tp group *string* tunnel *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destruct-timeout *number*

Synopsis	Destruction timeout
Context	**configure** router *string* l2tp group *string* tunnel *string* destruct-timeout *number*
Tree	destruct-timeout
Range	60 to 86400
Units	seconds
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the **failover** context
Context	**configure** router *string* l2tp group *string* tunnel *string* failover
Tree	failover
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-method *keyword*

Synopsis	Recovery method of the sequence numbers after failover
Context	**configure** router *string* l2tp group *string* tunnel *string* failover recovery-method *keyword*
Tree	recovery-method
Options	mcs, recovery-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-time *number*

Synopsis	Time requested from the L2TP peer before assuming failover as failed
Context	**configure** router *string* l2tp group *string* tunnel *string* failover recovery-time *number*
Tree	recovery-time
Range	0 to 900
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hello-interval *(number | keyword)*

Synopsis	Hello interval
Context	**configure** router *string* l2tp group *string* tunnel *string* hello-interval *(number | keyword)*
Tree	hello-interval
Range	10 to 3600

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Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

idle-timeout *(number | keyword)*

Synopsis	Idle timeout
Context	**configure** router *string* l2tp group *string* tunnel *string* idle-timeout *(number | keyword)*
Tree	idle-timeout
Range	0 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2tpv3

Synopsis	Enter the **l2tpv3** context
Context	**configure** router *string* l2tp group *string* tunnel *string* l2tpv3
Tree	l2tpv3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

private-tcp-mss-adjust *(number | keyword)*

Synopsis	TCP maximum segment size (MSS) on private network
Context	**configure** router *string* l2tp group *string* tunnel *string* l2tpv3 private-tcp-mss-adjust *(number | keyword)*
Tree	private-tcp-mss-adjust
Range	512 to 9000
Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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public-tcp-mss-adjust *(number | keyword)*

Synopsis	TCP maximum segment size (MSS) on public network
Context	**configure** router *string* l2tp group *string* tunnel *string* l2tpv3 public-tcp-mss-adjust *(number | keyword)*
Tree	public-tcp-mss-adjust
Range	512 to 9000
Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lac

Synopsis	Enter the **lac** context
Context	**configure** router *string* l2tp group *string* tunnel *string* lac
Tree	lac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

df-bit *keyword*

Synopsis	DF (do not fragment) bit in data traffic transmitted as LAC
Context	**configure** router *string* l2tp group *string* tunnel *string* lac df-bit *keyword*
Tree	df-bit
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lns

Synopsis	Enter the **lns** context
Context	**configure** router *string* l2tp group *string* tunnel *string* lns
Tree	lns
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lns-group *reference*

Synopsis	ISA LNS group
Context	**configure** router *string* l2tp group *string* tunnel *string* lns lns-group *reference*
Tree	lns-group
Reference	**configure** isa lns-group *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

load-balance-method *keyword*

Synopsis	New sessions for L2TP ISA MDA
Context	**configure** router *string* l2tp group *string* tunnel *string* lns load-balance-method *keyword*
Tree	load-balance-method
Options	per-session, per-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mlppp

Synopsis	Enter the **mlppp** context
Context	**configure** router *string* l2tp group *string* tunnel *string* lns mlppp
Tree	mlppp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of MLPPP in the L2TP tunnel
Context	**configure** router *string* l2tp group *string* tunnel *string* lns mlppp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

endpoint

Synopsis	Enter the **endpoint** context
Context	**configure** router *string* l2tp group *string* tunnel *string* lns mlppp endpoint
Tree	endpoint
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

ip *(ipv4-address | keyword)*

Synopsis	Endpoint ID as an IP address
Context	**configure** router *string* l2tp group *string* tunnel *string* lns mlppp endpoint ip *(ipv4-address | keyword)*
Tree	ip
Options	system
Notes	The following elements are part of a choice: **ip** or **mac**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

mac *(mac-address | keyword)*

Synopsis	Endpoint ID as a MAC address
Context	**configure** router *string* l2tp group *string* tunnel *string* lns mlppp endpoint mac *(mac-address | keyword)*
Tree	mac
Options	system
Notes	The following elements are part of a choice: **ip** or **mac**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

interleave *keyword*

Synopsis	Use of Link fragmentation and interleaving
Context	**configure** router *string* l2tp group *string* tunnel *string* lns mlppp interleave *keyword*

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Tree	interleave
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

max-fragment-delay *number*

Synopsis	Maximum fragment delay caused by transmission on a link
Context	**configure** router *string* l2tp group *string* tunnel *string* lns mlppp max-fragment-delay *number*
Tree	max-fragment-delay
Range	5 to 1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

max-links *number*

Synopsis	Maximum MLPPP links
Context	**configure** router *string* l2tp group *string* tunnel *string* lns mlppp max-links *number*
Tree	max-links
Range	1 to 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

reassembly-timeout *number*

Synopsis	Reassembly timeout
Context	**configure** router *string* l2tp group *string* tunnel *string* lns mlppp reassembly-timeout *number*
Tree	reassembly-timeout
Range	100 | 1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

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short-sequence-numbers *keyword*

Synopsis	Request a peer to send short sequence numbers
Context	**configure** router *string* l2tp group *string* tunnel *string* lns mlppp short-sequence-numbers *keyword*
Tree	short-sequence-numbers
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

ppp

Synopsis	Enter the **ppp** context
Context	**configure** router *string* l2tp group *string* tunnel *string* lns ppp
Tree	ppp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication *keyword*

Synopsis	PPP authentication protocol to negotiate
Context	**configure** router *string* l2tp group *string* tunnel *string* lns ppp authentication *keyword*
Tree	authentication
Options	pap, chap, pref-chap, pref-pap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication-policy *string*

Synopsis	Authentication policy when a DHCP message is received
Context	**configure** router *string* l2tp group *string* tunnel *string* lns ppp authentication-policy *string*
Tree	authentication-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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chap-challenge-length

Synopsis	Enter the **chap-challenge-length** context
Context	**configure** router *string* l2tp group *string* tunnel *string* lns ppp chap-challenge-length
Tree	chap-challenge-length
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the PPP CHAP challenge length
Context	**configure** router *string* l2tp group *string* tunnel *string* lns ppp chap-challenge-length end *number*
Tree	end
Range	8 to 64
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of the PPP CHAP challenge length
Context	**configure** router *string* l2tp group *string* tunnel *string* lns ppp chap-challenge-length start *number*
Tree	start
Range	8 to 64
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-group-interface

Synopsis	Enter the **default-group-interface** context
Context	**configure** router *string* l2tp group *string* tunnel *string* lns ppp default-group-interface
Tree	default-group-interface
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface *string*

Synopsis	Group interface
Context	**configure** router *string* l2tp group *string* tunnel *string* lns ppp default-group-interface interface *string*
Tree	interface
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

service-name *string*

Synopsis	Administrative service name
Context	**configure** router *string* l2tp group *string* tunnel *string* lns ppp default-group-interface service-name *string*
Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipcp-subnet-negotiation *keyword*

Synopsis	Use of IPCP subnet negotiation for PPPoE hosts
Context	**configure** router *string* l2tp group *string* tunnel *string* lns ppp ipcp-subnet-negotiation *keyword*
Tree	ipcp-subnet-negotiation
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keepalive

Synopsis	Enter the **keepalive** context
Context	**configure** router *string* l2tp group *string* tunnel *string* lns ppp keepalive

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Tree	keepalive
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	PPP keepalive interval
Context	**configure** router *string* l2tp group *string* tunnel *string* lns ppp keepalive interval *number*
Tree	interval
Range	10 to 300
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multiplier *number*

Synopsis	PPP keepalive multiplier
Context	**configure** router *string* l2tp group *string* tunnel *string* lns ppp keepalive multiplier *number*
Tree	multiplier
Range	1 to 5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lcp-force-ack-accm *keyword*

Synopsis	Forced acknowledgement of the LCP Asynchronous Control Character Map (ACCM) option
Context	**configure** router *string* l2tp group *string* tunnel *string* lns ppp lcp-force-ack-accm *keyword*
Tree	lcp-force-ack-accm
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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lcp-ignore-magic-numbers *keyword*

Synopsis	Magic-Number field in LCP Echo-Request and LCP Echo-Reply messages that are checked
Context	**configure** router *string* l2tp group *string* tunnel *string* lns ppp lcp-ignore-magic-numbers *keyword*
Tree	lcp-ignore-magic-numbers
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtu *number*

Synopsis	Maximum PPP MTU size
Context	**configure** router *string* l2tp group *string* tunnel *string* lns ppp mtu *number*
Tree	mtu
Range	512 to 9212
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

proxy-authentication *keyword*

Synopsis	Authentication AVPs that are received from LAC
Context	**configure** router *string* l2tp group *string* tunnel *string* lns ppp proxy-authentication *keyword*
Tree	proxy-authentication
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

proxy-lcp *keyword*

Synopsis	Use the Proxy LCP AVPs that are received from the LAC
Context	**configure** router *string* l2tp group *string* tunnel *string* lns ppp proxy-lcp *keyword*
Tree	proxy-lcp
Options	false, true

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reject-disabled-ncp *keyword*

Synopsis	Force LCP Project Reject for IPv6CP Configure Request
Context	**configure** router *string* l2tp group *string* tunnel *string* lns ppp reject-disabled-ncp *keyword*
Tree	reject-disabled-ncp
Options	false, true
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

user-db *string*

Synopsis	Local user database for PPP PAP and CHAP authentication
Context	**configure** router *string* l2tp group *string* tunnel *string* lns ppp user-db *string*
Tree	user-db
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-address *string*

Synopsis	Local address
Context	**configure** router *string* l2tp group *string* tunnel *string* local-address *string*
Tree	local-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-name *string*

Synopsis	Local host name used to distinguish tunnels
Context	**configure** router *string* l2tp group *string* tunnel *string* local-name *string*
Tree	local-name
String Length	1 to 64

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-estab *number*

Synopsis	Maximum retries for established tunnels
Context	**configure** router *string* l2tp group *string* tunnel *string* max-retries-estab *number*
Tree	max-retries-estab
Range	2 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-not-estab *number*

Synopsis	Maximum retries for unestablished tunnels
Context	**configure** router *string* l2tp group *string* tunnel *string* max-retries-not-estab *number*
Tree	max-retries-not-estab
Range	2 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	Password between L2TP LAC and LNS
Context	**configure** router *string* l2tp group *string* tunnel *string* password *string*
Tree	password
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer *string*

Synopsis	Peer address
Context	**configure** router *string* l2tp group *string* tunnel *string* peer *string*
Tree	peer

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference *number*

Synopsis	Tunnel preference number with its group
Context	**configure** router *string* l2tp group *string* tunnel *string* preference *number*
Tree	preference
Range	0 to 16777215
Default	50
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy *reference*

Synopsis	RADIUS accounting policy
Context	**configure** router *string* l2tp group *string* tunnel *string* radius-accounting-policy *reference*
Tree	radius-accounting-policy
Reference	**configure** aaa radius l2tp-accounting-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

receive-window-size *number*

Synopsis	L2TP receive window size
Context	**configure** router *string* l2tp group *string* tunnel *string* receive-window-size *number*
Tree	receive-window-size
Range	4 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-name *string*

Synopsis	Remote tunnel host name
Context	**configure** router *string* l2tp group *string* tunnel *string* remote-name *string*

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Tree	remote-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *(number | keyword)*

Synopsis	L2TP session limit for each tunnel of this router
Context	**configure** router *string* l2tp group *string* tunnel *string* session-limit *(number | keyword)*
Tree	session-limit
Range	1 to 65534
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-session-limit *number*

Synopsis	L2TP session limit for each group of this router
Context	**configure** router *string* l2tp group-session-limit *number*
Tree	group-session-limit
Range	1 to 250000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hello-interval *(number | keyword)*

Synopsis	Hello interval
Context	**configure** router *string* l2tp hello-interval *(number | keyword)*
Tree	hello-interval
Range	10 to 3600
Units	seconds
Options	infinite
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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idle-timeout *(number | keyword)*

Synopsis	Idle timeout
Context	**configure** router *string* l2tp idle-timeout *(number | keyword)*
Tree	idle-timeout
Range	0 to 3600
Units	seconds
Options	infinite
Default	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-avps

Synopsis	Enter the **ignore-avps** context
Context	**configure** router *string* l2tp ignore-avps
Tree	ignore-avps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sequencing-required *boolean*

Synopsis	Ignore Sequencing Required AVP
Context	**configure** router *string* l2tp ignore-avps sequencing-required *boolean*
Tree	sequencing-required
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2tpv3

Synopsis	Enter the **l2tpv3** context
Context	**configure** router *string* l2tp l2tpv3
Tree	l2tpv3
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cookie-length *number*

Synopsis	Cookie field length
Context	**configure** router *string* l2tp l2tpv3 cookie-length *number*
Tree	cookie-length
Range	4 | 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

digest-type *keyword*

Synopsis	Hashing algorithm that calculates the message digest
Context	**configure** router *string* l2tp l2tpv3 digest-type *keyword*
Tree	digest-type
Options	md5, sha1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nonce-length *number*

Synopsis	Length of the local L2TPv3 nonce (random number)
Context	**configure** router *string* l2tp l2tpv3 nonce-length *number*
Tree	nonce-length
Range	0 | 16 to 64
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	L2TPv3 password
Context	**configure** router *string* l2tp l2tpv3 password *string*
Tree	password

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String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

private-tcp-mss-adjust *number*

Synopsis	TCP maximum segment size (MSS) on private network
Context	**configure** router *string* l2tp l2tpv3 private-tcp-mss-adjust *number*
Tree	private-tcp-mss-adjust
Range	512 to 9000
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

public-tcp-mss-adjust *number*

Synopsis	TCP maximum segment size (MSS) on public network
Context	**configure** router *string* l2tp l2tpv3 public-tcp-mss-adjust *number*
Tree	public-tcp-mss-adjust
Range	512 to 9000
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

transport-type

Synopsis	Enter the **transport-type** context
Context	**configure** router *string* l2tp l2tpv3 transport-type
Tree	transport-type
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip *boolean*

Synopsis	Use IP as the transport type for the L2TPv3 tunnel

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Context	**configure** router *string* l2tp l2tpv3 transport-type ip *boolean*
Tree	ip
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lac

Synopsis	Enter the **lac** context
Context	**configure** router *string* l2tp lac
Tree	lac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

calling-number-format *string*

Synopsis	Calling Number AVP for L2TP control messages
Context	**configure** router *string* l2tp lac calling-number-format *string*
Tree	calling-number-format
String Length	1 to 255
Default	%S %s
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cisco-nas-port

Synopsis	Enter the **cisco-nas-port** context
Context	**configure** router *string* l2tp lac cisco-nas-port
Tree	cisco-nas-port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ethernet *string*

Synopsis	L2TP Cisco NAS port AVP with binary patterns for Ethernet

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Context	**configure** router *string* l2tp lac cisco-nas-port ethernet *string*
Tree	ethernet
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

df-bit *boolean*

Synopsis	Send all L2TP packets with DF bit set to 1
Context	**configure** router *string* l2tp lac df-bit *boolean*
Tree	df-bit
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-address *string*

Synopsis	Local address
Context	**configure** router *string* l2tp local-address *string*
Tree	local-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-name *string*

Synopsis	Local host name
Context	**configure** router *string* l2tp local-name *string*
Tree	local-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-estab *number*

Synopsis	Maximum retries for established tunnels

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Context	**configure** router *string* l2tp max-retries-estab *number*
Tree	max-retries-estab
Range	2 to 7
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-not-estab *number*

Synopsis	Maximum retries for unestablished tunnels
Context	**configure** router *string* l2tp max-retries-not-estab *number*
Tree	max-retries-not-estab
Range	2 to 7
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

next-attempt *keyword*

Synopsis	Tunnel that is selected when previous session setup failed
Context	**configure** router *string* l2tp next-attempt *keyword*
Tree	next-attempt
Options	same-preference-level, next-preference-level
Default	next-preference-level
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	L2TP password
Context	**configure** router *string* l2tp password *string*
Tree	password
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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peer-address-change-policy *keyword*

Synopsis	Reaction for L2TP response from a different address
Context	**configure** router *string* l2tp peer-address-change-policy *keyword*
Tree	peer-address-change-policy
Options	accept, ignore, reject
Default	reject
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy *reference*

Synopsis	RADIUS accounting policy
Context	**configure** router *string* l2tp radius-accounting-policy *reference*
Tree	radius-accounting-policy
Reference	**configure** aaa radius l2tp-accounting-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

receive-window-size *number*

Synopsis	L2TP receive window size
Context	**configure** router *string* l2tp receive-window-size *number*
Tree	receive-window-size
Range	4 to 1024
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

replace-result-code

Synopsis	Enter the **replace-result-code** context
Context	**configure** router *string* l2tp replace-result-code
Tree	replace-result-code
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-invalid-dst *boolean*

Synopsis	Replace result code with general error code
Context	**configure** router *string* l2tp replace-result-code cdn-invalid-dst *boolean*
Tree	cdn-invalid-dst
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-permanent-no-facilities *boolean*

Synopsis	Replace result code with general error
Context	**configure** router *string* l2tp replace-result-code cdn-permanent-no-facilities *boolean*
Tree	cdn-permanent-no-facilities
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-temporary-no-facilities *boolean*

Synopsis	Replace result code with general error
Context	**configure** router *string* l2tp replace-result-code cdn-temporary-no-facilities *boolean*
Tree	cdn-temporary-no-facilities
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rtm-debounce-time *(number | keyword)*

Synopsis	Debounce timer that declares L2TP action for route table management events
Context	**configure** router *string* l2tp rtm-debounce-time *(number | keyword)*
Tree	rtm-debounce-time
Range	0 to 5000

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Units	milliseconds
Options	infinite
Default	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-assign-method *keyword*

Synopsis	Session assignment method
Context	**configure** router *string* l2tp session-assign-method *keyword*
Tree	session-assign-method
Options	existing-first, weighted, weighted-random
Default	existing-first
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *number*

Synopsis	L2TP session limit of this router
Context	**configure** router *string* l2tp session-limit *number*
Tree	session-limit
Range	1 to 250000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tunnel-selection-blacklist

Synopsis	Enter the **tunnel-selection-blacklist** context
Context	**configure** router *string* l2tp tunnel-selection-blacklist
Tree	tunnel-selection-blacklist
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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add-tunnel-on

Synopsis	Enter the **add-tunnel-on** context
Context	**configure** router *string* l2tp tunnel-selection-blacklist add-tunnel-on
Tree	add-tunnel-on
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address-change-timeout *boolean*

Synopsis	Enable a timed-out tunnel to be forced to the denylist
Context	**configure** router *string* l2tp tunnel-selection-blacklist add-tunnel-on address-change-timeout *boolean*
Tree	address-change-timeout
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-err-code *boolean*

Synopsis	Add to deny if CDN is received with code: General error
Context	**configure** router *string* l2tp tunnel-selection-blacklist add-tunnel-on cdn-err-code *boolean*
Tree	cdn-err-code
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-invalid-dst *boolean*

Synopsis	Force tunnel to the denylist in case of Result Codes 6
Context	**configure** router *string* l2tp tunnel-selection-blacklist add-tunnel-on cdn-invalid-dst *boolean*
Tree	cdn-invalid-dst
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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cdn-permanent-no-facilities *boolean*

Synopsis	Force tunnel to the denylist in case of Result Codes 5
Context	**configure** router *string* l2tp tunnel-selection-blacklist add-tunnel-on cdn-permanent-no-facilities *boolean*
Tree	cdn-permanent-no-facilities
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-temporary-no-facilities *boolean*

Synopsis	Force tunnel to the denylist in case of Result Codes 4
Context	**configure** router *string* l2tp tunnel-selection-blacklist add-tunnel-on cdn-temporary-no-facilities *boolean*
Tree	cdn-temporary-no-facilities
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stop-ccn-err-code *boolean*

Synopsis	Add to denylist if received with general error code
Context	**configure** router *string* l2tp tunnel-selection-blacklist add-tunnel-on stop-ccn-err-code *boolean*
Tree	stop-ccn-err-code
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stop-ccn-other *boolean*

Synopsis	Add to denylist if StopCCN received with general error
Context	**configure** router *string* l2tp tunnel-selection-blacklist add-tunnel-on stop-ccn-other *boolean*
Tree	stop-ccn-other

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Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tx-cdn-not-established-in-time *boolean*

Synopsis	Add to denylist if CDN transmitted with result code
Context	**configure** router *string* l2tp tunnel-selection-blacklist add-tunnel-on tx-cdn-not-established-in-time *boolean*
Tree	tx-cdn-not-established-in-time
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-list-length *(number | keyword)*

Synopsis	Number of tunnels or peers in the denylist
Context	**configure** router *string* l2tp tunnel-selection-blacklist max-list-length *(number | keyword)*
Tree	max-list-length
Range	1 to 65535
Options	infinite
Default	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-time *number*

Synopsis	Time that a tunnel or peer can remain in the denylist
Context	**configure** router *string* l2tp tunnel-selection-blacklist max-time *number*
Tree	max-time
Range	1 to 60
Units	minutes
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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timeout-action *keyword*

Synopsis	Action when a tunnel or peer exceeds time in denylist
Context	**configure** router *string* l2tp tunnel-selection-blacklist timeout-action *keyword*
Tree	timeout-action
Options	remove-from-blacklist, try-one-session
Default	remove-from-blacklist
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tunnel-session-limit *number*

Synopsis	L2TP session limit for each tunnel of this router
Context	**configure** router *string* l2tp tunnel-session-limit *number*
Tree	tunnel-session-limit
Range	1 to 65534
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ldp

Synopsis	Enable the **ldp** context
Context	**configure** router *string* ldp
Tree	ldp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of LDP
Context	**configure** router *string* ldp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1

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Platforms	All

aggregate-prefix-match

Synopsis	Enable the **aggregate-prefix-match** context
Context	**configure** router *string* ldp aggregate-prefix-match
Tree	aggregate-prefix-match
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LDP aggregate prefix match
Context	**configure** router *string* ldp aggregate-prefix-match admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

prefix-exclude *reference*

Synopsis	Import policies to filter LDP label bindings received from LDP peers
Context	**configure** router *string* ldp aggregate-prefix-match prefix-exclude *reference*
Tree	prefix-exclude
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

class-forwarding *keyword*

Synopsis	Forwarding mode for LDP over RSVP

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Context	**configure** router *string* ldp class-forwarding *keyword*
Tree	class-forwarding
Options	lsr – Class-based forwarding for LSR/SWAP only ler – Class-based forwarding for LER/PUSH only lsr-and-ler – Class-based forwarding for LER/PUSH and LSR/SWAP
Introduced	16.0.R1
Platforms	All

consider-system-ip-in-gep *boolean*

Synopsis	Apply global export policy for system IP FEC creation
Context	**configure** router *string* ldp consider-system-ip-in-gep *boolean*
Tree	consider-system-ip-in-gep
Default	false
Introduced	16.0.R1
Platforms	All

egress-statistics

Synopsis	Enter the **egress-statistics** context
Context	**configure** router *string* ldp egress-statistics
Tree	egress-statistics
Introduced	16.0.R1
Platforms	All

fec-prefix [ip-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **fec-prefix** list instance
Context	**configure** router *string* ldp egress-statistics fec-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	fec-prefix
Introduced	16.0.R1
Platforms	All

[**ip-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP prefix

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Context	**configure** router *string* ldp egress-statistics fec-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	fec-prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

accounting-policy *reference*

Synopsis	Accounting policy ID
Context	**configure** router *string* ldp egress-statistics fec-prefix *(ipv4-prefix | ipv6-prefix)* accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LDP egress statistics
Context	**configure** router *string* ldp egress-statistics fec-prefix *(ipv4-prefix | ipv6-prefix)* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

collect-stats *boolean*

Synopsis	Collect statistics
Context	**configure** router *string* ldp egress-statistics fec-prefix *(ipv4-prefix | ipv6-prefix)* collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

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entropy-label-capability *boolean*

Synopsis	Enable entropy label capability on the LDP instance
Context	**configure** router *string* ldp entropy-label-capability *boolean*
Tree	entropy-label-capability
Default	false
Introduced	16.0.R1
Platforms	All

export-policy *reference*

Synopsis	Export policies to determine routes exported to LDP
Context	**configure** router *string* ldp export-policy *reference*
Tree	export-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

export-tunnel-table *reference*

Synopsis	Tunnel table export policies to export tunneled routes
Context	**configure** router *string* ldp export-tunnel-table *reference*
Tree	export-tunnel-table
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

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fast-reroute

Synopsis	Enable the **fast-reroute** context
Context	**configure** router *string* ldp fast-reroute
Tree	fast-reroute
Introduced	16.0.R1
Platforms	All

backup-sr-tunnel *boolean*

Synopsis	Use SR tunnel as a remote LFA backup tunnel next-hop by an LDP FEC
Context	**configure** router *string* ldp fast-reroute backup-sr-tunnel *boolean*
Tree	backup-sr-tunnel
Default	false
Introduced	16.0.R1
Platforms	All

fec-originate [fec-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **fec-originate** list instance
Context	**configure** router *string* ldp fec-originate *(ipv4-prefix | ipv6-prefix)*
Tree	fec-originate
Introduced	16.0.R1
Platforms	All

[**fec-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Static FEC IP prefix
Context	**configure** router *string* ldp fec-originate *(ipv4-prefix | ipv6-prefix)*
Tree	fec-originate
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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advertised-label *number*

Synopsis	Label that is advertised to upstream peer
Context	**configure** router *string* ldp fec-originate *(ipv4-prefix | ipv6-prefix)* advertised-label *number*
Tree	advertised-label
Range	32 to 1048575
Introduced	16.0.R1
Platforms	All

interface *string*

Synopsis	Interface name for this static FEC prefix
Context	**configure** router *string* ldp fec-originate *(ipv4-prefix | ipv6-prefix)* interface *string*
Tree	interface
String Length	0 to 32
Notes	The following elements are part of a choice: (**interface**, **next-hop**, and **swap-label**) or **pop**.
Introduced	16.0.R1
Platforms	All

next-hop *(ipv4-address-no-zone \| ipv6-address-no-zone)*

Synopsis	IP address of the next hop
Context	**configure** router *string* ldp fec-originate *(ipv4-prefix | ipv6-prefix)* next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	next-hop
Notes	The following elements are part of a choice: (**interface**, **next-hop**, and **swap-label**) or **pop**.
Introduced	16.0.R1
Platforms	All

pop *boolean*

Synopsis	Pop the label and transmit without the label
Context	**configure** router *string* ldp fec-originate *(ipv4-prefix | ipv6-prefix)* pop *boolean*
Tree	pop

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Notes	The following elements are part of a choice: (**interface**, **next-hop**, and **swap-label**) or **pop**.
Introduced	16.0.R1
Platforms	All

swap-label *number*

Synopsis	Value mapped to egress label associated with next-hop entry that LSR uses to swap incoming label
Context	**configure** router *string* ldp fec-originate *(ipv4-prefix | ipv6-prefix)* swap-label *number*
Tree	swap-label
Range	6 to 1048575
Notes	The following elements are part of a choice: (**interface**, **next-hop**, and **swap-label**) or **pop**.
Introduced	16.0.R1
Platforms	All

generate-basic-fec-only *boolean*

Synopsis	Enable mLDP to generate a basic FEC
Context	**configure** router *string* ldp generate-basic-fec-only *boolean*
Tree	generate-basic-fec-only
Default	false
Introduced	16.0.R1
Platforms	All

graceful-restart

Synopsis	Enter the **graceful-restart** context
Context	**configure** router *string* ldp graceful-restart
Tree	graceful-restart
Introduced	16.0.R1
Platforms	All

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helper-mode *boolean*

Synopsis	Enable graceful restart helper
Context	**configure** router *string* ldp graceful-restart helper-mode *boolean*
Tree	helper-mode
Default	false
Introduced	16.0.R1
Platforms	All

maximum-recovery-time *number*

Synopsis	Value for the local maximum recovery time
Context	**configure** router *string* ldp graceful-restart maximum-recovery-time *number*
Tree	maximum-recovery-time
Range	15 to 1800
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	All

neighbor-liveness-time *number*

Synopsis	Value for the neighbor liveness timer
Context	**configure** router *string* ldp graceful-restart neighbor-liveness-time *number*
Tree	neighbor-liveness-time
Range	5 to 300
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	All

implicit-null-label *boolean*

Synopsis	Signal the implicit null label value for all LDP FECs for which the node is the egress LER
Context	**configure** router *string* ldp implicit-null-label *boolean*
Tree	implicit-null-label

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Default	false
Introduced	16.0.R1
Platforms	All

import-mcast-policy *reference*

Synopsis	Import policy for mLDP FECs arriving on the node
Context	**configure** router *string* ldp import-mcast-policy *reference*
Tree	import-mcast-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.5.R1
Platforms	All

import-pmsi-routes

Synopsis	Enter the **import-pmsi-routes** context
Context	**configure** router *string* ldp import-pmsi-routes
Tree	import-pmsi-routes
Introduced	19.5.R1
Platforms	All

mvpn *boolean*

Synopsis	Import BGP MVPN inter-AS routes
Context	**configure** router *string* ldp import-pmsi-routes mvpn *boolean*
Tree	mvpn
Default	false
Introduced	19.5.R1
Platforms	All

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mvpn-no-export-community *boolean*

Synopsis	Import BGP MVPN intra-AS routes
Context	**configure** router *string* ldp import-pmsi-routes mvpn-no-export-community *boolean*
Tree	mvpn-no-export-community
Default	false
Introduced	19.5.R1
Platforms	All

import-policy *reference*

Synopsis	Import policies to filter LDP label bindings received from LDP peers
Context	**configure** router *string* ldp import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

import-tunnel-table *reference*

Synopsis	Tunnel table import policies for non-host prefixes
Context	**configure** router *string* ldp import-tunnel-table *reference*
Tree	import-tunnel-table
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

interface-parameters

Synopsis	Enter the **interface-parameters** context

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Context	**configure** router *string* ldp interface-parameters
Tree	interface-parameters
Introduced	16.0.R1
Platforms	All

interface [ip-int-name] *reference*

Synopsis	Enter the **interface** list instance
Context	**configure** router *string* ldp interface-parameters interface *reference*
Tree	interface
Introduced	16.0.R1
Platforms	All

[**ip-int-name**] *reference*

Synopsis	Interface name
Context	**configure** router *string* ldp interface-parameters interface *reference*
Tree	interface
Reference	**configure** router *string* interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LDP interface
Context	**configure** router *string* ldp interface-parameters interface *reference* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

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bfd-liveness

Synopsis	Enter the **bfd-liveness** context
Context	**configure** router *string* ldp interface-parameters interface *reference* bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Allow BFD tracking of IPv4 LDP Session for interface
Context	**configure** router *string* ldp interface-parameters interface *reference* bfd-liveness ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Allow BFD tracking of IPv6 LDP session for interface
Context	**configure** router *string* ldp interface-parameters interface *reference* bfd-liveness ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enable the **ipv4** context
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the LDP interface
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv4 admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

fec-type-capability

Synopsis	Enter the **fec-type-capability** context
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv4 fec-type-capability
Tree	fec-type-capability
Introduced	16.0.R1
Platforms	All

p2mp-ipv4 *boolean*

Synopsis	Enable IPv4 P2MP FEC capability
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv4 fec-type-capability p2mp-ipv4 *boolean*
Tree	p2mp-ipv4
Default	true
Introduced	16.0.R1
Platforms	All

p2mp-ipv6 *boolean*

Synopsis	Enable IPv6 P2MP FEC capability
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv4 fec-type-capability p2mp-ipv6 *boolean*
Tree	p2mp-ipv6
Default	true

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Introduced	16.0.R1
Platforms	All

prefix-ipv4 *boolean*

Synopsis	Enable IPv4 prefix FEC capability
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv4 fec-type-capability prefix-ipv4 *boolean*
Tree	prefix-ipv4
Default	true
Introduced	16.0.R1
Platforms	All

prefix-ipv6 *boolean*

Synopsis	Enable IPv6 prefix FEC capability
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv4 fec-type-capability prefix-ipv6 *boolean*
Tree	prefix-ipv6
Default	true
Introduced	16.0.R1
Platforms	All

hello

Synopsis	Enable the **hello** context
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv4 hello
Tree	hello
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Factor value for Hello
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv4 hello factor *number*

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Tree	factor
Range	1 to 255
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout value for Hello
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv4 hello timeout *number*
Tree	timeout
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

keepalive

Synopsis	Enable the **keepalive** context
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv4 keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Factor value for keepalive
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv4 keepalive factor *number*
Tree	factor
Range	1 to 255
Introduced	16.0.R1
Platforms	All

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timeout *number*

Synopsis	Time that LDP waits before tearing down session
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv4 keepalive timeout *number*
Tree	timeout
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

local-lsr-id

Synopsis	Enter the **local-lsr-id** context
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv4 local-lsr-id
Tree	local-lsr-id
Introduced	16.0.R1
Platforms	All

interface-name *reference*

Synopsis	Name of network IP interface from which to obtain IP address to use as LSR-ID of LDP LSP
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv4 local-lsr-id interface-name *reference*
Tree	interface-name
Reference	**configure** router *string* interface *string*
Introduced	16.0.R1
Platforms	All

transport-address *keyword*

Synopsis	Transport address to set up the LDP TCP sessions
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv4 transport-address *keyword*
Tree	transport-address
Options	interface, system

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Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enable the **ipv6** context
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LDP interface
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv6 admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

fec-type-capability

Synopsis	Enter the **fec-type-capability** context
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv6 fec-type-capability
Tree	fec-type-capability
Introduced	16.0.R1
Platforms	All

p2mp-ipv4 *boolean*

Synopsis	Enable IPv4 P2MP FEC capability
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv6 fec-type-capability p2mp-ipv4 *boolean*

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Tree	p2mp-ipv4
Default	true
Introduced	16.0.R1
Platforms	All

p2mp-ipv6 *boolean*

Synopsis	Enable IPv6 P2MP FEC capability
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv6 fec-type-capability p2mp-ipv6 *boolean*
Tree	p2mp-ipv6
Default	true
Introduced	16.0.R1
Platforms	All

prefix-ipv4 *boolean*

Synopsis	Enable IPv4 prefix FEC capability
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv6 fec-type-capability prefix-ipv4 *boolean*
Tree	prefix-ipv4
Default	true
Introduced	16.0.R1
Platforms	All

prefix-ipv6 *boolean*

Synopsis	Enable IPv6 prefix FEC capability
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv6 fec-type-capability prefix-ipv6 *boolean*
Tree	prefix-ipv6
Default	true
Introduced	16.0.R1
Platforms	All

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hello

Synopsis	Enable the **hello** context
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv6 hello
Tree	hello
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Factor value for Hello
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv6 hello factor *number*
Tree	factor
Range	1 to 255
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout value for Hello
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv6 hello timeout *number*
Tree	timeout
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

keepalive

Synopsis	Enable the **keepalive** context
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv6 keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	All

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factor *number*

Synopsis	Factor value for keepalive
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv6 keepalive factor *number*
Tree	factor
Range	1 to 255
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Time that LDP waits before tearing down session
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv6 keepalive timeout *number*
Tree	timeout
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

local-lsr-id

Synopsis	Enter the **local-lsr-id** context
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv6 local-lsr-id
Tree	local-lsr-id
Introduced	16.0.R1
Platforms	All

format-32bit *boolean*

Synopsis	Use IPv4 address of local LSR-ID interface as LSR-ID of the LDP LSR
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv6 local-lsr-id format-32bit *boolean*
Tree	format-32bit
Default	false

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Introduced	16.0.R1
Platforms	All

interface-name *reference*

Synopsis	Name of network IP interface from which to obtain IP address to use as LSR-ID of LDP LSP
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv6 local-lsr-id interface-name *reference*
Tree	interface-name
Reference	**configure** router *string* interface *string*
Introduced	16.0.R1
Platforms	All

transport-address *keyword*

Synopsis	Transport address to set up the LDP TCP sessions
Context	**configure** router *string* ldp interface-parameters interface *reference* ipv6 transport-address *keyword*
Tree	transport-address
Options	interface, system
Introduced	16.0.R1
Platforms	All

load-balancing-weight *number*

Synopsis	Load balancing weight for the LDP interface
Context	**configure** router *string* ldp interface-parameters interface *reference* load-balancing-weight *number*
Tree	load-balancing-weight
Max. Range	0 to 4294967295
Introduced	20.2.R1
Platforms	All

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ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** router *string* ldp interface-parameters ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

hello

Synopsis	Enter the **hello** context
Context	**configure** router *string* ldp interface-parameters ipv4 hello
Tree	hello
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Value for the Hello factor
Context	**configure** router *string* ldp interface-parameters ipv4 hello factor *number*
Tree	factor
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout value for Hello
Context	**configure** router *string* ldp interface-parameters ipv4 hello timeout *number*
Tree	timeout
Range	3 to 65535
Units	seconds
Default	15
Introduced	16.0.R1
Platforms	All

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keepalive

Synopsis	Enter the **keepalive** context
Context	**configure** router *string* ldp interface-parameters ipv4 keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Value for the keep-alive factor
Context	**configure** router *string* ldp interface-parameters ipv4 keepalive factor *number*
Tree	factor
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout value for keepalive
Context	**configure** router *string* ldp interface-parameters ipv4 keepalive timeout *number*
Tree	timeout
Range	3 to 65535
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

transport-address *keyword*

Synopsis	Transport address to set up the LDP TCP sessions
Context	**configure** router *string* ldp interface-parameters ipv4 transport-address *keyword*
Tree	transport-address
Options	interface, system

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Default	system
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** router *string* ldp interface-parameters ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

hello

Synopsis	Enter the **hello** context
Context	**configure** router *string* ldp interface-parameters ipv6 hello
Tree	hello
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Value for the Hello factor
Context	**configure** router *string* ldp interface-parameters ipv6 hello factor *number*
Tree	factor
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout value for Hello
Context	**configure** router *string* ldp interface-parameters ipv6 hello timeout *number*
Tree	timeout

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Range	3 to 65535
Units	seconds
Default	15
Introduced	16.0.R1
Platforms	All

keepalive

Synopsis	Enter the **keepalive** context
Context	**configure** router *string* ldp interface-parameters ipv6 keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Value for the keep-alive factor
Context	**configure** router *string* ldp interface-parameters ipv6 keepalive factor *number*
Tree	factor
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout value for keepalive
Context	**configure** router *string* ldp interface-parameters ipv6 keepalive timeout *number*
Tree	timeout
Range	3 to 65535
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

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transport-address *keyword*

Synopsis	Transport address to set up the LDP TCP sessions
Context	**configure** router *string* ldp interface-parameters ipv6 transport-address *keyword*
Tree	transport-address
Options	interface, system
Default	system
Introduced	16.0.R1
Platforms	All

label-withdrawal-delay *number*

Synopsis	Time interval during which LDP delays for the withdrawal of FEC-label binding
Context	**configure** router *string* ldp label-withdrawal-delay *number*
Tree	label-withdrawal-delay
Range	3 to 120
Units	seconds
Introduced	16.0.R1
Platforms	All

ldp-shortcut

Synopsis	Enter the **ldp-shortcut** context
Context	**configure** router *string* ldp ldp-shortcut
Tree	ldp-shortcut
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Forward IPv4 packets by using LDP shortcuts
Context	**configure** router *string* ldp ldp-shortcut ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R1

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Platforms	All

ipv6 *boolean*

Synopsis	Forward IPv6 packets by using LDP shortcuts
Context	**configure** router *string* ldp ldp-shortcut ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

legacy-ipv4-lsr-interop *boolean*

Synopsis	Allow interoperability with legacy IPv4 LSR implementations
Context	**configure** router *string* ldp legacy-ipv4-lsr-interop *boolean*
Tree	legacy-ipv4-lsr-interop
Default	false
Introduced	16.0.R1
Platforms	All

lsp-bfd [prefix-list] *reference*

Synopsis	Enter the **lsp-bfd** list instance
Context	**configure** router *string* ldp lsp-bfd *reference*
Tree	lsp-bfd
Max. Instances	16
Introduced	16.0.R1
Platforms	All

[**prefix-list**] *reference*

Synopsis	Name of a router policy options prefix list
Context	**configure** router *string* ldp lsp-bfd *reference*
Tree	lsp-bfd

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Reference	**configure** policy-options prefix-list *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD on LDP LSPs with FECs that match the prefix list
Context	**configure** router *string* ldp lsp-bfd *reference* bfd-liveness *boolean*
Tree	bfd-liveness
Default	false
Introduced	16.0.R1
Platforms	All

bfd-template *reference*

Synopsis	BFD template to apply to BFD sessions associated with the prefix list
Context	**configure** router *string* ldp lsp-bfd *reference* bfd-template *reference*
Tree	bfd-template
Reference	**configure** bfd bfd-template *string*
Introduced	16.0.R1
Platforms	All

failure-action *keyword*

Synopsis	Reaction to BFD session failure for the prefix list
Context	**configure** router *string* ldp lsp-bfd *reference* failure-action *keyword*
Tree	failure-action
Options	down
Introduced	16.0.R1
Platforms	All

lsp-ping-interval *(number | keyword)*

Synopsis	LSP ping transmit interval for periodic verification

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Context	**configure** router *string* ldp lsp-bfd *reference* lsp-ping-interval *(number | keyword)*
Tree	lsp-ping-interval
Range	60 to 300
Units	seconds
Options	none
Default	60
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Prefix list to control the search order
Context	**configure** router *string* ldp lsp-bfd *reference* priority *number*
Tree	priority
Range	1 to 99
Default	1
Introduced	16.0.R1
Platforms	All

source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source address in LSP ping packets and BFD control packets associated with prefix list
Context	**configure** router *string* ldp lsp-bfd *reference* source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-address
Introduced	16.0.R1
Platforms	All

max-ecmp-routes *number*

Synopsis	Maximum ECMP value for LDP
Context	**configure** router *string* ldp max-ecmp-routes *number*
Tree	max-ecmp-routes
Description	This command sets the maximum number of ECMP routes that LDP may use to resolve the next hop for a FEC as permitted by the RTM or TTM.

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The system-wide maximum number of ECMP routes is set by the **configure router ecmp** command; therefore, the operational maximum number used by LDP is set to the lesser of the values configured by this command and the **configure router ecmp** command.

Range	1 to 64
Default	32
Introduced	19.10.R1
Platforms	All

mcast-upstream-asbr-frr *boolean*

Synopsis	Enable ASBR MoFRR to allow local leaf to perform MoFRR for multiple ASBRs
Context	**configure** router *string* ldp mcast-upstream-asbr-frr *boolean*
Tree	mcast-upstream-asbr-frr
Default	false
Introduced	16.0.R1
Platforms	All

mcast-upstream-frr *boolean*

Synopsis	Use fast upstream switchover for mLDP FECs
Context	**configure** router *string* ldp mcast-upstream-frr *boolean*
Tree	mcast-upstream-frr
Default	false
Introduced	16.0.R1
Platforms	All

mp-mbb-time *number*

Synopsis	MP MBB time
Context	**configure** router *string* ldp mp-mbb-time *number*
Tree	mp-mbb-time
Range	0 to 10
Units	seconds
Default	3
Introduced	16.0.R1

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Platforms	All

prefer-mcast-tunnel-in-tunnel *boolean*

Synopsis	Use T-LDP session to the peer for FEC resolution
Context	**configure** router *string* ldp prefer-mcast-tunnel-in-tunnel *boolean*
Tree	prefer-mcast-tunnel-in-tunnel
Default	true
Introduced	21.2.R1
Platforms	All

prefer-protocol-stitching *boolean*

Synopsis	Stitch LDP ILM to SR NHLFE even if LDP NHLFE exists
Context	**configure** router *string* ldp prefer-protocol-stitching *boolean*
Tree	prefer-protocol-stitching
Description	When configured to **true**, an LDP ILM stitches to an SR NHLFE, even if an LDP NHLFE exists. When configured to **false**, the stitching preference of an LDP ILM is to an LDP NHLFE.
Default	false
Introduced	21.7.R1
Platforms	All

prefer-tunnel-in-tunnel *boolean*

Synopsis	Preference tunnel-in-tunnel over a simple LDP tunnel
Context	**configure** router *string* ldp prefer-tunnel-in-tunnel *boolean*
Tree	prefer-tunnel-in-tunnel
Default	true
Introduced	16.0.R1
Platforms	All

resolve-root-using *keyword*

Synopsis	Resolution route table for multicast FECs

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Context	**configure** router *string* ldp resolve-root-using *keyword*
Tree	resolve-root-using
Options	ucast-rtm, mcast-rtm
Default	ucast-rtm
Introduced	16.0.R1
Platforms	All

session-parameters

Synopsis	Enter the **session-parameters** context
Context	**configure** router *string* ldp session-parameters
Tree	session-parameters
Introduced	16.0.R1
Platforms	All

peer [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **peer** list instance
Context	**configure** router *string* ldp session-parameters peer *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	peer
Introduced	16.0.R1
Platforms	All

[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the LDP peer
Context	**configure** router *string* ldp session-parameters peer *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	peer
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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adv-adj-addr-only *boolean*

Synopsis	Distribute only the local addresses used to establish the Hello adjacencies with a peer
Context	**configure** router *string* ldp session-parameters peer *(ipv4-address-no-zone | ipv6-address-no-zone)* adv-adj-addr-only *boolean*
Tree	adv-adj-addr-only
Default	false
Introduced	16.0.R1
Platforms	All

adv-local-lsr-id *boolean*

Synopsis	Advertise local LSR ID over a specified LDP session
Context	**configure** router *string* ldp session-parameters peer *(ipv4-address-no-zone | ipv6-address-no-zone)* adv-local-lsr-id *boolean*
Tree	adv-local-lsr-id
Default	false
Introduced	16.0.R1
Platforms	All

community *string*

Synopsis	Community string associated with a session to a specified peer
Context	**configure** router *string* ldp session-parameters peer *(ipv4-address-no-zone | ipv6-address-no-zone)* community *string*
Tree	community
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

dod-label-distribution *boolean*

Synopsis	Use LDP Downstream-on-Demand (DoD) label distribution procedures
Context	**configure** router *string* ldp session-parameters peer *(ipv4-address-no-zone | ipv6-address-no-zone)* dod-label-distribution *boolean*
Tree	dod-label-distribution
Default	false

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Introduced	16.0.R1
Platforms	All

export-addresses *reference*

Synopsis	Export policies to determine which local addresses should be distributed to this peer
Context	**configure** router *string* ldp session-parameters peer *(ipv4-address-no-zone | ipv6-address-no-zone)* export-addresses *reference*
Tree	export-addresses
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

export-prefixes *reference*

Synopsis	Export policies to determine which FEC prefixes are redistributed to LDP and TLDP peers
Context	**configure** router *string* ldp session-parameters peer *(ipv4-address-no-zone | ipv6-address-no-zone)* export-prefixes *reference*
Tree	export-prefixes
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

fec-limit

Synopsis	Enter the **fec-limit** context
Context	**configure** router *string* ldp session-parameters peer *(ipv4-address-no-zone | ipv6-address-no-zone)* fec-limit
Tree	fec-limit

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Introduced	16.0.R1
Platforms	All

limit *number*

Synopsis	Maximum number of FECs to be accepted from this peer LSR
Context	**configure** router *string* ldp session-parameters peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* fec-limit limit *number*
Tree	limit
Range	0 | 1 to 4294967295
Default	0
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Trap and syslog message to generate when reaching the threshold and limit
Context	**configure** router *string* ldp session-parameters peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* fec-limit log-only *boolean*
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Threshold that generates trap and warning when reached
Context	**configure** router *string* ldp session-parameters peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* fec-limit threshold *number*
Tree	threshold
Range	1 to 100
Default	90
Introduced	16.0.R1
Platforms	All

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fec-type-capability

Synopsis	Enter the **fec-type-capability** context
Context	**configure** router *string* ldp session-parameters peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* fec-type-capability
Tree	fec-type-capability
Introduced	16.0.R1
Platforms	All

p2mp *boolean*

Synopsis	Enable P2MP FEC capability for the session
Context	**configure** router *string* ldp session-parameters peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* fec-type-capability p2mp *boolean*
Tree	p2mp
Default	true
Introduced	16.0.R1
Platforms	All

prefix-ipv4 *boolean*

Synopsis	Enable IPv4 prefix FEC capability for the session
Context	**configure** router *string* ldp session-parameters peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* fec-type-capability prefix-ipv4 *boolean*
Tree	prefix-ipv4
Default	true
Introduced	16.0.R1
Platforms	All

prefix-ipv6 *boolean*

Synopsis	Enable IPv6 prefix FEC capability
Context	**configure** router *string* ldp session-parameters peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* fec-type-capability prefix-ipv6 *boolean*
Tree	prefix-ipv6
Default	true
Introduced	16.0.R1

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Platforms	All

fec129-cisco-interop *boolean*

Synopsis	Allow translation between non-compliant FEC 129 formats of Cisco
Context	**configure** router *string* ldp session-parameters peer *(ipv4-address-no-zone | ipv6-address-no-zone)* fec129-cisco-interop *boolean*
Tree	fec129-cisco-interop
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-prefixes *reference*

Synopsis	FEC prefixes to be redistributed to this LDP peer
Context	**configure** router *string* ldp session-parameters peer *(ipv4-address-no-zone | ipv6-address-no-zone)* import-prefixes *reference*
Tree	import-prefixes
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

pe-id-mac-flush-interop *boolean*

Synopsis	Send PE-ID TLV in LDP MAC withdrawal message
Context	**configure** router *string* ldp session-parameters peer *(ipv4-address-no-zone | ipv6-address-no-zone)* pe-id-mac-flush-interop *boolean*
Tree	pe-id-mac-flush-interop
Default	false
Introduced	16.0.R1
Platforms	All

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shortcut-local-ttl-propagate *boolean*

Synopsis	Propagate TTL over LSP shortcut for local packets
Context	**configure** router *string* ldp shortcut-local-ttl-propagate *boolean*
Tree	shortcut-local-ttl-propagate
Default	true
Introduced	16.0.R1
Platforms	All

shortcut-transit-ttl-propagate *boolean*

Synopsis	Enable TTL propagation over LSP shortcut
Context	**configure** router *string* ldp shortcut-transit-ttl-propagate *boolean*
Tree	shortcut-transit-ttl-propagate
Default	true
Introduced	16.0.R1
Platforms	All

targeted-session

Synopsis	Enter the **targeted-session** context
Context	**configure** router *string* ldp targeted-session
Tree	targeted-session
Introduced	16.0.R1
Platforms	All

auto-rx

Synopsis	Enter the **auto-rx** context
Context	**configure** router *string* ldp targeted-session auto-rx
Tree	auto-rx
Description	Commands in this context specify the LDP session configuration to accept targeted Hello messages from any peer.
Introduced	20.10.R1
Platforms	All

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ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** router *string* ldp targeted-session auto-rx ipv4
Tree	ipv4
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of IPv4 capabilities for peers
Context	**configure** router *string* ldp targeted-session auto-rx ipv4 admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	All

tunneling *boolean*

Synopsis	Enable tunneling for targeted peers
Context	**configure** router *string* ldp targeted-session auto-rx ipv4 tunneling *boolean*
Tree	tunneling
Description	When configured to **true**, this command enables the local system to use the targeted LDP session to send FEC label bindings that are advertised to other LDP peers. For LDP rLFA, the source node requires the PQ node's label binding information in order to reach the destination. If the **auto-rx** and **auto-tx** contexts are both administratively enabled, this command must be set to **true** for LDP rLFA to function properly. When configured to **false**, FEC label bindings are not sent via the LDP session.
Default	false
Introduced	20.10.R1
Platforms	All

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auto-tx

Synopsis	Enter the **auto-tx** context
Context	**configure** router *string* ldp targeted-session auto-tx
Tree	auto-tx
Description	Commands in this context specify the LDP session configuration to send targeted Hello messages toward PQ nodes determined by the rLFA algorithm.
Introduced	20.10.R1
Platforms	All

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** router *string* ldp targeted-session auto-tx ipv4
Tree	ipv4
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of IPv4 capabilities for peers
Context	**configure** router *string* ldp targeted-session auto-tx ipv4 admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	All

tunneling *boolean*

Synopsis	Enable tunneling for targeted peers
Context	**configure** router *string* ldp targeted-session auto-tx ipv4 tunneling *boolean*
Tree	tunneling
Description	When configured to **true**, this command enables the local system to use the targeted LDP session to send FEC label bindings that are advertised to other LDP peers. For LDP rLFA, the source node requires the PQ node's label binding information in order to reach the destination.

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If the **auto-rx** context is administratively disabled, this command should be set to **true** for LDP rLFA to function properly.

When configured to **false**, FEC label bindings are not sent via the LDP session.

Default	false
Introduced	20.10.R1
Platforms	All

export-prefixes *reference*

Synopsis	Export route policy to determine which routes are exported to this targeted LDP session
Context	**configure** router *string* ldp targeted-session export-prefixes *reference*
Tree	export-prefixes
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

import-prefixes *reference*

Synopsis	Import route policy to determine which routes are accepted from targeted LDP neighbors
Context	**configure** router *string* ldp targeted-session import-prefixes *reference*
Tree	import-prefixes
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** router *string* ldp targeted-session ipv4
Tree	ipv4

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Introduced	16.0.R1
Platforms	All

hello

Synopsis	Enter the **hello** context
Context	**configure** router *string* ldp targeted-session ipv4 hello
Tree	hello
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Factor value for Hello
Context	**configure** router *string* ldp targeted-session ipv4 hello factor *number*
Tree	factor
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout value for Hello
Context	**configure** router *string* ldp targeted-session ipv4 hello timeout *number*
Tree	timeout
Range	3 to 65535
Units	seconds
Default	45
Introduced	16.0.R1
Platforms	All

hello-reduction

Synopsis	Enter the **hello-reduction** context

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Context	**configure** router *string* ldp targeted-session ipv4 hello-reduction
Tree	hello-reduction
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of suppression of Hello messages
Context	**configure** router *string* ldp targeted-session ipv4 hello-reduction admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R3
Platforms	All

factor *number*

Synopsis	Hello reduction dampening factor
Context	**configure** router *string* ldp targeted-session ipv4 hello-reduction factor *number*
Tree	factor
Range	3 to 20
Default	3
Introduced	16.0.R1
Platforms	All

keepalive

Synopsis	Enter the **keepalive** context
Context	**configure** router *string* ldp targeted-session ipv4 keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	All

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factor *number*

Synopsis	Factor value for keepalive
Context	**configure** router *string* ldp targeted-session ipv4 keepalive factor *number*
Tree	factor
Range	1 to 255
Default	4
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout value for keepalive
Context	**configure** router *string* ldp targeted-session ipv4 keepalive timeout *number*
Tree	timeout
Range	3 to 65535
Units	seconds
Default	40
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** router *string* ldp targeted-session ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

hello

Synopsis	Enter the **hello** context
Context	**configure** router *string* ldp targeted-session ipv6 hello
Tree	hello
Introduced	16.0.R1
Platforms	All

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factor *number*

Synopsis	Factor value for Hello
Context	**configure** router *string* ldp targeted-session ipv6 hello factor *number*
Tree	factor
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout value for Hello
Context	**configure** router *string* ldp targeted-session ipv6 hello timeout *number*
Tree	timeout
Range	3 to 65535
Units	seconds
Default	45
Introduced	16.0.R1
Platforms	All

hello-reduction

Synopsis	Enter the **hello-reduction** context
Context	**configure** router *string* ldp targeted-session ipv6 hello-reduction
Tree	hello-reduction
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of suppression of Hello messages
Context	**configure** router *string* ldp targeted-session ipv6 hello-reduction admin-state *keyword*
Tree	admin-state
Options	enable, disable

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Default	disable
Introduced	16.0.R3
Platforms	All

factor *number*

Synopsis	Hello reduction dampening factor
Context	**configure** router *string* ldp targeted-session ipv6 hello-reduction factor *number*
Tree	factor
Range	3 to 20
Default	3
Introduced	16.0.R1
Platforms	All

keepalive

Synopsis	Enter the **keepalive** context
Context	**configure** router *string* ldp targeted-session ipv6 keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Factor value for keepalive
Context	**configure** router *string* ldp targeted-session ipv6 keepalive factor *number*
Tree	factor
Range	1 to 255
Default	4
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout value for keepalive

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Context	**configure** router *string* ldp targeted-session ipv6 keepalive timeout *number*
Tree	timeout
Range	3 to 65535
Units	seconds
Default	40
Introduced	16.0.R1
Platforms	All

peer [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **peer** list instance
Context	**configure** router *string* ldp targeted-session peer *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	peer
Introduced	16.0.R1
Platforms	All

[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the LDP peer
Context	**configure** router *string* ldp targeted-session peer *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	peer
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LDP peer
Context	**configure** router *string* ldp targeted-session peer *(ipv4-address-no-zone | ipv6-address-no-zone)* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1

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Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD tracking of LDP session for the peer
Context	**configure** router *string* ldp targeted-session peer *(ipv4-address-no-zone | ipv6-address-no-zone)* bfd-liveness *boolean*
Tree	bfd-liveness
Default	false
Introduced	16.0.R1
Platforms	All

hello

Synopsis	Enable the **hello** context
Context	**configure** router *string* ldp targeted-session peer *(ipv4-address-no-zone | ipv6-address-no-zone)* hello
Tree	hello
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Factor value for Hello
Context	**configure** router *string* ldp targeted-session peer *(ipv4-address-no-zone | ipv6-address-no-zone)* hello factor *number*
Tree	factor
Range	1 to 255
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout value for Hello
Context	**configure** router *string* ldp targeted-session peer *(ipv4-address-no-zone | ipv6-address-no-zone)* hello timeout *number*
Tree	timeout

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Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

hello-reduction

Synopsis	Enable the **hello-reduction** context
Context	**configure** router *string* ldp targeted-session peer *(ipv4-address-no-zone | ipv6-address-no-zone)* hello-reduction
Tree	hello-reduction
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of suppression of Hello messages
Context	**configure** router *string* ldp targeted-session peer *(ipv4-address-no-zone | ipv6-address-no-zone)* hello-reduction admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R3
Platforms	All

factor *number*

Synopsis	Hello reduction dampening factor
Context	**configure** router *string* ldp targeted-session peer *(ipv4-address-no-zone | ipv6-address-no-zone)* hello-reduction factor *number*
Tree	factor
Range	3 to 20
Introduced	16.0.R1
Platforms	All

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keepalive

Synopsis	Enable the **keepalive** context
Context	**configure** router *string* ldp targeted-session peer *(ipv4-address-no-zone | ipv6-address-no-zone)* keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Factor value for keepalive
Context	**configure** router *string* ldp targeted-session peer *(ipv4-address-no-zone | ipv6-address-no-zone)* keepalive factor *number*
Tree	factor
Range	1 to 255
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Time that LDP waits before tearing down session
Context	**configure** router *string* ldp targeted-session peer *(ipv4-address-no-zone | ipv6-address-no-zone)* keepalive timeout *number*
Tree	timeout
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

local-lsr-id

Synopsis	Enter the **local-lsr-id** context
Context	**configure** router *string* ldp targeted-session peer *(ipv4-address-no-zone | ipv6-address-no-zone)* local-lsr-id
Tree	local-lsr-id
Introduced	16.0.R1

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Platforms	All

format-32bit *boolean*

Synopsis	Use IPv4 address of local LSR-ID interface as LSR-ID of the LDP LSR
Context	**configure** router *string* ldp targeted-session peer *(ipv4-address-no-zone | ipv6-address-no-zone)* local-lsr-id format-32bit *boolean*
Tree	format-32bit
Default	false
Introduced	16.0.R1
Platforms	All

interface-name *reference*

Synopsis	Name of network IP interface from which to obtain IP address to use as LSR-ID of LDP LSP
Context	**configure** router *string* ldp targeted-session peer *(ipv4-address-no-zone | ipv6-address-no-zone)* local-lsr-id interface-name *reference*
Tree	interface-name
Reference	**configure** router *string* interface *string*
Introduced	16.0.R1
Platforms	All

mcast-tunneling

Synopsis	Enable the **mcast-tunneling** context
Context	**configure** router *string* ldp targeted-session peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mcast-tunneling
Tree	mcast-tunneling
Introduced	21.2.R1
Platforms	All

lsp [lsp-name] *string*

Synopsis	Add a list entry for **lsp**
Context	**configure** router *string* ldp targeted-session peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mcast-tunneling lsp *string*

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Tree	lsp
Max. Instances	4
Introduced	21.2.R1
Platforms	All

[**lsp-name**] *string*

Synopsis	LSP name
Context	**configure** router *string* ldp targeted-session peer *(ipv4-address-no-zone | ipv6-address-no-zone)* mcast-tunneling lsp *string*
Tree	lsp
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

tunneling

Synopsis	Enable the **tunneling** context
Context	**configure** router *string* ldp targeted-session peer *(ipv4-address-no-zone | ipv6-address-no-zone)* tunneling
Tree	tunneling
Introduced	16.0.R1
Platforms	All

lsp [lsp-name] *string*

Synopsis	Add a list entry for **lsp**
Context	**configure** router *string* ldp targeted-session peer *(ipv4-address-no-zone | ipv6-address-no-zone)* tunneling lsp *string*
Tree	lsp
Max. Instances	4
Introduced	16.0.R1
Platforms	All

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[**lsp-name**] *string*

Synopsis	LSP name
Context	**configure** router *string* ldp targeted-session peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* tunneling lsp *string*
Tree	lsp
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

peer-template [template-name] *string*

Synopsis	Enter the **peer-template** list instance
Context	**configure** router *string* ldp targeted-session peer-template *string*
Tree	peer-template
Max. Instances	500
Introduced	16.0.R1
Platforms	All

[**template-name**] *string*

Synopsis	Name for the targeted peer template
Context	**configure** router *string* ldp targeted-session peer-template *string*
Tree	peer-template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the peer template
Context	**configure** router *string* ldp targeted-session peer-template *string* admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

adv-local-lsr-id *boolean*

Synopsis	Advertise local LSR ID over a specified LDP session
Context	**configure** router *string* ldp targeted-session peer-template *string* adv-local-lsr-id *boolean*
Tree	adv-local-lsr-id
Default	false
Introduced	16.0.R1
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD tracking of LDP session for sessions created by peer template
Context	**configure** router *string* ldp targeted-session peer-template *string* bfd-liveness *boolean*
Tree	bfd-liveness
Default	false
Introduced	16.0.R1
Platforms	All

community *string*

Synopsis	Community string associated with a session to a specified peer
Context	**configure** router *string* ldp targeted-session peer-template *string* community *string*
Tree	community
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

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hello

Synopsis	Enable the **hello** context
Context	**configure** router *string* ldp targeted-session peer-template *string* hello
Tree	hello
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Factor value for Hello
Context	**configure** router *string* ldp targeted-session peer-template *string* hello factor *number*
Tree	factor
Range	1 to 255
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout value for Hello
Context	**configure** router *string* ldp targeted-session peer-template *string* hello timeout *number*
Tree	timeout
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

hello-reduction

Synopsis	Enable the **hello-reduction** context
Context	**configure** router *string* ldp targeted-session peer-template *string* hello-reduction
Tree	hello-reduction
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of suppression of Hello messages
Context	**configure** router *string* ldp targeted-session peer-template *string* hello-reduction admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R3
Platforms	All

factor *number*

Synopsis	Hello reduction dampening factor
Context	**configure** router *string* ldp targeted-session peer-template *string* hello-reduction factor *number*
Tree	factor
Range	3 to 20
Introduced	16.0.R1
Platforms	All

keepalive

Synopsis	Enable the **keepalive** context
Context	**configure** router *string* ldp targeted-session peer-template *string* keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Factor value for keepalive
Context	**configure** router *string* ldp targeted-session peer-template *string* keepalive factor *number*
Tree	factor
Range	1 to 255
Introduced	16.0.R1
Platforms	All

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timeout *number*

Synopsis	Time that LDP waits before tearing down session
Context	**configure** router *string* ldp targeted-session peer-template *string* keepalive timeout *number*
Tree	timeout
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

local-lsr-id

Synopsis	Enter the **local-lsr-id** context
Context	**configure** router *string* ldp targeted-session peer-template *string* local-lsr-id
Tree	local-lsr-id
Introduced	16.0.R1
Platforms	All

interface-name *reference*

Synopsis	Name of network IP interface from which to obtain IP address to use as LSR-ID of LDP LSP
Context	**configure** router *string* ldp targeted-session peer-template *string* local-lsr-id interface-name *reference*
Tree	interface-name
Reference	**configure** router *string* interface *string*
Introduced	16.0.R1
Platforms	All

mcast-tunneling *boolean*

Synopsis	Enable MLDP over RSVP-TE tunnels for the template
Context	**configure** router *string* ldp targeted-session peer-template *string* mcast-tunneling *boolean*
Tree	mcast-tunneling

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Default	false
Introduced	21.2.R1
Platforms	All

tunneling *boolean*

Synopsis	Allow LDP over tunnels
Context	**configure** router *string* ldp targeted-session peer-template *string* tunneling *boolean*
Tree	tunneling
Default	false
Introduced	16.0.R1
Platforms	All

peer-template-map [template-map-name] *reference*

Synopsis	Enter the **peer-template-map** list instance
Context	**configure** router *string* ldp targeted-session peer-template-map *reference*
Tree	peer-template-map
Max. Instances	500
Introduced	16.0.R1
Platforms	All

[**template-map-name**] *reference*

Synopsis	Name to identify the targeted peer template
Context	**configure** router *string* ldp targeted-session peer-template-map *reference*
Tree	peer-template-map
Reference	**configure** router *string* ldp targeted-session peer-template *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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policy-map *reference*

Synopsis	Targeted peer template to apply to the given policies
Context	**configure** router *string* ldp targeted-session peer-template-map *reference* policy-map *reference*
Tree	policy-map
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

resolve-v6-prefix-over-shortcut *boolean*

Synopsis	Resolve IPv6 prefix over IGP shortcuts
Context	**configure** router *string* ldp targeted-session resolve-v6-prefix-over-shortcut *boolean*
Tree	resolve-v6-prefix-over-shortcut
Description	When configured to **true**, the system enables the resolution of IPv6 LDP unicast prefix FECs over IGP shortcuts. When configured to **false**, the resolution is not allowed.
Default	false
Introduced	22.7.R1
Platforms	All

sdp-auto-targeted-session *boolean*

Synopsis	Allow auto-creation of targeted sessions by SDP
Context	**configure** router *string* ldp targeted-session sdp-auto-targeted-session *boolean*
Tree	sdp-auto-targeted-session
Default	true
Introduced	16.0.R1
Platforms	All

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tcp-session-parameters

Synopsis	Enter the **tcp-session-parameters** context
Context	**configure** router *string* ldp tcp-session-parameters
Tree	tcp-session-parameters
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Authentication key between LDP peers
Context	**configure** router *string* ldp tcp-session-parameters authentication-key *string*
Tree	authentication-key
Description	This command specifies the authentication key used to establish a session between LDP peers. Authentication uses the MD-5 message-based digest. The peer address used in authentication must be the TCP session transport address. If one or more transport addresses used in the Hello adjacencies to the same peer LSR are different from the LSR ID value, the user must add each transport address to the authentication key configuration as a separate peer. As a result, when the TCP connection is bootstrapped by a specific Hello adjacency, the authentication can operate over that TCP connection by using its specific transport address. The per-peer authentication configuration takes precedence over global authentication configuration, and authentication keychain configuration takes precedence over authentication key configuration.
String Length	1 to 370
Introduced	21.2.R1
Platforms	All

authentication-keychain *reference*

Synopsis	Authentication keychain to use for the TCP session
Context	**configure** router *string* ldp tcp-session-parameters authentication-keychain *reference*
Tree	authentication-keychain
Description	This command configures the authentication keychain to use for the TCP session. The per-peer authentication configuration takes precedence over the global authentication configuration.
Reference	**configure** system security keychains keychain *string*
Introduced	21.2.R1

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Platforms	All

peer-transport [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **peer-transport** list instance
Context	**configure** router *string* ldp tcp-session-parameters peer-transport *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	peer-transport
Introduced	16.0.R1
Platforms	All

[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the TCP connection to the LDP peer
Context	**configure** router *string* ldp tcp-session-parameters peer-transport *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	peer-transport
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Authentication key for the peer
Context	**configure** router *string* ldp tcp-session-parameters peer-transport *(ipv4-address-no-zone | ipv6-address-no-zone)* authentication-key *string*
Tree	authentication-key
String Length	1 to 370
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	TCP authentication keychain to use for the session
Context	**configure** router *string* ldp tcp-session-parameters peer-transport *(ipv4-address-no-zone | ipv6-address-no-zone)* authentication-keychain *reference*

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Tree	authentication-keychain
Reference	**configure** system security keychains keychain *string*
Introduced	16.0.R3
Platforms	All

path-mtu-discovery *boolean*

Synopsis	Allow Path MTU Discovery for associated TCP connections
Context	**configure** router *string* ldp tcp-session-parameters peer-transport *(ipv4-address-no-zone | ipv6-address-no-zone)* path-mtu-discovery *boolean*
Tree	path-mtu-discovery
Default	false
Introduced	16.0.R1
Platforms	All

ttl-security *number*

Synopsis	Minimum TTL value for incoming packets
Context	**configure** router *string* ldp tcp-session-parameters peer-transport *(ipv4-address-no-zone | ipv6-address-no-zone)* ttl-security *number*
Tree	ttl-security
Range	1 to 255
Introduced	16.0.R1
Platforms	All

tunnel-down-damp-time *number*

Synopsis	Time interval for an LDP to damp a tunnel down event before posting to the Route Table Manager (RTM)
Context	**configure** router *string* ldp tunnel-down-damp-time *number*
Tree	tunnel-down-damp-time
Range	0 to 20
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	All

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tunnel-table-pref *number*

Synopsis	Tunnel table preference value for address FECs
Context	**configure** router *string* ldp tunnel-table-pref *number*
Tree	tunnel-table-pref
Description	This command configures the tunnel table preference for an LDP tunnel type. The tunnel table preference applies to next-hop resolution of BGP routes for: EVPN, IPv4, IPv6, VPN-IPv4, VPN-IPv6, label-IPv4, and label-IPV6 in the tunnel table. This feature does not apply to a VPRN, VPLS, or VLL service with explicit binding to an SDP that enabled the **mixed-lsp-mode** option. The service manager controls and fixes the tunnel preference in such an SDP. The tunnel table preference configuration does not modify the SDP behavior, nor the services that bind to it. It is recommended to not set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.
Range	1 to 255
Default	9
Introduced	21.10.R1
Platforms	All

weighted-ecmp *boolean*

Synopsis	Allow weighted ECMP load-balancing
Context	**configure** router *string* ldp weighted-ecmp *boolean*
Tree	weighted-ecmp
Description	When configured to **true**, the system allows weighted ECMP on LDP using RSVP LSPs or SR-TE LSPs. LDP labeled packets are sprayed across the RSVP or SR-TE LSP ECMP set in proportion to the configured load-balancing weight of LSPs. When configured to **false**, the system removes weighted ECMP load-balancing.
Default	false
Introduced	16.0.R1
Platforms	All

leak-export

Synopsis	Enter the **leak-export** context
Context	**configure** router *string* leak-export

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Tree	leak-export
Introduced	16.0.R4
Platforms	All

leak-export-limit *number*

Synopsis	Maximum limit on number of GRT routes leaked into VPRNs
Context	**configure** router *string* leak-export leak-export-limit *number*
Tree	leak-export-limit
Range	1 to 10000
Default	5
Introduced	16.0.R4
Platforms	All

policy-name *(policy-expr-string | string)*

Synopsis	Route policy name
Context	**configure** router *string* leak-export policy-name *(policy-expr-string | string)*
Tree	policy-name
String Length	1 to 255
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

lsp-bfd

Synopsis	Enter the **lsp-bfd** context
Context	**configure** router *string* lsp-bfd
Tree	lsp-bfd
Introduced	16.0.R1
Platforms	All

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bfd-sessions *number*

Synopsis	Maximum number of LSP BFD session tail-ends
Context	**configure** router *string* lsp-bfd bfd-sessions *number*
Tree	bfd-sessions
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

tail-end

Synopsis	Enter the **tail-end** context
Context	**configure** router *string* lsp-bfd tail-end
Tree	tail-end
Introduced	20.10.R1
Platforms	All

multiplier *number*

Synopsis	Missed message threshold before session is set to down
Context	**configure** router *string* lsp-bfd tail-end multiplier *number*
Tree	multiplier
Range	1 to 20
Default	3
Introduced	20.10.R1
Platforms	All

receive-interval *number*

Synopsis	The BFD receive interval for LSP tail-end
Context	**configure** router *string* lsp-bfd tail-end receive-interval *number*
Tree	receive-interval
Range	100 to 1000
Units	milliseconds
Default	1000
Introduced	20.10.R1

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Platforms	All

transmit-interval *number*

Synopsis	The BFD transmit interval for LSP tail-end
Context	**configure** router *string* lsp-bfd tail-end transmit-interval *number*
Tree	transmit-interval
Range	100 to 1000
Units	milliseconds
Default	1000
Introduced	20.10.R1
Platforms	All

mc-maximum-routes

Synopsis	Enter the **mc-maximum-routes** context
Context	**configure** router *string* mc-maximum-routes
Tree	mc-maximum-routes
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Log and allow learning of new multicast routes
Context	**configure** router *string* mc-maximum-routes log-only *boolean*
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Maximum multicast routes which the VRF holds
Context	**configure** router *string* mc-maximum-routes threshold *number*
Tree	threshold

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Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Maximum multicast routes configured on virtual router
Context	**configure** router *string* mc-maximum-routes value *number*
Tree	value
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

mld

Synopsis	Enable the **mld** context
Context	**configure** router *string* mld
Tree	mld
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MLD
Context	**configure** router *string* mld admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

forwarding-group-interface forwarding-service *string* group-interface-name *reference*

Synopsis	Enter the **forwarding-group-interface** list instance

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Context	**configure** router *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference*
Tree	forwarding-group-interface
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

forwarding-service *string*

Synopsis	Forwarding service for the subscriber interface
Context	**configure** router *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference*
Tree	forwarding-group-interface
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface-name *reference*

Synopsis	Group interface name
Context	**configure** router *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference*
Tree	forwarding-group-interface
Reference	**configure** service vprn *string* subscriber-interface *string* group-interface *string*
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the MLD interface
Context	**configure** router *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable

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Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy to filter MLD packets
Context	**configure** router *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	**configure** router *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* maximum-number-group-sources *number*
Tree	maximum-number-group-sources
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	**configure** router *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 16000
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	**configure** router *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* maximum-number-sources *number*
Tree	maximum-number-sources
Range	1 to 1000
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mcac

Synopsis	Enter the **mcac** context
Context	**configure** router *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* mcac
Tree	mcac
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bandwidth

Synopsis	Enter the **bandwidth** context
Context	**configure** router *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* mcac bandwidth
Tree	bandwidth
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mandatory *(number | keyword)*

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	**configure** router *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* mcac bandwidth mandatory *(number | keyword)*
Tree	mandatory
Range	0 to 2147483647
Options	unlimited

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Default	unlimited
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

total *(number | keyword)*

Synopsis	Maximum allowed bandwidth
Context	**configure** router *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* mcac bandwidth total *(number | keyword)*
Tree	total
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	**configure** router *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* mcac interface-policy *reference*
Tree	interface-policy
Reference	**configure** mcac interface-policy *string*
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	Multicast CAC policy name
Context	**configure** router *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* mcac policy *reference*
Tree	policy
Description	This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment. Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.

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If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.

Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:

- subscriber level and redirected interface when redirection is configured
- subscriber level and group-interface level when redirection is unconfigured

In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).

Reference	**configure** mcac policy *string*
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** router *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* query-interval *number*
Tree	query-interval
Range	2 to 1024
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	**configure** router *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* query-last-member-interval *number*
Tree	query-last-member-interval
Range	1 to 1023
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages

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Context	**configure** router *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* query-response-interval *number*
Tree	query-response-interval
Range	1 to 1023
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-source-address *string*

Synopsis	Source address for MLD queries
Context	**configure** router *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* query-source-address *string*
Tree	query-source-address
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	**configure** router *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* router-alert-check *boolean*
Tree	router-alert-check
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-hosts-only *boolean*

Synopsis	Allow MLD traffic from known hosts only
Context	**configure** router *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* sub-hosts-only *boolean*
Tree	sub-hosts-only
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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subnet-check *boolean*

Synopsis	Enable subnet checking
Context	**configure** router *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* subnet-check *boolean*
Tree	subnet-check
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis	MLD protocol version
Context	**configure** router *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* version *keyword*
Tree	version
Options	1, 2
Default	2
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-if-query-source-address *string*

Synopsis	Source address in queries for group interfaces when not configured at group interface level
Context	**configure** router *string* mld group-if-query-source-address *string*
Tree	group-if-query-source-address
Introduced	16.0.R1
Platforms	All

group-interface [group-interface-name] *reference*

Synopsis	Enter the **group-interface** list instance
Context	**configure** router *string* mld group-interface *reference*
Tree	group-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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[**group-interface-name**] *reference*

Synopsis	Group interface name
Context	**configure** router *string* mld group-interface *reference*
Tree	group-interface
Reference	**configure** service ies *string* subscriber-interface *string* group-interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the MLD interface
Context	**configure** router *string* mld group-interface *reference* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy to filter MLD packets
Context	**configure** router *string* mld group-interface *reference* import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	**configure** router *string* mld group-interface *reference* maximum-number-group-sources *number*
Tree	maximum-number-group-sources

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Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	**configure** router *string* mld group-interface *reference* maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	**configure** router *string* mld group-interface *reference* maximum-number-sources *number*
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mcac

Synopsis	Enter the **mcac** context
Context	**configure** router *string* mld group-interface *reference* mcac
Tree	mcac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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bandwidth

Synopsis	Enter the **bandwidth** context
Context	**configure** router *string* mld group-interface *reference* mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mandatory *(number | keyword)*

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	**configure** router *string* mld group-interface *reference* mcac bandwidth mandatory *(number | keyword)*
Tree	mandatory
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

total *(number | keyword)*

Synopsis	Maximum allowed bandwidth
Context	**configure** router *string* mld group-interface *reference* mcac bandwidth total *(number | keyword)*
Tree	total
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	**configure** router *string* mld group-interface *reference* mcac interface-policy *reference*

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Tree	interface-policy
Reference	**configure** mcac interface-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	Multicast CAC policy name
Context	**configure** router *string* mld group-interface *reference* mcac policy *reference*
Tree	policy
Description	This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment. Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode. If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect. Hierarchical MCAC (HMCAC) is supported on two levels simultaneously: • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).
Reference	**configure** mcac policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** router *string* mld group-interface *reference* query-interval *number*
Tree	query-interval
Range	2 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	**configure** router *string* mld group-interface *reference* query-last-member-interval *number*
Tree	query-last-member-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	**configure** router *string* mld group-interface *reference* query-response-interval *number*
Tree	query-response-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-source-address *string*

Synopsis	Source address for MLD queries
Context	**configure** router *string* mld group-interface *reference* query-source-address *string*
Tree	query-source-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	**configure** router *string* mld group-interface *reference* router-alert-check *boolean*
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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sub-hosts-only *boolean*

Synopsis	Allow MLD traffic from known hosts only
Context	**configure** router *string* mld group-interface *reference* sub-hosts-only *boolean*
Tree	sub-hosts-only
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subnet-check *boolean*

Synopsis	Enable subnet checking
Context	**configure** router *string* mld group-interface *reference* subnet-check *boolean*
Tree	subnet-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis	MLD protocol version
Context	**configure** router *string* mld group-interface *reference* version *keyword*
Tree	version
Options	1, 2
Default	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface [ip-interface-name] *string*

Synopsis	Enter the **interface** list instance
Context	**configure** router *string* mld interface *string*
Tree	interface
Introduced	16.0.R1
Platforms	All

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[**ip-interface-name**] *string*

Synopsis	IP interface name
Context	**configure** router *string* mld interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the MLD interface
Context	**configure** router *string* mld interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy to filter MLD packets
Context	**configure** router *string* mld interface *string* import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	All

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	**configure** router *string* mld interface *string* maximum-number-group-sources *number*
Tree	maximum-number-group-sources

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Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	All

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	**configure** router *string* mld interface *string* maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	**configure** router *string* mld interface *string* maximum-number-sources *number*
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

mcac

Synopsis	Enter the **mcac** context
Context	**configure** router *string* mld interface *string* mcac
Tree	mcac
Introduced	16.0.R1
Platforms	All

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bandwidth

Synopsis	Enter the **bandwidth** context
Context	**configure** router *string* mld interface *string* mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	All

mandatory *(number | keyword)*

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	**configure** router *string* mld interface *string* mcac bandwidth mandatory *(number | keyword)*
Tree	mandatory
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

total *(number | keyword)*

Synopsis	Maximum allowed bandwidth
Context	**configure** router *string* mld interface *string* mcac bandwidth total *(number | keyword)*
Tree	total
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	**configure** router *string* mld interface *string* mcac interface-policy *reference*
Tree	interface-policy

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Reference	**configure** mcac interface-policy *string*
Introduced	16.0.R1
Platforms	All

mc-constraints

Synopsis	Enter the **mc-constraints** context
Context	**configure** router *string* mld interface *string* mcac mc-constraints
Tree	mc-constraints
Introduced	16.0.R1
Platforms	All

level [level-id] *number*

Synopsis	Enter the **level** list instance
Context	**configure** router *string* mld interface *string* mcac mc-constraints level *number*
Tree	level
Introduced	16.0.R1
Platforms	All

[**level-id**] *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	**configure** router *string* mld interface *string* mcac mc-constraints level *number*
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Bandwidth available for this level
Context	**configure** router *string* mld interface *string* mcac mc-constraints level *number* bandwidth *number*

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Tree	bandwidth
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

number-down [number-lag-port-down] *number*

Synopsis	Enter the **number-down** list instance
Context	**configure** router *string* mld interface *string* mcac mc-constraints number-down *number*
Tree	number-down
Introduced	16.0.R1
Platforms	All

[**number-lag-port-down**] *number*

Synopsis	Number of ports that are down in this LAG link
Context	**configure** router *string* mld interface *string* mcac mc-constraints number-down *number*
Tree	number-down
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level ID to associate with number of down LAG ports
Context	**configure** router *string* mld interface *string* mcac mc-constraints number-down *number* level *number*
Tree	level
Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.

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Introduced	16.0.R1
Platforms	All

use-lag-port-weight *boolean*

Synopsis	Use LAG port weight in calculating MCAC constraints
Context	**configure** router *string* mld interface *string* mcac mc-constraints use-lag-port-weight *boolean*
Tree	use-lag-port-weight
Description	When configured to **true**, port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.
Default	false
Introduced	16.0.R1
Platforms	All

policy *reference*

Synopsis	Multicast CAC policy name
Context	**configure** router *string* mld interface *string* mcac policy *reference*
Tree	policy
Description	This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment. Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode. If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect. Hierarchical MCAC (HMCAC) is supported on two levels simultaneously: • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).
Reference	**configure** mcac policy *string*
Introduced	16.0.R1

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Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** router *string* mld interface *string* query-interval *number*
Tree	query-interval
Range	2 to 1024
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	**configure** router *string* mld interface *string* query-last-member-interval *number*
Tree	query-last-member-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	**configure** router *string* mld interface *string* query-response-interval *number*
Tree	query-response-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	All

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	**configure** router *string* mld interface *string* router-alert-check *boolean*
Tree	router-alert-check
Default	true

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Introduced	16.0.R1
Platforms	All

ssm-translate

Synopsis	Enter the **ssm-translate** context
Context	**configure** router *string* mld interface *string* ssm-translate
Tree	ssm-translate
Introduced	16.0.R1
Platforms	All

group-range start *string* end *string*

Synopsis	Enter the **group-range** list instance
Context	**configure** router *string* mld interface *string* ssm-translate group-range start *string* end *string*
Tree	group-range
Introduced	16.0.R1
Platforms	All

start *string*

Synopsis	Lower bound of the group range
Context	**configure** router *string* mld interface *string* ssm-translate group-range start *string* end *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *string*

Synopsis	Upper bound of the group range
Context	**configure** router *string* mld interface *string* ssm-translate group-range start *string* end *string*
Tree	group-range

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [source-address] *string*

Synopsis	Add a list entry for **source**
Context	**configure** router *string* mld interface *string* ssm-translate group-range start *string* end *string* source *string*
Tree	source
Min. Instances	1
Introduced	16.0.R1
Platforms	All

[**source-address**] *string*

Synopsis	Source IP address
Context	**configure** router *string* mld interface *string* ssm-translate group-range start *string* end *string* source *string*
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

static

Synopsis	Enter the **static** context
Context	**configure** router *string* mld interface *string* static
Tree	static
Introduced	16.0.R1
Platforms	All

group [group-address] *string*

Synopsis	Enter the **group** list instance

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Context	**configure** router *string* mld interface *string* static group *string*
Tree	group
Introduced	16.0.R1
Platforms	All

[**group-address**] *string*

Synopsis	Group address of multicast channel
Context	**configure** router *string* mld interface *string* static group *string*
Tree	group
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [source-address] *string*

Synopsis	Add a list entry for **source**
Context	**configure** router *string* mld interface *string* static group *string* source *string*
Tree	source
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R1
Platforms	All

[**source-address**] *string*

Synopsis	Source IP address
Context	**configure** router *string* mld interface *string* static group *string* source *string*
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	any source address (*,G)

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Context	**configure** router *string* mld interface *string* static group *string* starg
Tree	starg
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R2
Platforms	All

group-range start *string* end *string* step *string*

Synopsis	Enter the **group-range** list instance
Context	**configure** router *string* mld interface *string* static group-range start *string* end *string* step *string*
Tree	group-range
Introduced	16.0.R1
Platforms	All

start *string*

Synopsis	Lower bound of the static multicast group
Context	**configure** router *string* mld interface *string* static group-range start *string* end *string* step *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *string*

Synopsis	Upper bound of the static multicast group
Context	**configure** router *string* mld interface *string* static group-range start *string* end *string* step *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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step *string*

Synopsis	Step interval for the group-range addresses
Context	**configure** router *string* mld interface *string* static group-range start *string* end *string* step *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [source-address] *string*

Synopsis	Add a list entry for **source**
Context	**configure** router *string* mld interface *string* static group-range start *string* end *string* step *string* source *string*
Tree	source
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R1
Platforms	All

[**source-address**] *string*

Synopsis	Source IP address
Context	**configure** router *string* mld interface *string* static group-range start *string* end *string* step *string* source *string*
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	any source address (*,G)
Context	**configure** router *string* mld interface *string* static group-range start *string* end *string* step *string* starg
Tree	starg
Notes	The following elements are part of a mandatory choice: **source** or **starg**.

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Introduced	16.0.R2
Platforms	All

version *keyword*

Synopsis	MLD protocol version
Context	**configure** router *string* mld interface *string* version *keyword*
Tree	version
Options	1, 2
Default	2
Introduced	16.0.R1
Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** router *string* mld query-interval *number*
Tree	query-interval
Range	2 to 1024
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	**configure** router *string* mld query-last-member-interval *number*
Tree	query-last-member-interval
Range	1 to 1023
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

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query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	**configure** router *string* mld query-response-interval *number*
Tree	query-response-interval
Range	1 to 1023
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	**configure** router *string* mld robust-count *number*
Tree	robust-count
Range	2 to 10
Default	2
Introduced	16.0.R1
Platforms	All

ssm-translate

Synopsis	Enter the **ssm-translate** context
Context	**configure** router *string* mld ssm-translate
Tree	ssm-translate
Introduced	16.0.R1
Platforms	All

group-range start *string* end *string*

Synopsis	Enter the **group-range** list instance
Context	**configure** router *string* mld ssm-translate group-range start *string* end *string*
Tree	group-range
Introduced	16.0.R1

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Platforms	All

start *string*

Synopsis	Lower bound of the group range
Context	**configure** router *string* mld ssm-translate group-range start *string* end *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *string*

Synopsis	Upper bound of the group range
Context	**configure** router *string* mld ssm-translate group-range start *string* end *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [source-address] *string*

Synopsis	Add a list entry for **source**
Context	**configure** router *string* mld ssm-translate group-range start *string* end *string* source *string*
Tree	source
Min. Instances	1
Introduced	16.0.R1
Platforms	All

[**source-address**] *string*

Synopsis	Source IP address
Context	**configure** router *string* mld ssm-translate group-range start *string* end *string* source *string*

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Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

mpls

Synopsis	Enable the **mpls** context
Context	**configure** router *string* mpls
Tree	mpls
Introduced	16.0.R1
Platforms	All

admin-group-frr *boolean*

Synopsis	Use admin group constraints for FRR path computation
Context	**configure** router *string* mpls admin-group-frr *boolean*
Tree	admin-group-frr
Default	false
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the MPLS instance
Context	**configure** router *string* mpls admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

auto-bandwidth-multipliers

Synopsis	Enter the **auto-bandwidth-multipliers** context

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Context	**configure** router *string* mpls auto-bandwidth-multipliers
Tree	auto-bandwidth-multipliers
Introduced	16.0.R1
Platforms	All

adjust-multiplier *number*

Synopsis	Collection intervals in a sample interval
Context	**configure** router *string* mpls auto-bandwidth-multipliers adjust-multiplier *number*
Tree	adjust-multiplier
Range	1 to 16383
Default	288
Introduced	16.0.R1
Platforms	All

sample-multiplier *number*

Synopsis	Collection intervals in a sample interval
Context	**configure** router *string* mpls auto-bandwidth-multipliers sample-multiplier *number*
Tree	sample-multiplier
Range	1 to 511
Default	1
Introduced	16.0.R1
Platforms	All

auto-lsp [template-name] *reference*

Synopsis	Enter the **auto-lsp** list instance
Context	**configure** router *string* mpls auto-lsp *reference*
Tree	auto-lsp
Max. Instances	500
Introduced	16.0.R1
Platforms	All

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[**template-name**] *reference*

Synopsis	LSP template name
Context	**configure** router *string* mpls auto-lsp *reference*
Tree	auto-lsp
Reference	**configure** router *string* mpls lsp-template *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

one-hop *boolean*

Synopsis	Enable one-hop point-to-point LSP automatic signaling
Context	**configure** router *string* mpls auto-lsp *reference* one-hop *boolean*
Tree	one-hop
Description	This command enables the automatic signaling of one-hop point-to-point LSPs.
Default	false
Notes	The following elements are part of a choice: **one-hop** or **policy**.
Introduced	16.0.R1
Platforms	All

policy *reference*

Synopsis	Peer prefix policy name
Context	**configure** router *string* mpls auto-lsp *reference* policy *reference*
Tree	policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	The following elements are part of a choice: **one-hop** or **policy**. This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

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aux-stats

Synopsis	Enable the **aux-stats** context
Context	**configure** router *string* mpls aux-stats
Tree	aux-stats
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

sr *boolean*

Synopsis	Traffic type count in MPLS statistics table
Context	**configure** router *string* mpls aux-stats sr *boolean*
Tree	sr
Description	This command configures the type of traffic to count in the auxiliary MPLS statistics table. It refers to any type of segment routing traffic (SR-OSPF, SR-ISIS, SR-TE, and so on).
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

bypass-resignal-timer *number*

Synopsis	Resignal timer for bypass
Context	**configure** router *string* mpls bypass-resignal-timer *number*
Tree	bypass-resignal-timer
Range	1 to 10080
Units	minutes
Introduced	16.0.R1
Platforms	All

class-forwarding-policy [policy-name] *string*

Synopsis	Enter the **class-forwarding-policy** list instance
Context	**configure** router *string* mpls class-forwarding-policy *string*
Tree	class-forwarding-policy
Max. Instances	15

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Introduced	16.0.R1
Platforms	All

[**policy-name**] *string*

Synopsis	Name of class forwarding policy
Context	**configure** router *string* mpls class-forwarding-policy *string*
Tree	class-forwarding-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

default-set *number*

Synopsis	Default forwarding set ID
Context	**configure** router *string* mpls class-forwarding-policy *string* default-set *number*
Tree	default-set
Range	1 to 6
Default	1
Introduced	16.0.R1
Platforms	All

fc [fc-name] *keyword*

Synopsis	Enter the **fc** list instance
Context	**configure** router *string* mpls class-forwarding-policy *string* fc *keyword*
Tree	fc
Introduced	16.0.R1
Platforms	All

[**fc-name**] *keyword*

Synopsis	Forwarding class name for LSP
Context	**configure** router *string* mpls class-forwarding-policy *string* fc *keyword*

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Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

forwarding-set *number*

Synopsis	Forwarding set ID for forwarding classes
Context	**configure** router *string* mpls class-forwarding-policy *string* fc *keyword* forwarding-set *number*
Tree	forwarding-set
Range	1 to 6
Default	1
Introduced	16.0.R1
Platforms	All

cspf-on-loose-hop *boolean*

Synopsis	Calculate CSPF until next loose hop on LSR
Context	**configure** router *string* mpls cspf-on-loose-hop *boolean*
Tree	cspf-on-loose-hop
Default	false
Introduced	16.0.R1
Platforms	All

dynamic-bypass *boolean*

Synopsis	Create dynamic bypass LSPs in FRR
Context	**configure** router *string* mpls dynamic-bypass *boolean*
Tree	dynamic-bypass
Default	true
Introduced	16.0.R1
Platforms	All

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entropy-label

Synopsis	Enter the **entropy-label** context
Context	**configure** router *string* mpls entropy-label
Tree	entropy-label
Introduced	16.0.R1
Platforms	All

rsvp-te *boolean*

Synopsis	Apply entropy labels to RSVP-TE LSPs
Context	**configure** router *string* mpls entropy-label rsvp-te *boolean*
Tree	rsvp-te
Introduced	16.0.R1
Platforms	All

sr-te *boolean*

Synopsis	Apply entropy labels to SR-TE LSPs
Context	**configure** router *string* mpls entropy-label sr-te *boolean*
Tree	sr-te
Introduced	16.0.R1
Platforms	All

exponential-backoff-retry *boolean*

Synopsis	Use exponential back-off timer when retrying an LSP
Context	**configure** router *string* mpls exponential-backoff-retry *boolean*
Tree	exponential-backoff-retry
Default	false
Introduced	16.0.R1
Platforms	All

forwarding-policies

Synopsis	Enable the **forwarding-policies** context

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Context	**configure** router *string* mpls forwarding-policies
Tree	forwarding-policies
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MPLS forwarding policies
Context	**configure** router *string* mpls forwarding-policies admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

forwarding-policy [policy-name] *string*

Synopsis	Enter the **forwarding-policy** list instance
Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string*
Tree	forwarding-policy
Max. Instances	65536
Introduced	16.0.R1
Platforms	All

[**policy-name**] *string*

Synopsis	Forwarding policy name
Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string*
Tree	forwarding-policy
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the MPLS forwarding policy
Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

binding-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Binding label
Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string* binding-label *number*
Tree	binding-label
Range	32 to 1048575
Introduced	16.0.R1
Platforms	All

egress-statistics

Synopsis	Enable the **egress-statistics** context
Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string* egress-statistics
Tree	egress-statistics
Introduced	19.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of egress or ingress statistics

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Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string* egress-statistics admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.7.R1
Platforms	All

endpoint *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure endpoint address.
Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string* endpoint *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	endpoint
Introduced	16.0.R4
Platforms	All

ingress-statistics

Synopsis	Enable the **ingress-statistics** context
Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string* ingress-statistics
Tree	ingress-statistics
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of egress or ingress statistics
Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string* ingress-statistics admin-state *keyword*
Tree	admin-state
Options	enable, disable

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Default	disable
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	Metric of an MPLS forwarding policy
Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string* metric *number*
Tree	metric
Range	1 to 16777215
Introduced	16.0.R4
Platforms	All

next-hop-group [index] *number*

Synopsis	Enter the **next-hop-group** list instance
Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string* next-hop-group *number*
Tree	next-hop-group
Max. Instances	32
Introduced	16.0.R1
Platforms	All

[**index**] *number*

Synopsis	Index for next hop group
Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string* next-hop-group *number*
Tree	next-hop-group
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of NHG in MPLS forwarding policy
Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string* next-hop-group *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

backup-next-hop

Synopsis	Enable the **backup-next-hop** context
Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string* next-hop-group *number* backup-next-hop
Tree	backup-next-hop
Introduced	16.0.R1
Platforms	All

next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Next hop address
Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string* next-hop-group *number* backup-next-hop next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	next-hop
Introduced	16.0.R1
Platforms	All

pushed-labels [index] *number*

Synopsis	Enter the **pushed-labels** list instance
Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string* next-hop-group *number* backup-next-hop pushed-labels *number*
Tree	pushed-labels
Max. Instances	10

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Introduced	16.0.R4
Platforms	All

[**index**] *number*

Synopsis	Index for push label
Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string* next-hop-group *number* backup-next-hop pushed-labels *number*
Tree	pushed-labels
Range	1 to 10
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

label *number*

Synopsis	Label value
Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string* next-hop-group *number* backup-next-hop pushed-labels *number* label *number*
Tree	label
Range	1 to 1048575
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

load-balancing-weight *number*

Synopsis	Load balancing weight of an NHG entry
Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string* next-hop-group *number* load-balancing-weight *number*
Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	16.0.R4
Platforms	All

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primary-next-hop

Synopsis	Enable the **primary-next-hop** context
Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string* next-hop-group *number* primary-next-hop
Tree	primary-next-hop
Introduced	16.0.R1
Platforms	All

next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Next hop address
Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string* next-hop-group *number* primary-next-hop next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	next-hop
Introduced	16.0.R1
Platforms	All

pushed-labels [index] *number*

Synopsis	Enter the **pushed-labels** list instance
Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string* next-hop-group *number* primary-next-hop pushed-labels *number*
Tree	pushed-labels
Max. Instances	10
Introduced	16.0.R4
Platforms	All

[index] *number*

Synopsis	Index for push label
Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string* next-hop-group *number* primary-next-hop pushed-labels *number*
Tree	pushed-labels
Range	1 to 10
Notes	This element is part of a list key.

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Introduced	16.0.R4
Platforms	All

label *number*

Synopsis	Label value
Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string* next-hop-group *number* primary-next-hop pushed-labels *number* label *number*
Tree	label
Range	1 to 1048575
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

resolution-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Resolution type for next hop group
Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string* next-hop-group *number* resolution-type *keyword*
Tree	resolution-type
Options	direct, indirect
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

preference *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Preference number

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Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string* preference *number*
Tree	preference
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

revert-timer *number*

Synopsis	Revert timer
Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string* revert-timer *number*
Tree	revert-timer
Range	1 to 600
Units	seconds
Introduced	16.0.R1
Platforms	All

tunnel-table-pref *number*

Synopsis	Tunnel table preference
Context	**configure** router *string* mpls forwarding-policies forwarding-policy *string* tunnel-table-pref *number*
Tree	tunnel-table-pref
Description	This command configures the TTM preference value of an MPLS forwarding policy. It is used by applications to select one tunnel type to bind to in TTM when multiple tunnel types are enabled for the application. It is recommended to not set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.
Range	1 to 255
Default	255
Introduced	16.0.R4
Platforms	All

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reserved-label-block *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reserved label block
Context	**configure** router *string* mpls forwarding-policies reserved-label-block *reference*
Tree	reserved-label-block
Reference	**configure** router *string* mpls-labels reserved-label-block *string*
Introduced	16.0.R1
Platforms	All

frr-object *boolean*

Synopsis	Signal with fast reroute object
Context	**configure** router *string* mpls frr-object *boolean*
Tree	frr-object
Default	true
Introduced	16.0.R1
Platforms	All

hold-timer *number*

Synopsis	Hold timer value
Context	**configure** router *string* mpls hold-timer *number*
Tree	hold-timer
Range	0 to 1000
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

ingress-statistics

Synopsis	Enter the **ingress-statistics** context
Context	**configure** router *string* mpls ingress-statistics

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Tree	ingress-statistics
Introduced	16.0.R1
Platforms	All

lsp sender *(ipv4-address-no-zone | ipv6-address-no-zone)* lsp-name *string*

Synopsis	Enter the **lsp** list instance
Context	**configure** router *string* mpls ingress-statistics lsp sender *(ipv4-address-no-zone | ipv6-address-no-zone)* lsp-name *string*
Tree	lsp
Introduced	16.0.R1
Platforms	All

sender *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Sender address
Context	**configure** router *string* mpls ingress-statistics lsp sender *(ipv4-address-no-zone | ipv6-address-no-zone)* lsp-name *string*
Tree	lsp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

lsp-name *string*

Synopsis	LSP name
Context	**configure** router *string* mpls ingress-statistics lsp sender *(ipv4-address-no-zone | ipv6-address-no-zone)* lsp-name *string*
Tree	lsp
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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accounting-policy *reference*

Synopsis	Accounting policy ID
Context	**configure** router *string* mpls ingress-statistics lsp sender *(ipv4-address-no-zone | ipv6-address-no-zone)* lsp-name *string* accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of statistics for the LSP
Context	**configure** router *string* mpls ingress-statistics lsp sender *(ipv4-address-no-zone | ipv6-address-no-zone)* lsp-name *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

collect-stats *boolean*

Synopsis	Collect statistics
Context	**configure** router *string* mpls ingress-statistics lsp sender *(ipv4-address-no-zone | ipv6-address-no-zone)* lsp-name *string* collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

stat-mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Stat mode

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Context	**configure** router *string* mpls ingress-statistics lsp sender *(ipv4-address-no-zone | ipv6-address-no-zone)* lsp-name *string* stat-mode *keyword*
Tree	stat-mode
Options	per-fc, aggregate
Introduced	21.10.R1
Platforms	All

p2mp-template-lsp sender *(ipv4-address-no-zone | ipv6-address-no-zone)* rsvp-session-name *string*

Synopsis	Enter the **p2mp-template-lsp** list instance
Context	**configure** router *string* mpls ingress-statistics p2mp-template-lsp sender *(ipv4-address-no-zone | ipv6-address-no-zone)* rsvp-session-name *string*
Tree	p2mp-template-lsp
Introduced	16.0.R1
Platforms	All

sender *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Sender address
Context	**configure** router *string* mpls ingress-statistics p2mp-template-lsp sender *(ipv4-address-no-zone | ipv6-address-no-zone)* rsvp-session-name *string*
Tree	p2mp-template-lsp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

rsvp-session-name *string*

Synopsis	RSVP session name
Context	**configure** router *string* mpls ingress-statistics p2mp-template-lsp sender *(ipv4-address-no-zone | ipv6-address-no-zone)* rsvp-session-name *string*
Tree	p2mp-template-lsp
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

accounting-policy *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accounting policy ID
Context	**configure** router *string* mpls ingress-statistics p2mp-template-lsp sender *(ipv4-address-no-zone | ipv6-address-no-zone)* rsvp-session-name *string* accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of statistics for the LSP
Context	**configure** router *string* mpls ingress-statistics p2mp-template-lsp sender *(ipv4-address-no-zone | ipv6-address-no-zone)* rsvp-session-name *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

collect-stats *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Collect statistics
Context	**configure** router *string* mpls ingress-statistics p2mp-template-lsp sender *(ipv4-address-no-zone | ipv6-address-no-zone)* rsvp-session-name *string* collect-stats *boolean*
Tree	collect-stats
Default	false

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Introduced	16.0.R1
Platforms	All

max-stats *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of statistic indices
Context	**configure** router *string* mpls ingress-statistics p2mp-template-lsp sender *(ipv4-address-no-zone | ipv6-address-no-zone)* rsvp-session-name *string* max-stats *number*
Tree	max-stats
Range	1 to 8191
Default	8191
Introduced	16.0.R1
Platforms	All

stat-mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Stat mode
Context	**configure** router *string* mpls ingress-statistics p2mp-template-lsp sender *(ipv4-address-no-zone | ipv6-address-no-zone)* rsvp-session-name *string* stat-mode *keyword*
Tree	stat-mode
Options	per-fc, aggregate
Introduced	21.10.R1
Platforms	All

p2p-template-lsp sender *(ipv4-address-no-zone | ipv6-address-no-zone)* rsvp-session-name *string*

Synopsis	Enter the **p2p-template-lsp** list instance
Context	**configure** router *string* mpls ingress-statistics p2p-template-lsp sender *(ipv4-address-no-zone | ipv6-address-no-zone)* rsvp-session-name *string*

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Tree	p2p-template-lsp
Introduced	16.0.R1
Platforms	All

sender *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Sender address
Context	**configure** router *string* mpls ingress-statistics p2p-template-lsp sender *(ipv4-address-no-zone | ipv6-address-no-zone)* rsvp-session-name *string*
Tree	p2p-template-lsp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

rsvp-session-name *string*

Synopsis	RSVP session name
Context	**configure** router *string* mpls ingress-statistics p2p-template-lsp sender *(ipv4-address-no-zone | ipv6-address-no-zone)* rsvp-session-name *string*
Tree	p2p-template-lsp
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

accounting-policy *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accounting policy ID
Context	**configure** router *string* mpls ingress-statistics p2p-template-lsp sender *(ipv4-address-no-zone | ipv6-address-no-zone)* rsvp-session-name *string* accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*

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Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of statistics for the LSP
Context	**configure** router *string* mpls ingress-statistics p2p-template-lsp sender *(ipv4-address-no-zone | ipv6-address-no-zone)* rsvp-session-name *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

collect-stats *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Collect statistics
Context	**configure** router *string* mpls ingress-statistics p2p-template-lsp sender *(ipv4-address-no-zone | ipv6-address-no-zone)* rsvp-session-name *string* collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

max-stats *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of statistic indices
Context	**configure** router *string* mpls ingress-statistics p2p-template-lsp sender *(ipv4-address-no-zone | ipv6-address-no-zone)* rsvp-session-name *string* max-stats *number*
Tree	max-stats

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Range	1 to 8191
Default	8191
Introduced	16.0.R1
Platforms	All

stat-mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Stat mode
Context	**configure** router *string* mpls ingress-statistics p2p-template-lsp sender *(ipv4-address-no-zone | ipv6-address-no-zone)* rsvp-session-name *string* stat-mode *keyword*
Tree	stat-mode
Options	per-fc, aggregate
Introduced	21.10.R1
Platforms	All

interface [interface-name] *reference*

Synopsis	Enter the **interface** list instance
Context	**configure** router *string* mpls interface *reference*
Tree	interface
Description	Commands in this context configure the attributes for MPLS protocol support on an IP interface. MPLS commands are not executed on an IP interface where MPLS is not enabled. An MPLS interface must be explicitly enabled (admin-state enabled). The MPLS interface must be admin-state disabled to delete the interface definition. A corresponding RSVP interface must also be configured. The MPLS interface cannot be deleted without also deleting the RSVP interface.
Introduced	16.0.R1
Platforms	All

[**interface-name**] *reference*

Synopsis	Router interface name

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Context	**configure** router *string* mpls interface *reference*
Tree	interface
Reference	**configure** router *string* interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-group *reference*

Synopsis	Administrative groups supported by the interface
Context	**configure** router *string* mpls interface *reference* admin-group *reference*
Tree	admin-group
Description	This command specifies the administrative groups that the interface supports. This information is advertised as part of OSPF and IS-IS to help CSPF compute constrained LSPs that must include or exclude certain administrative groups. An MPLS interface is assumed to belong to all the administrative groups unless this command is issued under the interface configuration. With this command configured, the interface is assumed to belong to only the groups specifically configured in this command. Only the administrative groups bound to an MPLS interface are advertised in TE link TLVs and sub-TLVs when the **traffic-engineering** option is enabled in IS-IS or OSPF. IES and VPRN interfaces do not have their attributes advertised in TE TLVs.
Reference	**configure** routing-options if-attribute admin-group *string*
Max. Instances	32
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the MPLS interface
Context	**configure** router *string* mpls interface *reference* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

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label-map [in-label] *number*

Synopsis	Enter the **label-map** list instance
Context	**configure** router *string* mpls interface *reference* label-map *number*
Tree	label-map
Introduced	16.0.R1
Platforms	All

[**in-label**] *number*

Synopsis	Match the incoming MPLS label
Context	**configure** router *string* mpls interface *reference* label-map *number*
Tree	label-map
Range	32 to 1048575
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the label map
Context	**configure** router *string* mpls interface *reference* label-map *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

pop

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Pop (remove) the incoming label and forward packet based on service header
Context	**configure** router *string* mpls interface *reference* label-map *number* pop
Tree	pop
Notes	The following elements are part of a choice: **pop** or **swap**.
Introduced	16.0.R1
Platforms	All

swap

Synopsis	Enable the **swap** context
Context	**configure** router *string* mpls interface *reference* label-map *number* swap
Tree	swap
Notes	The following elements are part of a choice: **pop** or **swap**.
Introduced	16.0.R1
Platforms	All

next-hop *string*

Synopsis	IP address for the next hop
Context	**configure** router *string* mpls interface *reference* label-map *number* swap next-hop *string*
Tree	next-hop
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

out-label *(number | keyword)*

Synopsis	Push specific label onto the top of the outgoing packet's label stack
Context	**configure** router *string* mpls interface *reference* label-map *number* swap out-label *(number | keyword)*
Tree	out-label
Range	16 to 1048575

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Options	implicit-null-label
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

srlg-group [name] *reference*

Synopsis	Add a list entry for **srlg-group**
Context	**configure** router *string* mpls interface *reference* srlg-group *reference*
Tree	srlg-group
Max. Instances	64
Introduced	16.0.R1
Platforms	All

[**name**] *reference*

Synopsis	Shared Risk Link Group (SRLG) name
Context	**configure** router *string* mpls interface *reference* srlg-group *reference*
Tree	srlg-group
Reference	**configure** routing-options if-attribute srlg-group *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

te-metric *number*

Synopsis	TE metric for the interface
Context	**configure** router *string* mpls interface *reference* te-metric *number*
Tree	te-metric
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

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least-fill-min-thd *number*

Synopsis	Percentage of the least fill minimum threshold value
Context	**configure** router *string* mpls least-fill-min-thd *number*
Tree	least-fill-min-thd
Range	0 to 100
Units	percent
Default	5
Introduced	16.0.R1
Platforms	All

least-fill-reoptim-thd *number*

Synopsis	Percentage of the least fill reoptimization threshold value
Context	**configure** router *string* mpls least-fill-reoptim-thd *number*
Tree	least-fill-reoptim-thd
Range	0 to 100
Units	percent
Default	10
Introduced	16.0.R1
Platforms	All

logger-event-bundling *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Merge and bundle MPLS traps
Context	**configure** router *string* mpls logger-event-bundling *boolean*
Tree	logger-event-bundling
Default	false
Introduced	16.0.R1
Platforms	All

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lsp [lsp-name] *string*

Synopsis	Enter the **lsp** list instance
Context	**configure** router *string* mpls lsp *string*
Tree	lsp
Introduced	16.0.R1
Platforms	All

[**lsp-name**] *string*

Synopsis	Labeled Switch path name
Context	**configure** router *string* mpls lsp *string*
Tree	lsp
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptive *boolean*

Synopsis	Enable make-before-break functionality
Context	**configure** router *string* mpls lsp *string* adaptive *boolean*
Tree	adaptive
Default	true
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LSP
Context	**configure** router *string* mpls lsp *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

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admin-tag [name] *reference*

Synopsis	Add a list entry for **admin-tag**
Context	**configure** router *string* mpls lsp *string* admin-tag *reference*
Tree	admin-tag
Max. Instances	4
Introduced	16.0.R1
Platforms	All

[**name**] *reference*

Synopsis	Name of the admin tags
Context	**configure** router *string* mpls lsp *string* admin-tag *reference*
Tree	admin-tag
Reference	**configure** routing-options admin-tags admin-tag *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adspec *boolean*

Synopsis	Include ADSPEC object in RSVP messages
Context	**configure** router *string* mpls lsp *string* adspec *boolean*
Tree	adspec
Default	false
Introduced	16.0.R1
Platforms	All

auto-bandwidth

Synopsis	Enable the **auto-bandwidth** context
Context	**configure** router *string* mpls lsp *string* auto-bandwidth
Tree	auto-bandwidth
Introduced	16.0.R1

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Platforms	All

adjust-down

Synopsis	Enter the **adjust-down** context
Context	**configure** router *string* mpls lsp *string* auto-bandwidth adjust-down
Tree	adjust-down
Introduced	16.0.R1
Platforms	All

bw *number*

Synopsis	Minimum difference in absolute bandwidth
Context	**configure** router *string* mpls lsp *string* auto-bandwidth adjust-down bw *number*
Tree	bw
Range	0 to 6400000
Units	megabps
Default	0
Introduced	16.0.R1
Platforms	All

percent *number*

Synopsis	Minimum difference in percent
Context	**configure** router *string* mpls lsp *string* auto-bandwidth adjust-down percent *number*
Tree	percent
Range	0 to 100
Units	percent
Default	5
Introduced	16.0.R1
Platforms	All

adjust-up

Synopsis	Enter the **adjust-up** context

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Context	**configure** router *string* mpls lsp *string* auto-bandwidth adjust-up
Tree	adjust-up
Introduced	16.0.R1
Platforms	All

bw *number*

Synopsis	Minimum difference in absolute bandwidth
Context	**configure** router *string* mpls lsp *string* auto-bandwidth adjust-up bw *number*
Tree	bw
Range	0 to 6400000
Units	megabps
Default	0
Introduced	16.0.R1
Platforms	All

percent *number*

Synopsis	Minimum difference in percent
Context	**configure** router *string* mpls lsp *string* auto-bandwidth adjust-up percent *number*
Tree	percent
Range	0 to 100
Units	percent
Default	5
Introduced	16.0.R1
Platforms	All

fc [fc-name] *keyword*

Synopsis	Enter the **fc** list instance
Context	**configure** router *string* mpls lsp *string* auto-bandwidth fc *keyword*
Tree	fc
Max. Instances	8
Introduced	16.0.R1

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Platforms	All

[**fc-name**] *keyword*

Synopsis	Forwarding class name for LSP
Context	**configure** router *string* mpls lsp *string* auto-bandwidth fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

sampling-weight *number*

Synopsis	Forwarding class weight for LSP
Context	**configure** router *string* mpls lsp *string* auto-bandwidth fc *keyword* sampling-weight *number*
Tree	sampling-weight
Range	0 to 100
Units	percent
Default	100
Introduced	16.0.R1
Platforms	All

max-bandwidth *number*

Synopsis	Maximum bandwidth of auto-bandwidth to request for LSP
Context	**configure** router *string* mpls lsp *string* auto-bandwidth max-bandwidth *number*
Tree	max-bandwidth
Range	0 to 6400000
Units	megabps
Default	100000
Introduced	16.0.R1
Platforms	All

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min-bandwidth *number*

Synopsis	Minimum bandwidth of auto-bandwidth to request for the LSP
Context	**configure** router *string* mpls lsp *string* auto-bandwidth min-bandwidth *number*
Tree	min-bandwidth
Range	0 to 6400000
Units	megabps
Default	0
Introduced	16.0.R1
Platforms	All

monitor-bandwidth *boolean*

Synopsis	Collect and display auto-bandwidth measurements for the LSP
Context	**configure** router *string* mpls lsp *string* auto-bandwidth monitor-bandwidth *boolean*
Tree	monitor-bandwidth
Default	false
Introduced	16.0.R1
Platforms	All

multipliers

Synopsis	Enter the **multipliers** context
Context	**configure** router *string* mpls lsp *string* auto-bandwidth multipliers
Tree	multipliers
Introduced	16.0.R1
Platforms	All

adjust-multiplier *number*

Synopsis	Number of collection intervals in the adjust interval
Context	**configure** router *string* mpls lsp *string* auto-bandwidth multipliers adjust-multiplier *number*
Tree	adjust-multiplier
Range	1 to 16383
Introduced	16.0.R1

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Platforms	All

sample-multiplier *number*

Synopsis	Multiplier for collection intervals in a sample interval
Context	**configure** router *string* mpls lsp *string* auto-bandwidth multipliers sample-multiplier *number*
Tree	sample-multiplier
Range	1 to 511
Introduced	16.0.R1
Platforms	All

overflow-limit

Synopsis	Enable the **overflow-limit** context
Context	**configure** router *string* mpls lsp *string* auto-bandwidth overflow-limit
Tree	overflow-limit
Introduced	16.0.R1
Platforms	All

bw *number*

Synopsis	Minimum difference in absolute bandwidth
Context	**configure** router *string* mpls lsp *string* auto-bandwidth overflow-limit bw *number*
Tree	bw
Range	1 to 6400000
Units	megabps
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number of overflow samples to trigger an overflow auto-bandwidth adjustment attempt
Context	**configure** router *string* mpls lsp *string* auto-bandwidth overflow-limit number *number*
Tree	number
Range	1 to 10

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Minimum difference in percent between the LSP bandwidth and the sampled data rate
Context	**configure** router *string* mpls lsp *string* auto-bandwidth overflow-limit threshold *number*
Tree	threshold
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	All

underflow-limit

Synopsis	Enable the **underflow-limit** context
Context	**configure** router *string* mpls lsp *string* auto-bandwidth underflow-limit
Tree	underflow-limit
Introduced	16.0.R1
Platforms	All

bw *number*

Synopsis	Minimum difference in absolute bandwidth
Context	**configure** router *string* mpls lsp *string* auto-bandwidth underflow-limit bw *number*
Tree	bw
Range	1 to 6400000
Units	megabps
Introduced	16.0.R1
Platforms	All

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number *number*

Synopsis	Number of overflow samples to trigger an overflow auto-bandwidth adjustment attempt
Context	**configure** router *string* mpls lsp *string* auto-bandwidth underflow-limit number *number*
Tree	number
Range	1 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Minimum difference in percent between the LSP bandwidth and the sampled data rate
Context	**configure** router *string* mpls lsp *string* auto-bandwidth underflow-limit threshold *number*
Tree	threshold
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	All

use-last-adj-bw

Synopsis	Enable the **use-last-adj-bw** context
Context	**configure** router *string* mpls lsp *string* auto-bandwidth use-last-adj-bw
Tree	use-last-adj-bw
Introduced	16.0.R5
Platforms	All

secondary-retry-limit *(number | keyword)*

Synopsis	Maximum number of retry limits for secondary paths
Context	**configure** router *string* mpls lsp *string* auto-bandwidth use-last-adj-bw secondary-retry-limit *(number | keyword)*
Tree	secondary-retry-limit

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Description	This command configures the maximum number of retry attempts for secondary paths. After each successful attempt, the counter is reset to zero.
Range	1 to 10000
Options	infinite
Default	5
Introduced	16.0.R5
Platforms	All

bfd

Synopsis	Enter the **bfd** context
Context	**configure** router *string* mpls lsp *string* bfd
Tree	bfd
Description	Commands in this context configure BFD on RSVP LSPs or Seamless BFD on SR-TE LSPs.
Introduced	16.0.R1
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD on the RSVP LSP or S-BFD on the SR-TE LSP
Context	**configure** router *string* mpls lsp *string* bfd bfd-liveness *boolean*
Tree	bfd-liveness
Default	false
Introduced	16.0.R1
Platforms	All

bfd-template *reference*

Synopsis	BFD template to be used by LSP BFD sessions
Context	**configure** router *string* mpls lsp *string* bfd bfd-template *reference*
Tree	bfd-template
Reference	**configure** bfd bfd-template *string*
Introduced	16.0.R1
Platforms	All

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failure-action *keyword*

Synopsis	Action when LSP BFD fails on the RSVP SR-TE LSP
Context	**configure** router *string* mpls lsp *string* bfd failure-action *keyword*
Tree	failure-action
Description	The command specifies the action when LSP BFD fails on an RSVP, SR-TE, or LDP LSP. Regardless of the failure action specified, when the BFD session goes down on the LSP, the system generates an SNMP trap.
Options	none, down, failover, failover-or-down
Default	none
Introduced	16.0.R1
Platforms	All

lsp-ping-interval *(number | keyword)*

Synopsis	Interval for periodic LSP ping for BFD bootstrapping
Context	**configure** router *string* mpls lsp *string* bfd lsp-ping-interval *(number | keyword)*
Tree	lsp-ping-interval
Range	60 to 300
Units	seconds
Options	none
Default	60
Introduced	16.0.R1
Platforms	All

return-path-label *number*

Synopsis	S-BFD return-path label
Context	**configure** router *string* mpls lsp *string* bfd return-path-label *number*
Tree	return-path-label
Description	This command configures the S-BFD session to echo mode and adds an additional MPLS label to the bottom of the label stack for the S-BFD packet. The command applies to the initiator of the S-BFD sessions. The return-path label may be a binding SID for an SR policy or other MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through this MPLS return path.

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If the command is deleted, S-BFD returns to asynchronous mode and no return-path label is pushed by the initiator node. Any S-BFD packets for this LSP or path that the reflector receives are routed through the IGP path.

Range 32 to 1048512

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

wait-for-up-timer *number*

Synopsis Time to wait for BFD to become operationally available

Context **configure** router *string* mpls lsp *string* bfd wait-for-up-timer *number*

Tree wait-for-up-timer

Description This command configures the time to wait for BFD to become operationally up. The timer is applicable to SR-TE LSPs, including auto LSPs and PCE-initiated LSPS, as well RSVP-TE LSPs.

For SR-TE LSPs, the timer takes effect when BFD is first enabled on a path or when BFD transitions from up to down. Upon expiration, if BFD is not up, the path is torn down, removed from the TTM and the IOM, and the system starts the retry timer.

For RSVP-TE LSPs, the timer controls the following:

- a path undergoing MBB when BFD is up
- the initial administrative state of the LSP
- the retry signaling of non-standby secondary paths

Range 1 to 60

Units seconds

Default 4

Introduced 19.7.R1

Platforms All

bgp-shortcut *boolean*

Synopsis Include LSP for BGP routes

Context **configure** router *string* mpls lsp *string* bgp-shortcut *boolean*

Tree bgp-shortcut

Introduced 16.0.R1

Platforms All

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bgp-transport-tunnel *boolean*

Synopsis	Include LSP as transport LSP for labeled BGP routes
Context	**configure** router *string* mpls lsp *string* bgp-transport-tunnel *boolean*
Tree	bgp-transport-tunnel
Introduced	16.0.R1
Platforms	All

binding-sid *number*

Synopsis	Binding SID for the LSP
Context	**configure** router *string* mpls lsp *string* binding-sid *number*
Tree	binding-sid
Description	This command binds a label to the LSP. The label value must belong to the reserved label block that is configured with the **configure router mpls lsp-bsid-block** command.
Range	32 to 1048575
Introduced	22.10.R1
Platforms	All

class-forwarding

Synopsis	Enable the **class-forwarding** context
Context	**configure** router *string* mpls lsp *string* class-forwarding
Tree	class-forwarding
Introduced	16.0.R1
Platforms	All

forwarding-set

Synopsis	Enter the **forwarding-set** context
Context	**configure** router *string* mpls lsp *string* class-forwarding forwarding-set
Tree	forwarding-set
Notes	The following elements are part of a choice: (**default-lsp** and **fc**) or **forwarding-set**.
Introduced	16.0.R1
Platforms	All

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policy *reference*

Synopsis	Name for the class based forwarding policy for LSP instances
Context	**configure** router *string* mpls lsp *string* class-forwarding forwarding-set policy *reference*
Tree	policy
Reference	**configure** router *string* mpls class-forwarding-policy *string*
Introduced	16.0.R1
Platforms	All

set *number*

Synopsis	Forwarding set ID
Context	**configure** router *string* mpls lsp *string* class-forwarding forwarding-set set *number*
Tree	set
Range	1 to 6
Introduced	16.0.R1
Platforms	All

class-type *number*

Synopsis	Class type for an LSP
Context	**configure** router *string* mpls lsp *string* class-type *number*
Tree	class-type
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All

egress-statistics

Synopsis	Enable the **egress-statistics** context
Context	**configure** router *string* mpls lsp *string* egress-statistics
Tree	egress-statistics
Introduced	16.0.R1
Platforms	All

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accounting-policy *reference*

Synopsis	Accounting policy ID
Context	**configure** router *string* mpls lsp *string* egress-statistics accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of statistics for the LSP
Context	**configure** router *string* mpls lsp *string* egress-statistics admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

collect-stats *boolean*

Synopsis	Collect LSP statistics
Context	**configure** router *string* mpls lsp *string* egress-statistics collect-stats *boolean*
Tree	collect-stats
Description	When configured to **true**, this command enables LSP statistics collection. When you apply accounting policies, the forwarding engine collects data in the appropriate records and by default the CPU obtains and writes the results to the designated billing file.
Default	false
Introduced	16.0.R1
Platforms	All

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stat-mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Statistics collection mode
Context	**configure** router *string* mpls lsp *string* egress-statistics stat-mode *keyword*
Tree	stat-mode
Options	per-fc, aggregate
Introduced	21.10.R1
Platforms	All

entropy-label *keyword*

Synopsis	Entropy label
Context	**configure** router *string* mpls lsp *string* entropy-label *keyword*
Tree	entropy-label
Options	false, true
Introduced	16.0.R1
Platforms	All

exclude-admin-group *reference*

Synopsis	Name of admin group excluded when LSP is set up
Context	**configure** router *string* mpls lsp *string* exclude-admin-group *reference*
Tree	exclude-admin-group
Reference	**configure** routing-options if-attribute admin-group *string*
Max. Instances	32
Introduced	16.0.R1
Platforms	All

exclude-node *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Exclude Routers object to be included in the bypass path message

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Context	**configure** router *string* mpls lsp *string* exclude-node *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	exclude-node
Introduced	16.0.R1
Platforms	All

fallback-path-computation-method *keyword*

Synopsis	Fallback path computation method
Context	**configure** router *string* mpls lsp *string* fallback-path-computation-method *keyword*
Tree	fallback-path-computation-method
Description	This command specifies the fallback path computation method used if all configured PCEs are down or are signaling overload and the redelegation timer has expired. This method is used regardless of whether the LSP is PCE-controlled and PCE-computed, or only PCE-computed.
Options	none, local-cspf
Introduced	21.2.R1
Platforms	All

fast-reroute

Synopsis	Enable the **fast-reroute** context
Context	**configure** router *string* mpls lsp *string* fast-reroute
Tree	fast-reroute
Introduced	16.0.R1
Platforms	All

frr-method *keyword*

Synopsis	Fast Reroute method
Context	**configure** router *string* mpls lsp *string* fast-reroute frr-method *keyword*
Tree	frr-method
Options	one-to-one, facility
Introduced	16.0.R1
Platforms	All

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hop-limit *number*

Synopsis	Total number of hops a detour or backup LSP can take
Context	**configure** router *string* mpls lsp *string* fast-reroute hop-limit *number*
Tree	hop-limit
Range	0 to 255
Default	16
Introduced	16.0.R1
Platforms	All

node-protect *boolean*

Synopsis	Enable node and link protection for the specified LSP
Context	**configure** router *string* mpls lsp *string* fast-reroute node-protect *boolean*
Tree	node-protect
Introduced	16.0.R1
Platforms	All

propagate-admin-group *boolean*

Synopsis	Enable admin group constraints on a FRR backup LSP
Context	**configure** router *string* mpls lsp *string* fast-reroute propagate-admin-group *boolean*
Tree	propagate-admin-group
Default	false
Introduced	16.0.R1
Platforms	All

from *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Source IP address of this LSP
Context	**configure** router *string* mpls lsp *string* from *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	from

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Introduced	16.0.R1
Platforms	All

hop-limit *number*

Synopsis	Maximum number of hops that an LSP can traverse including ingress and egress routers
Context	**configure** router *string* mpls lsp *string* hop-limit *number*
Tree	hop-limit
Range	2 to 255
Default	255
Introduced	16.0.R1
Platforms	All

igp-shortcut

Synopsis	Enter the **igp-shortcut** context
Context	**configure** router *string* mpls lsp *string* igp-shortcut
Tree	igp-shortcut
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of LSP for shortcut or forwarding
Context	**configure** router *string* mpls lsp *string* igp-shortcut admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

allow-sr-over-srte *boolean*

Synopsis	Use as eligible SRv4 or SRv6 IGP shortcut
Context	**configure** router *string* mpls lsp *string* igp-shortcut allow-sr-over-srte *boolean*
Tree	allow-sr-over-srte

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Description	When configured to **true**, the router performs the local SPF and the SR-TE LSP is used as an eligible IGP SR-MPLS shortcut for SR-MPLS SRv4 or SRv6 only if the SR-TE is explicitly allowed using this command when the top SID in the SR-TE LSP is an adjacency SID.
Default	false
Introduced	23.3.R1
Platforms	All

lfa-type *keyword*

Synopsis	LSP usage in LFA SPF
Context	**configure** router *string* mpls lsp *string* igp-shortcut lfa-type *keyword*
Tree	lfa-type
Options	lfa-protect, lfa-only
Notes	The following elements are part of a choice: **lfa-type** or **relative-metric**.
Introduced	16.0.R1
Platforms	All

relative-metric *number*

Synopsis	Shortest IGP cost between the endpoints of the LSP plus the configured offset
Context	**configure** router *string* mpls lsp *string* igp-shortcut relative-metric *number*
Tree	relative-metric
Range	-10 to 10
Notes	The following elements are part of a choice: **lfa-type** or **relative-metric**.
Introduced	16.0.R1
Platforms	All

include-admin-group *reference*

Synopsis	Admin group name included when LSP is set up
Context	**configure** router *string* mpls lsp *string* include-admin-group *reference*
Tree	include-admin-group
Reference	**configure** routing-options if-attribute admin-group *string*
Max. Instances	32

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Introduced	16.0.R1
Platforms	All

label-stack-reduction *boolean*

Synopsis	Enable/disable label compression for LSP path.
Context	**configure** router *string* mpls lsp *string* label-stack-reduction *boolean*
Tree	label-stack-reduction
Default	false
Introduced	19.7.R1
Platforms	All

ldp-over-rsvp *boolean*

Synopsis	Include this LSP in LDP over RSVP
Context	**configure** router *string* mpls lsp *string* ldp-over-rsvp *boolean*
Tree	ldp-over-rsvp
Introduced	16.0.R1
Platforms	All

least-fill *boolean*

Synopsis	Enable least-fill path selection for this LSP
Context	**configure** router *string* mpls lsp *string* least-fill *boolean*
Tree	least-fill
Default	false
Introduced	16.0.R1
Platforms	All

load-balancing-weight *number*

Synopsis	Load balancing weight for an MPLS LSP
Context	**configure** router *string* mpls lsp *string* load-balancing-weight *number*
Tree	load-balancing-weight
Range	1 to 4294967295

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Introduced	16.0.R1
Platforms	All

local-sr-protection *keyword*

Synopsis	Local SR protection preference for LSP path computation
Context	**configure** router *string* mpls lsp *string* local-sr-protection *keyword*
Tree	local-sr-protection
Options	none, preferred, mandatory
Default	preferred
Introduced	19.7.R1
Platforms	All

lsp-self-ping *keyword*

Synopsis	LSP Self Ping activation status on the RSVP-TE LSP
Context	**configure** router *string* mpls lsp *string* lsp-self-ping *keyword*
Tree	lsp-self-ping
Description	When configured, the system uses this setting for the LSP regardless of the value configured under **configure router mpls lsp-self-ping rsvp-te**. When unconfigured, the command inherits the value configured under **configure router mpls lsp-self-ping rsvp-te**.
Options	false, true
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

main-ct-retry-limit *number*

Synopsis	Maximum number of retries before reverting to backup CT
Context	**configure** router *string* mpls lsp *string* main-ct-retry-limit *number*
Tree	main-ct-retry-limit
Range	1 to 10000
Introduced	16.0.R1
Platforms	All

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max-sr-labels

Synopsis	Enter the **max-sr-labels** context
Context	**configure** router *string* mpls lsp *string* max-sr-labels
Tree	max-sr-labels
Introduced	16.0.R1
Platforms	All

additional-frr-labels *number*

Synopsis	Value for the maximum additional overhead labels
Context	**configure** router *string* mpls lsp *string* max-sr-labels additional-frr-labels *number*
Tree	additional-frr-labels
Range	0 to 4
Default	1
Introduced	16.0.R1
Platforms	All

label-stack-size *number*

Synopsis	Maximum label stack size
Context	**configure** router *string* mpls lsp *string* max-sr-labels label-stack-size *number*
Tree	label-stack-size
Description	This command configures the maximum label stack size of the primary path of the SR-TE LSP.
Range	1 to 11
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	LSP metric that forces to a constant value
Context	**configure** router *string* mpls lsp *string* metric *number*
Tree	metric
Range	0 to 16777215
Introduced	16.0.R1

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Platforms	All

metric-type *keyword*

Synopsis	Metric type used for LSP path computation
Context	**configure** router *string* mpls lsp *string* metric-type *keyword*
Tree	metric-type
Options	igp, te
Default	igp
Introduced	19.7.R1
Platforms	All

override-tunnel-elc *boolean*

Synopsis	Override any received entropy label capability
Context	**configure** router *string* mpls lsp *string* override-tunnel-elc *boolean*
Tree	override-tunnel-elc
Description	When configured to **true**, this command allows the system to override any received entropy label capability advertisement. When configured to **false**, this command disables the override.
Default	false
Introduced	21.10.R1
Platforms	All

p2mp-id *number*

Synopsis	Unique identifier as Point-to-Multipoint (P2MP) identifier
Context	**configure** router *string* mpls lsp *string* p2mp-id *number*
Tree	p2mp-id
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

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path-computation-method *keyword*

Synopsis	Path computation method
Context	**configure** router *string* mpls lsp *string* path-computation-method *keyword*
Tree	path-computation-method
Description	This command configures the path computation method of an RSVP-TE or SR-TE LSP. If this command is not configured to one of the supported options, the default path computation method is used depending on the type of LSP; the hop-to-label translation is used for the SR-TE LSP template and the IGP-based path is used for the RSVP-TE-LSP. See "SR-TE LSP path computation using hop-to-label translation" in the *7750 Service Router and 7950 Extensible Routing System Segment Routing nad PCE User Guide* for more information.
Options	local-cspf, pce
Introduced	19.7.R1
Platforms	All

path-profile [profile-id] *number*

Synopsis	Enter the **path-profile** list instance
Context	**configure** router *string* mpls lsp *string* path-profile *number*
Tree	path-profile
Description	Commands in this context configure the attributes of the PCE path profile.
Max. Instances	5
Introduced	16.0.R1
Platforms	All

[**profile-id**] *number*

Synopsis	Profile ID for the specified LSP
Context	**configure** router *string* mpls lsp *string* path-profile *number*
Tree	path-profile
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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path-group *number*

Synopsis	Path-group ID for the specified LSP
Context	**configure** router *string* mpls lsp *string* path-profile *number* path-group *number*
Tree	path-group
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R1
Platforms	All

pce-associations

Synopsis	Enter the **pce-associations** context
Context	**configure** router *string* mpls lsp *string* pce-associations
Tree	pce-associations
Description	Commands in this context configure the LSP binding with one or more PCEP associations.
Introduced	22.5.R1
Platforms	All

diversity [diversity-name] *reference*

Synopsis	Add a list entry for **diversity**
Context	**configure** router *string* mpls lsp *string* pce-associations diversity *reference*
Tree	diversity
Description	Commands in this context bind the LSP to a named diversity association. The diversity association must exist under the PCC.
Max. Instances	5
Introduced	22.5.R1
Platforms	All

[**diversity-name**] *reference*

Synopsis	Name of the PCE association configured under the PCC
Context	**configure** router *string* mpls lsp *string* pce-associations diversity *reference*

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Tree	diversity
Reference	**configure** router *string* pcep pcc pce-associations diversity *string*
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

policy [policy-name] *reference*

Synopsis	Add a list entry for **policy**
Context	**configure** router *string* mpls lsp *string* pce-associations policy *reference*
Tree	policy
Description	Commands in this context bind the LSP to a named policy association. The policy association name must exist under the PCC.
Max. Instances	5
Introduced	22.5.R1
Platforms	All

[**policy-name**] *reference*

Synopsis	Name of the PCE association configured under the PCC
Context	**configure** router *string* mpls lsp *string* pce-associations policy *reference*
Tree	policy
Reference	**configure** router *string* pcep pcc pce-associations policy *string*
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

pce-control *boolean*

Synopsis	Enable PCE controlled LSP mode of operation
Context	**configure** router *string* mpls lsp *string* pce-control *boolean*
Tree	pce-control
Description	When configured to **true**, this command enables a PCE-controlled mode of operation for the LSP. In this mode, the router delegates full control of the LSP to the PCE (PCE controlled). The PCE acts in stateful-active mode for this LSP and is able to reroute the

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	path following a failure or to re-optimize the path and update the router without a request from the router. When configured to **false**, the PCE-controlled mode of operation for the LSP has no effect.
Default	false
Introduced	16.0.R1
Platforms	All

pce-report *keyword*

Synopsis	Global configuration of reporting to PCE to override
Context	**configure** router *string* mpls lsp *string* pce-report *keyword*
Tree	pce-report
Options	false, true
Introduced	16.0.R1
Platforms	All

primary [path-name] *reference*

Synopsis	Enter the **primary** list instance
Context	**configure** router *string* mpls lsp *string* primary *reference*
Tree	primary
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[**path-name**] *reference*

Synopsis	Path name
Context	**configure** router *string* mpls lsp *string* primary *reference*
Tree	primary
Reference	**configure** router *string* mpls path *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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adaptive *boolean*

Synopsis	Enable make-before-break functionality
Context	**configure** router *string* mpls lsp *string* primary *reference* adaptive *boolean*
Tree	adaptive
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LSP path
Context	**configure** router *string* mpls lsp *string* primary *reference* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

backup-class-type *number*

Synopsis	Class-type for the LSP or LSP path
Context	**configure** router *string* mpls lsp *string* primary *reference* backup-class-type *number*
Tree	backup-class-type
Range	0 to 7
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Amount of bandwidth to be reserved
Context	**configure** router *string* mpls lsp *string* primary *reference* bandwidth *number*
Tree	bandwidth
Range	0 to 6400000
Units	megabps
Default	0

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Introduced	16.0.R1
Platforms	All

bfd

Synopsis	Enter the **bfd** context
Context	**configure** router *string* mpls lsp *string* primary *reference* bfd
Tree	bfd
Description	Commands in this context configure BFD on RSVP LSPs or Seamless BFD on SR-TE LSPs.
Introduced	16.0.R1
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD on the RSVP LSP or S-BFD on the SR-TE LSP
Context	**configure** router *string* mpls lsp *string* primary *reference* bfd bfd-liveness *boolean*
Tree	bfd-liveness
Default	false
Introduced	16.0.R1
Platforms	All

bfd-template *reference*

Synopsis	BFD template to be used by LSP BFD sessions
Context	**configure** router *string* mpls lsp *string* primary *reference* bfd bfd-template *reference*
Tree	bfd-template
Reference	**configure** bfd bfd-template *string*
Introduced	16.0.R1
Platforms	All

lsp-ping-interval *(number | keyword)*

Synopsis	Interval for periodic LSP ping for BFD bootstrapping
Context	**configure** router *string* mpls lsp *string* primary *reference* bfd lsp-ping-interval *(number | keyword)*

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Tree	lsp-ping-interval
Range	60 to 300
Units	seconds
Options	none
Default	60
Introduced	16.0.R1
Platforms	All

return-path-label *number*

Synopsis	S-BFD return-path label
Context	**configure** router *string* mpls lsp *string* primary *reference* bfd return-path-label *number*
Tree	return-path-label
Description	This command configures the S-BFD session to echo mode and adds an additional MPLS label to the bottom of the label stack for the S-BFD packet. The command applies to the initiator of the S-BFD sessions. The return-path label may be a binding SID for an SR policy or other MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through this MPLS return path. If the command is deleted, S-BFD returns to asynchronous mode and no return-path label is pushed by the initiator node. Any S-BFD packets for this LSP or path that the reflector receives are routed through the IGP path.
Range	32 to 1048512
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

wait-for-up-timer *number*

Synopsis	Time to wait for BFD to become operationally available
Context	**configure** router *string* mpls lsp *string* primary *reference* bfd wait-for-up-timer *number*
Tree	wait-for-up-timer
Description	This command configures the time to wait for BFD to become operationally up. The timer is applicable to SR-TE LSPs, including auto LSPs and PCE-initiated LSPS, as well RSVP-TE LSPs. For SR-TE LSPs, the timer takes effect when BFD is first enabled on a path or when BFD transitions from up to down. Upon expiration, if BFD is not up, the path is torn down, removed from the TTM and the IOM, and the system starts the retry timer. For RSVP-TE LSPs, the timer controls the following:

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- a path undergoing MBB when BFD is up
- the initial administrative state of the LSP
- the retry signaling of non-standby secondary paths

Range	1 to 60
Units	seconds
Default	4
Introduced	19.7.R1
Platforms	All

class-type *number*

Synopsis	Class-type
Context	**configure** router *string* mpls lsp *string* primary *reference* class-type *number*
Tree	class-type
Range	0 to 7
Introduced	16.0.R1
Platforms	All

exclude-admin-group

Synopsis	Enable the **exclude-admin-group** context
Context	**configure** router *string* mpls lsp *string* primary *reference* exclude-admin-group
Tree	exclude-admin-group
Introduced	16.0.R1
Platforms	All

group *reference*

Synopsis	Groups to exclude when the LSP path is setup
Context	**configure** router *string* mpls lsp *string* primary *reference* exclude-admin-group group *reference*
Tree	group
Reference	**configure** routing-options if-attribute admin-group *string*
Max. Instances	32

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Min. Instances	1
Introduced	16.0.R1
Platforms	All

hop-limit *number*

Synopsis	Total number of hops that an LSP traverses
Context	**configure** router *string* mpls lsp *string* primary *reference* hop-limit *number*
Tree	hop-limit
Range	2 to 255
Introduced	16.0.R1
Platforms	All

include-admin-group

Synopsis	Enable the **include-admin-group** context
Context	**configure** router *string* mpls lsp *string* primary *reference* include-admin-group
Tree	include-admin-group
Introduced	16.0.R1
Platforms	All

group *reference*

Synopsis	Groups that are included when LSP path is setup
Context	**configure** router *string* mpls lsp *string* primary *reference* include-admin-group group *reference*
Tree	group
Reference	**configure** routing-options if-attribute admin-group *string*
Max. Instances	32
Min. Instances	1
Introduced	16.0.R1
Platforms	All

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priority

Synopsis	Enter the **priority** context
Context	**configure** router *string* mpls lsp *string* primary *reference* priority
Tree	priority
Introduced	16.0.R1
Platforms	All

hold-priority *number*

Synopsis	Priority of an LSP session at preemption action
Context	**configure** router *string* mpls lsp *string* primary *reference* priority hold-priority *number*
Tree	hold-priority
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All

setup-priority *number*

Synopsis	Priority when insufficient bandwidth for LSP setup
Context	**configure** router *string* mpls lsp *string* primary *reference* priority setup-priority *number*
Tree	setup-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	All

record *boolean*

Synopsis	Enable recording of all hops that an LSP path traverses
Context	**configure** router *string* mpls lsp *string* primary *reference* record *boolean*
Tree	record
Default	true
Introduced	16.0.R1
Platforms	All

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record-label *boolean*

Synopsis	Enable recording of labels at each node or instance
Context	**configure** router *string* mpls lsp *string* primary *reference* record-label *boolean*
Tree	record-label
Default	true
Introduced	16.0.R1
Platforms	All

primary-p2mp-instance [instance-name] *string*

Synopsis	Enter the **primary-p2mp-instance** list instance
Context	**configure** router *string* mpls lsp *string* primary-p2mp-instance *string*
Tree	primary-p2mp-instance
Max. Instances	1
Introduced	16.0.R4
Platforms	All

[**instance-name**] *string*

Synopsis	P2MP LSP instance name
Context	**configure** router *string* mpls lsp *string* primary-p2mp-instance *string*
Tree	primary-p2mp-instance
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

adaptive *boolean*

Synopsis	Enable make-before-break functionality
Context	**configure** router *string* mpls lsp *string* primary-p2mp-instance *string* adaptive *boolean*
Tree	adaptive
Introduced	16.0.R4

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Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LSP path
Context	**configure** router *string* mpls lsp *string* primary-p2mp-instance *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

bandwidth *number*

Synopsis	Amount of bandwidth to be reserved
Context	**configure** router *string* mpls lsp *string* primary-p2mp-instance *string* bandwidth *number*
Tree	bandwidth
Range	0 to 6400000
Units	megabps
Default	0
Introduced	16.0.R4
Platforms	All

exclude-admin-group

Synopsis	Enable the **exclude-admin-group** context
Context	**configure** router *string* mpls lsp *string* primary-p2mp-instance *string* exclude-admin-group
Tree	exclude-admin-group
Introduced	16.0.R4
Platforms	All

group *reference*

Synopsis	Groups to exclude when the LSP path is setup

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Context	**configure** router *string* mpls lsp *string* primary-p2mp-instance *string* exclude-admin-group group *reference*
Tree	group
Reference	**configure** routing-options if-attribute admin-group *string*
Max. Instances	32
Min. Instances	1
Introduced	16.0.R4
Platforms	All

hop-limit *number*

Synopsis	Total number of hops that an LSP traverses
Context	**configure** router *string* mpls lsp *string* primary-p2mp-instance *string* hop-limit *number*
Tree	hop-limit
Range	2 to 255
Introduced	16.0.R4
Platforms	All

include-admin-group

Synopsis	Enable the **include-admin-group** context
Context	**configure** router *string* mpls lsp *string* primary-p2mp-instance *string* include-admin-group
Tree	include-admin-group
Introduced	16.0.R4
Platforms	All

group *reference*

Synopsis	Groups that are included when LSP path is setup
Context	**configure** router *string* mpls lsp *string* primary-p2mp-instance *string* include-admin-group group *reference*
Tree	group
Reference	**configure** routing-options if-attribute admin-group *string*

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Max. Instances	32
Min. Instances	1
Introduced	16.0.R4
Platforms	All

priority

Synopsis	Enter the **priority** context
Context	**configure** router *string* mpls lsp *string* primary-p2mp-instance *string* priority
Tree	priority
Introduced	21.10.R1
Platforms	All

hold-priority *number*

Synopsis	Hold priority when not enough bandwidth for LSP setup
Context	**configure** router *string* mpls lsp *string* primary-p2mp-instance *string* priority hold-priority *number*
Tree	hold-priority
Range	0 to 7
Default	0
Introduced	21.10.R1
Platforms	All

setup-priority *number*

Synopsis	Priority when insufficient bandwidth for LSP setup
Context	**configure** router *string* mpls lsp *string* primary-p2mp-instance *string* priority setup-priority *number*
Tree	setup-priority
Range	0 to 7
Default	7
Introduced	21.10.R1
Platforms	All

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record *boolean*

Synopsis	Enable recording of all hops that an LSP path traverses
Context	**configure** router *string* mpls lsp *string* primary-p2mp-instance *string* record *boolean*
Tree	record
Default	true
Introduced	16.0.R4
Platforms	All

record-label *boolean*

Synopsis	Enable recording of labels at each node or instance
Context	**configure** router *string* mpls lsp *string* primary-p2mp-instance *string* record-label *boolean*
Tree	record-label
Default	true
Introduced	16.0.R4
Platforms	All

s2l-path [path-name] *reference* to *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **s2l-path** list instance
Context	**configure** router *string* mpls lsp *string* primary-p2mp-instance *string* s2l-path *reference* to *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	s2l-path
Max. Instances	650
Introduced	16.0.R4
Platforms	All

[**path-name**] *reference*

Synopsis	P2MP LSP name
Context	**configure** router *string* mpls lsp *string* primary-p2mp-instance *string* s2l-path *reference* to *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	s2l-path

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Reference	**configure** router *string* mpls path *string*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

to *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	System IP address of the egress router
Context	**configure** router *string* mpls lsp *string* primary-p2mp-instance *string* s2l-path *reference* to *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	s2l-path
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the S2L sub-LSP for a P2MP LSP
Context	**configure** router *string* mpls lsp *string* primary-p2mp-instance *string* s2l-path *reference* to *(ipv4-address-no-zone | ipv6-address-no-zone)* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

propagate-admin-group *boolean*

Synopsis	Enable admin groups via session attribute object
Context	**configure** router *string* mpls lsp *string* propagate-admin-group *boolean*
Tree	propagate-admin-group
Default	false
Introduced	16.0.R1
Platforms	All

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retry-limit *number*

Synopsis	Number of attempts to re-establish LSP after it fails
Context	**configure** router *string* mpls lsp *string* retry-limit *number*
Tree	retry-limit
Range	1 to 10000
Introduced	16.0.R1
Platforms	All

retry-timer *number*

Synopsis	Time for LSP re-establishment attempts after failure
Context	**configure** router *string* mpls lsp *string* retry-timer *number*
Tree	retry-timer
Range	1 to 600
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

revert-timer *number*

Synopsis	Revert timer for the LSP
Context	**configure** router *string* mpls lsp *string* revert-timer *number*
Tree	revert-timer
Range	1 to 4320
Units	minutes
Introduced	16.0.R1
Platforms	All

rsvp-resv-style *keyword*

Synopsis	Reservation style for RSVP
Context	**configure** router *string* mpls lsp *string* rsvp-resv-style *keyword*
Tree	rsvp-resv-style
Options	se, ff

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Default	se
Introduced	16.0.R1
Platforms	All

secondary [path-name] *reference*

Synopsis	Enter the **secondary** list instance
Context	**configure** router *string* mpls lsp *string* secondary *reference*
Tree	secondary
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[**path-name**] *reference*

Synopsis	Path name
Context	**configure** router *string* mpls lsp *string* secondary *reference*
Tree	secondary
Reference	**configure** router *string* mpls path *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptive *boolean*

Synopsis	Enable make-before-break functionality
Context	**configure** router *string* mpls lsp *string* secondary *reference* adaptive *boolean*
Tree	adaptive
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LSP path

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Context	**configure** router *string* mpls lsp *string* secondary *reference* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Amount of bandwidth to be reserved
Context	**configure** router *string* mpls lsp *string* secondary *reference* bandwidth *number*
Tree	bandwidth
Range	0 to 6400000
Units	megabps
Default	0
Introduced	16.0.R1
Platforms	All

bfd

Synopsis	Enter the **bfd** context
Context	**configure** router *string* mpls lsp *string* secondary *reference* bfd
Tree	bfd
Description	Commands in this context configure BFD on RSVP LSPs or Seamless BFD on SR-TE LSPs.
Introduced	19.7.R1
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD on the RSVP LSP or S-BFD on the SR-TE LSP
Context	**configure** router *string* mpls lsp *string* secondary *reference* bfd bfd-liveness *boolean*
Tree	bfd-liveness
Default	false
Introduced	19.7.R1

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Platforms	All

bfd-template *reference*

Synopsis	BFD template to be used by LSP BFD sessions
Context	**configure** router *string* mpls lsp *string* secondary *reference* bfd bfd-template *reference*
Tree	bfd-template
Reference	**configure** bfd bfd-template *string*
Introduced	19.7.R1
Platforms	All

lsp-ping-interval *(number | keyword)*

Synopsis	Interval for periodic LSP ping for BFD bootstrapping
Context	**configure** router *string* mpls lsp *string* secondary *reference* bfd lsp-ping-interval *(number | keyword)*
Tree	lsp-ping-interval
Range	60 to 300
Units	seconds
Options	none
Default	60
Introduced	19.7.R1
Platforms	All

return-path-label *number*

Synopsis	S-BFD return-path label
Context	**configure** router *string* mpls lsp *string* secondary *reference* bfd return-path-label *number*
Tree	return-path-label
Description	This command configures the S-BFD session to echo mode and adds an additional MPLS label to the bottom of the label stack for the S-BFD packet. The command applies to the initiator of the S-BFD sessions. The return-path label may be a binding SID for an SR policy or other MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through this MPLS return path.

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If the command is deleted, S-BFD returns to asynchronous mode and no return-path label is pushed by the initiator node. Any S-BFD packets for this LSP or path that the reflector receives are routed through the IGP path.

Range	32 to 1048512
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

wait-for-up-timer *number*

Synopsis	Time to wait for BFD to become operationally available
Context	**configure** router *string* mpls lsp *string* secondary *reference* bfd wait-for-up-timer *number*
Tree	wait-for-up-timer
Description	This command configures the time to wait for BFD to become operationally up. The timer is applicable to SR-TE LSPs, including auto LSPs and PCE-initiated LSPS, as well RSVP-TE LSPs. For SR-TE LSPs, the timer takes effect when BFD is first enabled on a path or when BFD transitions from up to down. Upon expiration, if BFD is not up, the path is torn down, removed from the TTM and the IOM, and the system starts the retry timer. For RSVP-TE LSPs, the timer controls the following: • a path undergoing MBB when BFD is up • the initial administrative state of the LSP • the retry signaling of non-standby secondary paths
Range	1 to 60
Units	seconds
Default	4
Introduced	19.7.R1
Platforms	All

class-type *number*

Synopsis	Class-type
Context	**configure** router *string* mpls lsp *string* secondary *reference* class-type *number*
Tree	class-type
Range	0 to 7
Introduced	16.0.R1
Platforms	All

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exclude-admin-group

Synopsis	Enable the **exclude-admin-group** context
Context	**configure** router *string* mpls lsp *string* secondary *reference* exclude-admin-group
Tree	exclude-admin-group
Introduced	16.0.R1
Platforms	All

group *reference*

Synopsis	Groups to exclude when the LSP path is setup
Context	**configure** router *string* mpls lsp *string* secondary *reference* exclude-admin-group group *reference*
Tree	group
Reference	**configure** routing-options if-attribute admin-group *string*
Max. Instances	32
Min. Instances	1
Introduced	16.0.R1
Platforms	All

hop-limit *number*

Synopsis	Total number of hops that an LSP traverses
Context	**configure** router *string* mpls lsp *string* secondary *reference* hop-limit *number*
Tree	hop-limit
Range	2 to 255
Introduced	16.0.R1
Platforms	All

include-admin-group

Synopsis	Enable the **include-admin-group** context
Context	**configure** router *string* mpls lsp *string* secondary *reference* include-admin-group
Tree	include-admin-group

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Introduced	16.0.R1
Platforms	All

group *reference*

Synopsis	Groups that are included when LSP path is setup
Context	**configure** router *string* mpls lsp *string* secondary *reference* include-admin-group group *reference*
Tree	group
Reference	**configure** routing-options if-attribute admin-group *string*
Max. Instances	32
Min. Instances	1
Introduced	16.0.R1
Platforms	All

path-preference *number*

Synopsis	Path preference for the secondary standby path
Context	**configure** router *string* mpls lsp *string* secondary *reference* path-preference *number*
Tree	path-preference
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

priority

Synopsis	Enter the **priority** context
Context	**configure** router *string* mpls lsp *string* secondary *reference* priority
Tree	priority
Introduced	16.0.R1
Platforms	All

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hold-priority *number*

Synopsis	Priority of an LSP session at preemption action
Context	**configure** router *string* mpls lsp *string* secondary *reference* priority hold-priority *number*
Tree	hold-priority
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All

setup-priority *number*

Synopsis	Priority when insufficient bandwidth for LSP setup
Context	**configure** router *string* mpls lsp *string* secondary *reference* priority setup-priority *number*
Tree	setup-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	All

record *boolean*

Synopsis	Enable recording of all hops that an LSP path traverses
Context	**configure** router *string* mpls lsp *string* secondary *reference* record *boolean*
Tree	record
Default	true
Introduced	16.0.R1
Platforms	All

record-label *boolean*

Synopsis	Enable recording of labels at each node or instance
Context	**configure** router *string* mpls lsp *string* secondary *reference* record-label *boolean*
Tree	record-label
Default	true

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Introduced	16.0.R1
Platforms	All

srlg *boolean*

Synopsis	Use SRLG constraint in secondary path computation for an LSP at the head-end LER
Context	**configure** router *string* mpls lsp *string* secondary *reference* srlg *boolean*
Tree	srlg
Default	false
Introduced	16.0.R1
Platforms	All

standby *boolean*

Synopsis	Keep secondary path indefinitely in hot standby state
Context	**configure** router *string* mpls lsp *string* secondary *reference* standby *boolean*
Tree	standby
Default	false
Introduced	16.0.R1
Platforms	All

soft-preemption *boolean*

Synopsis	Enable soft preemption
Context	**configure** router *string* mpls lsp *string* soft-preemption *boolean*
Tree	soft-preemption
Description	When configured to **true**, the P2MP LSP preemption is governed by the **configure router rsvp preemption-timer** value. When configured to **false**, the preemption timer value is set to 0 and the P2MP LSPs are hard preempted. For P2P LSPs, soft preemption is always enabled and cannot be disabled.
Introduced	22.2.R1
Platforms	All

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to *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination IP address or the egress router for the LSP
Context	**configure** router *string* mpls lsp *string* to *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	to
Introduced	16.0.R1
Platforms	All

type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	LSP for bypass protection, point to multipoint, segment routing or MPLS-TP static LSP
Context	**configure** router *string* mpls lsp *string* type *keyword*
Tree	type
Options	p2p-rsvp, p2p-static-mpls, p2p-rsvp-bypass, p2mp-rsvp, p2mp-rsvp-auto, p2p-rsvp-mesh, p2p-rsvp-one-hop, p2p-sr-te, p2p-sr-te-mesh, p2p-sr-te-one-hop, p2p-sr-te-pce-init, p2p-sr-te-on-demand
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vprn-auto-bind *boolean*

Synopsis	Include this LSP in auto-bind for VPRN services
Context	**configure** router *string* mpls lsp *string* vprn-auto-bind *boolean*
Tree	vprn-auto-bind
Introduced	16.0.R1
Platforms	All

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lsp-bsid-block *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reserved label block for binding SIDs
Context	**configure** router *string* mpls lsp-bsid-block *reference*
Tree	lsp-bsid-block
Description	This command references a pre-existing reserved label block for statically configured binding SIDs.
Reference	**configure** router *string* mpls-labels reserved-label-block *string*
Introduced	22.7.R1
Platforms	All

lsp-history

Synopsis	Enable the **lsp-history** context
Context	**configure** router *string* mpls lsp-history
Tree	lsp-history
Description	Commands in this context control the recording of LSP history events. When the context is created, memory is allocated for storing up to 100 of the most recent LSP history events. When the context is deleted, memory is deallocated.
Introduced	22.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of LSP history recording
Context	**configure** router *string* mpls lsp-history admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	22.10.R1
Platforms	All

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lsp-init-retry-timeout *number*

Synopsis	LSP initial retry timeout
Context	**configure** router *string* mpls lsp-init-retry-timeout *number*
Tree	lsp-init-retry-timeout
Range	10 to 600
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

lsp-self-ping

Synopsis	Enter the **lsp-self-ping** context
Context	**configure** router *string* mpls lsp-self-ping
Tree	lsp-self-ping
Description	Commands in this context configure LSP Self Ping parameters. LSP Self Ping checks that the datapath of an RSVP LSP has been programmed by all LSRs along its path before switching the traffic to it. If enabled, LSP Self Ping packets are sent periodically at a configurable interval following the receipt of the RESV message for an RSVP LSP path following an MBB or other event where the active path changes while the previous active path stayed up. The router will not switch traffic to the new path until an LSP Self Ping reply is received from the far-end LER. When configured under the MPLS context, LSP Self Ping is enabled for all RSVP LSPs, unless it is explicitly disabled for a given LSP.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number*

Synopsis	MPLS periodic LSP Self Ping interval
Context	**configure** router *string* mpls lsp-self-ping interval *number*
Tree	interval
Description	This command configures the interval at which LSP Self Ping packets are periodically sent on a candidate path of an RSVP LSP. This value is used for all LSPs that have LSP Self Ping enabled.
Range	1 to 10

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Units	seconds
Default	1
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rsvp-te *boolean*

Synopsis	Activate LSP Self Ping on RSVP-TE LSPs
Context	**configure** router *string* mpls lsp-self-ping rsvp-te *boolean*
Tree	rsvp-te
Description	When configured to **true**, this command enables LSP Self Ping on all RSVP-TE LSPs, unless an individual LSP has this explicitly disabled under the **configure router mpls lsp lsp-self-ping** command or in the LSP template. When configured to **false**, this command disables LSP Self Ping on all RSVP-TE LSPs.
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

timeout *number*

Synopsis	MPLS LSP Self Ping timeout
Context	**configure** router *string* mpls lsp-self-ping timeout *number*
Tree	timeout
Description	This command configures a timeout value for the LSP Self Ping timer. The LSP Self Ping timer starts when the RESV message is received for an LSP. The system periodically sends LSP Self Ping packets until the timer expires or the first LSP Self Ping reply is received, whichever comes first. If the timer expires before an LSP Self Ping packet is received, the configured timeout action is performed.
Range	3 to 3600
Units	seconds
Default	300
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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timeout-action *keyword*

Synopsis	Action taken when LSP Self Ping timer expires
Context	**configure** router *string* mpls lsp-self-ping timeout-action *keyword*
Tree	timeout-action
Options	retry, switch
Default	retry
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lsp-template [template-name] *string*

Synopsis	Enter the **lsp-template** list instance
Context	**configure** router *string* mpls lsp-template *string*
Tree	lsp-template
Description	Commands in this context configure the attributes of an LSP template that can be referenced by a client application when dynamic LSPs must be created.
Max. Instances	4096
Introduced	16.0.R1
Platforms	All

[**template-name**] *string*

Synopsis	LSP template name
Context	**configure** router *string* mpls lsp-template *string*
Tree	lsp-template
Description	This command specifies the name of the LSP template. An LSP template name and LSP name must not be the same.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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adaptive *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable make-before-break functionality
Context	**configure** router *string* mpls lsp-template *string* adaptive *boolean*
Tree	adaptive
Default	true
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LSP template
Context	**configure** router *string* mpls lsp-template *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

admin-tag [name] *reference*

Synopsis	Add a list entry for **admin-tag**
Context	**configure** router *string* mpls lsp-template *string* admin-tag *reference*
Tree	admin-tag
Max. Instances	4
Introduced	16.0.R1
Platforms	All

[**name**] *reference*

Synopsis	Name of the admin tags
Context	**configure** router *string* mpls lsp-template *string* admin-tag *reference*

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Tree	admin-tag
Reference	**configure** routing-options admin-tags admin-tag *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adspec *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Include ADSPEC objects in RSVP messages
Context	**configure** router *string* mpls lsp-template *string* adspec *boolean*
Tree	adspec
Default	false
Introduced	16.0.R1
Platforms	All

auto-bandwidth

Synopsis	Enable the **auto-bandwidth** context
Context	**configure** router *string* mpls lsp-template *string* auto-bandwidth
Tree	auto-bandwidth
Introduced	16.0.R1
Platforms	All

adjust-down

Synopsis	Enter the **adjust-down** context
Context	**configure** router *string* mpls lsp-template *string* auto-bandwidth adjust-down
Tree	adjust-down
Introduced	16.0.R1
Platforms	All

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bw *number*

Synopsis	Minimum difference in absolute bandwidth
Context	**configure** router *string* mpls lsp-template *string* auto-bandwidth adjust-down bw *number*
Tree	bw
Range	0 to 6400000
Units	megabps
Default	0
Introduced	16.0.R1
Platforms	All

percent *number*

Synopsis	Minimum difference in percent
Context	**configure** router *string* mpls lsp-template *string* auto-bandwidth adjust-down percent *number*
Tree	percent
Range	0 to 100
Units	percent
Default	5
Introduced	16.0.R1
Platforms	All

adjust-up

Synopsis	Enter the **adjust-up** context
Context	**configure** router *string* mpls lsp-template *string* auto-bandwidth adjust-up
Tree	adjust-up
Introduced	16.0.R1
Platforms	All

bw *number*

Synopsis	Minimum difference in absolute bandwidth
Context	**configure** router *string* mpls lsp-template *string* auto-bandwidth adjust-up bw *number*
Tree	bw

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Range	0 to 6400000
Units	megabps
Default	0
Introduced	16.0.R1
Platforms	All

percent *number*

Synopsis	Minimum difference in percent
Context	**configure** router *string* mpls lsp-template *string* auto-bandwidth adjust-up percent *number*
Tree	percent
Range	0 to 100
Units	percent
Default	5
Introduced	16.0.R1
Platforms	All

fc [fc-name] *keyword*

Synopsis	Enter the **fc** list instance
Context	**configure** router *string* mpls lsp-template *string* auto-bandwidth fc *keyword*
Tree	fc
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[**fc-name**] *keyword*

Synopsis	Forwarding class name for LSP
Context	**configure** router *string* mpls lsp-template *string* auto-bandwidth fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	All

sampling-weight *number*

Synopsis	Forwarding class weight for LSP
Context	**configure** router *string* mpls lsp-template *string* auto-bandwidth fc *keyword* sampling-weight *number*
Tree	sampling-weight
Range	0 to 100
Units	percent
Default	100
Introduced	16.0.R1
Platforms	All

max-bandwidth *number*

Synopsis	Maximum bandwidth of auto-bandwidth to request for LSP
Context	**configure** router *string* mpls lsp-template *string* auto-bandwidth max-bandwidth *number*
Tree	max-bandwidth
Range	0 to 6400000
Units	megabps
Default	100000
Introduced	16.0.R1
Platforms	All

min-bandwidth *number*

Synopsis	Minimum bandwidth of auto-bandwidth to request for the LSP
Context	**configure** router *string* mpls lsp-template *string* auto-bandwidth min-bandwidth *number*
Tree	min-bandwidth
Range	0 to 6400000
Units	megabps
Default	0
Introduced	16.0.R1

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Platforms	All

monitor-bandwidth *boolean*

Synopsis	Collect and display auto-bandwidth measurements for the LSP
Context	**configure** router *string* mpls lsp-template *string* auto-bandwidth monitor-bandwidth *boolean*
Tree	monitor-bandwidth
Default	false
Introduced	16.0.R1
Platforms	All

multipliers

Synopsis	Enter the **multipliers** context
Context	**configure** router *string* mpls lsp-template *string* auto-bandwidth multipliers
Tree	multipliers
Introduced	16.0.R1
Platforms	All

adjust-multiplier *number*

Synopsis	Number of collection intervals in the adjust interval
Context	**configure** router *string* mpls lsp-template *string* auto-bandwidth multipliers adjust-multiplier *number*
Tree	adjust-multiplier
Range	1 to 16383
Introduced	16.0.R1
Platforms	All

sample-multiplier *number*

Synopsis	Multiplier for collection intervals in a sample interval
Context	**configure** router *string* mpls lsp-template *string* auto-bandwidth multipliers sample-multiplier *number*
Tree	sample-multiplier

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Range	1 to 511
Introduced	16.0.R1
Platforms	All

overflow-limit

Synopsis	Enable the **overflow-limit** context
Context	**configure** router *string* mpls lsp-template *string* auto-bandwidth overflow-limit
Tree	overflow-limit
Introduced	16.0.R1
Platforms	All

bw *number*

Synopsis	Minimum difference in absolute bandwidth
Context	**configure** router *string* mpls lsp-template *string* auto-bandwidth overflow-limit bw *number*
Tree	bw
Range	1 to 6400000
Units	megabps
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number of overflow samples to trigger an overflow auto-bandwidth adjustment attempt
Context	**configure** router *string* mpls lsp-template *string* auto-bandwidth overflow-limit number *number*
Tree	number
Range	1 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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threshold *number*

Synopsis	Minimum difference in percent between the LSP bandwidth and the sampled data rate
Context	**configure** router *string* mpls lsp-template *string* auto-bandwidth overflow-limit threshold *number*
Tree	threshold
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	All

underflow-limit

Synopsis	Enable the **underflow-limit** context
Context	**configure** router *string* mpls lsp-template *string* auto-bandwidth underflow-limit
Tree	underflow-limit
Introduced	16.0.R1
Platforms	All

bw *number*

Synopsis	Minimum difference in absolute bandwidth
Context	**configure** router *string* mpls lsp-template *string* auto-bandwidth underflow-limit bw *number*
Tree	bw
Range	1 to 6400000
Units	megabps
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number of overflow samples to trigger an overflow auto-bandwidth adjustment attempt
Context	**configure** router *string* mpls lsp-template *string* auto-bandwidth underflow-limit number *number*
Tree	number

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Range	1 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Minimum difference in percent between the LSP bandwidth and the sampled data rate
Context	**configure** router *string* mpls lsp-template *string* auto-bandwidth underflow-limit threshold *number*
Tree	threshold
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	All

backup-class-type *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Backup class type for this LSP template
Context	**configure** router *string* mpls lsp-template *string* backup-class-type *number*
Tree	backup-class-type
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Amount of bandwidth reserved for the P2MP instance
Context	**configure** router *string* mpls lsp-template *string* bandwidth *number*
Tree	bandwidth

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Range	0 to 6400000
Units	megabps
Default	0
Introduced	16.0.R1
Platforms	All

bfd

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **bfd** context
Context	**configure** router *string* mpls lsp-template *string* bfd
Tree	bfd
Description	Commands in this context configure BFD on RSVP LSPs or Seamless BFD on SR-TE LSPs.
Introduced	16.0.R1
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD on the RSVP LSP or S-BFD on the SR-TE LSP
Context	**configure** router *string* mpls lsp-template *string* bfd bfd-liveness *boolean*
Tree	bfd-liveness
Default	false
Introduced	16.0.R1
Platforms	All

bfd-template *reference*

Synopsis	BFD template to be used by LSP BFD sessions
Context	**configure** router *string* mpls lsp-template *string* bfd bfd-template *reference*
Tree	bfd-template
Reference	**configure** bfd bfd-template *string*
Introduced	16.0.R1

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Platforms	All

failure-action *keyword*

Synopsis	Action to take when LSP BFD session fails
Context	**configure** router *string* mpls lsp-template *string* bfd failure-action *keyword*
Tree	failure-action
Options	none, down, failover-or-down
Default	none
Introduced	16.0.R1
Platforms	All

lsp-ping-interval *(number | keyword)*

Synopsis	Interval for periodic LSP ping for BFD bootstrapping
Context	**configure** router *string* mpls lsp-template *string* bfd lsp-ping-interval *(number | keyword)*
Tree	lsp-ping-interval
Range	60 to 300
Units	seconds
Options	none
Default	60
Introduced	16.0.R1
Platforms	All

return-path-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	S-BFD return-path label
Context	**configure** router *string* mpls lsp-template *string* bfd return-path-label *number*
Tree	return-path-label
Description	This command configures the S-BFD session to echo mode and adds an additional MPLS label to the bottom of the label stack for the S-BFD packet. The command applies to the initiator of the S-BFD sessions. The return-path label may be a binding SID for an SR policy or other MPLS path configured on the reflector router.

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Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through this MPLS return path.

If the command is deleted, S-BFD returns to asynchronous mode and no return-path label is pushed by the initiator node. Any S-BFD packets for this LSP or path that the reflector receives are routed through the IGP path.

Range	32 to 1048512
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

wait-for-up-timer *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time to wait for BFD to become operationally available
Context	**configure** router *string* mpls lsp-template *string* bfd wait-for-up-timer *number*
Tree	wait-for-up-timer
Description	This command configures the time to wait for BFD to become operationally up. The timer is applicable to SR-TE LSPs, including auto LSPs and PCE-initiated LSPS, as well RSVP-TE LSPs. For SR-TE LSPs, the timer takes effect when BFD is first enabled on a path or when BFD transitions from up to down. Upon expiration, if BFD is not up, the path is torn down, removed from the TTM and the IOM, and the system starts the retry timer. For RSVP-TE LSPs, the timer controls the following: • a path undergoing MBB when BFD is up • the initial administrative state of the LSP • the retry signaling of non-standby secondary paths
Range	1 to 60
Units	seconds
Default	4
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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bgp-shortcut *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable/disable use of RSVP LSP for IPv4 BGP routes.
Context	**configure** router *string* mpls lsp-template *string* bgp-shortcut *boolean*
Tree	bgp-shortcut
Introduced	16.0.R1
Platforms	All

bgp-transport-tunnel *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow use of RSVP-TE LSP as transport for tunnel routes
Context	**configure** router *string* mpls lsp-template *string* bgp-transport-tunnel *boolean*
Tree	bgp-transport-tunnel
Default	true
Introduced	16.0.R1
Platforms	All

binding-sid *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Request to allocate and bind a label
Context	**configure** router *string* mpls lsp-template *string* binding-sid *boolean*
Tree	binding-sid
Description	When configured to **true**, the system allocates and binds a label to any LSP that is created using the template. When configured to **false**, this command removes the configuration but this does not affect LSPs that were already created using the template.
Default	false

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Introduced	22.10.R1
Platforms	All

class-forwarding

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **class-forwarding** context
Context	**configure** router *string* mpls lsp-template *string* class-forwarding
Tree	class-forwarding
Introduced	16.0.R1
Platforms	All

forwarding-set

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **forwarding-set** context
Context	**configure** router *string* mpls lsp-template *string* class-forwarding forwarding-set
Tree	forwarding-set
Notes	The following elements are part of a choice: (**default-lsp** and **fc**) or **forwarding-set**.
Introduced	16.0.R1
Platforms	All

policy *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name for the class based forwarding policy for LSP instances
Context	**configure** router *string* mpls lsp-template *string* class-forwarding forwarding-set policy *reference*
Tree	policy

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Reference	**configure** router *string* mpls class-forwarding-policy *string*
Introduced	16.0.R1
Platforms	All

set *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Forwarding set ID
Context	**configure** router *string* mpls lsp-template *string* class-forwarding forwarding-set set *number*
Tree	set
Range	1 to 6
Introduced	16.0.R1
Platforms	All

class-type *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Class type for an LSP template
Context	**configure** router *string* mpls lsp-template *string* class-type *number*
Tree	class-type
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All

default-path *reference*

WARNING:
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WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Default path to be used for signaling LSP instances
Context	**configure** router *string* mpls lsp-template *string* default-path *reference*
Tree	default-path
Reference	**configure** router *string* mpls path *string*
Introduced	16.0.R1
Platforms	All

egress-statistics

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **egress-statistics** context
Context	**configure** router *string* mpls lsp-template *string* egress-statistics
Tree	egress-statistics
Introduced	16.0.R1
Platforms	All

accounting-policy *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accounting policy ID
Context	**configure** router *string* mpls lsp-template *string* egress-statistics accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R1
Platforms	All

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collect-stats *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Collect LSP statistics
Context	**configure** router *string* mpls lsp-template *string* egress-statistics collect-stats *boolean*
Tree	collect-stats
Description	When configured to **true**, this command enables LSP statistics collection. When you apply accounting policies, the forwarding engine collects data in the appropriate records and by default the CPU obtains and writes the results to the designated billing file. When configured to **false**, the forwarding engine still accumulates statistics. However, the CPU does not write them to the billing file. If you subsequently re-enable this command, the counters written to the billing file include all the traffic collected while the command was disabled.
Default	false
Introduced	16.0.R1
Platforms	All

stat-mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Statistics collection mode
Context	**configure** router *string* mpls lsp-template *string* egress-statistics stat-mode *keyword*
Tree	stat-mode
Options	per-fc, aggregate
Introduced	21.10.R1
Platforms	All

entropy-label *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Entropy label for an LSP template

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Context	**configure** router *string* mpls lsp-template *string* entropy-label *keyword*
Tree	entropy-label
Options	false, true
Introduced	16.0.R1
Platforms	All

exclude-admin-group *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Admin group name excluded when LSP is set up
Context	**configure** router *string* mpls lsp-template *string* exclude-admin-group *reference*
Tree	exclude-admin-group
Reference	**configure** routing-options if-attribute admin-group *string*
Max. Instances	32
Introduced	16.0.R1
Platforms	All

fallback-path-computation-method *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Fallback path computation method
Context	**configure** router *string* mpls lsp-template *string* fallback-path-computation-method *keyword*
Tree	fallback-path-computation-method
Description	This command specifies the fallback path computation method used if all configured PCEs are down or are signaling overload and the redelegation timer has expired. This method is used regardless of whether the LSP is PCE-controlled and PCE-computed, or only PCE-computed.
Options	none, local-cspf
Introduced	21.10.R1
Platforms	All

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family *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Address family that specifies template use in SR-TE LSP
Context	**configure** router *string* mpls lsp-template *string* family *keyword*
Tree	family
Description	This command specifies the address family for which the LSP template applies in an SR-TE LSP. An LSP template is required for each address family.
Options	ipv4, ipv6
Default	ipv4
Introduced	20.5.R1
Platforms	All

fast-reroute

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **fast-reroute** context
Context	**configure** router *string* mpls lsp-template *string* fast-reroute
Tree	fast-reroute
Introduced	16.0.R1
Platforms	All

frr-method *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Fast Reroute method for the LSPs that are dynamically created using this LSP template
Context	**configure** router *string* mpls lsp-template *string* fast-reroute frr-method *keyword*
Tree	frr-method

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Options	one-to-one, facility
Default	facility
Introduced	16.0.R1
Platforms	All

hop-limit *number*

Synopsis	Total number of hops a detour or backup LSP can take
Context	**configure** router *string* mpls lsp-template *string* fast-reroute hop-limit *number*
Tree	hop-limit
Range	0 to 255
Default	16
Introduced	16.0.R1
Platforms	All

node-protect *boolean*

Synopsis	Enable node and link protection for the specified LSP
Context	**configure** router *string* mpls lsp-template *string* fast-reroute node-protect *boolean*
Tree	node-protect
Default	false
Introduced	16.0.R1
Platforms	All

propagate-admin-group *boolean*

Synopsis	Enable admin group constraints on a FRR backup LSP
Context	**configure** router *string* mpls lsp-template *string* fast-reroute propagate-admin-group *boolean*
Tree	propagate-admin-group
Default	false
Introduced	16.0.R1
Platforms	All

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from *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address of the ingress router for the LSP template
Context	**configure** router *string* mpls lsp-template *string* from *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	from
Introduced	16.0.R1
Platforms	All

hop-limit *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum hops for an LSP created using this LSP template
Context	**configure** router *string* mpls lsp-template *string* hop-limit *number*
Tree	hop-limit
Range	2 to 255
Introduced	16.0.R1
Platforms	All

igp-shortcut

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **igp-shortcut** context
Context	**configure** router *string* mpls lsp-template *string* igp-shortcut
Tree	igp-shortcut
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of LSP for shortcut or forwarding
Context	**configure** router *string* mpls lsp-template *string* igp-shortcut admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

allow-sr-over-srte *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use as eligible SRv4 or SRv6 IGP shortcut
Context	**configure** router *string* mpls lsp-template *string* igp-shortcut allow-sr-over-srte *boolean*
Tree	allow-sr-over-srte
Description	When configured to **true**, the router performs local SPF and the SR-TE LSP template is used as an eligible IGP SR-MPLS shortcut for SR-MPLS SRv4 or SRv6 only if the SR-TE is explicitly allowed using this command and when the top SID in the SR-TE LSP is an adjacency SID.
Default	false
Introduced	23.3.R1
Platforms	All

lfa-type *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	LSP usage in LFA SPF
Context	**configure** router *string* mpls lsp-template *string* igp-shortcut lfa-type *keyword*

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Tree	lfa-type
Options	lfa-protect, lfa-only
Notes	The following elements are part of a choice: **lfa-type** or **relative-metric**.
Introduced	16.0.R1
Platforms	All

relative-metric *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Shortest IGP cost between the endpoints of the LSP plus the configured offset
Context	**configure** router *string* mpls lsp-template *string* igp-shortcut relative-metric *number*
Tree	relative-metric
Range	-10 to 10
Notes	The following elements are part of a choice: **lfa-type** or **relative-metric**.
Introduced	16.0.R1
Platforms	All

include-admin-group *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Admin group name included when LSP is set up
Context	**configure** router *string* mpls lsp-template *string* include-admin-group *reference*
Tree	include-admin-group
Reference	**configure** routing-options if-attribute admin-group *string*
Max. Instances	32
Introduced	16.0.R1
Platforms	All

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label-stack-reduction *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable label compression for LSP path
Context	**configure** router *string* mpls lsp-template *string* label-stack-reduction *boolean*
Tree	label-stack-reduction
Default	false
Introduced	19.7.R1
Platforms	All

ldp-over-rsvp *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Include this LSP in LDP over RSVP
Context	**configure** router *string* mpls lsp-template *string* ldp-over-rsvp *boolean*
Tree	ldp-over-rsvp
Default	true
Introduced	16.0.R1
Platforms	All

least-fill *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable least-fill path selection for this LSP template
Context	**configure** router *string* mpls lsp-template *string* least-fill *boolean*
Tree	least-fill
Default	false
Introduced	16.0.R1
Platforms	All

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load-balancing-weight *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Load balancing weight for an MPLS LSP template
Context	**configure** router *string* mpls lsp-template *string* load-balancing-weight *number*
Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

local-sr-protection *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local SR protection preference for LSP path computation
Context	**configure** router *string* mpls lsp-template *string* local-sr-protection *keyword*
Tree	local-sr-protection
Options	none, preferred, mandatory
Default	preferred
Introduced	19.7.R1
Platforms	All

lsp-self-ping *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	LSP Self Ping activation status on RSVP-TE LSP template
Context	**configure** router *string* mpls lsp-template *string* lsp-self-ping *keyword*
Tree	lsp-self-ping
Description	When configured, the system uses this setting for the LSP template regardless of the value configured under **configure router mpls lsp-self-ping rsvp-te**.

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When unconfigured, the command inherits the value configured under **configure router mpls lsp-self-ping rsvp-te**.

Options	false, true
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

main-ct-retry-limit *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of retries before reverting to backup CT
Context	**configure** router *string* mpls lsp-template *string* main-ct-retry-limit *number*
Tree	main-ct-retry-limit
Range	1 to 10000
Introduced	16.0.R1
Platforms	All

max-sr-labels

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **max-sr-labels** context
Context	**configure** router *string* mpls lsp-template *string* max-sr-labels
Tree	max-sr-labels
Introduced	16.0.R1
Platforms	All

additional-frr-labels *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of additional overhead labels

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Context	**configure** router *string* mpls lsp-template *string* max-sr-labels additional-frr-labels *number*
Tree	additional-frr-labels
Range	0 to 4
Default	1
Introduced	16.0.R1
Platforms	All

label-stack-size *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Size for the maximum segment routing label stack
Context	**configure** router *string* mpls lsp-template *string* max-sr-labels label-stack-size *number*
Tree	label-stack-size
Range	1 to 11
Introduced	16.0.R1
Platforms	All

metric *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	LSP template metric
Context	**configure** router *string* mpls lsp-template *string* metric *number*
Tree	metric
Range	0 to 16777215
Default	0
Introduced	16.0.R1
Platforms	All

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metric-type *keyword*

WARNING:
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Synopsis	Metric type used for LSP path computation
Context	**configure** router *string* mpls lsp-template *string* metric-type *keyword*
Tree	metric-type
Options	igp, te
Default	igp
Introduced	19.7.R1
Platforms	All

override-tunnel-elc *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Override any received entropy label capability
Context	**configure** router *string* mpls lsp-template *string* override-tunnel-elc *boolean*
Tree	override-tunnel-elc
Description	When configured to **true**, this command allows the system to override any received entropy label capability advertisement. When configured to **false**, this command disables the override.
Default	false
Introduced	21.10.R1
Platforms	All

path-computation-method *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Path computation method
Context	**configure** router *string* mpls lsp-template *string* path-computation-method *keyword*

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Tree	path-computation-method
Description	This command configures the path computation method of an RSVP-TE or SR-TE LSP. If this command is not configured to one of the supported options, the default path computation method is used depending on the type of LSP; the hop-to-label translation is used for the SR-TE LSP template and the IGP-based path is used for the RSVP-TE-LSP. See "SR-TE LSP path computation using hop-to-label translation" in the *7750 Service Router and 7950 Extensible Routing System Segment Routing nad PCE User Guide* for more information.
Options	local-cspf, pce
Introduced	19.7.R1
Platforms	All

path-profile [profile-id] *number*

Synopsis	Enter the **path-profile** list instance
Context	**configure** router *string* mpls lsp-template *string* path-profile *number*
Tree	path-profile
Description	Commands in this context configure the attributes of the PCE path profile.
Max. Instances	5
Introduced	21.10.R1
Platforms	All

[**profile-id**] *number*

Synopsis	Profile ID for the specified LSP
Context	**configure** router *string* mpls lsp-template *string* path-profile *number*
Tree	path-profile
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

path-group *number*

Synopsis	Path-group ID for the specified LSP

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Context	**configure** router *string* mpls lsp-template *string* path-profile *number* path-group *number*
Tree	path-group
Max. Range	0 to 4294967295
Default	0
Introduced	21.10.R1
Platforms	All

pce-associations

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **pce-associations** context
Context	**configure** router *string* mpls lsp-template *string* pce-associations
Tree	pce-associations
Description	Commands in this context configure the LSP binding with one or more PCEP associations.
Introduced	22.5.R1
Platforms	All

diversity [diversity-name] *reference*

Synopsis	Add a list entry for **diversity**
Context	**configure** router *string* mpls lsp-template *string* pce-associations diversity *reference*
Tree	diversity
Description	Commands in this context bind the LSP to a named diversity association. The diversity association must exist under the PCC.
Max. Instances	5
Introduced	22.5.R1
Platforms	All

[**diversity-name**] *reference*

Synopsis	Name of the PCE association configured under the PCC
Context	**configure** router *string* mpls lsp-template *string* pce-associations diversity *reference*

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Tree	diversity
Reference	**configure** router *string* pcep pcc pce-associations diversity *string*
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

policy [policy-name] *reference*

Synopsis	Add a list entry for **policy**
Context	**configure** router *string* mpls lsp-template *string* pce-associations policy *reference*
Tree	policy
Description	Commands in this context bind the LSP to a named policy association. The policy association name must exist under the PCC.
Max. Instances	5
Introduced	22.5.R1
Platforms	All

[**policy-name**] *reference*

Synopsis	Name of the PCE association configured under the PCC
Context	**configure** router *string* mpls lsp-template *string* pce-associations policy *reference*
Tree	policy
Reference	**configure** router *string* pcep pcc pce-associations policy *string*
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

pce-control *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable PCE controlled LSP mode of operation
Context	**configure** router *string* mpls lsp-template *string* pce-control *boolean*

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Tree	pce-control
Description	When configured to **true**, this command enables a PCE-controlled mode of operation for the LSP. In this mode, the router delegates full control of the LSP to the PCE (PCE controlled). The PCE acts in stateful-active mode for this LSP and is able to reroute the path following a failure or to re-optimize the path and update the router without a request from the router. When configured to **false**, the PCE-controlled mode of operation for the LSP has no effect.
Default	false
Introduced	21.10.R1
Platforms	All

pce-report *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable reporting modes to PCE for RSVP-TE or SR-TE LSPs
Context	**configure** router *string* mpls lsp-template *string* pce-report *keyword*
Tree	pce-report
Options	false, true
Introduced	16.0.R1
Platforms	All

priority

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **priority** context
Context	**configure** router *string* mpls lsp-template *string* priority
Tree	priority
Introduced	16.0.R1
Platforms	All

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hold-priority *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Hold priority when insufficient bandwidth is available to set up LSP
Context	**configure** router *string* mpls lsp-template *string* priority hold-priority *number*
Tree	hold-priority
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All

setup-priority *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Setup priority when insufficient bandwidth is available to set up LSP
Context	**configure** router *string* mpls lsp-template *string* priority setup-priority *number*
Tree	setup-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	All

propagate-admin-group *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable admin groups via session attribute object
Context	**configure** router *string* mpls lsp-template *string* propagate-admin-group *boolean*
Tree	propagate-admin-group
Default	false

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Introduced	16.0.R1
Platforms	All

record *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable recording of all hops for this LSP template
Context	**configure** router *string* mpls lsp-template *string* record *boolean*
Tree	record
Default	true
Introduced	16.0.R1
Platforms	All

record-label *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable recording of labels at each node or instance
Context	**configure** router *string* mpls lsp-template *string* record-label *boolean*
Tree	record-label
Default	true
Introduced	16.0.R1
Platforms	All

retry-limit *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of attempts to re-establish LSP after it fails
Context	**configure** router *string* mpls lsp-template *string* retry-limit *number*
Tree	retry-limit

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Range	1 to 10000
Introduced	16.0.R1
Platforms	All

retry-timer *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time for LSP re-establishment attempts after failure
Context	**configure** router *string* mpls lsp-template *string* retry-timer *number*
Tree	retry-timer
Range	1 to 600
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

soft-preemption *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable soft preemption
Context	**configure** router *string* mpls lsp-template *string* soft-preemption *boolean*
Tree	soft-preemption
Description	When configured to **true**, the P2MP LSP preemption is governed by the **configure router rsvp preemption-timer** value. When configured to **false**, the preemption timer value is set to 0 and the P2MP LSPs are hard preempted. For P2P LSPs, soft preemption is always enabled and cannot be disabled.
Introduced	22.2.R1
Platforms	All

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template-id *(number | keyword)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Template ID
Context	**configure** router *string* mpls lsp-template *string* template-id *(number | keyword)*
Tree	template-id
Description	This command specifies the value that is signaled in the PCE to identify the LSP template.
Range	1 to 4294967295
Options	default
Introduced	16.0.R5
Platforms	All

type *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	LSP template type
Context	**configure** router *string* mpls lsp-template *string* type *keyword*
Tree	type
Description	This command configures the type of a template that can be referenced by a client application where dynamic LSP creation is required. The LSP template type is mandatory.
Options	p2mp-rsvp, p2p-rsvp-one-hop, p2p-rsvp-mesh, p2p-sr-te-one-hop, p2p-sr-te-mesh, p2p-sr-te-pce-init, p2p-sr-te-on-demand
Notes	This element is mandatory.
Introduced	16.0.R1

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Platforms	All

vprn-auto-bind *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Include LSP template in auto-bind for VPRN services
Context	**configure** router *string* mpls lsp-template *string* vprn-auto-bind *boolean*
Tree	vprn-auto-bind
Default	true
Introduced	16.0.R1
Platforms	All

max-bypass-associations *number*

Synopsis	Maximum number of LSPs associated with a bypass tunnel
Context	**configure** router *string* mpls max-bypass-associations *number*
Tree	max-bypass-associations
Range	100 to 131072
Default	1000
Introduced	16.0.R1
Platforms	All

max-bypass-plr-associations *number*

Synopsis	Maximum number of PLRs per RSVP-TE bypass LSP
Context	**configure** router *string* mpls max-bypass-plr-associations *number*
Tree	max-bypass-plr-associations
Range	1 to 16
Default	16
Introduced	19.10.R1
Platforms	All

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mbb-prefer-current-hops *boolean*

Synopsis	Select preference to use the current hops for Make-Before-Break (MBB)
Context	**configure** router *string* mpls mbb-prefer-current-hops *boolean*
Tree	mbb-prefer-current-hops
Default	false
Introduced	16.0.R1
Platforms	All

p2mp-resignal-timer *number*

Synopsis	Resignal timer for P2MP LSPs
Context	**configure** router *string* mpls p2mp-resignal-timer *number*
Tree	p2mp-resignal-timer
Range	60 to 10080
Units	minutes
Introduced	16.0.R1
Platforms	All

p2mp-s2l-fast-retry *number*

Synopsis	Fast retry timer for P2MP S2L paths
Context	**configure** router *string* mpls p2mp-s2l-fast-retry *number*
Tree	p2mp-s2l-fast-retry
Range	1 to 10
Units	seconds
Introduced	16.0.R1
Platforms	All

p2mp-ttl-propagate *boolean*

Synopsis	Use uniform mode for TTL propagation for RSVP P2MP LSPs
Context	**configure** router *string* mpls p2mp-ttl-propagate *boolean*
Tree	p2mp-ttl-propagate
Description	When configured to **true**, the router configures the uniform mode of operation for P2MP LSPs.

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When configured to **false**, the router configures the pipe mode of operation for RSVP P2MP LSPs.

When the propagation mode is modified, the new configuration applies to future RSVP P2MP LSPs only and the existing operational LSPs are not affected.

Default	true
Introduced	23.7.R1
Platforms	All

p2p-active-path-fast-retry *number*

Synopsis	Fast retry timer for P2P active paths
Context	**configure** router *string* mpls p2p-active-path-fast-retry *number*
Tree	p2p-active-path-fast-retry
Range	1 to 10
Units	seconds
Introduced	16.0.R1
Platforms	All

path [path-name] *string*

Synopsis	Enter the **path** list instance
Context	**configure** router *string* mpls path *string*
Tree	path
Max. Instances	65535
Introduced	16.0.R1
Platforms	All

[**path-name**] *string*

Synopsis	Name for this LSP path
Context	**configure** router *string* mpls path *string*
Tree	path
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the path used for LSPs
Context	**configure** router *string* mpls path *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

hop [hop-index] *number*

Synopsis	Enter the **hop** list instance
Context	**configure** router *string* mpls path *string* hop *number*
Tree	hop
Max. Instances	255
Introduced	16.0.R1
Platforms	All

[**hop-index**] *number*

Synopsis	Index to identify a particular hop
Context	**configure** router *string* mpls path *string* hop *number*
Tree	hop
Range	1 to 1024
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the transit router
Context	**configure** router *string* mpls path *string* hop *number* ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-address
Notes	The following elements are part of a mandatory choice: (**ip-address** and **type**) or **sid-label**.
Introduced	16.0.R1
Platforms	All

sid-label *number*

Synopsis	MPLS label for tunnel hop in the path of an SR-TE LSP
Context	**configure** router *string* mpls path *string* hop *number* sid-label *number*
Tree	sid-label
Range	32 to 1048575
Notes	The following elements are part of a mandatory choice: (**ip-address** and **type**) or **sid-label**.
Introduced	19.10.R1
Platforms	All

type *keyword*

Synopsis	Tunnel hop type
Context	**configure** router *string* mpls path *string* hop *number* type *keyword*
Tree	type
Options	strict, loose
Notes	The following elements are part of a mandatory choice: (**ip-address** and **type**) or **sid-label**.
Introduced	16.0.R1
Platforms	All

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pce-init-lsp

Synopsis	Enable the **pce-init-lsp** context
Context	**configure** router *string* mpls pce-init-lsp
Tree	pce-init-lsp
Introduced	16.0.R5
Platforms	All

sr-te

Synopsis	Enable the **sr-te** context
Context	**configure** router *string* mpls pce-init-lsp sr-te
Tree	sr-te
Introduced	16.0.R5
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of SR-TE PCE-initiated LSP support
Context	**configure** router *string* mpls pce-init-lsp sr-te admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R5
Platforms	All

pce-report

Synopsis	Enter the **pce-report** context
Context	**configure** router *string* mpls pce-report
Tree	pce-report
Introduced	16.0.R1
Platforms	All

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rsvp-te *boolean*

Synopsis	Allow PCE reporting for all TE LSPs of RSVP-TE type
Context	**configure** router *string* mpls pce-report rsvp-te *boolean*
Tree	rsvp-te
Default	false
Introduced	16.0.R1
Platforms	All

sr-te *boolean*

Synopsis	Allow PCE reporting for all TE LSPs of SR-TE type
Context	**configure** router *string* mpls pce-report sr-te *boolean*
Tree	sr-te
Default	false
Introduced	16.0.R1
Platforms	All

resignal-on-igp-overload *boolean*

Synopsis	Resignal all RSVP-TE LSPs upon IGP overload
Context	**configure** router *string* mpls resignal-on-igp-overload *boolean*
Tree	resignal-on-igp-overload
Description	When configured to **true**, the receipt of the IS-IS overload bit in the TE-DB triggers the immediate resignaling of all RSVP-TE LSPs. MPLS forces the expiry of the resignal timer and the TE-DB computes a new CSPF for each RSVP-TE LSP active path. The re-optimization causes the immediate transition of RSVP-TE LSP paths away from the IS-IS node in overload using the MBB operation. This command cannot be configured to **true** when the **retry-on-igp-overloa**d command is configured to **true**. When configured to **false**, the default behavior is maintained where MBB re-optimization occurs only when a timer-based resignal is performed or a manual resignal is executed.
Default	false
Introduced	20.10.R1
Platforms	All

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resignal-timer *number*

Synopsis	Resignal timer for RSVP LSPs
Context	**configure** router *string* mpls resignal-timer *number*
Tree	resignal-timer
Range	30 to 10080
Units	minutes
Introduced	16.0.R1
Platforms	All

retry-on-igp-overload *boolean*

Synopsis	Tear down LSPs when IGP is in overload state
Context	**configure** router *string* mpls retry-on-igp-overload *boolean*
Tree	retry-on-igp-overload
Default	false
Introduced	16.0.R1
Platforms	All

secondary-fast-retry-timer *number*

Synopsis	Fast retry timer for secondary paths
Context	**configure** router *string* mpls secondary-fast-retry-timer *number*
Tree	secondary-fast-retry-timer
Range	1 to 10
Units	seconds
Introduced	16.0.R1
Platforms	All

shortcut-local-ttl-propagate *boolean*

Synopsis	Propagate TTL over LSP shortcut for local packets
Context	**configure** router *string* mpls shortcut-local-ttl-propagate *boolean*
Tree	shortcut-local-ttl-propagate
Default	true
Introduced	16.0.R1

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Platforms	All

shortcut-transit-ttl-propagate *boolean*

Synopsis	Propagate TTL over LSP shortcut for local packets for transit packets
Context	**configure** router *string* mpls shortcut-transit-ttl-propagate *boolean*
Tree	shortcut-transit-ttl-propagate
Default	true
Introduced	16.0.R1
Platforms	All

sr-te-resignal

Synopsis	Enter the **sr-te-resignal** context
Context	**configure** router *string* mpls sr-te-resignal
Tree	sr-te-resignal
Introduced	19.10.R1
Platforms	All

resignal-on-igp-event *boolean*

Synopsis	Re-optimize SR-TE LSPs upon IGP link events
Context	**configure** router *string* mpls sr-te-resignal resignal-on-igp-event *boolean*
Tree	resignal-on-igp-event
Description	When configured to **true**, the system signals the re-optimization of all SR-TE LSPs when one or more IGP link down events are received in the TE-DB. The triggered behavior is identical to the timer-based or resignal behavior or the manual-based resignal behavior used with a delay option. MPLS forces the expiry of the resignal timer and all active paths of all SR-TE LSPs are re-evaluated. When configured to **false**, re-optimization is not triggered by IGP events.
Default	false
Introduced	19.10.R1
Platforms	All

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resignal-on-igp-overload *boolean*

Synopsis	Enable resignaling of SR-TE LSPs upon IGP overload
Context	**configure** router *string* mpls sr-te-resignal resignal-on-igp-overload *boolean*
Tree	resignal-on-igp-overload
Description	When configured to **true**, the system enables ad-hoc re-optimzation of the CSPF paths of all SR-TE LSPs when IS-IS receives an IS-IS overload bit advertisement from a remote router. When this command is enabled on the router and an IGP overload bit is set in a Layer 1 or Layer 2 IS-IS LSP received from a remote router, MPLS performs an ad-hoc re-optimization of all the paths of all the SR-TE LSPs that have paths computed by the local CSPF. For each SR-TE LSP current path that transits the router in overload, the CSPF looks for a new path that avoids the router. For each SR-TE LSP current path that terminates on the router in overload, the CSPF checks if a better path exists. In both cases, if a new path is not found the system maintains the current path when operationally up. The ad-hoc re-optimization triggers the timer-based re-optimization by forcing the resignal timer to expire. Therefore, the user must use the **configure router mpls sr-te-resignal resignal-timer** command to configure the resignal timer for the SR-TE application. When configured to **false**, MPLS does not act immediately on an IS-IS overload bit from a remote router. MPLS acts on it at the next timer-based or manual re-optimization of the SR-TE LSPs.
Default	false
Introduced	23.3.R1
Platforms	All

resignal-timer *number*

Synopsis	Resignal timer for SR-TE LSPs
Context	**configure** router *string* mpls sr-te-resignal resignal-timer *number*
Tree	resignal-timer
Description	This command configures the time the system waits before signaling the re-optimization of all SR-TE LSPs.
Range	30 to 10080
Units	minutes
Introduced	19.10.R1
Platforms	All

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srlg-database

Synopsis	Enter the **srlg-database** context
Context	**configure** router *string* mpls srlg-database
Tree	srlg-database
Introduced	16.0.R1
Platforms	All

router-id [router-address] *string*

Synopsis	Enter the **router-id** list instance
Context	**configure** router *string* mpls srlg-database router-id *string*
Tree	router-id
Introduced	16.0.R1
Platforms	All

[**router-address**] *string*

Synopsis	Router ID for the system
Context	**configure** router *string* mpls srlg-database router-id *string*
Tree	router-id
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the interface entry
Context	**configure** router *string* mpls srlg-database router-id *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

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interface [interface-address] *string* srlg-group *reference*

Synopsis	Add a list entry for **interface**
Context	**configure** router *string* mpls srlg-database router-id *string* interface *string* srlg-group *reference*
Tree	interface
Introduced	16.0.R1
Platforms	All

[**interface-address**] *string*

Synopsis	IP address of the interface
Context	**configure** router *string* mpls srlg-database router-id *string* interface *string* srlg-group *reference*
Tree	interface
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

srlg-group *reference*

Synopsis	SRLG group name
Context	**configure** router *string* mpls srlg-database router-id *string* interface *string* srlg-group *reference*
Tree	interface
Reference	**configure** routing-options if-attribute srlg-group *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

srlg-frr *keyword*

Synopsis	Use of SRLG constraint for FRR path computation
Context	**configure** router *string* mpls srlg-frr *keyword*
Tree	srlg-frr
Options	loose, strict

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Introduced	16.0.R1
Platforms	All

static-lsp [lsp-name] *string*

Synopsis	Enter the **static-lsp** list instance
Context	**configure** router *string* mpls static-lsp *string*
Tree	static-lsp
Max. Instances	1000
Introduced	16.0.R1
Platforms	All

[**lsp-name**] *string*

Synopsis	Labeled Switch path name
Context	**configure** router *string* mpls static-lsp *string*
Tree	static-lsp
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the static LSP
Context	**configure** router *string* mpls static-lsp *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

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metric *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MPLS static LSP metric to select an LSP
Context	**configure** router *string* mpls static-lsp *string* metric *number*
Tree	metric
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

push

Synopsis	Enable the **push** context
Context	**configure** router *string* mpls static-lsp *string* push
Tree	push
Introduced	16.0.R1
Platforms	All

next-hop *string*

Synopsis	IP address for the next hop
Context	**configure** router *string* mpls static-lsp *string* push next-hop *string*
Tree	next-hop
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

out-label *(number | keyword)*

Synopsis	Push specific label onto the top of the outgoing packet's label stack
Context	**configure** router *string* mpls static-lsp *string* push out-label *(number | keyword)*
Tree	out-label
Range	16 to 1048575
Options	implicit-null-label

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

to *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination IP address or the egress router for the LSP
Context	**configure** router *string* mpls static-lsp *string* to *string*
Tree	to
Introduced	16.0.R1
Platforms	All

static-lsp-fast-retry *number*

Synopsis	Fast retry timer for static LSPs
Context	**configure** router *string* mpls static-lsp-fast-retry *number*
Tree	static-lsp-fast-retry
Range	1 to 30
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

strict-ero-nhop-direct-resolution *boolean*

Synopsis	Resolves RSVP-TE LSP ERO to local and host routes only
Context	**configure** router *string* mpls strict-ero-nhop-direct-resolution *boolean*
Tree	strict-ero-nhop-direct-resolution
Description	When configured to **true**, the router enables the strict Explicit Route Object (ERO) next-hop direct resolution. The feature restricts the routes used to resolve the next hop of an ERO address to local and host routes. This command avoids using a next hop over a parallel link when a half link is up in the routing table. This command applies to an ERO when all of the following conditions are met:

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- the ERO next hop is an IPv4 address
- the ERO object is a strict hop
- the IPv4 address matches the primary subnet of a local numbered interface

If no such route exists, RSVP rejects the PATH message with ErrCode = Routing Error (24) and SubErrCode = Bad Strict Node (2).

When configured to **false**, the router disables the strict ERO next-hop direct resolution.

Default	false
Introduced	22.5.R1
Platforms	All

tunnel-table-pref

Synopsis	Enter the **tunnel-table-pref** context
Context	**configure** router *string* mpls tunnel-table-pref
Tree	tunnel-table-pref
Description	Commands in this context configure the tunnel table preference for RSVP-TE LSP and SR-TE LSP tunnel types.
Introduced	21.10.R1
Platforms	All

rsvp-te *number*

Synopsis	RSVP-TE tunnel table preference
Context	**configure** router *string* mpls tunnel-table-pref rsvp-te *number*
Tree	rsvp-te
Description	This command configures the tunnel table preference for RSVP-TE LSP tunnel type. The tunnel table preference applies to next-hop resolution of BGP routes for: EVPN, IPv4, IPv6, VPN-IPv4, VPN-IPv6, label-IPv4, and label-IPV6 in the tunnel table. This feature does not apply to a VPRN, VPLS, or VLL service with explicit binding to an SDP that enabled the **mixed-lsp-mode** option. The service manager controls and fixes the tunnel preference in such an SDP. The tunnel table preference configuration does not modify the SDP behavior, nor the services that bind to it. Nokia recommends that tunnel types have unique preference values. In a situation where two or more tunnel types are set to the same preference value, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.
Range	1 to 255
Default	7
Introduced	21.10.R1

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Platforms	All

sr-te *number*

Synopsis	SR-TE tunnel table preference
Context	**configure** router *string* mpls tunnel-table-pref sr-te *number*
Tree	sr-te
Description	This command configures the tunnel table preference for SR-TE LSP tunnel type. The tunnel table preference applies to next-hop resolution of BGP routes for: EVPN, IPv4, IPv6, VPN-IPv4, VPN-IPv6, label-IPv4, and label-IPV6 in the tunnel table. This feature does not apply to a VPRN, VPLS, or VLL service with explicit binding to an SDP that enabled the **mixed-lsp-mode** option. The service manager controls and fixes the tunnel preference in such an SDP. The tunnel table preference configuration does not modify the SDP behavior, nor the services that bind to it. It is recommended to not set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.
Range	1 to 255
Default	8
Introduced	21.10.R1
Platforms	All

user-srlg-db *boolean*

Synopsis	Enable the use of user SRLG database
Context	**configure** router *string* mpls user-srlg-db *boolean*
Tree	user-srlg-db
Default	false
Introduced	16.0.R1
Platforms	All

mpls-labels

Synopsis	Enter the **mpls-labels** context
Context	**configure** router *string* mpls-labels
Tree	mpls-labels
Introduced	16.0.R1

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Platforms	All

bgp-labels-hold-timer *number*

Synopsis	BGP labels hold timer for the ingress router
Context	**configure** router *string* mpls-labels bgp-labels-hold-timer *number*
Tree	bgp-labels-hold-timer
Range	0 to 255
Default	0
Introduced	16.0.R1
Platforms	All

reserved-label-block [label-block-name] *string*

Synopsis	Enter the **reserved-label-block** list instance
Context	**configure** router *string* mpls-labels reserved-label-block *string*
Tree	reserved-label-block
Max. Instances	16
Introduced	16.0.R1
Platforms	All

[**label-block-name**] *string*

Synopsis	Name for the reserved label block
Context	**configure** router *string* mpls-labels reserved-label-block *string*
Tree	reserved-label-block
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end-label *number*

Synopsis	End label for the reserved label block

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Context	**configure** router *string* mpls-labels reserved-label-block *string* end-label *number*
Tree	end-label
Range	32 to 1048575
Introduced	16.0.R1
Platforms	All

start-label *number*

Synopsis	Start label value for the reserved label block
Context	**configure** router *string* mpls-labels reserved-label-block *string* start-label *number*
Tree	start-label
Range	32 to 1048575
Introduced	16.0.R1
Platforms	All

sr-labels

Synopsis	Enter the **sr-labels** context
Context	**configure** router *string* mpls-labels sr-labels
Tree	sr-labels
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	End label for the SRGB
Context	**configure** router *string* mpls-labels sr-labels end *number*
Tree	end
Range	32 to 1048575
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Start label value for the SRGB

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Context	**configure** router *string* mpls-labels sr-labels start *number*
Tree	start
Range	32 to 1048575
Introduced	16.0.R1
Platforms	All

static-label-range *number*

Synopsis	Static label range on the ingress router
Context	**configure** router *string* mpls-labels static-label-range *number*
Tree	static-label-range
Range	0 to 1048544
Default	18400
Introduced	16.0.R1
Platforms	All

msdp

Synopsis	Enable the **msdp** context
Context	**configure** router *string* msdp
Tree	msdp
Introduced	19.10.R1
Platforms	All

active-source-limit *number*

Synopsis	Maximum number of active messages accepted by MSDP
Context	**configure** router *string* msdp active-source-limit *number*
Tree	active-source-limit
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of MSDP
Context	**configure** router *string* msdp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	19.10.R1
Platforms	All

data-encapsulation *boolean*

Synopsis	Enable encapsulation of multicast data used by MSDP
Context	**configure** router *string* msdp data-encapsulation *boolean*
Tree	data-encapsulation
Default	true
Introduced	19.10.R1
Platforms	All

export-policy *reference*

Synopsis	Policies to export source active state into MSDP
Context	**configure** router *string* msdp export-policy *reference*
Tree	export-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

group [name] *string*

Synopsis	Enter the **group** list instance
Context	**configure** router *string* msdp group *string*
Tree	group

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Introduced	19.10.R1
Platforms	All

[**name**] *string*

Synopsis	MSDP group name
Context	**configure** router *string* msdp group *string*
Tree	group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

active-source-limit *number*

Synopsis	Maximum number of active messages accepted by MSDP
Context	**configure** router *string* msdp group *string* active-source-limit *number*
Tree	active-source-limit
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MSDP
Context	**configure** router *string* msdp group *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	19.10.R1
Platforms	All

export-policy *reference*

Synopsis	Policies to export source active state into MSDP

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Context	**configure** router *string* msdp group *string* export-policy *reference*
Tree	export-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

import-policy *reference*

Synopsis	Policy to import source active state from MSDP
Context	**configure** router *string* msdp group *string* import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

local-address *string*

Synopsis	Local end of an MSDP session
Context	**configure** router *string* msdp group *string* local-address *string*
Tree	local-address
Introduced	19.10.R1
Platforms	All

mode *keyword*

Synopsis	Topology of groups of peers
Context	**configure** router *string* msdp group *string* mode *keyword*
Tree	mode
Options	standard, mesh-group

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Default	standard
Introduced	19.10.R1
Platforms	All

peer [ip-address] *string*

Synopsis	Enter the **peer** list instance
Context	**configure** router *string* msdp group *string* peer *string*
Tree	peer
Introduced	19.10.R1
Platforms	All

[**ip-address**] *string*

Synopsis	IP address of the remote MSDP router for peering
Context	**configure** router *string* msdp group *string* peer *string*
Tree	peer
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

active-source-limit *number*

Synopsis	Maximum number of active messages accepted by MSDP
Context	**configure** router *string* msdp group *string* peer *string* active-source-limit *number*
Tree	active-source-limit
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MSDP
Context	**configure** router *string* msdp group *string* peer *string* admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	enable
Introduced	19.10.R1
Platforms	All

authentication-key *string*

Synopsis	MD5 authentication key for the MSDP peering session
Context	**configure** router *string* msdp group *string* peer *string* authentication-key *string*
Tree	authentication-key
String Length	1 to 370
Introduced	19.10.R1
Platforms	All

default-peer *boolean*

Synopsis	Enable/Disable default peer as MSDP peer
Context	**configure** router *string* msdp group *string* peer *string* default-peer *boolean*
Tree	default-peer
Default	false
Introduced	19.10.R1
Platforms	All

export-policy *reference*

Synopsis	Policies to export source active state into MSDP
Context	**configure** router *string* msdp group *string* peer *string* export-policy *reference*
Tree	export-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

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import-policy *reference*

Synopsis	Policy to import source active state from MSDP
Context	**configure** router *string* msdp group *string* peer *string* import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

local-address *string*

Synopsis	Local end of an MSDP session
Context	**configure** router *string* msdp group *string* peer *string* local-address *string*
Tree	local-address
Introduced	19.10.R1
Platforms	All

receive-message-rate

Synopsis	Enter the **receive-message-rate** context
Context	**configure** router *string* msdp group *string* peer *string* receive-message-rate
Tree	receive-message-rate
Introduced	19.10.R1
Platforms	All

rate *number*

Synopsis	Number of MSDP messages read from the TCP session
Context	**configure** router *string* msdp group *string* peer *string* receive-message-rate rate *number*
Tree	rate
Range	10 to 10000
Introduced	19.10.R1

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Platforms	All

threshold *number*

Synopsis	Limit for MSDP messages read from the TCP session
Context	**configure** router *string* msdp group *string* peer *string* receive-message-rate threshold *number*
Tree	threshold
Range	1 to 1000000
Introduced	19.10.R1
Platforms	All

time *number*

Synopsis	Limit of MSDP messages read from the TCP session
Context	**configure** router *string* msdp group *string* peer *string* receive-message-rate time *number*
Tree	time
Range	1 to 600
Units	seconds
Introduced	19.10.R1
Platforms	All

receive-message-rate

Synopsis	Enter the **receive-message-rate** context
Context	**configure** router *string* msdp group *string* receive-message-rate
Tree	receive-message-rate
Introduced	19.10.R1
Platforms	All

rate *number*

Synopsis	Number of MSDP messages read from the TCP session
Context	**configure** router *string* msdp group *string* receive-message-rate rate *number*
Tree	rate

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Range	10 to 10000
Introduced	19.10.R1
Platforms	All

threshold *number*

Synopsis	Limit for MSDP messages read from the TCP session
Context	**configure** router *string* msdp group *string* receive-message-rate threshold *number*
Tree	threshold
Range	1 to 1000000
Introduced	19.10.R1
Platforms	All

time *number*

Synopsis	Limit of MSDP messages read from the TCP session
Context	**configure** router *string* msdp group *string* receive-message-rate time *number*
Tree	time
Range	1 to 600
Units	seconds
Introduced	19.10.R1
Platforms	All

import-policy *reference*

Synopsis	Policy to import source active state from MSDP
Context	**configure** router *string* msdp import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

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local-address *string*

Synopsis	Local end of an MSDP session
Context	**configure** router *string* msdp local-address *string*
Tree	local-address
Introduced	19.10.R1
Platforms	All

peer [ip-address] *string*

Synopsis	Enter the **peer** list instance
Context	**configure** router *string* msdp peer *string*
Tree	peer
Introduced	19.10.R1
Platforms	All

[**ip-address**] *string*

Synopsis	IP address of the remote MSDP router for peering
Context	**configure** router *string* msdp peer *string*
Tree	peer
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

active-source-limit *number*

Synopsis	Maximum number of active messages accepted by MSDP
Context	**configure** router *string* msdp peer *string* active-source-limit *number*
Tree	active-source-limit
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of MSDP
Context	**configure** router *string* msdp peer *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	19.10.R1
Platforms	All

authentication-key *string*

Synopsis	MD5 authentication key for the MSDP peering session
Context	**configure** router *string* msdp peer *string* authentication-key *string*
Tree	authentication-key
String Length	1 to 370
Introduced	19.10.R1
Platforms	All

default-peer *boolean*

Synopsis	Enable/Disable default peer as MSDP peer
Context	**configure** router *string* msdp peer *string* default-peer *boolean*
Tree	default-peer
Default	false
Introduced	19.10.R1
Platforms	All

export-policy *reference*

Synopsis	Policies to export source active state into MSDP
Context	**configure** router *string* msdp peer *string* export-policy *reference*
Tree	export-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5

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Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

import-policy *reference*

Synopsis	Policy to import source active state from MSDP
Context	**configure** router *string* msdp peer *string* import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

local-address *string*

Synopsis	Local end of an MSDP session
Context	**configure** router *string* msdp peer *string* local-address *string*
Tree	local-address
Introduced	19.10.R1
Platforms	All

receive-message-rate

Synopsis	Enter the **receive-message-rate** context
Context	**configure** router *string* msdp peer *string* receive-message-rate
Tree	receive-message-rate
Introduced	19.10.R1
Platforms	All

rate *number*

Synopsis	Number of MSDP messages read from the TCP session

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Context	**configure** router *string* msdp peer *string* receive-message-rate rate *number*
Tree	rate
Range	10 to 10000
Introduced	19.10.R1
Platforms	All

threshold *number*

Synopsis	Limit for MSDP messages read from the TCP session
Context	**configure** router *string* msdp peer *string* receive-message-rate threshold *number*
Tree	threshold
Range	1 to 1000000
Introduced	19.10.R1
Platforms	All

time *number*

Synopsis	Limit of MSDP messages read from the TCP session
Context	**configure** router *string* msdp peer *string* receive-message-rate time *number*
Tree	time
Range	1 to 600
Units	seconds
Introduced	19.10.R1
Platforms	All

receive-message-rate

Synopsis	Enter the **receive-message-rate** context
Context	**configure** router *string* msdp receive-message-rate
Tree	receive-message-rate
Introduced	19.10.R1
Platforms	All

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rate *number*

Synopsis	Number of MSDP messages read from the TCP session
Context	**configure** router *string* msdp receive-message-rate rate *number*
Tree	rate
Range	10 to 10000
Introduced	19.10.R1
Platforms	All

threshold *number*

Synopsis	Limit for MSDP messages read from the TCP session
Context	**configure** router *string* msdp receive-message-rate threshold *number*
Tree	threshold
Range	1 to 1000000
Introduced	19.10.R1
Platforms	All

time *number*

Synopsis	Limit of MSDP messages read from the TCP session
Context	**configure** router *string* msdp receive-message-rate time *number*
Tree	time
Range	1 to 600
Units	seconds
Introduced	19.10.R1
Platforms	All

rpf-table *keyword*

Synopsis	Route tables for RPF lookup
Context	**configure** router *string* msdp rpf-table *keyword*
Tree	rpf-table
Options	rtable-m, rtable-u, both
Default	rtable-u
Introduced	19.10.R1

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Platforms	All

source [ip-prefix] *string*

Synopsis	Enter the **source** list instance
Context	**configure** router *string* msdp source *string*
Tree	source
Introduced	19.10.R1
Platforms	All

[**ip-prefix**] *string*

Synopsis	Source IP address for accepted active source messages
Context	**configure** router *string* msdp source *string*
Tree	source
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

active-source-limit *number*

Synopsis	Number of active source messages accepted by MSDP
Context	**configure** router *string* msdp source *string* active-source-limit *number*
Tree	active-source-limit
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

source-active-cache-lifetime *number*

Synopsis	Lifetime of SA entries in the cache
Context	**configure** router *string* msdp source-active-cache-lifetime *number*
Tree	source-active-cache-lifetime
Range	90 to 600
Units	seconds

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Default	90
Introduced	19.10.R1
Platforms	All

mss-adjust

Synopsis	Enable the **mss-adjust** context
Context	**configure** router *string* mss-adjust
Tree	mss-adjust
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group used for TCP-MSS adjustment
Context	**configure** router *string* mss-adjust nat-group *number*
Tree	nat-group
Max. Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

segment-size *number*

Synopsis	TCP-MSS option value in transmitted TCP SYN requests
Context	**configure** router *string* mss-adjust segment-size *number*
Tree	segment-size
Range	160 to 10240
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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mtrace2

Synopsis	Enter the **mtrace2** context
Context	**configure** router *string* mtrace2
Tree	mtrace2
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of multicast path tracing
Context	**configure** router *string* mtrace2 admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

udp-port *number*

Synopsis	Destination and listening port for the mtrace2 command
Context	**configure** router *string* mtrace2 udp-port *number*
Tree	udp-port
Range	1024 to 49151
Default	5000
Introduced	16.0.R1
Platforms	All

multicast-info-policy *reference*

Synopsis	Multicast policy name for virtual router
Context	**configure** router *string* multicast-info-policy *reference*
Tree	multicast-info-policy
Reference	**configure** multicast-management multicast-info-policy *string*
Introduced	16.0.R1

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Platforms	All

nat

Synopsis	Enable the **nat** context
Context	**configure** router *string* nat
Tree	nat
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside

Synopsis	Enter the **inside** context
Context	**configure** router *string* nat inside
Tree	inside
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2-aware

Synopsis	Enter the **l2-aware** context
Context	**configure** router *string* nat inside l2-aware
Tree	l2-aware
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

force-unique-ip-addresses *boolean*

Synopsis	Enforce unique IPv4 addresses for L2-aware subscribers
Context	**configure** router *string* nat inside l2-aware force-unique-ip-addresses *boolean*
Tree	force-unique-ip-addresses
Description	When configured to **true**, the system enforces the uniqueness of IPv4 addresses of L2-aware subscribers in an inside routing context. This functionality is required if multicast sourced from the inside routing context is enabled for L2-aware subscribers.
Default	false

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Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscribers [prefix] *string*

Synopsis	Add a list entry for **subscribers**
Context	**configure** router *string* nat inside l2-aware subscribers *string*
Tree	subscribers
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**prefix**] *string*

Synopsis	Layer-2 Aware NAT subscriber prefix
Context	**configure** router *string* nat inside l2-aware subscribers *string*
Tree	subscribers
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

large-scale

Synopsis	Enter the **large-scale** context
Context	**configure** router *string* nat inside large-scale
Tree	large-scale
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dnat-only

Synopsis	Enter the **dnat-only** context
Context	**configure** router *string* nat inside large-scale dnat-only
Tree	dnat-only
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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source-prefix-list *reference*

Synopsis	NAT prefix list that contains source IP addresses
Context	**configure** router *string* nat inside large-scale dnat-only source-prefix-list *reference*
Tree	source-prefix-list
Reference	**configure** service nat prefix-list *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dual-stack-lite

Synopsis	Enter the **dual-stack-lite** context
Context	**configure** router *string* nat inside large-scale dual-stack-lite
Tree	dual-stack-lite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of Dual Stack Lite
Context	**configure** router *string* nat inside large-scale dual-stack-lite admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

deterministic

Synopsis	Enter the **deterministic** context
Context	**configure** router *string* nat inside large-scale dual-stack-lite deterministic
Tree	deterministic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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prefix-map [source-prefix] *string* nat-policy *reference*

Synopsis	Enter the **prefix-map** list instance
Context	**configure** router *string* nat inside large-scale dual-stack-lite deterministic prefix-map *string* nat-policy *reference*
Tree	prefix-map
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**source-prefix**] *string*

Synopsis	List containing source IP addresses on the private side
Context	**configure** router *string* nat inside large-scale dual-stack-lite deterministic prefix-map *string* nat-policy *reference*
Tree	prefix-map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*

Synopsis	NAT policy
Context	**configure** router *string* nat inside large-scale dual-stack-lite deterministic prefix-map *string* nat-policy *reference*
Tree	prefix-map
Reference	**configure** service nat nat-policy *string*
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the prefix
Context	**configure** router *string* nat inside large-scale dual-stack-lite deterministic prefix-map *string* nat-policy *reference* admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

map [from] *string* to *string*

Synopsis	Enter the **map** list instance
Context	**configure** router *string* nat inside large-scale dual-stack-lite deterministic prefix-map *string* nat-policy *reference* map *string* to *string*
Tree	map
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**from**] *string*

Synopsis	Beginning of the range for IPv6 addresses
Context	**configure** router *string* nat inside large-scale dual-stack-lite deterministic prefix-map *string* nat-policy *reference* map *string* to *string*
Tree	map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

to *string*

Synopsis	End of the range for IPv6 addresses
Context	**configure** router *string* nat inside large-scale dual-stack-lite deterministic prefix-map *string* nat-policy *reference* map *string* to *string*
Tree	map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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first-outside-address *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outside IP address mapped to inside IP address range
Context	**configure** router *string* nat inside large-scale dual-stack-lite deterministic prefix-map *string* nat-policy *reference* map *string* to *string* first-outside-address *string*
Tree	first-outside-address
Notes	This element is mandatory.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

endpoint [address] *string*

Synopsis	Enter the **endpoint** list instance
Context	**configure** router *string* nat inside large-scale dual-stack-lite endpoint *string*
Tree	endpoint
Max. Instances	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**address**] *string*

Synopsis	Dual Stack Lite IPv6 address
Context	**configure** router *string* nat inside large-scale dual-stack-lite endpoint *string*
Tree	endpoint
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-fragmentation *keyword*

Synopsis	Fragmentation control of the AFTR originated downstream IPv6 traffic

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Context	**configure** router *string* nat inside large-scale dual-stack-lite endpoint *string* ip-fragmentation *keyword*
Tree	ip-fragmentation
Options	fragment-ipv6, fragment-ipv6-unless-ipv4-df-set
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

min-first-fragment-size-rx *number*

Synopsis	Minimum MTU size for upstream packets
Context	**configure** router *string* nat inside large-scale dual-stack-lite endpoint *string* min-first-fragment-size-rx *number*
Tree	min-first-fragment-size-rx
Description	This command configures the minimum MTU size for the first fragment in the upstream direction. This command can be used to enable processing of first IPv6 fragments smaller than 1280 bytes. RFC 8200 recommends the minimum MTU in IPv6 be 1280 bytes which allows fragmentation only for packets that are larger than 1280 bytes. If a first fragment is smaller than 1280 bytes, DS-lite implementation in the SR OS, by default, drops the first fragment.
Range	512 to 1280
Default	1280
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reassembly *boolean*

Synopsis	Reassembly of IPv6 payload datagrams
Context	**configure** router *string* nat inside large-scale dual-stack-lite endpoint *string* reassembly *boolean*
Tree	reassembly
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-mtu *number*

Synopsis	DS-Lite tunnel MTU for this address

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Context	**configure** router *string* nat inside large-scale dual-stack-lite endpoint *string* tunnel-mtu *number*
Tree	tunnel-mtu
Description	This command configures the Dual Stack Lite (DS-Lite) tunnel MTU for this address.
Range	464 to 9212
Default	1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-subscriber-limit *number*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Largest value for all subscriber limits in each deterministic pool
Context	**configure** router *string* nat inside large-scale dual-stack-lite max-subscriber-limit *number*
Tree	max-subscriber-limit
Range	1 | 2 | 4 | 8 | 16 | 32 | 64 | 128 | 256 | 512 | 1024 | 2048 | 4096 | 8192 | 16384 | 32768
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-prefix-length *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	IPv6 prefix length of the Dual Stack Lite subscribers
Context	**configure** router *string* nat inside large-scale dual-stack-lite subscriber-prefix-length *number*
Tree	subscriber-prefix-length
Range	32 to 64 | 128
Default	128
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT policy for LSN
Context	**configure** router *string* nat inside large-scale nat-policy *reference*
Tree	nat-policy
Reference	**configure** service nat nat-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat44

Synopsis	Enter the **nat44** context
Context	**configure** router *string* nat inside large-scale nat44
Tree	nat44
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

destination-prefix [ip-prefix-length] *string*

Synopsis	Enter the **destination-prefix** list instance
Context	**configure** router *string* nat inside large-scale nat44 destination-prefix *string*
Tree	destination-prefix
Max. Instances	6144
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**ip-prefix-length**] *string*

Synopsis	IP prefix for the destination address
Context	**configure** router *string* nat inside large-scale nat44 destination-prefix *string*

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Tree	destination-prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT policy
Context	**configure** router *string* nat inside large-scale nat44 destination-prefix *string* nat-policy *reference*
Tree	nat-policy
Reference	**configure** service nat nat-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

deterministic

Synopsis	Enter the **deterministic** context
Context	**configure** router *string* nat inside large-scale nat44 deterministic
Tree	deterministic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix-map [source-prefix] *string* nat-policy *reference*

Synopsis	Enter the **prefix-map** list instance
Context	**configure** router *string* nat inside large-scale nat44 deterministic prefix-map *string* nat-policy *reference*
Tree	prefix-map
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**source-prefix**] *string*

Synopsis	Traffic sent from sources within this prefix will be NATed
Context	**configure** router *string* nat inside large-scale nat44 deterministic prefix-map *string* nat-policy *reference*
Tree	prefix-map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*

Synopsis	NAT policy
Context	**configure** router *string* nat inside large-scale nat44 deterministic prefix-map *string* nat-policy *reference*
Tree	prefix-map
Reference	**configure** service nat nat-policy *string*
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the prefix
Context	**configure** router *string* nat inside large-scale nat44 deterministic prefix-map *string* nat-policy *reference* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

map [from] *string* to *string*

Synopsis	Enter the **map** list instance
Context	**configure** router *string* nat inside large-scale nat44 deterministic prefix-map *string* nat-policy *reference* map *string* to *string*

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Tree	map
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**from**] *string*

Synopsis	Beginning of the range for IPv4 addresses
Context	**configure** router *string* nat inside large-scale nat44 deterministic prefix-map *string* nat-policy *reference* map *string* to *string*
Tree	map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

to *string*

Synopsis	End of the range for IPv4 addresses
Context	**configure** router *string* nat inside large-scale nat44 deterministic prefix-map *string* nat-policy *reference* map *string* to *string*
Tree	map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

first-outside-address *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outside IP address mapped to inside IP address range
Context	**configure** router *string* nat inside large-scale nat44 deterministic prefix-map *string* nat-policy *reference* map *string* to *string* first-outside-address *string*
Tree	first-outside-address
Notes	This element is mandatory.
Introduced	21.5.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-subscriber-limit *number*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Largest value for all subscriber limits in each deterministic pool
Context	**configure** router *string* nat inside large-scale nat44 max-subscriber-limit *number*
Tree	max-subscriber-limit
Range	1 | 2 | 4 | 8 | 16 | 32 | 64 | 128 | 256 | 512 | 1024 | 2048 | 4096 | 8192 | 16384 | 32768
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-import *reference*

Synopsis	Import BGP-VPN routes in NAT inside routing context
Context	**configure** router *string* nat inside large-scale nat44 nat-import *reference*
Tree	nat-import
Description	This command references an import policy to determine the routes that should be installed in the routing table as NAT routes, which are used to steer traffic to NAT. A dynamic route obtained by BGP-VPN can be imported into an inside (private side) routing context in NAT environment. This route is associated with a NAT policy that maps traffic destined into a NAT pool and outside routing context. If the NAT policy is not explicitly configured in the import route-policy, the imported NAT route is, by default, associated with the default NAT policy defined in the NAT inside routing context. All BGP-VPN routes that are destined to be imported into NAT inside routing context must be configured with action-type accept in the route policy.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source-prefix [ip-prefix-length] *string*

Synopsis	Enter the **source-prefix** list instance

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Context	**configure** router *string* nat inside large-scale nat44 source-prefix *string*
Tree	source-prefix
Description	Commands in this context configure the source prefix used to identify traffic for NAT processing. After the traffic is diverted to the ESA-VM or vISA, its source IP address is checked to determine if it belongs to the configured prefix. If it does, the traffic is processed by NAT, otherwise, it is dropped.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**ip-prefix-length**] *string*

Synopsis	IPv4 prefix length
Context	**configure** router *string* nat inside large-scale nat44 source-prefix *string*
Tree	source-prefix
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	AT policy associated with the source prefix
Context	**configure** router *string* nat inside large-scale nat44 source-prefix *string* nat-policy *reference*
Tree	nat-policy
Reference	**configure** service nat nat-policy *string*
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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nat64

Synopsis	Enable the **nat64** context
Context	**configure** router *string* nat inside large-scale nat64
Tree	nat64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of NAT64
Context	**configure** router *string* nat inside large-scale nat64 admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

drop-zero-ipv4-checksum *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Drop UDP datagrams with zero IPv4 checksum
Context	**configure** router *string* nat inside large-scale nat64 drop-zero-ipv4-checksum *boolean*
Tree	drop-zero-ipv4-checksum
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

insert-ipv6-fragment-header *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Include IPv6 fragment header to indicate that the sender allows fragmentation

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Context	**configure** router *string* nat inside large-scale nat64 insert-ipv6-fragment-header *boolean*
Tree	insert-ipv6-fragment-header
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-fragmentation *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Control fragmentation of originated downstream IPv6 traffic
Context	**configure** router *string* nat inside large-scale nat64 ip-fragmentation *keyword*
Tree	ip-fragmentation
Options	fragment-ipv6, fragment-ipv6-unless-ipv4-df-set
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-mtu *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Size of the IPv6 downstream packet in NAT64
Context	**configure** router *string* nat inside large-scale nat64 ipv6-mtu *number*
Tree	ipv6-mtu
Range	1280 to 9212
Default	1520
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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prefix *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	IPv6 prefix to derive the IPv6 address from the IPv4 address
Context	**configure** router *string* nat inside large-scale nat64 prefix *string*
Tree	prefix
Default	64:ff9b::/96
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-prefix-length *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	IPv6 prefix length for the NAT64 subscribers
Context	**configure** router *string* nat inside large-scale nat64 subscriber-prefix-length *number*
Tree	subscriber-prefix-length
Range	32 to 64 | 128
Default	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tos

WARNING:
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Synopsis	Enter the **tos** context
Context	**configure** router *string* nat inside large-scale nat64 tos
Tree	tos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

downstream

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **downstream** context
Context	**configure** router *string* nat inside large-scale nat64 tos downstream
Tree	downstream
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

use-ipv4 *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Copy TOS/DSCP bits from the incoming IPv4 frame to the outgoing IPv6 frame
Context	**configure** router *string* nat inside large-scale nat64 tos downstream use-ipv4 *boolean*
Tree	use-ipv4
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

upstream

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **upstream** context

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Context	**configure** router *string* nat inside large-scale nat64 tos upstream
Tree	upstream
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

set-tos *(keyword | number)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TOS/DSCP bits in IPv4 frame in the upstream direction
Context	**configure** router *string* nat inside large-scale nat64 tos upstream set-tos *(keyword | number)*
Tree	set-tos
Range	0 to 255
Options	use-ipv6
Default	use-ipv6
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

redundancy

Synopsis	Enter the **redundancy** context
Context	**configure** router *string* nat inside large-scale redundancy
Tree	redundancy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer *string*

Synopsis	IP address of the NAT redundancy peer for this virtual router instance
Context	**configure** router *string* nat inside large-scale redundancy peer *string*
Tree	peer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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peer6 *string*

Synopsis	IPv6 address of the NAT redundancy peer for this virtual router instance
Context	**configure** router *string* nat inside large-scale redundancy peer6 *string*
Tree	peer6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

steering-route *string*

Synopsis	IP address and prefix length of the steering route
Context	**configure** router *string* nat inside large-scale redundancy steering-route *string*
Tree	steering-route
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-identification

Synopsis	Enter the **subscriber-identification** context
Context	**configure** router *string* nat inside large-scale subscriber-identification
Tree	subscriber-identification
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of subscriber identification
Context	**configure** router *string* nat inside large-scale subscriber-identification admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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attribute

Synopsis	Enter the **attribute** context
Context	**configure** router *string* nat inside large-scale subscriber-identification attribute
Tree	attribute
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	RADIUS attribute used as subscriber identifier
Context	**configure** router *string* nat inside large-scale subscriber-identification attribute type *keyword*
Tree	type
Options	alc-sub-string, user-name, class, station-id, imsi, imei
Default	alc-sub-string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vendor *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	The RADIUS Vendor
Context	**configure** router *string* nat inside large-scale subscriber-identification attribute vendor *keyword*
Tree	vendor
Options	standard, nokia, 3gpp
Default	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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description *string*

Synopsis	Text description
Context	**configure** router *string* nat inside large-scale subscriber-identification description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

drop-unidentified-traffic *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Drop traffic from unidentified flows
Context	**configure** router *string* nat inside large-scale subscriber-identification drop-unidentified-traffic *boolean*
Tree	drop-unidentified-traffic
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-proxy-server

Synopsis	Enable the **radius-proxy-server** context
Context	**configure** router *string* nat inside large-scale subscriber-identification radius-proxy-server
Tree	radius-proxy-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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router-instance *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance
Context	**configure** router *string* nat inside large-scale subscriber-identification radius-proxy-server router-instance *string*
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Server name
Context	**configure** router *string* nat inside large-scale subscriber-identification radius-proxy-server server *string*
Tree	server
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

traffic-identification

Synopsis	Enter the **traffic-identification** context
Context	**configure** router *string* nat inside large-scale traffic-identification
Tree	traffic-identification
Description	Commands in this context configure traffic idenification for NAT processing
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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source-prefix-only *boolean*

Synopsis	Allow traffic associated with source prefixes only
Context	**configure** router *string* nat inside large-scale traffic-identification source-prefix-only *boolean*
Tree	source-prefix-only
Default	false
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

map

Synopsis	Enter the **map** context
Context	**configure** router *string* nat map
Tree	map
Introduced	16.0.R1
Platforms	VSR

map-domain [domain-name] *reference*

Synopsis	Add a list entry for **map-domain**
Context	**configure** router *string* nat map map-domain *reference*
Tree	map-domain
Introduced	16.0.R1
Platforms	VSR

[**domain-name**] *reference*

Synopsis	MAP domain template name
Context	**configure** router *string* nat map map-domain *reference*
Tree	map-domain
Reference	**configure** service nat map-t domain *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	VSR

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outside

Synopsis	Enter the **outside** context
Context	**configure** router *string* nat outside
Tree	outside
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dnat-only

Synopsis	Enter the **dnat-only** context
Context	**configure** router *string* nat outside dnat-only
Tree	dnat-only
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

route-limit *number*

Synopsis	Limit for internal routes for downstream traffic
Context	**configure** router *string* nat outside dnat-only route-limit *number*
Tree	route-limit
Range	1 to 131072
Default	32768
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filters

Synopsis	Enter the **filters** context
Context	**configure** router *string* nat outside filters
Tree	filters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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downstream

Synopsis	Enter the **downstream** context
Context	**configure** router *string* nat outside filters downstream
Tree	downstream
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4 *reference*

Synopsis	IPv4 filter policy name
Context	**configure** router *string* nat outside filters downstream ipv4 *reference*
Tree	ipv4
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** router *string* nat outside filters downstream ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

upstream

Synopsis	Enter the **upstream** context
Context	**configure** router *string* nat outside filters upstream
Tree	upstream
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ipv4 *reference*

Synopsis	IPv4 filter policy name
Context	**configure** router *string* nat outside filters upstream ipv4 *reference*
Tree	ipv4
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** router *string* nat outside filters upstream ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtu *number*

Synopsis	MTU for downstream traffic
Context	**configure** router *string* nat outside mtu *number*
Tree	mtu
Range	512 to 9000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool [name] *string*

Synopsis	Enter the **pool** list instance
Context	**configure** router *string* nat outside pool *string*
Tree	pool
Max. Instances	4096
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**name**] *string*

Synopsis	NAT pool name
Context	**configure** router *string* nat outside pool *string*
Tree	pool
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address-pooling *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Outside IP address allocation mode for a NAT subscriber
Context	**configure** router *string* nat outside pool *string* address-pooling *keyword*
Tree	address-pooling
Description	This command configures address pooling which defines a relationship between the NAT subscriber and its outside IP address(es). The behavior in NAT, as defined in RFC 7857, strongly recommends that the NAT subscribers be mapped to a single outside IP address. If this outside IP address runs out of ports, no new ports for the subscriber are allocated. This behavior is called paired address pooling. The alternative behavior is arbitrary address pooling, where a NAT subscriber is mapped to multiple IP addresses when the current outside IP address runs out of ports. This way, the subscriber becomes associated with multiple outside IP addresses. While this results in better resource utilization in NAT, it may negatively affect the behavior of some applications.
Options	paired, arbitrary
Default	paired
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address-range [start] *string* end *string*

Synopsis	Enter the **address-range** list instance

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Context	**configure** router *string* nat outside pool *string* address-range *string* end *string*
Tree	address-range
Max. Instances	4096
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**start**] *string*

Synopsis	Lower bound of the NAT address range
Context	**configure** router *string* nat outside pool *string* address-range *string* end *string*
Tree	address-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *string*

Synopsis	Upper bound of the NAT address range
Context	**configure** router *string* nat outside pool *string* address-range *string* end *string*
Tree	address-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** router *string* nat outside pool *string* address-range *string* end *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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drain *boolean*

Synopsis	Start or stop draining this NAT address range
Context	**configure** router *string* nat outside pool *string* address-range *string* end *string* drain *boolean*
Tree	drain
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the outside routing NAT pool
Context	**configure** router *string* nat outside pool *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

applications

Synopsis	Enter the **applications** context
Context	**configure** router *string* nat outside pool *string* applications
Tree	applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

agnostic *boolean*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT pool to create in the outside routing context

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Context	**configure** router *string* nat outside pool *string* applications agnostic *boolean*
Tree	agnostic
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** router *string* nat outside pool *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp-echo-reply *boolean*

Synopsis	Allow NAT pool IP addresses to respond to ICMP PINGs
Context	**configure** router *string* nat outside pool *string* icmp-echo-reply *boolean*
Tree	icmp-echo-reply
Description	This command allows IP addresses in the NAT pool to respond to ICMP Echo requests (PINGs). The configuration can be toggled while the pool is in use. In L2-aware NAT when port-block-extensions is disabled, the reply from an outside IP address is generated only when this IP address has at least one host (binding) behind it. In L2-aware NAT when port-block-extensions is enabled, the reply from an outside IP address is generated regardless if a binding is present. In LSN, the reply from an outside IP address is generated regardless if a binding is present.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2-aware

Synopsis	Enter the **l2-aware** context
Context	**configure** router *string* nat outside pool *string* l2-aware

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Tree	l2-aware
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-host

Synopsis	Enable the **default-host** context
Context	**configure** router *string* nat outside pool *string* l2-aware default-host
Tree	default-host
Description	Commands in this context configure the default DMZ host options. A default DMZ host is a node on the inside to which all unknown traffic is redirected by changing the destination IPv4 address in the traffic header. During this operation, the checksums in the Layer 3 and Layer 4 header (UDP and TCP) are recalculated. Unknown traffic in NAT represent all unmatched traffic arriving from the outside (where there is no pinhole or a matching flow record created by traffic initiated from the inside). The purpose of the default DMZ host is to capture and analyze the unknown traffic as part of threat analysis. The rate of redirected unknown traffic can be restricted by configuration.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside-router-instance *string*

Synopsis	Router instance of the DMZ
Context	**configure** router *string* nat outside pool *string* l2-aware default-host inside-router-instance *string*
Tree	inside-router-instance
Description	This command configures the router instance on the inside where the default DMZ host resides.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis	IP address of the default DMZ host
Context	**configure** router *string* nat outside pool *string* l2-aware default-host ip-address *string*
Tree	ip-address

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Description	This command configures the IP address of the default DMZ host. Redirection to the default DMZ host is achieved by replacing the destination IP address in the traffic header in the unknown traffic initiated from the outside with the one of the default DMZ host.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-limit *number*

Synopsis	Rate limit for unknown traffic sent to default DMZ host
Context	**configure** router *string* nat outside pool *string* l2-aware default-host rate-limit *number*
Tree	rate-limit
Description	This command configures the rate limit of the unknown traffic sent to the default DMZ host. Unknown traffic sent to the default DMZ host is rate limited by a configurable value expressed in mbps. The rate limit is configurable per NAT pool per ISA, vISA, or ESA-VM.
Range	1 to 10000
Units	megabps
Default	10
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

external-assignment *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	External IP address for Layer-2-aware
Context	**configure** router *string* nat outside pool *string* l2-aware external-assignment *boolean*
Tree	external-assignment
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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port-block-extension

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **port-block-extension** context
Context	**configure** router *string* nat outside pool *string* l2-aware port-block-extension
Tree	port-block-extension
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ports *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of ports per dynamic port-block
Context	**configure** router *string* nat outside pool *string* l2-aware port-block-extension ports *number*
Tree	ports
Description	For Carrier Grade NAT (CGN), this command represents the size of all port blocks for NAT subscribes in the NAT pool. For L2-Aware NAT, this command represents only the size of the initial port block of a subscriber in the L2-aware NAT pool. Additional port-blocks (extended port blocks) for the L2-Aware subscriber must be explicitly enabled under the **l2-aware port-block-extension** hierarchy in the NAT pool. This command does not affect the size of extended port-blocks.
Range	10 to 5000
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber

Synopsis	Enter the **subscriber** context
Context	**configure** router *string* nat outside pool *string* l2-aware port-block-extension subscriber

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Tree	subscriber
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the **watermarks** context
Context	**configure** router *string* nat outside pool *string* l2-aware port-block-extension subscriber watermarks
Tree	watermarks
Description	This command configures watermarks for NAT resources.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis	High watermark percentage
Context	**configure** router *string* nat outside pool *string* l2-aware port-block-extension subscriber watermarks high *number*
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low *number*

Synopsis	Low watermark percentage
Context	**configure** router *string* nat outside pool *string* l2-aware port-block-extension subscriber watermarks low *number*
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.

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Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-limit *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of L2-Aware NAT subscribers per outside address
Context	**configure** router *string* nat outside pool *string* l2-aware port-block-extension subscriber-limit *number*
Tree	subscriber-limit
Description	When port-block extensions for the L2-Aware subscribers are enabled, the port space for an outside IP address is divided into the following: • well-known port (this is a fixed and permanently allocated block of ports for all NAT types) • static port-forwarding range (if enabled by configuration) • port range allocated for initial port blocks of each L2-Aware subscriber • port range allocated for extended port blocks for the remainder after the three previous port ranges The number of L2-Aware NAT subscribers per an outside IP address multiplied by the size of the initial port-block size determines the size of the port range reserved for initial port-blocks of each subscriber. The lower boundary of the extended port range is determined by adding the upper boundary of the configured port forwarding range and the size of the port range allocated for initial port blocks.
Range	2 to 2000
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the **watermarks** context

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Context	**configure** router *string* nat outside pool *string* l2-aware port-block-extension watermarks
Tree	watermarks
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis	High watermark percentage
Context	**configure** router *string* nat outside pool *string* l2-aware port-block-extension watermarks high *number*
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low *number*

Synopsis	Low watermark percentage
Context	**configure** router *string* nat outside pool *string* l2-aware port-block-extension watermarks low *number*
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

large-scale

Synopsis	Enter the **large-scale** context

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Context	**configure** router *string* nat outside pool *string* large-scale
Tree	large-scale
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-host

Synopsis	Enable the **default-host** context
Context	**configure** router *string* nat outside pool *string* large-scale default-host
Tree	default-host
Description	Commands in this context configure the default DMZ host options. A default DMZ host is a node on the inside to which all unknown traffic is redirected by changing the destination IPv4 address in the traffic header. During this operation, the checksums in the Layer 3 and Layer 4 header (UDP and TCP) are recalculated. Unknown traffic in NAT represent all unmatched traffic arriving from the outside (where there is no pinhole or a matching flow record created by traffic initiated from the inside). The purpose of the default DMZ host is to capture and analyze the unknown traffic as part of threat analysis. The rate of redirected unknown traffic can be restricted by configuration.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside-router-instance *string*

Synopsis	Router instance of the DMZ
Context	**configure** router *string* nat outside pool *string* large-scale default-host inside-router-instance *string*
Tree	inside-router-instance
Description	This command configures the router instance on the inside where the default DMZ host resides.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis	IP address of the default DMZ host
Context	**configure** router *string* nat outside pool *string* large-scale default-host ip-address *string*

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Tree	ip-address
Description	This command configures the IP address of the default DMZ host. Redirection to the default DMZ host is achieved by replacing the destination IP address in the traffic header in the unknown traffic initiated from the outside with the one of the default DMZ host.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-limit *number*

Synopsis	Rate limit for unknown traffic sent to default DMZ host
Context	**configure** router *string* nat outside pool *string* large-scale default-host rate-limit *number*
Tree	rate-limit
Description	This command configures the rate limit of the unknown traffic sent to the default DMZ host. Unknown traffic sent to the default DMZ host is rate limited by a configurable value expressed in mbps. The rate limit is configurable per NAT pool per ISA, vISA, or ESA-VM.
Range	1 to 10000
Units	megabps
Default	10
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

deterministic

Synopsis	Enter the **deterministic** context
Context	**configure** router *string* nat outside pool *string* large-scale deterministic
Tree	deterministic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-reservation *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Number of ports per deterministic port-block
Context	**configure** router *string* nat outside pool *string* large-scale deterministic port-reservation *number*
Tree	port-reservation
Range	1 to 65536
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the **watermarks** context
Context	**configure** router *string* nat outside pool *string* large-scale deterministic watermarks
Tree	watermarks
Description	Commands in this context monitor extended (dynamic) port-block utilization per outside IP in a NAT pool in deterministic LSN. High and low thresholds are configured in percentages of total available extended port-blocks per outside IP in a pool. Both values represent extended port-block utilization or occupancy per outside IP in a pool. For the system to generate those events, the NAT event-id 2045 must be enabled through configuration in the log event-control.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis	High watermark percentage
Context	**configure** router *string* nat outside pool *string* large-scale deterministic watermarks high *number*
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.

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Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low *number*

Synopsis	Low watermark percentage
Context	**configure** router *string* nat outside pool *string* large-scale deterministic watermarks low *number*
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

redundancy

Synopsis	Enter the **redundancy** context
Context	**configure** router *string* nat outside pool *string* large-scale redundancy
Tree	redundancy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of NAT pool redundancy
Context	**configure** router *string* nat outside pool *string* large-scale redundancy admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Notes	The following elements are part of a choice: (**admin-state**, **export-route**, and **monitor-route**) or **follow**.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-route *string*

Synopsis	Route to export to the peer
Context	**configure** router *string* nat outside pool *string* large-scale redundancy export-route *string*
Tree	export-route
Notes	The following elements are part of a choice: (**admin-state**, **export-route**, and **monitor-route**) or **follow**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

follow

Synopsis	Enter the **follow** context
Context	**configure** router *string* nat outside pool *string* large-scale redundancy follow
Tree	follow
Notes	The following elements are part of a choice: (**admin-state**, **export-route**, and **monitor-route**) or **follow**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	Name of the pool where activity is shared
Context	**configure** router *string* nat outside pool *string* large-scale redundancy follow name *string*
Tree	name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Router instance where the lead pool resides

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Context	**configure** router *string* nat outside pool *string* large-scale redundancy follow router-instance *string*
Tree	router-instance
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

monitor-route *string*

Synopsis	Monitor the peer route
Context	**configure** router *string* nat outside pool *string* large-scale redundancy monitor-route *string*
Tree	monitor-route
Notes	The following elements are part of a choice: (**admin-state**, **export-route**, and **monitor-route**) or **follow**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-limit *number*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Maximum number of subscribers per IP address
Context	**configure** router *string* nat outside pool *string* large-scale subscriber-limit *number*
Tree	subscriber-limit
Range	1 to 65535 | 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

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Synopsis	Mode of operation of this NAT address pool
Context	**configure** router *string* nat outside pool *string* mode *keyword*
Tree	mode
Options	auto, napt, one-to-one
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group *reference*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Create a NAT group
Context	**configure** router *string* nat outside pool *string* nat-group *reference*
Tree	nat-group
Reference	**configure** isa nat-group *number*
Notes	The following elements are part of a mandatory choice: **nat-group** or **wlan-gw-group**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-forwarding

Synopsis	Enter the **port-forwarding** context
Context	**configure** router *string* nat outside pool *string* port-forwarding
Tree	port-forwarding
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic-block-reservation *boolean*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

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Synopsis	Reserve dynamic block for subscriber
Context	**configure** router *string* nat outside pool *string* port-forwarding dynamic-block-reservation *boolean*
Tree	dynamic-block-reservation
Description	When configured to **true**, the system reserves dynamic port block when the first port forward for the subscriber is created. The dynamic port block allocation is logged only if the block is being used and mappings are created. Dynamic port block reservation due to the port forward creation but without any dynamic mapping, is not logged. The reserved port block is released only when the last mapping in the block expires and there are no port forwards associated with the subscriber. The de-allocation log (syslog or RADIUS) is generated when the dynamic port block is completely released. Dynamic port block reservations can be enabled only if the configured maximum number of subscribers per outside IP addresses are less than or equal to the maximum number of configured port blocks per outside IP address. When configured to **false**, dynamic port blocks are not reserved when the first port forward for the subscriber is created.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range-end *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	End of the wildcard range for port forwards
Context	**configure** router *string* nat outside pool *string* port-forwarding range-end *number*
Tree	range-end
Description	This command configures the upper boundary of the wildcard port range dedicated to port forwarding in a NAT pool, whereas the **range-start** command configures the lower boundary (the starting port) of the wildcard port range dedicated to port forwarding in a NAT pool. If unconfigured, the **range-end** implicit value is set to 1023, that represents the end of the well-known port range that is always enabled. Port forwards are supported only in pools in NAPT mode. Pools in 1:1 mode do not support port-forwards.
Range	0 | 1023 to 65535

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range-start *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Start of the wildcard range for port forwards
Context	**configure** router *string* nat outside pool *string* port-forwarding range-start *number*
Tree	range-start
Description	This command configures the lower boundary (the starting port) of the wildcard port range dedicated to port forwarding in a NAT pool, whereas the **range-end** command configures the upper boundary of the wildcard port range dedicated to port forwarding in a NAT pool. Port 0 is always excluded from the port forwarding range. Port forwards are supported only in pools in Network Address and Port Translation (NAPT) mode. Pools in 1:1 mode do not support configured port forwards.
Range	0 | 1 | 1025 to 65535
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-reservation

Synopsis	Enter the **port-reservation** context
Context	**configure** router *string* nat outside pool *string* port-reservation
Tree	port-reservation
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-blocks *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Port block size for NAT subscribers
Context	**configure** router *string* nat outside pool *string* port-reservation port-blocks *number*
Tree	port-blocks
Description	In CGN, this command specifies the number of port-blocks per outside IP address in the NAT pool. The available ports per outside IP address (the end port minus the upper bound value of the static port-forwarding range) are divided into the number of port blocks specified in this command. This implicitly determines the size of each port block. For L2-aware NAT, this command can be configured only if the port block extensions (extended port blocks) are disabled. You must disable the **l2-aware port-block-extension** hierarchy in the NAT pool.
Range	0 to 64512
Notes	The following elements are part of a choice: **port-blocks** or **ports**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ports *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Size of the port block for NAT subscribers
Context	**configure** router *string* nat outside pool *string* port-reservation ports *number*
Tree	ports
Description	For carrier-grade NAT (CGN), this command specifies the size of port blocks for NAT subscribes in the NAT pool. For L2-aware NAT, this command specifies the size of the initial port-block of a subscriber in the pool. Additional port blocks (extended port blocks) for the L2-aware subscriber must be explicitly enabled under the **l2-aware port-block-extension** hierarchy in the NAT pool. This command does not affect the size of extended port blocks.
Range	1 to 64512
Notes	The following elements are part of a choice: **port-blocks** or **ports**.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT pool type
Context	**configure** router *string* nat outside pool *string* type *keyword*
Tree	type
Options	large-scale, l2-aware, wlan-gw-anchor
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the **watermarks** context
Context	**configure** router *string* nat outside pool *string* watermarks
Tree	watermarks
Description	This command configures watermarks for NAT resources.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis	High watermark percentage
Context	**configure** router *string* nat outside pool *string* watermarks high *number*
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.

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Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low *number*

Synopsis	Low watermark percentage
Context	**configure** router *string* nat outside pool *string* watermarks low *number*
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Create a WLAN GW group for NAT
Context	**configure** router *string* nat outside pool *string* wlan-gw-group *reference*
Tree	wlan-gw-group
Reference	**configure** isa wlan-gw-group *number*
Notes	The following elements are part of a mandatory choice: **nat-group** or **wlan-gw-group**.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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network-domains

Synopsis	Enter the **network-domains** context
Context	**configure** router *string* network-domains
Tree	network-domains
Introduced	16.0.R4
Platforms	All

network-domain [domain-name] *string*

Synopsis	Enter the **network-domain** list instance
Context	**configure** router *string* network-domains network-domain *string*
Tree	network-domain
Max. Instances	5
Introduced	16.0.R4
Platforms	All

[domain-name] *string*

Synopsis	Network domain name
Context	**configure** router *string* network-domains network-domain *string*
Tree	network-domain
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** router *string* network-domains network-domain *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4

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Platforms	All

origin-validation

Synopsis	Enter the **origin-validation** context
Context	**configure** router *string* origin-validation
Tree	origin-validation
Introduced	19.5.R1
Platforms	All

rpki-session [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **rpki-session** list instance
Context	**configure** router *string* origin-validation rpki-session *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	rpki-session
Introduced	19.5.R1
Platforms	All

[ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IPv4 or IPv6 address for the RPKI local cache server
Context	**configure** router *string* origin-validation rpki-session *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	rpki-session
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the RPKI session
Context	**configure** router *string* origin-validation rpki-session *(ipv4-address-no-zone | ipv6-address-no-zone)* admin-state *keyword*
Tree	admin-state
Options	enable, disable

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Default	disable
Introduced	19.5.R1
Platforms	All

connect-retry *number*

Synopsis	RPKI Connect Retry timer value
Context	**configure** router *string* origin-validation rpki-session *(ipv4-address-no-zone | ipv6-address-no-zone)* connect-retry *number*
Tree	connect-retry
Range	1 to 65535
Units	seconds
Default	120
Introduced	19.5.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** router *string* origin-validation rpki-session *(ipv4-address-no-zone | ipv6-address-no-zone)* description *string*
Tree	description
String Length	1 to 80
Introduced	19.5.R1
Platforms	All

local-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local address for the TCP connection setup
Context	**configure** router *string* origin-validation rpki-session *(ipv4-address-no-zone | ipv6-address-no-zone)* local-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	local-address
Introduced	19.5.R1

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Platforms	All

port *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination port number used to contact cache server
Context	**configure** router *string* origin-validation rpki-session *(ipv4-address-no-zone* | *ipv6-address-no-zone)* port *number*
Tree	port
Range	0 to 65535
Default	323
Introduced	19.5.R1
Platforms	All

refresh-time

Synopsis	Enter the **refresh-time** context
Context	**configure** router *string* origin-validation rpki-session *(ipv4-address-no-zone* | *ipv6-address-no-zone)* refresh-time
Tree	refresh-time
Introduced	19.5.R1
Platforms	All

hold-time *number*

Synopsis	Length of time that the session is to be considered UP
Context	**configure** router *string* origin-validation rpki-session *(ipv4-address-no-zone* | *ipv6-address-no-zone)* refresh-time hold-time *number*
Tree	hold-time
Range	60 to 65535
Units	seconds
Default	600
Introduced	19.5.R1
Platforms	All

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value *number*

Synopsis	Periodic Serial Query PDUs sent for liveness detection
Context	**configure** router *string* origin-validation rpki-session *(ipv4-address-no-zone | ipv6-address-no-zone)* refresh-time value *number*
Tree	value
Range	30 to 32767
Units	seconds
Default	300
Introduced	19.5.R1
Platforms	All

stale-time *number*

Synopsis	Maximum time prefix origin validation remains usable
Context	**configure** router *string* origin-validation rpki-session *(ipv4-address-no-zone | ipv6-address-no-zone)* stale-time *number*
Tree	stale-time
Range	60 to 3600
Units	seconds
Default	3600
Introduced	19.5.R1
Platforms	All

static-entry [ip-prefix] *(ipv4-prefix | ipv6-prefix)* upto *number* origin-as *number*

Synopsis	Enter the **static-entry** list instance
Context	**configure** router *string* origin-validation static-entry *(ipv4-prefix | ipv6-prefix)* upto *number* origin-as *number*
Tree	static-entry
Introduced	19.5.R1
Platforms	All

[**ip-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	IPv4 or IPv6 address with the minimum prefix and length

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Context	**configure** router *string* origin-validation static-entry *(ipv4-prefix | ipv6-prefix)* upto *number* origin-as *number*
Tree	static-entry
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

upto *number*

Synopsis	Maximum prefix length
Context	**configure** router *string* origin-validation static-entry *(ipv4-prefix | ipv6-prefix)* upto *number* origin-as *number*
Tree	static-entry
Range	1 to 128
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

origin-as *number*

Synopsis	Origin AS number
Context	**configure** router *string* origin-validation static-entry *(ipv4-prefix | ipv6-prefix)* upto *number* origin-as *number*
Tree	static-entry
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

valid *boolean*

Synopsis	Designate mix of origin AS and prefix range as valid
Context	**configure** router *string* origin-validation static-entry *(ipv4-prefix | ipv6-prefix)* upto *number* origin-as *number* valid *boolean*
Tree	valid
Default	true

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Introduced	19.5.R1
Platforms	All

ospf [ospf-instance] *number*

Synopsis	Enter the **ospf** list instance
Context	**configure** router *string* ospf *number*
Tree	ospf
Max. Instances	32
Introduced	16.0.R1
Platforms	All

[**ospf-instance**] *number*

Synopsis	Value for the integrated OSPF instance
Context	**configure** router *string* ospf *number*
Tree	ospf
Range	0 to 31
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OSPF instance
Context	**configure** router *string* ospf *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

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advertise-router-capability *keyword*

Synopsis	Allow router advertisement capabilities
Context	**configure** router *string* ospf *number* advertise-router-capability *keyword*
Tree	advertise-router-capability
Options	false, link, area, as
Default	false
Introduced	16.0.R1
Platforms	All

advertise-tunnel-link *boolean*

Synopsis	Allow router advertisement capabilities
Context	**configure** router *string* ospf *number* advertise-tunnel-link *boolean*
Tree	advertise-tunnel-link
Default	false
Introduced	16.0.R1
Platforms	All

area [area-id] *string*

Synopsis	Enter the **area** list instance
Context	**configure** router *string* ospf *number* area *string*
Tree	area
Introduced	16.0.R1
Platforms	All

[**area-id**] *string*

Synopsis	Area-ID attribute
Context	**configure** router *string* ospf *number* area *string*
Tree	area
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	**configure** router *string* ospf *number* area *string* advertise-router-capability *boolean*
Tree	advertise-router-capability
Default	true
Introduced	16.0.R1
Platforms	All

area-range [ip-prefix-mask] *string*

Synopsis	Enter the **area-range** list instance
Context	**configure** router *string* ospf *number* area *string* area-range *string*
Tree	area-range
Introduced	16.0.R1
Platforms	All

[**ip-prefix-mask**] *string*

Synopsis	IP prefix and subnet mask for the range used by the ABR
Context	**configure** router *string* ospf *number* area *string* area-range *string*
Tree	area-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	**configure** router *string* ospf *number* area *string* area-range *string* advertise *boolean*
Tree	advertise
Default	true
Introduced	16.0.R1
Platforms	All

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bier

Synopsis	Enter the **bier** context
Context	**configure** router *string* ospf *number* area *string* bier
Tree	bier
Description	Commands in this context configure the administrative state of BIER and the BIER template assigned to the OSPF area.
Introduced	20.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BIER
Context	**configure** router *string* ospf *number* area *string* bier admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.5.R1
Platforms	All

template *reference*

Synopsis	BIER template name
Context	**configure** router *string* ospf *number* area *string* bier template *reference*
Tree	template
Reference	**configure** router *string* bier template *string*
Introduced	20.5.R1
Platforms	All

blackhole-aggregate *boolean*

Synopsis	Install a low priority blackhole route to avoid loops
Context	**configure** router *string* ospf *number* area *string* blackhole-aggregate *boolean*
Tree	blackhole-aggregate
Default	true

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Introduced	16.0.R1
Platforms	All

database-export-exclude *boolean*

Synopsis	Exclude IGP link-state OSPF area info into TE-DB
Context	**configure** router *string* ospf *number* area *string* database-export-exclude *boolean*
Tree	database-export-exclude
Default	false
Introduced	16.0.R1
Platforms	All

export-policy *reference*

Synopsis	Type 3 Summary-LSA/OSPFv3 inter-area-prefix-LSA route
Context	**configure** router *string* ospf *number* area *string* export-policy *reference*
Tree	export-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Route imported as Summary Type 3/Inter-Area-Prefix-LSA
Context	**configure** router *string* ospf *number* area *string* import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

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interface [interface-name] *string*

Synopsis	Enter the **interface** list instance
Context	**configure** router *string* ospf *number* area *string* interface *string*
Tree	interface
Description	Commands in this context configure the attributes of the OSPF area interface. Unless they are explicitly configured, interfaces are not activated by default in any interior gateway protocol such as OSPF.
Introduced	16.0.R1
Platforms	All

[**interface-name**] *string*

Synopsis	Router interface name
Context	**configure** router *string* ospf *number* area *string* interface *string*
Tree	interface
Description	This command specifies the IP interface name. Interface names must be unique within the group of defined IP interfaces for **configure router interface** and **configure service ies interface** commands. An interface name cannot be in the form of an IP address. Interface names can be a string composed of printable, 7-bit ASCII characters. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes. If the IP interface name does not exist or does not have an IP address configured, an error message is returned. If the IP interface exists in a different area it is moved to this area.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adjacency-set [id] *reference*

Synopsis	Add a list entry for **adjacency-set**
Context	**configure** router *string* ospf *number* area *string* interface *string* adjacency-set *reference*
Tree	adjacency-set
Max. Instances	1024

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Introduced	16.0.R1
Platforms	All

[**id**] *reference*

Synopsis	Adjacency set identity
Context	**configure** router *string* ospf *number* area *string* interface *string* adjacency-set *reference*
Tree	adjacency-set
Reference	**configure** router *string* ospf *number* segment-routing adjacency-set *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adjacency-sid

Synopsis	Enable the **adjacency-sid** context
Context	**configure** router *string* ospf *number* area *string* interface *string* adjacency-sid
Tree	adjacency-sid
Introduced	16.0.R1
Platforms	All

label *number*

Synopsis	Adjacency SID label
Context	**configure** router *string* ospf *number* area *string* interface *string* adjacency-sid label *number*
Tree	label
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OSPF interface
Context	**configure** router *string* ospf *number* area *string* interface *string* admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	**configure** router *string* ospf *number* area *string* interface *string* advertise-router-capability *boolean*
Tree	advertise-router-capability
Default	true
Introduced	16.0.R1
Platforms	All

advertise-subnet *boolean*

Synopsis	Advertise point-to-point interfaces as subnet routes
Context	**configure** router *string* ospf *number* area *string* interface *string* advertise-subnet *boolean*
Tree	advertise-subnet
Default	true
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Authentication key
Context	**configure** router *string* ospf *number* area *string* interface *string* authentication-key *string*
Tree	authentication-key
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

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authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	**configure** router *string* ospf *number* area *string* interface *string* authentication-keychain *reference*
Tree	authentication-keychain
Reference	**configure** system security keychains keychain *string*
Introduced	16.0.R3
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type used on OSPF interface
Context	**configure** router *string* ospf *number* area *string* interface *string* authentication-type *keyword*
Tree	authentication-type
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enable the **bfd-liveness** context
Context	**configure** router *string* ospf *number* area *string* interface *string* bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

remain-down-on-failure *boolean*

Synopsis	Force adjacency down on failure until session returns
Context	**configure** router *string* ospf *number* area *string* interface *string* bfd-liveness remain-down-on-failure *boolean*
Tree	remain-down-on-failure
Default	false
Introduced	16.0.R1
Platforms	All

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strict *boolean*

Synopsis	Enable BFD strict mode
Context	**configure** router *string* ospf *number* area *string* interface *string* bfd-liveness strict *boolean*
Tree	strict
Description	When configured to **true**, the system uses BFD strict-mode. BFD strict-mode mandates that an active BFD session must exist between the OSPF neighbors before establishing a full adjacency. When configured to **true**, the router uses Link-Local Signaling (LLS) with the B-flag set to instruct the OSPF neighbors that BFD must be enabled on the link. BFD strict-mode requires both sides to have the B-flag set. During OSPFv3 BFD strict-mode operations, the router advertises the local interface IPv4 address TLV using LLS, but the SR OS router continues to use IPv6-based BFD sessions for both the IPv4 and IPv6 address families.
Default	false
Introduced	23.3.R1
Platforms	All

strict-mode-holddown *number*

Synopsis	Adjacency up time delay after BFD session establishment
Context	**configure** router *string* ospf *number* area *string* interface *string* bfd-liveness strict-mode-holddown *number*
Tree	strict-mode-holddown
Description	This command configures a delay timer before bringing up the OSPF adjacency after the BFD session establishment. Holddown helps mitigate potential routing churn when BFD sessions are unstable. The holddown timer is reset when a BFD session operationally toggles.
Range	1 to 600
Units	seconds
Introduced	23.3.R1
Platforms	All

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	**configure** router *string* ospf *number* area *string* interface *string* dead-interval *number*
Tree	dead-interval

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Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

flex-algo [flex-algo-id] *number*

Synopsis	Enter the **flex-algo** list instance
Context	**configure** router *string* ospf *number* area *string* interface *string* flex-algo *number*
Tree	flex-algo
Description	Commands in this context configure the attributes of OSPFv2 flexible algorithms interface.
Max. Instances	7
Introduced	21.7.R1
Platforms	All

[**flex-algo-id**] *number*

Synopsis	Flexible algorithm ID
Context	**configure** router *string* ospf *number* area *string* interface *string* flex-algo *number*
Tree	flex-algo
Range	128 to 255
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	All

node-sid

Synopsis	Enable the **node-sid** context
Context	**configure** router *string* ospf *number* area *string* interface *string* flex-algo *number* node-sid
Tree	node-sid
Introduced	21.7.R1
Platforms	All

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index *number*

Synopsis	Node SID index for this interface
Context	**configure** router *string* ospf *number* area *string* interface *string* flex-algo *number* node-sid index *number*
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: **index** or **label**.
Introduced	21.7.R1
Platforms	All

label *number*

Synopsis	Label value for the node SID
Context	**configure** router *string* ospf *number* area *string* interface *string* flex-algo *number* node-sid label *number*
Tree	label
Range	1 to 4294967295
Notes	The following elements are part of a choice: **index** or **label**.
Introduced	21.7.R1
Platforms	All

hello-interval *number*

Synopsis	Time between OSPF Hellos of this interface
Context	**configure** router *string* ospf *number* area *string* interface *string* hello-interval *number*
Tree	hello-interval
Range	1 to 65535
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

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interface-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Interface type
Context	**configure** router *string* ospf *number* area *string* interface *string* interface-type *keyword*
Tree	interface-type
Description	This command specifies the interface type. **broadcast** - Broadcast network To significantly improve adjacency forming and network convergence, configure a network as point-to-point if only two routers are connected, even if the network is a broadcast media such as Ethernet. **non-broadcast** - Non-broadcast network **point-to-point** - Point-to-point link Set the interface type of an Ethernet link to **point-to-point** to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided is used as a point-to-point. **p2mp-nbma** - Point-to-multipoint on a link without broadcast or multicast support No designated router or backup designated router is elected on this type of interface and all OSPF neighbors connect through individual point-to-point links. Only VPRN and IES services interfaces support this interface type. **secondary** - Multiple secondary adjacencies allowed A **secondary** interface allows multiple secondary adjacencies, in addition to the primary adjacency, to be established over a single IP interface. This interface type can also be applied to the system interface and to loopback interfaces to allow them to participate in multiple areas, although no adjacencies are formed over these types of interfaces.
Options	broadcast, non-broadcast, point-to-point, secondary, p2mp-nbma
Introduced	16.0.R1
Platforms	All

load-balancing-weight *number*

Synopsis	Load balancing weight for an OSPF interface
Context	**configure** router *string* ospf *number* area *string* interface *string* load-balancing-weight *number*
Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	20.2.R1

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Platforms	All

loopfree-alternate

Synopsis	Enter the **loopfree-alternate** context
Context	**configure** router *string* ospf *number* area *string* interface *string* loopfree-alternate
Tree	loopfree-alternate
Introduced	16.0.R3
Platforms	All

exclude *boolean*

Synopsis	Enable fast reroute at OSPF primary interface level
Context	**configure** router *string* ospf *number* area *string* interface *string* loopfree-alternate exclude *boolean*
Tree	exclude
Default	false
Introduced	16.0.R3
Platforms	All

policy-map

Synopsis	Enable the **policy-map** context
Context	**configure** router *string* ospf *number* area *string* interface *string* loopfree-alternate policy-map
Tree	policy-map
Introduced	16.0.R3
Platforms	All

route-nh-template *reference*

Synopsis	Route next hop policy template name
Context	**configure** router *string* ospf *number* area *string* interface *string* loopfree-alternate policy-map route-nh-template *reference*
Tree	route-nh-template
Reference	**configure** routing-options route-next-hop-policy template *string*

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Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

lsa-filter-out *keyword*

Synopsis	LSA flooding reduction
Context	**configure** router *string* ospf *number* area *string* interface *string* lsa-filter-out *keyword*
Tree	lsa-filter-out
Options	none, all, except-own-rtrlsa, except-own-rtrlsa-and-defaults
Default	none
Introduced	16.0.R1
Platforms	All

message-digest-key [key-id] *number*

Synopsis	Enter the **message-digest-key** list instance
Context	**configure** router *string* ospf *number* area *string* interface *string* message-digest-key *number*
Tree	message-digest-key
Introduced	16.0.R1
Platforms	All

[**key-id**] *number*

Synopsis	Message digest index
Context	**configure** router *string* ospf *number* area *string* interface *string* message-digest-key *number*
Tree	message-digest-key
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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md5 *string*

Synopsis	MD5 hash key
Context	**configure** router *string* ospf *number* area *string* interface *string* message-digest-key *number* md5 *string*
Tree	md5
String Length	1 to 51
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	Route cost metric for the interface
Context	**configure** router *string* ospf *number* area *string* interface *string* metric *number*
Tree	metric
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

mtu *number*

Synopsis	MTU for the OSPF to use on the interface
Context	**configure** router *string* ospf *number* area *string* interface *string* mtu *number*
Tree	mtu
Range	512 to 9786
Introduced	16.0.R1
Platforms	All

neighbor [address] *string*

Synopsis	Add a list entry for **neighbor**
Context	**configure** router *string* ospf *number* area *string* interface *string* neighbor *string*
Tree	neighbor
Introduced	16.0.R1
Platforms	All

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[**address**] *string*

Synopsis	IPv4 address of the OSPFv2 neighbor
Context	**configure** router *string* ospf *number* area *string* interface *string* neighbor *string*
Tree	neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

node-sid

Synopsis	Enable the **node-sid** context
Context	**configure** router *string* ospf *number* area *string* interface *string* node-sid
Tree	node-sid
Description	Commands in this context configure a node SID index or label value for the prefix representing the primary address of a network interface of type system or loopback. A separate SID value can be configured for each IPv4 and IPv6 primary address of the interface. The secondary address of an IPv4 interface cannot be assigned a node SID index and does not inherit the SID of the primary IPv4 address. In OSPFv2 and OSPFv3, the node SID is configured in the primary area but is inherited in any other area in which the interface is added as secondary. This command fails if the network interface is not a loopback type or if the interface is defined in an IES or VPRN context. Assigning the same SID index or label value to the same interface in two different IGP instances is not allowed within the same node. The value of the label or index SID is taken from the range configured for this IGP instance. When using the global mode of operation, the segment routing module checks that the same index or label value is not assigned to more than one loopback interface address. When using the per-instance mode of operation, this check is not required because the index and, therefore, the label ranges of IGP instances are not allowed to overlap. The **clear-n-flag** option allows the user to clear the N-flag (node-sid flag) in an OSPF or OSPF3 prefix SID sub-TLV originated for the prefix of a loopback interface on the system. By default, the prefix SID sub-TLV for the prefix of a loopback interface is tagged as a node SID; that is, it belongs to this node only. However, to configure and advertise an anycast SID using the same loopback interface prefix on multiple nodes, the user must clear the N-flag to assure interoperability with third-party implementations. This may perform a strict check on the receive end and drop duplicate prefix SID sub-TLVs when the N-flag is set. The SR OS implementation is relaxed on the receive end and accepts duplicate prefix SIDs with the N-flag set or clear. SR OS resolves to the closest owner, or owners if ECMP, of the prefix SID cost-wise.

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Introduced	16.0.R1
Platforms	All

clear-n-flag *boolean*

Synopsis	Clear the N-flag in an OSPF prefix
Context	**configure** router *string* ospf *number* area *string* interface *string* node-sid clear-n-flag *boolean*
Tree	clear-n-flag
Description	When configured to **true**, this command allows the user to clear the N-flag in an OSPF prefix SID sub-TLV originated for the prefix of a loopback interface on the system. When configured to **false**, the N-flag in an OSPF prefix SID sub-TLV originated for the prefix of a loopback interface on the system is not cleared. When the user wants to configure and advertise an anycast SID using the same loopback interface prefix on multiple nodes, the user must clear the N-flag to assure interoperability with third-party implementations. This may perform a strict check on the receive end and drop duplicate prefix SID sub-TLVs when the N-flag is set.
Default	false
Introduced	16.0.R1
Platforms	All

index *number*

Synopsis	Node SID index for this interface
Context	**configure** router *string* ospf *number* area *string* interface *string* node-sid index *number*
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: **index** or **label**.
Introduced	16.0.R1
Platforms	All

label *number*

Synopsis	Label value for the node SID
Context	**configure** router *string* ospf *number* area *string* interface *string* node-sid label *number*
Tree	label
Range	1 to 4294967295

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Notes	The following elements are part of a choice: **index** or **label**.
Introduced	16.0.R1
Platforms	All

passive *boolean*

Synopsis	Advertise passive interfaces as OSPF interfaces
Context	**configure** router *string* ospf *number* area *string* interface *string* passive *boolean*
Tree	passive
Introduced	16.0.R1
Platforms	All

poll-interval *number*

Synopsis	Interval for Hellos to non-adjacent OSPF NBMA neighbor
Context	**configure** router *string* ospf *number* area *string* interface *string* poll-interval *number*
Tree	poll-interval
Max. Range	0 to 4294967295
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Interface priority in the DR election on the subnet
Context	**configure** router *string* ospf *number* area *string* interface *string* priority *number*
Tree	priority
Range	0 to 255
Default	1
Introduced	16.0.R1
Platforms	All

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retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	**configure** router *string* ospf *number* area *string* interface *string* retransmit-interval *number*
Tree	retransmit-interval
Range	1 to 1800
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

rib-priority *keyword*

Synopsis	RIB priority for OSPF
Context	**configure** router *string* ospf *number* area *string* interface *string* rib-priority *keyword*
Tree	rib-priority
Options	high
Introduced	16.0.R1
Platforms	All

sid-protection *boolean*

Synopsis	Allow adjacency SID protection by LFA and remote LFA
Context	**configure** router *string* ospf *number* area *string* interface *string* sid-protection *boolean*
Tree	sid-protection
Default	true
Introduced	16.0.R1
Platforms	All

transit-delay *number*

Synopsis	Required LSA transmit time
Context	**configure** router *string* ospf *number* area *string* interface *string* transit-delay *number*
Tree	transit-delay
Range	1 to 1800

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Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

loopfree-alternate-exclude *boolean*

Synopsis	Exclude interfaces in OSPF areas in SPF LFA computation
Context	**configure** router *string* ospf *number* area *string* loopfree-alternate-exclude *boolean*
Tree	loopfree-alternate-exclude
Default	false
Introduced	16.0.R1
Platforms	All

nssa

Synopsis	Enable the **nssa** context
Context	**configure** router *string* ospf *number* area *string* nssa
Tree	nssa
Introduced	16.0.R1
Platforms	All

area-range [ip-prefix-mask] *string*

Synopsis	Enter the **area-range** list instance
Context	**configure** router *string* ospf *number* area *string* nssa area-range *string*
Tree	area-range
Introduced	16.0.R1
Platforms	All

[**ip-prefix-mask**] *string*

Synopsis	IP prefix and subnet mask for the range used by the ABR
Context	**configure** router *string* ospf *number* area *string* nssa area-range *string*
Tree	area-range

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	**configure** router *string* ospf *number* area *string* nssa area-range *string* advertise *boolean*
Tree	advertise
Default	true
Introduced	16.0.R1
Platforms	All

originate-default-route

Synopsis	Enable the **originate-default-route** context
Context	**configure** router *string* ospf *number* area *string* nssa originate-default-route
Tree	originate-default-route
Introduced	16.0.R1
Platforms	All

adjacency-check *boolean*

Synopsis	Default route to remove if there is no adjacency
Context	**configure** router *string* ospf *number* area *string* nssa originate-default-route adjacency-check *boolean*
Tree	adjacency-check
Default	true
Introduced	16.0.R1
Platforms	All

type-nssa *boolean*

Synopsis	Generate a default route using NSSA-LSA type

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Context	**configure** router *string* ospf *number* area *string* nssa originate-default-route type-nssa *boolean*
Tree	type-nssa
Default	false
Introduced	16.0.R1
Platforms	All

redistribute-external *boolean*

Synopsis	Redistribute external routes into the NSSA
Context	**configure** router *string* ospf *number* area *string* nssa redistribute-external *boolean*
Tree	redistribute-external
Default	true
Introduced	16.0.R1
Platforms	All

summaries *boolean*

Synopsis	Send summary (Type 3) LSAs into the NSSA on an ABR
Context	**configure** router *string* ospf *number* area *string* nssa summaries *boolean*
Tree	summaries
Default	true
Introduced	16.0.R1
Platforms	All

stub

Synopsis	Enable the **stub** context
Context	**configure** router *string* ospf *number* area *string* stub
Tree	stub
Introduced	16.0.R1
Platforms	All

default-metric *number*

Synopsis	Metric used by ABR for default route into the stub area

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Context	**configure** router *string* ospf *number* area *string* stub default-metric *number*
Tree	default-metric
Range	1 to 16777214
Default	1
Introduced	16.0.R1
Platforms	All

summaries *boolean*

Synopsis	Send summary (Type 3) LSAs into the stub area on an ABR
Context	**configure** router *string* ospf *number* area *string* stub summaries *boolean*
Tree	summaries
Default	true
Introduced	16.0.R1
Platforms	All

virtual-link [router-id] *string* transit-area *reference*

Synopsis	Enter the **virtual-link** list instance
Context	**configure** router *string* ospf *number* area *string* virtual-link *string* transit-area *reference*
Tree	virtual-link
Introduced	16.0.R1
Platforms	All

[**router-id**] *string*

Synopsis	Router identity of the virtual link neighbor
Context	**configure** router *string* ospf *number* area *string* virtual-link *string* transit-area *reference*
Tree	virtual-link
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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transit-area *reference*

Synopsis	Transit area linking the backbone to not-connected area
Context	**configure** router *string* ospf *number* area *string* virtual-link *string* transit-area *reference*
Tree	virtual-link
Reference	**configure** router *string* ospf *number* area *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OSPF interface
Context	**configure** router *string* ospf *number* area *string* virtual-link *string* transit-area *reference* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Authentication key
Context	**configure** router *string* ospf *number* area *string* virtual-link *string* transit-area *reference* authentication-key *string*
Tree	authentication-key
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	**configure** router *string* ospf *number* area *string* virtual-link *string* transit-area *reference* authentication-keychain *reference*
Tree	authentication-keychain

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Reference	**configure** system security keychains keychain *string*
Introduced	16.0.R3
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type used on OSPF interface
Context	**configure** router *string* ospf *number* area *string* virtual-link *string* transit-area *reference* authentication-type *keyword*
Tree	authentication-type
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	**configure** router *string* ospf *number* area *string* virtual-link *string* transit-area *reference* dead-interval *number*
Tree	dead-interval
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

hello-interval *number*

Synopsis	Time between OSPF Hellos of this interface
Context	**configure** router *string* ospf *number* area *string* virtual-link *string* transit-area *reference* hello-interval *number*
Tree	hello-interval
Range	1 to 65535
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

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message-digest-key [key-id] *number*

Synopsis	Enter the **message-digest-key** list instance
Context	**configure** router *string* ospf *number* area *string* virtual-link *string* transit-area *reference* message-digest-key *number*
Tree	message-digest-key
Introduced	16.0.R1
Platforms	All

[**key-id**] *number*

Synopsis	Message digest index
Context	**configure** router *string* ospf *number* area *string* virtual-link *string* transit-area *reference* message-digest-key *number*
Tree	message-digest-key
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

md5 *string*

Synopsis	MD5 hash key
Context	**configure** router *string* ospf *number* area *string* virtual-link *string* transit-area *reference* message-digest-key *number* md5 *string*
Tree	md5
String Length	1 to 51
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	**configure** router *string* ospf *number* area *string* virtual-link *string* transit-area *reference* retransmit-interval *number*

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Tree	retransmit-interval
Range	1 to 1800
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

transit-delay *number*

Synopsis	Required LSA transmit time
Context	**configure** router *string* ospf *number* area *string* virtual-link *string* transit-area *reference* transit-delay *number*
Tree	transit-delay
Range	1 to 1800
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

asbr

Synopsis	Enable the **asbr** context
Context	**configure** router *string* ospf *number* asbr
Tree	asbr
Introduced	16.0.R1
Platforms	All

trace-path *(number | keyword)*

Synopsis	Domain identity
Context	**configure** router *string* ospf *number* asbr trace-path *(number | keyword)*
Tree	trace-path
Range	0 to 31
Options	none
Default	none

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Introduced	16.0.R1
Platforms	All

compatible-rfc1583 *boolean*

Synopsis	OSPF summary and external route calculations
Context	**configure** router *string* ospf *number* compatible-rfc1583 *boolean*
Tree	compatible-rfc1583
Default	true
Introduced	16.0.R1
Platforms	All

database-export

Synopsis	Enable the **database-export** context
Context	**configure** router *string* ospf *number* database-export
Tree	database-export
Introduced	16.0.R1
Platforms	All

bgp-ls-identifier

Synopsis	Enable the **bgp-ls-identifier** context
Context	**configure** router *string* ospf *number* database-export bgp-ls-identifier
Tree	bgp-ls-identifier
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	BGP-LS identifier sent in the BGP-LS NLRI
Context	**configure** router *string* ospf *number* database-export bgp-ls-identifier value *number*
Tree	value
Max. Range	0 to 4294967295
Default	0

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Introduced	16.0.R1
Platforms	All

igp-identifier *number*

Synopsis	IGP instance in the BGP-LS NLRI
Context	**configure** router *string* ospf *number* database-export igp-identifier *number*
Tree	igp-identifier
Max. Range	0 to 18446744073709551615
Introduced	16.0.R1
Platforms	All

entropy-label

Synopsis	Enter the **entropy-label** context
Context	**configure** router *string* ospf *number* entropy-label
Tree	entropy-label
Introduced	16.0.R1
Platforms	All

override-tunnel-elc *boolean*

Synopsis	Enable override of received ELC advertisements
Context	**configure** router *string* ospf *number* entropy-label override-tunnel-elc *boolean*
Tree	override-tunnel-elc
Default	false
Introduced	16.0.R1
Platforms	All

export-limit

Synopsis	Enable the **export-limit** context
Context	**configure** router *string* ospf *number* export-limit
Tree	export-limit
Introduced	16.0.R1

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Platforms	All

log-percent *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	**configure** router *string* ospf *number* export-limit log-percent *number*
Tree	log-percent
Range	1 to 100
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	**configure** router *string* ospf *number* export-limit number *number*
Tree	number
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

export-policy *reference*

Synopsis	Export policies that determine exported routes
Context	**configure** router *string* ospf *number* export-policy *reference*
Tree	export-policy
Description	This command configures export routing policies for the routes exported from the routing table to IS-IS. If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied. If the **aggregate** command is also configured in the **configure router** context, the aggregation is applied before the export policy is applied. Routing policies are created in the **configure router policy-options** context.
Reference	**configure** policy-options policy-statement *string*

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Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

external-db-overflow

Synopsis	Enable the **external-db-overflow** context
Context	**configure** router *string* ospf *number* external-db-overflow
Tree	external-db-overflow
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Time during which the router operates in overload
Context	**configure** router *string* ospf *number* external-db-overflow interval *number*
Tree	interval
Range	0 to 2147483647
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	All

limit *number*

Synopsis	Number of external LSA at which overload is triggered
Context	**configure** router *string* ospf *number* external-db-overflow limit *number*
Tree	limit
Range	0 to 2147483647
Default	0
Introduced	16.0.R1
Platforms	All

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external-preference *number*

Synopsis	Preference for OSPF external routes
Context	**configure** router *string* ospf *number* external-preference *number*
Tree	external-preference
Range	1 to 255
Default	150
Introduced	16.0.R1
Platforms	All

flexible-algorithms

Synopsis	Enter the **flexible-algorithms** context
Context	**configure** router *string* ospf *number* flexible-algorithms
Tree	flexible-algorithms
Description	Commands in this context configure the OSPFv2 parameters for flexible algorithm participation.
Introduced	21.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of flexible algorithm support
Context	**configure** router *string* ospf *number* flexible-algorithms admin-state *keyword*
Tree	admin-state
Description	This command specifies the administrative state of the support of flexible algorithm IGP LSDB extensions.
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	All

advertise-admin-group *keyword*

Synopsis	Administrative group TLV to advertise
Context	**configure** router *string* ospf *number* flexible-algorithms advertise-admin-group *keyword*

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Tree	advertise-admin-group
Description	This command configures the type of Administrative Group TLV the router advertises as an IGP link attribute. This command is configured for this IGP instance.
Options	prefer-ag, eag-only, ag-eag
Default	prefer-ag
Introduced	23.3.R1
Platforms	All

flex-algo [flex-algo-id] *number*

Synopsis	Enter the **flex-algo** list instance
Context	**configure** router *string* ospf *number* flexible-algorithms flex-algo *number*
Tree	flex-algo
Description	Commands in this context configure the attributes of the OSPFv2 flexible algorithm. The maximum unique flexible algorithms can be configured on a router across all configured OSPFv2 instances. In each OSPF flexible algorithm configuration context, the OSPFv2 instance participation can be either enabled or disabled, and it configures the advertising of a locally-configured flexible algorithm definition. When flexible algorithm is enabled in an OSPF instance, it is enabled for all areas within the OSPF instance.
Max. Instances	7
Introduced	21.7.R1
Platforms	All

[**flex-algo-id**] *number*

Synopsis	Flexible algorithm ID
Context	**configure** router *string* ospf *number* flexible-algorithms flex-algo *number*
Tree	flex-algo
Range	128 to 255
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	All

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advertise *reference*

Synopsis	Flexible Algorithm Definition advertisement
Context	**configure** router *string* ospf *number* flexible-algorithms flex-algo *number* advertise *reference*
Tree	advertise
Description	This command enables the advertisement of a locally configured Flexible Algorithm Definition (FAD). The winning FAD that a router uses must be consistent with the winning FAD on all other routers, which avoids routing loops and traffic blackholing. The winning FAD is selected using a tiebreaker algorithm that first selects the highest advertised FAD priority followed by the highest system ID.
Reference	**configure** routing-options flexible-algorithm-definitions flex-algo *string*
Introduced	21.7.R1
Platforms	All

loopfree-alternate

Synopsis	Enable the **loopfree-alternate** context
Context	**configure** router *string* ospf *number* flexible-algorithms flex-algo *number* loopfree-alternate
Tree	loopfree-alternate
Introduced	21.7.R1
Platforms	All

participate *boolean*

Synopsis	Allow participation in the Flexible Algorithm
Context	**configure** router *string* ospf *number* flexible-algorithms flex-algo *number* participate *boolean*
Tree	participate
Description	When configured to **true**, the router advertises the capability to participate in a flexible algorithm within the IS-IS Router Capability TLV. A router only advertises participation when the winning FAD can be supported, which includes segment routing support. When configured to **false**, flexible algorithm participation is not enabled.
Default	false
Introduced	21.7.R1
Platforms	All

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graceful-restart

Synopsis	Enable the **graceful-restart** context
Context	**configure** router *string* ospf *number* graceful-restart
Tree	graceful-restart
Introduced	16.0.R1
Platforms	All

helper-mode *boolean*

Synopsis	Enable graceful restart helper for OSPF
Context	**configure** router *string* ospf *number* graceful-restart helper-mode *boolean*
Tree	helper-mode
Default	true
Introduced	16.0.R1
Platforms	All

strict-lsa-checking *boolean*

Synopsis	Perform strict LSA checking during graceful restart
Context	**configure** router *string* ospf *number* graceful-restart strict-lsa-checking *boolean*
Tree	strict-lsa-checking
Default	true
Introduced	16.0.R1
Platforms	All

igp-shortcut

Synopsis	Enter the **igp-shortcut** context
Context	**configure** router *string* ospf *number* igp-shortcut
Tree	igp-shortcut
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the IGP shortcuts
Context	**configure** router *string* ospf *number* igp-shortcut admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

allow-sr-over-srte *boolean*

Synopsis	Enable SR over SR-TE LSPs
Context	**configure** router *string* ospf *number* igp-shortcut allow-sr-over-srte *boolean*
Tree	allow-sr-over-srte
Description	When configured to **true**, the router only allows SR-MPLS SRv4 and SRv6 IGP shortcuts to use SR-TE LSPs with **allow-sr-over-srte** explicitly enabled with an adjacency SID as top SID in the SR-TE LSP. IPv4 and IPv6 addresses can use all available SR-TE LSPs as IGP shortcuts regardless of the explicit **allow-sr-over-srte** configuration. Under ECMP, when this command is configured to **true**, preference is given to the SR-TE LSPs with **allow-sr-over-srte** explicitly configured over the LSPs that do not have **allow-sr-over-srte** configured.
Default	false
Introduced	23.3.R1
Platforms	All

tunnel-next-hop

Synopsis	Enter the **tunnel-next-hop** context
Context	**configure** router *string* ospf *number* igp-shortcut tunnel-next-hop
Tree	tunnel-next-hop
Introduced	16.0.R1
Platforms	All

family [family-type] *keyword*

Synopsis	Enter the **family** list instance

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Context	**configure** router *string* ospf *number* igp-shortcut tunnel-next-hop family *keyword*
Tree	family
Introduced	16.0.R1
Platforms	All

[**family-type**] *keyword*

Synopsis	Address family type for tunnel next-hop
Context	**configure** router *string* ospf *number* igp-shortcut tunnel-next-hop family *keyword*
Tree	family
Options	ipv4, srv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

resolution *keyword*

Synopsis	Resolution state for IGP shortcut tunnels
Context	**configure** router *string* ospf *number* igp-shortcut tunnel-next-hop family *keyword* resolution *keyword*
Tree	resolution
Options	none, filter, any, match-family-ip
Default	none
Introduced	16.0.R1
Platforms	All

resolution-filter

Synopsis	Enter the **resolution-filter** context
Context	**configure** router *string* ospf *number* igp-shortcut tunnel-next-hop family *keyword* resolution-filter
Tree	resolution-filter
Introduced	16.0.R1
Platforms	All

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rsvp *boolean*

Synopsis	Use RSVP tunneling for next-hop resolution
Context	**configure** router *string* ospf *number* igp-shortcut tunnel-next-hop family *keyword* resolution-filter rsvp *boolean*
Tree	rsvp
Default	false
Introduced	16.0.R1
Platforms	All

sr-te *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	**configure** router *string* ospf *number* igp-shortcut tunnel-next-hop family *keyword* resolution-filter sr-te *boolean*
Tree	sr-te
Default	false
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy names for routes from IGP to route table
Context	**configure** router *string* ospf *number* import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

ldp-over-rsvp *boolean*

Synopsis	Allow LSP over RSVP in this OSPF instance
Context	**configure** router *string* ospf *number* ldp-over-rsvp *boolean*
Tree	ldp-over-rsvp

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Default	false
Introduced	16.0.R1
Platforms	All

ldp-sync *boolean*

Synopsis	Configure IGP-LDP synchronization for interfaces
Context	**configure** router *string* ospf *number* ldp-sync *boolean*
Tree	ldp-sync
Default	true
Introduced	16.0.R1
Platforms	All

loopfree-alternate

Synopsis	Enable the **loopfree-alternate** context
Context	**configure** router *string* ospf *number* loopfree-alternate
Tree	loopfree-alternate
Introduced	16.0.R1
Platforms	All

augment-route-table *boolean*

Synopsis	Attach remote LFA information to RTM entries
Context	**configure** router *string* ospf *number* loopfree-alternate augment-route-table *boolean*
Tree	augment-route-table
Description	When configured to **true**, this command enables IS-IS to attach remote LFA-specific information to RTM entries for use by protocols such as LDP. When configured to **false**, rLFA-specific information is not added to RTM entries.
Default	false
Introduced	21.10.R1
Platforms	All

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exclude

Synopsis	Enter the **exclude** context
Context	**configure** router *string* ospf *number* loopfree-alternate exclude
Tree	exclude
Introduced	16.0.R3
Platforms	All

prefix-policy *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	**configure** router *string* ospf *number* loopfree-alternate exclude prefix-policy *reference*
Tree	prefix-policy
Description	This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation. An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R3
Platforms	All

multi-homed-prefix

Synopsis	Enable the **multi-homed-prefix** context
Context	**configure** router *string* ospf *number* loopfree-alternate multi-homed-prefix
Tree	multi-homed-prefix
Description	Commands in this context configure a multihomed prefix LFA for both RTM routes (IP FRR) and SR-OSPF tunnels. SR-OSPF tunnels enable multihomed prefix extension in both algorithm 0 and flexible-algorithm numbers. This feature makes use of the multihomed prefix model described in RFC 8518 to compute a backup IP next hop using an alternate ABR or ASBR for external prefixes and to an alternate router owner for local anycast prefixes. This feature further enhances the multihomed prefix backup path calculation beyond RFC 8518 with the addition of repair tunnels that make use of a PQ node or a P-Q set to reach the alternate exit ABR or ASBR of external prefixes or the alternate owner router of local anycast prefixes.

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The computed IP next-hop based backup path is added to OSPF routes of external /32 prefixes (OSPFv2 routes types 3, 4, 5, and 7) and local /32 anycast prefixes in the RTM if the prefix is not protected by base LFA or if the user set leaf preference value to all. The user must enable the ip-fast-reroute leaf to have these backup paths programmed into the FIB in datapath.

The computed IP next hop or repair tunnel based backup path is also programmed for SR-OSPF node SID tunnels of external /32 prefixes and to /32 prefixes in same area as the computing node S and which are advertised by multiple routers (anycast prefix) in both algorithm 0 and flexible-algorithm numbers.

Introduced	22.2.R1
Platforms	All

preference *keyword*

Synopsis	Multi-homed prefix LFA backup path preference
Context	**configure** router *string* ospf *number* loopfree-alternate multi-homed-prefix preference *keyword*
Tree	preference
Options	none, all
Default	none
Introduced	22.2.R1
Platforms	All

remote-lfa

Synopsis	Enable the **remote-lfa** context
Context	**configure** router *string* ospf *number* loopfree-alternate remote-lfa
Tree	remote-lfa
Introduced	16.0.R1
Platforms	All

max-pq-cost *number*

Synopsis	Destination max cost for reverse SPF calculation
Context	**configure** router *string* ospf *number* loopfree-alternate remote-lfa max-pq-cost *number*
Tree	max-pq-cost
Max. Range	0 to 4294967295
Default	65535

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Introduced	16.0.R1
Platforms	All

node-protect

Synopsis	Enable the **node-protect** context
Context	**configure** router *string* ospf *number* loopfree-alternate remote-lfa node-protect
Tree	node-protect
Introduced	16.0.R4
Platforms	All

max-pq-nodes *number*

Synopsis	Maximum number of PQ nodes found in the LFA SPFs
Context	**configure** router *string* ospf *number* loopfree-alternate remote-lfa node-protect max-pq-nodes *number*
Tree	max-pq-nodes
Range	1 to 32
Default	16
Introduced	16.0.R4
Platforms	All

ti-lfa

Synopsis	Enable the **ti-lfa** context
Context	**configure** router *string* ospf *number* loopfree-alternate ti-lfa
Tree	ti-lfa
Description	Commands in this context configure the Topology Independent Loop-Free Alternate (TI-LFA) algorithm used in the LFA Shortest Path First (SPF) calculation for this OSPF instance.
Introduced	16.0.R1
Platforms	All

max-sr-frr-labels *number*

Synopsis	Maximum number of labels the TI-LFA backup path can use

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Context	**configure** router *string* ospf *number* loopfree-alternate ti-lfa max-sr-frr-labels *number*
Tree	max-sr-frr-labels
Description	This command configures the maximum number of labels allowed in the segment list of the TI-LFA repair tunnel. A higher value results in better coverage by TI-LFA at the expense of increased packet encapsulation overhead. The TI-LFA algorithm uses this value to limit the search for the Q-node from the P-node on the post-convergence path.
Range	0 to 3
Default	2
Introduced	16.0.R1
Platforms	All

node-protect

Synopsis	Enable the **node-protect** context
Context	**configure** router *string* ospf *number* loopfree-alternate ti-lfa node-protect
Tree	node-protect
Introduced	16.0.R5
Platforms	All

multi-instance *boolean*

Synopsis	Enable OSPF Multi Instance Extensions
Context	**configure** router *string* ospf *number* multi-instance *boolean*
Tree	multi-instance
Description	When configured to **true**, the Base router supports RFC 6549, OSPFv2 Multi-Instance Extensions. This support is enabled per instance and allows flexibility when migrating a particular instance from classic OSPFv2 to a multi-instance OSPFv2.
Default	false
Introduced	19.10.R1
Platforms	All

multicast-import *boolean*

Synopsis	Submit routes into the multicast Route Table Manager
Context	**configure** router *string* ospf *number* multicast-import *boolean*

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Tree	multicast-import
Default	false
Introduced	16.0.R1
Platforms	All

overload *boolean*

Synopsis	Change local router state to appear overloaded
Context	**configure** router *string* ospf *number* overload *boolean*
Tree	overload
Default	false
Introduced	16.0.R1
Platforms	All

overload-include-ext-1 *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	**configure** router *string* ospf *number* overload-include-ext-1 *boolean*
Tree	overload-include-ext-1
Default	false
Introduced	19.7.R1
Platforms	All

overload-include-ext-2 *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	**configure** router *string* ospf *number* overload-include-ext-2 *boolean*
Tree	overload-include-ext-2
Default	false
Introduced	16.0.R1
Platforms	All

overload-include-stub *boolean*

Synopsis	Advertise all stub interfaces with max metric value

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Context	**configure** router *string* ospf *number* overload-include-stub *boolean*
Tree	overload-include-stub
Default	false
Introduced	16.0.R1
Platforms	All

overload-on-boot

Synopsis	Enable the **overload-on-boot** context
Context	**configure** router *string* ospf *number* overload-on-boot
Tree	overload-on-boot
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Time during which the router operates in overload state
Context	**configure** router *string* ospf *number* overload-on-boot timeout *number*
Tree	timeout
Range	1 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Preference for OSPF internal routes
Context	**configure** router *string* ospf *number* preference *number*
Tree	preference
Range	1 to 255
Default	10
Introduced	16.0.R1
Platforms	All

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reference-bandwidth *number*

Synopsis	Bandwidth to reference default costing of interfaces
Context	**configure** router *string* ospf *number* reference-bandwidth *number*
Tree	reference-bandwidth
Range	1 to 18446744073709551615
Units	kilobps
Default	100000000
Introduced	16.0.R1
Platforms	All

rib-priority

Synopsis	Enter the **rib-priority** context
Context	**configure** router *string* ospf *number* rib-priority
Tree	rib-priority
Introduced	16.0.R1
Platforms	All

high

Synopsis	Enter the **high** context
Context	**configure** router *string* ospf *number* rib-priority high
Tree	high
Introduced	16.0.R1
Platforms	All

prefix-list *reference*

Synopsis	Higher priority list used during OSPF route calculation
Context	**configure** router *string* ospf *number* rib-priority high prefix-list *reference*
Tree	prefix-list
Reference	**configure** policy-options prefix-list *string*
Introduced	16.0.R1
Platforms	All

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router-id *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique router ID for the OSPF instance
Context	**configure** router *string* ospf *number* router-id *string*
Tree	router-id
Introduced	16.0.R1
Platforms	All

rtr-adv-lsa-limit

Synopsis	Enable the **rtr-adv-lsa-limit** context
Context	**configure** router *string* ospf *number* rtr-adv-lsa-limit
Tree	rtr-adv-lsa-limit
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Log the event without triggering overload
Context	**configure** router *string* ospf *number* rtr-adv-lsa-limit log-only *boolean*
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

max-lsa-count *number*

Synopsis	Max number of LSAs one router can advertise
Context	**configure** router *string* ospf *number* rtr-adv-lsa-limit max-lsa-count *number*
Tree	max-lsa-count
Range	1 to 4294967295
Notes	This element is mandatory.

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Introduced	16.0.R1
Platforms	All

overload-timeout *(number | keyword)*

Synopsis	Maximum time in overload after LSA limit is reached
Context	**configure** router *string* ospf *number* rtr-adv-lsa-limit overload-timeout *(number | keyword)*
Tree	overload-timeout
Range	1 to 1800
Units	seconds
Options	forever
Default	forever
Introduced	16.0.R1
Platforms	All

warning-threshold *number*

Synopsis	Percentage of the max LSA count that causes a warning
Context	**configure** router *string* ospf *number* rtr-adv-lsa-limit warning-threshold *number*
Tree	warning-threshold
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	All

segment-routing

Synopsis	Enter the **segment-routing** context
Context	**configure** router *string* ospf *number* segment-routing
Tree	segment-routing
Introduced	16.0.R1
Platforms	All

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adj-sid-hold *(number | keyword)*

Synopsis Adjacency SID hold time

Context **configure** router *string* ospf *number* segment-routing adj-sid-hold *(number | keyword)*

Tree adj-sid-hold

Description This command configures a timer to hold the ILM or LTN of an adjacency SID following a failure of the adjacency.

When an adjacency to a neighbor fails, the following procedure is followed for both an LFA protected and the LFA unprotected SID of this adjacency in SR-MPLS. An adjacency can have both types of SIDs assigned by configuration. An LFA protected adjacency SID is eligible for LFA protection, however, the following procedure applies even if an LFA backup is not programmed at the time of the failure. An LFA unprotected adjacency SID is not eligible for LFA protection.

- IGP withdraws the advertisement of the link TLV as well as its adjacency SID sub-TLV.
- The adjacency SID hold timer starts.
- The LTN and ILM records of the adjacency are kept in the datapath for as long as the adjacency SID hold time is running. This allows packets to flow over the LFA backup path, when the adjacency is protected, and allows the ingress LER or PCE time to compute a new path of the SR-TE LSP after IGP converges.
- If the adjacency is restored while the adjacency SID hold timer is running, the timer is aborted, and the adjacency SID remains programmed in the datapath with the retained SID values. However, the backup NHLFE may change if a new LFA SPF runs while the adjacency SID hold timer running. An update to the backup NHLFE is performed immediately following the LFA SPF. In all cases, the adjacency keeps its assigned SID label value.
- If the adjacency SID hold timer expires before the adjacency is restored, the SID is deprogrammed from the datapath and the label returned into the common pool where it was drawn from. Users of the adjacency (for example, SR policy and SR-TE LSP) are also informed. When the adjacency is subsequently restored, it gets assigned its allocated static-label value or a new dynamic-label value.
- A new PG-ID is assigned each time an adjacency comes back up. This PG-ID is used by the ILM and LTN of the adjacency SID and of all downstream node SIDs that resolve to a next hop over this adjacency.

Range 1 to 1800

Units seconds

Options none

Default 15

Introduced 16.0.R1

Platforms All

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adjacency-set [id] *number*

Synopsis	Enter the **adjacency-set** list instance
Context	**configure** router *string* ospf *number* segment-routing adjacency-set *number*
Tree	adjacency-set
Introduced	16.0.R1
Platforms	All

[**id**] *number*

Synopsis	Non-zero identifier for a given adjacency set
Context	**configure** router *string* ospf *number* segment-routing adjacency-set *number*
Tree	adjacency-set
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise *boolean*

Synopsis	Advertise adjacency for links terminating on same node
Context	**configure** router *string* ospf *number* segment-routing adjacency-set *number* advertise *boolean*
Tree	advertise
Default	true
Introduced	16.0.R1
Platforms	All

parallel *boolean*

Synopsis	Require adjacency members to terminate on same neighbor
Context	**configure** router *string* ospf *number* segment-routing adjacency-set *number* parallel *boolean*
Tree	parallel
Default	true
Introduced	16.0.R1

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Platforms	All

sid

Synopsis	Enable the **sid** context
Context	**configure** router *string* ospf *number* segment-routing adjacency-set *number* sid
Tree	sid
Introduced	16.0.R1
Platforms	All

label *number*

Synopsis	Adjacency SID label
Context	**configure** router *string* ospf *number* segment-routing adjacency-set *number* sid label *number*
Tree	label
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

adjacency-sid

Synopsis	Enter the **adjacency-sid** context
Context	**configure** router *string* ospf *number* segment-routing adjacency-sid
Tree	adjacency-sid
Introduced	22.7.R1
Platforms	All

allocate-dual-sids *boolean*

Synopsis	Allocate dual adjacency SIDs per interface
Context	**configure** router *string* ospf *number* segment-routing adjacency-sid allocate-dual-sids *boolean*
Tree	allocate-dual-sids
Description	When configured to **true**, the router supports two SR-MPLS adjacency SIDs per interface. A protected and unprotected adjacency SID is instantiated and advertised. If

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an SR-MPLS adjacency SID already exists, an additional complementary (protected or unprotected) adjacency SID is created on the interface.

When configured to **false**, the router disables the support of two SR-MPLS adjacency SIDs per interface.

Default	false
Introduced	22.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of segment routing
Context	**configure** router *string* ospf *number* segment-routing admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

backup-node-sid

Synopsis	Enable the **backup-node-sid** context
Context	**configure** router *string* ospf *number* segment-routing backup-node-sid
Tree	backup-node-sid
Introduced	16.0.R1
Platforms	All

index *number*

Synopsis	Node SID index for this interface
Context	**configure** router *string* ospf *number* segment-routing backup-node-sid index *number*
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: **index** or **label**.
Introduced	16.0.R1
Platforms	All

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ip-prefix *string*

Synopsis	IP prefix and prefix length for the backup node SID
Context	**configure** router *string* ospf *number* segment-routing backup-node-sid ip-prefix *string*
Tree	ip-prefix
Introduced	16.0.R1
Platforms	All

label *number*

Synopsis	Label value for the node SID
Context	**configure** router *string* ospf *number* segment-routing backup-node-sid label *number*
Tree	label
Range	1 to 4294967295
Notes	The following elements are part of a choice: **index** or **label**.
Introduced	16.0.R1
Platforms	All

class-forwarding *boolean*

Synopsis	Allow CBF with ECMP over RSVP-TE LSPs as IGP shortcuts
Context	**configure** router *string* ospf *number* segment-routing class-forwarding *boolean*
Tree	class-forwarding
Description	When configured to **true**, this command enables Class-Based Forwarding (CBF) with ECMP for SR-OSPF resolved to RSVP-TE LSPs as IGP shortcuts. For CBF with ECMP to be effective, a class forwarding policy must be defined, as well as FC to set associations and RSVP-TE LSPs to set associations. When configured to **false**, CBF over IGP shortcuts is disabled.
Default	false
Introduced	20.5.R1
Platforms	All

egress-statistics

Synopsis	Enter the **egress-statistics** context
Context	**configure** router *string* ospf *number* segment-routing egress-statistics

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Tree	egress-statistics
Introduced	19.10.R1
Platforms	All

adj-set *boolean*

Synopsis	Enable the allocation of statistics on adjacency sets
Context	**configure** router *string* ospf *number* segment-routing egress-statistics adj-set *boolean*
Tree	adj-set
Description	When configured to **true**, this command enables the allocation of statistic indices to each adjacency set. All adjacencies of a set share the same statistics index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

adj-sid *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	**configure** router *string* ospf *number* segment-routing egress-statistics adj-sid *boolean*
Tree	adj-sid
Description	When configured to **true**, this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

node-sid *boolean*

Synopsis	Enable the allocation of statistics on node SIDs
Context	**configure** router *string* ospf *number* segment-routing egress-statistics node-sid *boolean*
Tree	node-sid

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Default	false
Introduced	19.10.R1
Platforms	All

entropy-label *boolean*

Synopsis	Enable processing of received ELC signaled in the IGP
Context	**configure** router *string* ospf *number* segment-routing entropy-label *boolean*
Tree	entropy-label
Introduced	16.0.R1
Platforms	All

export-tunnel-table *keyword*

Synopsis	Export tunnel table
Context	**configure** router *string* ospf *number* segment-routing export-tunnel-table *keyword*
Tree	export-tunnel-table
Options	ldp
Introduced	16.0.R1
Platforms	All

ingress-statistics

Synopsis	Enter the **ingress-statistics** context
Context	**configure** router *string* ospf *number* segment-routing ingress-statistics
Tree	ingress-statistics
Introduced	19.10.R1
Platforms	All

adj-set *boolean*

Synopsis	Enable the allocation of statistics on adjacency sets
Context	**configure** router *string* ospf *number* segment-routing ingress-statistics adj-set *boolean*
Tree	adj-set
Description	When configured to **true**, this command enables the allocation of statistic indices to each adjacency set. All adjacencies of a set share the same statistics index. If a

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statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.

Default false

Introduced 19.10.R1

Platforms All

adj-sid *boolean*

Synopsis Enable the allocation of statistics on adjacency SIDs

Context **configure** router *string* ospf *number* segment-routing ingress-statistics adj-sid *boolean*

Tree adj-sid

Description When configured to **true**, this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.

Default false

Introduced 19.10.R1

Platforms All

node-sid *boolean*

Synopsis Enable the allocation of statistics on node SIDs

Context **configure** router *string* ospf *number* segment-routing ingress-statistics node-sid *boolean*

Tree node-sid

Default false

Introduced 19.10.R1

Platforms All

mapping-server

Synopsis Enter the **mapping-server** context

Context **configure** router *string* ospf *number* segment-routing mapping-server

Tree mapping-server

Introduced 16.0.R1

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Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OSPF mapping server
Context	**configure** router *string* ospf *number* segment-routing mapping-server admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

node-sid-map [sid-index] *number*

Synopsis	Enter the **node-sid-map** list instance
Context	**configure** router *string* ospf *number* segment-routing mapping-server node-sid-map *number*
Tree	node-sid-map
Introduced	16.0.R1
Platforms	All

[**sid-index**] *number*

Synopsis	Start SID index for the node SID mapping
Context	**configure** router *string* ospf *number* segment-routing mapping-server node-sid-map *number*
Tree	node-sid-map
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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ip-prefix *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Starting prefix of the mapping
Context	**configure** router *string* ospf *number* segment-routing mapping-server node-sid-map *number* ip-prefix *string*
Tree	ip-prefix
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

range *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of prefixes mapped by Extended Range Prefix TLV
Context	**configure** router *string* ospf *number* segment-routing mapping-server node-sid-map *number* range *number*
Tree	range
Range	1 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

scope

Synopsis	Enter the **scope** context
Context	**configure** router *string* ospf *number* segment-routing mapping-server node-sid-map *number* scope
Tree	scope
Introduced	16.0.R1
Platforms	All

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area *reference*

Synopsis	Area ID in which the advertise Extended Range TLV is advertised
Context	**configure** router *string* ospf *number* segment-routing mapping-server node-sid-map *number* scope area *reference*
Tree	area
Reference	**configure** router *string* ospf *number* area *string*
Notes	The following elements are part of a choice: **area** or **as**.
Introduced	16.0.R1
Platforms	All

as

Synopsis	Advertise Extended Range TLV in whole autonomous system
Context	**configure** router *string* ospf *number* segment-routing mapping-server node-sid-map *number* scope as
Tree	as
Notes	The following elements are part of a choice: **area** or **as**.
Introduced	16.0.R1
Platforms	All

maximum-sid-depth

Synopsis	Enter the **maximum-sid-depth** context
Context	**configure** router *string* ospf *number* segment-routing maximum-sid-depth
Tree	maximum-sid-depth
Introduced	20.2.R1
Platforms	All

override-bmi *number*

Synopsis	Value to override the announced node MSD-BMI value
Context	**configure** router *string* ospf *number* segment-routing maximum-sid-depth override-bmi *number*
Tree	override-bmi
Description	This command overrides the announced MSD node Base MPLS Imposition (BMI) value. The MSD-BMI value announced by a router can be used by recipients to understand the

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number of MPLS labels that can be imposed inclusive of all service, transport, or special labels.

When unconfigured, the router announces the maximum supported BMI of the node assuming the most simple services and Layer 2 encapsulation.

Range	0 to 12
Introduced	20.2.R1
Platforms	All

override-erld *number*

Synopsis	Value to override the announced node MSD-ERLD value
Context	**configure** router *string* ospf *number* segment-routing maximum-sid-depth override-erld *number*
Tree	override-erld
Description	This command configures the override Entropy Readable Label Depth (ERLD) Maximum Sid Depth (MSD) value. Information about the capability of each intermediate LSR of reading the maximum label stack depth is used by ingress LSRs to perform EL-based load balancing. When unconfigured, the router announces the node maximum supported ERLD assuming the most simple Layer 2 encapsulation.
Range	0 to 15
Introduced	20.2.R1
Platforms	All

prefix-sid-range

Synopsis	Enable the **prefix-sid-range** context
Context	**configure** router *string* ospf *number* segment-routing prefix-sid-range
Tree	prefix-sid-range
Introduced	16.0.R1
Platforms	All

global

Synopsis	BGP global SR range allocation
Context	**configure** router *string* ospf *number* segment-routing prefix-sid-range global
Tree	global

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Description	When configured, the system allows BGP to allocate labels from the SRGB space, as defined under the **configure router mpls-labels sr-labels** context.
Notes	The following elements are part of a choice: **global** or (**max-index** and **start-label**).
Introduced	16.0.R1
Platforms	All

max-index *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound value for the local SID index
Context	**configure** router *string* ospf *number* segment-routing prefix-sid-range max-index *number*
Tree	max-index
Range	0 to 524287
Default	1
Notes	The following elements are part of a choice: **global** or (**max-index** and **start-label**).
Introduced	16.0.R1
Platforms	All

start-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound value for the local label offset
Context	**configure** router *string* ospf *number* segment-routing prefix-sid-range start-label *number*
Tree	start-label
Range	0 to 524287
Default	0
Notes	The following elements are part of a choice: **global** or (**max-index** and **start-label**).
Introduced	16.0.R1
Platforms	All

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srlb *reference*

Synopsis	Segment routing local block
Context	**configure** router *string* ospf *number* segment-routing srlb *reference*
Tree	srlb
Reference	**configure** router *string* mpls-labels reserved-label-block *string*
Introduced	16.0.R1
Platforms	All

tunnel-mtu *number*

Synopsis	Tunnel MTU size
Context	**configure** router *string* ospf *number* segment-routing tunnel-mtu *number*
Tree	tunnel-mtu
Range	512 to 9786
Introduced	16.0.R1
Platforms	All

tunnel-table-pref *number*

Synopsis	Preference of SR tunnels created by the IGP instance
Context	**configure** router *string* ospf *number* segment-routing tunnel-table-pref *number*
Tree	tunnel-table-pref
Description	This command configures the TTM preference of shortest path SR tunnels created by the IGP instance. This is used for BGP shortcuts, VPRN auto-bind, or BGP transport tunnel when the tunnel binding commands are configured to the **any** value, which parses the TTM for tunnels in the protocol preference order. The user can choose to either accept the global TTM preference or explicitly list the tunnel types they want to use. If the user lists the tunnel type explicitly, the TTM preference is still used to select one type over the other. In both cases, a fallback to the next preferred tunnel type is performed if the selected type fails. A reversion to a more preferred tunnel type is performed as soon as one is available. The segment routing module adds to the TTM an SR tunnel entry for each resolved remote node SID prefix and programs the data path having the corresponding LTN with the push operation pointing to the primary and LFA backup NHLFEs. The default preference for shortest path SR tunnels in the TTM is set lower than LDP tunnels but higher than BGP tunnels to allow controlled migration of customers without disrupting their current deployment when they enable segment routing. The following is the value of the default preference for the various tunnel types. This includes the

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preference of SR tunnels based on shortest path (referred to as SR-ISIS and SR-OSPF).

Note: The preference of an SR-TE LSP is not configurable and is the second most preferred tunnel type after RSVP-TE. The preference is the same whether if the SR-TE LSP was resolved in IS-IS or OSPF.

The global default TTM preference for the tunnel types is as follows:

- ROUTE_PREF_RSVP 7
- ROUTE_PREF_SR_TE 8
- ROUTE_PREF_LDP 9
- ROUTE_PREF_OSPF_TTM 10
- ROUTE_PREF_ISIS_TTM 11
- ROUTE_PREF_BGP_TTM 12
- ROUTE_PREF_GRE 255

The default value for SR-ISIS or SR-OSPF is the same regardless if one or more IS-IS or OSPF instances programmed a tunnel for the same prefix. The selection of a SR tunnel in this case will be based on the lowest IGP instance ID. Similarly, IPv6 SR-ISIS and SR-OSPF3 tunnels are programmed into TTMv6 with the same default preference value as IPv4 SR-ISIS and IPv4 SR-OSPF respectively.

Nokia recommends not to set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.

Range	1 to 255
Default	10
Introduced	16.0.R1
Platforms	All

timers

Synopsis	Enter the **timers** context
Context	**configure** router *string* ospf *number* timers
Tree	timers
Introduced	16.0.R1
Platforms	All

incremental-spf-wait *number*

Synopsis	Delay time before an incremental SPF calculation starts
Context	**configure** router *string* ospf *number* timers incremental-spf-wait *number*

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Tree	incremental-spf-wait
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

lsa-accumulate *number*

Synopsis	Delay to gather LSAs before advertising to neighbors
Context	**configure** router *string* ospf *number* timers lsa-accumulate *number*
Tree	lsa-accumulate
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

lsa-arrival *number*

Synopsis	Min delay between receipt of same LSAs from neighbors
Context	**configure** router *string* ospf *number* timers lsa-arrival *number*
Tree	lsa-arrival
Range	0 to 600000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

lsa-generate

Synopsis	Enter the **lsa-generate** context
Context	**configure** router *string* ospf *number* timers lsa-generate
Tree	lsa-generate
Introduced	16.0.R1

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Platforms	All

lsa-initial-wait *number*

Synopsis	First wait period between OSPF LSA generation
Context	**configure** router *string* ospf *number* timers lsa-generate lsa-initial-wait *number*
Tree	lsa-initial-wait
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

lsa-second-wait *number*

Synopsis	Hold time between the first and second LSA generation
Context	**configure** router *string* ospf *number* timers lsa-generate lsa-second-wait *number*
Tree	lsa-second-wait
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

max-lsa-wait *number*

Synopsis	Max time between two LSAs being generated
Context	**configure** router *string* ospf *number* timers lsa-generate max-lsa-wait *number*
Tree	max-lsa-wait
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

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redistribute-delay *number*

Synopsis	Hold down timer for external routes into OSPF
Context	**configure** router *string* ospf *number* timers redistribute-delay *number*
Tree	redistribute-delay
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

spf-wait

Synopsis	Enter the **spf-wait** context
Context	**configure** router *string* ospf *number* timers spf-wait
Tree	spf-wait
Introduced	16.0.R1
Platforms	All

spf-initial-wait *number*

Synopsis	Initial SPF calculation delay after a topology change
Context	**configure** router *string* ospf *number* timers spf-wait spf-initial-wait *number*
Tree	spf-initial-wait
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

spf-max-wait *number*

Synopsis	Max interval between two consecutive SPF calculations
Context	**configure** router *string* ospf *number* timers spf-wait spf-max-wait *number*
Tree	spf-max-wait

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Range	10 to 120000
Units	milliseconds
Default	10000
Introduced	16.0.R1
Platforms	All

spf-second-wait *number*

Synopsis	Hold time between the first and second SPF calculation
Context	**configure** router *string* ospf *number* timers spf-wait spf-second-wait *number*
Tree	spf-second-wait
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

traffic-engineering *boolean*

Synopsis	Calculate traffic engineering route
Context	**configure** router *string* ospf *number* traffic-engineering *boolean*
Tree	traffic-engineering
Default	false
Introduced	16.0.R1
Platforms	All

traffic-engineering-options

Synopsis	Enter the **traffic-engineering-options** context
Context	**configure** router *string* ospf *number* traffic-engineering-options
Tree	traffic-engineering-options
Introduced	20.7.R1
Platforms	All

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advertise-delay *boolean*

Synopsis	Enable the advertisement of link delay for TE
Context	**configure** router *string* ospf *number* traffic-engineering-options advertise-delay *boolean*
Tree	advertise-delay
Description	When configured to **true**, the router advertises link delay in the IGP LSDB within the OSPF-TE TLV attribute or when the Application-Specific Link Attribute (ASLA) is enabled within SR-TE ASLA. When the router is configured under the **configure router ospf traffic-engineering-options sr-te application-specific-link-attributes** command to generate SR-TE ASLA attributes, link delay is advertised as a legacy RFC 3630 TLV when RSVP-TE is enabled and as an ASLA RFC 8920 TLV for SR-TE when MPLS is enabled for an interface. SR OS accepts and handles both legacy RSVP-TE TLVs and ASLAs for the RSVP application. However, SR OS only advertises RFC 3630 legacy RSVP-TE TLVs (as recommended by RFC 8920) to avoid compatibility issues. When configured to **false**, the router disables link delay advertisement.
Default	false
Introduced	22.10.R1
Platforms	All

sr-te *keyword*

Synopsis	Advertisement of link attributes for SR-TE
Context	**configure** router *string* ospf *number* traffic-engineering-options sr-te *keyword*
Tree	sr-te
Description	This command specifies the advertisement of TE attributes of each link on a per-application basis for RSVP-TE and SR-TE applications.
Options	false, legacy, application-specific-link-attributes
Default	false
Introduced	20.7.R1
Platforms	All

unicast-import *boolean*

Synopsis	Submit routes into the unicast Route Table Manager
Context	**configure** router *string* ospf *number* unicast-import *boolean*
Tree	unicast-import
Default	true

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Introduced	16.0.R1
Platforms	All

ospf3 [ospf-instance] *number*

Synopsis	Enter the **ospf3** list instance
Context	**configure** router *string* ospf3 *number*
Tree	ospf3
Max. Instances	32
Introduced	16.0.R1
Platforms	All

[**ospf-instance**] *number*

Synopsis	Value for the integrated OSPF instance
Context	**configure** router *string* ospf3 *number*
Tree	ospf3
Range	0 to 31 | 64 to 95
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OSPF instance
Context	**configure** router *string* ospf3 *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

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advertise-router-capability *keyword*

Synopsis	Allow router advertisement capabilities
Context	**configure** router *string* ospf3 *number* advertise-router-capability *keyword*
Tree	advertise-router-capability
Options	false, link, area, as
Default	false
Introduced	16.0.R1
Platforms	All

area [area-id] *string*

Synopsis	Enter the **area** list instance
Context	**configure** router *string* ospf3 *number* area *string*
Tree	area
Introduced	16.0.R1
Platforms	All

[**area-id**] *string*

Synopsis	Area-ID attribute
Context	**configure** router *string* ospf3 *number* area *string*
Tree	area
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	**configure** router *string* ospf3 *number* area *string* advertise-router-capability *boolean*
Tree	advertise-router-capability
Default	true
Introduced	16.0.R1
Platforms	All

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area-range [ip-prefix-mask] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **area-range** list instance
Context	**configure** router *string* ospf3 *number* area *string* area-range *(ipv4-prefix | ipv6-prefix)*
Tree	area-range
Introduced	16.0.R1
Platforms	All

[**ip-prefix-mask**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Address ranges to create on an ABR for route summarization or suppression
Context	**configure** router *string* ospf3 *number* area *string* area-range *(ipv4-prefix | ipv6-prefix)*
Tree	area-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	**configure** router *string* ospf3 *number* area *string* area-range *(ipv4-prefix | ipv6-prefix)* advertise *boolean*
Tree	advertise
Default	true
Introduced	16.0.R1
Platforms	All

blackhole-aggregate *boolean*

Synopsis	Install a low priority blackhole route to avoid loops
Context	**configure** router *string* ospf3 *number* area *string* blackhole-aggregate *boolean*
Tree	blackhole-aggregate
Default	true
Introduced	16.0.R1
Platforms	All

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database-export-exclude *boolean*

Synopsis	Exclude IGP link-state OSPF area info into TE-DB
Context	**configure** router *string* ospf3 *number* area *string* database-export-exclude *boolean*
Tree	database-export-exclude
Default	false
Introduced	16.0.R4
Platforms	All

export-policy *reference*

Synopsis	Type 3 Summary-LSA/OSPFv3 inter-area-prefix-LSA route
Context	**configure** router *string* ospf3 *number* area *string* export-policy *reference*
Tree	export-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

extended-lsa *keyword*

Synopsis	Extended LSA format in an OSPFv3 area
Context	**configure** router *string* ospf3 *number* area *string* extended-lsa *keyword*
Tree	extended-lsa
Options	only
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Route imported as Summary Type 3/Inter-Area-Prefix-LSA
Context	**configure** router *string* ospf3 *number* area *string* import-policy *reference*
Tree	import-policy

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Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

interface [interface-name] *string*

Synopsis	Enter the **interface** list instance
Context	**configure** router *string* ospf3 *number* area *string* interface *string*
Tree	interface
Introduced	16.0.R1
Platforms	All

[**interface-name**] *string*

Synopsis	Router interface name
Context	**configure** router *string* ospf3 *number* area *string* interface *string*
Tree	interface
Description	This command specifies the IP interface name. Interface names must be unique within the group of defined IP interfaces for **configure router interface** and **configure service ies interface** commands. An interface name cannot be in the form of an IP address. Interface names can be a string composed of printable, 7-bit ASCII characters. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes. If the IP interface name does not exist or does not have an IP address configured, an error message is returned. If the IP interface exists in a different area it is moved to this area.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OSPF interface

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Context	**configure** router *string* ospf3 *number* area *string* interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	**configure** router *string* ospf3 *number* area *string* interface *string* advertise-router-capability *boolean*
Tree	advertise-router-capability
Default	true
Introduced	16.0.R1
Platforms	All

authentication

Synopsis	Enable the **authentication** context
Context	**configure** router *string* ospf3 *number* area *string* interface *string* authentication
Tree	authentication
Introduced	16.0.R6
Platforms	All

inbound *reference*

Synopsis	sa-name
Context	**configure** router *string* ospf3 *number* area *string* interface *string* authentication inbound *reference*
Tree	inbound
Reference	**configure** ipsec static-sa *string*
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

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outbound *reference*

Synopsis	sa-name
Context	**configure** router *string* ospf3 *number* area *string* interface *string* authentication outbound *reference*
Tree	outbound
Reference	**configure** ipsec static-sa *string*
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

bfd-liveness

Synopsis	Enable the **bfd-liveness** context
Context	**configure** router *string* ospf3 *number* area *string* interface *string* bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

remain-down-on-failure *boolean*

Synopsis	Force adjacency down on failure until session returns
Context	**configure** router *string* ospf3 *number* area *string* interface *string* bfd-liveness remain-down-on-failure *boolean*
Tree	remain-down-on-failure
Default	false
Introduced	16.0.R1
Platforms	All

strict *boolean*

Synopsis	Enable BFD strict mode
Context	**configure** router *string* ospf3 *number* area *string* interface *string* bfd-liveness strict *boolean*
Tree	strict

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Description	When configured to **true**, the system uses BFD strict-mode. BFD strict-mode mandates that an active BFD session must exist between the OSPF neighbors before establishing a full adjacency. When configured to **true**, the router uses Link-Local Signaling (LLS) with the B-flag set to instruct the OSPF neighbors that BFD must be enabled on the link. BFD strict-mode requires both sides to have the B-flag set. During OSPFv3 BFD strict-mode operations, the router advertises the local interface IPv4 address TLV using LLS, but the SR OS router continues to use IPv6-based BFD sessions for both the IPv4 and IPv6 address families.
Default	false
Introduced	23.3.R1
Platforms	All

strict-mode-holddown *number*

Synopsis	Adjacency up time delay after BFD session establishment
Context	**configure** router *string* ospf3 *number* area *string* interface *string* bfd-liveness strict-mode-holddown *number*
Tree	strict-mode-holddown
Description	This command configures a delay timer before bringing up the OSPF adjacency after the BFD session establishment. Holddown helps mitigate potential routing churn when BFD sessions are unstable. The holddown timer is reset when a BFD session operationally toggles.
Range	1 to 600
Units	seconds
Introduced	23.3.R1
Platforms	All

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	**configure** router *string* ospf3 *number* area *string* interface *string* dead-interval *number*
Tree	dead-interval
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

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hello-interval *number*

Synopsis	Time between OSPF Hellos of this interface
Context	**configure** router *string* ospf3 *number* area *string* interface *string* hello-interval *number*
Tree	hello-interval
Range	1 to 65535
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

interface-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Interface type
Context	**configure** router *string* ospf3 *number* area *string* interface *string* interface-type *keyword*
Tree	interface-type
Description	This command specifies the interface type.

broadcast - Broadcast network

To significantly improve adjacency forming and network convergence, configure a network as point-to-point if only two routers are connected, even if the network is a broadcast media such as Ethernet.

non-broadcast - Non-broadcast network

point-to-point - Point-to-point link

Set the interface type of an Ethernet link to **point-to-point** to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided is used as a point-to-point.

p2mp-nbma - Point-to-multipoint on a link without broadcast or multicast support

No designated router or backup designated router is elected on this type of interface and all OSPF neighbors connect through individual point-to-point links. Only VPRN and IES services interfaces support this interface type.

secondary - Multiple secondary adjacencies allowed

A **secondary** interface allows multiple secondary adjacencies, in addition to the primary adjacency, to be established over a single IP interface. This interface type can also be applied to the system interface and to loopback interfaces to allow them to participate in multiple areas, although no adjacencies are formed over these types of interfaces.

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Options	broadcast, non-broadcast, point-to-point, secondary, p2mp-nbma
Introduced	16.0.R1
Platforms	All

load-balancing-weight *number*

Synopsis	Load balancing weight for an OSPF3 interface
Context	**configure** router *string* ospf3 *number* area *string* interface *string* load-balancing-weight *number*
Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	20.2.R1
Platforms	All

loopfree-alternate

Synopsis	Enter the **loopfree-alternate** context
Context	**configure** router *string* ospf3 *number* area *string* interface *string* loopfree-alternate
Tree	loopfree-alternate
Introduced	16.0.R3
Platforms	All

exclude *boolean*

Synopsis	Enable fast reroute at OSPF primary interface level
Context	**configure** router *string* ospf3 *number* area *string* interface *string* loopfree-alternate exclude *boolean*
Tree	exclude
Default	false
Introduced	16.0.R3
Platforms	All

policy-map

Synopsis	Enable the **policy-map** context

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Context	**configure** router *string* ospf3 *number* area *string* interface *string* loopfree-alternate policy-map
Tree	policy-map
Introduced	16.0.R3
Platforms	All

route-nh-template *reference*

Synopsis	Route next hop policy template name
Context	**configure** router *string* ospf3 *number* area *string* interface *string* loopfree-alternate policy-map route-nh-template *reference*
Tree	route-nh-template
Reference	**configure** routing-options route-next-hop-policy template *string*
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

lsa-filter-out *keyword*

Synopsis	LSA flooding reduction
Context	**configure** router *string* ospf3 *number* area *string* interface *string* lsa-filter-out *keyword*
Tree	lsa-filter-out
Options	none, all, except-own-rtrlsa, except-own-rtrlsa-and-defaults
Default	none
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	Route cost metric for the interface
Context	**configure** router *string* ospf3 *number* area *string* interface *string* metric *number*
Tree	metric
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

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mtu *number*

Synopsis	MTU for the OSPF to use on the interface
Context	**configure** router *string* ospf3 *number* area *string* interface *string* mtu *number*
Tree	mtu
Range	512 to 9786
Introduced	16.0.R1
Platforms	All

neighbor [address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Add a list entry for **neighbor**
Context	**configure** router *string* ospf3 *number* area *string* interface *string* neighbor *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	neighbor
Introduced	16.0.R1
Platforms	All

[**address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Neighbor link local address
Context	**configure** router *string* ospf3 *number* area *string* interface *string* neighbor *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

node-sid

Synopsis	Enable the **node-sid** context
Context	**configure** router *string* ospf3 *number* area *string* interface *string* node-sid
Tree	node-sid
Introduced	16.0.R4
Platforms	All

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clear-n-flag *boolean*

Synopsis	Clear the N-flag in an OSPF3 prefix
Context	**configure** router *string* ospf3 *number* area *string* interface *string* node-sid clear-n-flag *boolean*
Tree	clear-n-flag
Description	When configured to **true**, this command allows the user to clear the N-flag in an OSPF3 prefix SID sub-TLV originated for the prefix of a loopback interface on the system. When configured to **false**, the N-flag in an OSPF3 prefix SID sub-TLV originated for the prefix of a loopback interface on the system is not cleared. When the user wants to configure and advertise an anycast SID using the same loopback interface prefix on multiple nodes, the user must clear the N-flag to assure interoperability with third-party implementations. This may perform a strict check on the receive end and drop duplicate prefix SID sub-TLVs when the N-flag is set.
Default	false
Introduced	16.0.R5
Platforms	All

index *number*

Synopsis	Node SID index for this interface
Context	**configure** router *string* ospf3 *number* area *string* interface *string* node-sid index *number*
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: **index** or **label**.
Introduced	16.0.R4
Platforms	All

label *number*

Synopsis	Label value for the node SID
Context	**configure** router *string* ospf3 *number* area *string* interface *string* node-sid label *number*
Tree	label
Range	1 to 4294967295
Notes	The following elements are part of a choice: **index** or **label**.
Introduced	16.0.R4

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Platforms	All

passive *boolean*

Synopsis	Advertise passive interfaces as OSPF interfaces
Context	**configure** router *string* ospf3 *number* area *string* interface *string* passive *boolean*
Tree	passive
Introduced	16.0.R1
Platforms	All

poll-interval *number*

Synopsis	Interval for Hellos to non-adjacent OSPF NBMA neighbor
Context	**configure** router *string* ospf3 *number* area *string* interface *string* poll-interval *number*
Tree	poll-interval
Max. Range	0 to 4294967295
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Interface priority in the DR election on the subnet
Context	**configure** router *string* ospf3 *number* area *string* interface *string* priority *number*
Tree	priority
Range	0 to 255
Default	1
Introduced	16.0.R1
Platforms	All

retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	**configure** router *string* ospf3 *number* area *string* interface *string* retransmit-interval *number*

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Tree	retransmit-interval
Range	1 to 1800
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

rib-priority *keyword*

Synopsis	RIB priority for OSPF
Context	**configure** router *string* ospf3 *number* area *string* interface *string* rib-priority *keyword*
Tree	rib-priority
Options	high
Introduced	16.0.R1
Platforms	All

sid-protection *boolean*

Synopsis	Allow adjacency SID protection by LFA and remote LFA
Context	**configure** router *string* ospf3 *number* area *string* interface *string* sid-protection *boolean*
Tree	sid-protection
Default	true
Introduced	16.0.R4
Platforms	All

transit-delay *number*

Synopsis	Required LSA transmit time
Context	**configure** router *string* ospf3 *number* area *string* interface *string* transit-delay *number*
Tree	transit-delay
Range	1 to 1800
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

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key-rollover-interval *number*

Synopsis	Key rollover interval
Context	**configure** router *string* ospf3 *number* area *string* key-rollover-interval *number*
Tree	key-rollover-interval
Range	10 to 300
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

loopfree-alternate-exclude *boolean*

Synopsis	Exclude interfaces in OSPF areas in SPF LFA computation
Context	**configure** router *string* ospf3 *number* area *string* loopfree-alternate-exclude *boolean*
Tree	loopfree-alternate-exclude
Default	false
Introduced	16.0.R1
Platforms	All

nssa

Synopsis	Enable the **nssa** context
Context	**configure** router *string* ospf3 *number* area *string* nssa
Tree	nssa
Introduced	16.0.R1
Platforms	All

area-range [ip-prefix-mask] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **area-range** list instance
Context	**configure** router *string* ospf3 *number* area *string* nssa area-range *(ipv4-prefix | ipv6-prefix)*
Tree	area-range
Introduced	16.0.R1

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Platforms	All

[**ip-prefix-mask**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Addresses on ABR for route summarization or suppression
Context	**configure** router *string* ospf3 *number* area *string* nssa area-range *(ipv4-prefix | ipv6-prefix)*
Tree	area-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	**configure** router *string* ospf3 *number* area *string* nssa area-range *(ipv4-prefix | ipv6-prefix)* advertise *boolean*
Tree	advertise
Default	true
Introduced	16.0.R1
Platforms	All

originate-default-route

Synopsis	Enable the **originate-default-route** context
Context	**configure** router *string* ospf3 *number* area *string* nssa originate-default-route
Tree	originate-default-route
Introduced	16.0.R1
Platforms	All

adjacency-check *boolean*

Synopsis	Default route to remove if there is no adjacency
Context	**configure** router *string* ospf3 *number* area *string* nssa originate-default-route adjacency-check *boolean*
Tree	adjacency-check

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Default	true
Introduced	16.0.R1
Platforms	All

type-nssa *boolean*

Synopsis	Generate a default route using NSSA-LSA type
Context	**configure** router *string* ospf3 *number* area *string* nssa originate-default-route type-nssa *boolean*
Tree	type-nssa
Default	false
Introduced	16.0.R1
Platforms	All

redistribute-external *boolean*

Synopsis	Redistribute external routes into the NSSA
Context	**configure** router *string* ospf3 *number* area *string* nssa redistribute-external *boolean*
Tree	redistribute-external
Default	true
Introduced	16.0.R1
Platforms	All

summaries *boolean*

Synopsis	Send summary (Type 3) LSAs into the NSSA on an ABR
Context	**configure** router *string* ospf3 *number* area *string* nssa summaries *boolean*
Tree	summaries
Default	true
Introduced	16.0.R1
Platforms	All

stub

Synopsis	Enable the **stub** context
Context	**configure** router *string* ospf3 *number* area *string* stub

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Tree	stub
Introduced	16.0.R1
Platforms	All

default-metric *number*

Synopsis	Metric used by ABR for default route into the stub area
Context	**configure** router *string* ospf3 *number* area *string* stub default-metric *number*
Tree	default-metric
Range	1 to 16777214
Default	1
Introduced	16.0.R1
Platforms	All

summaries *boolean*

Synopsis	Send summary (Type 3) LSAs into the stub area on an ABR
Context	**configure** router *string* ospf3 *number* area *string* stub summaries *boolean*
Tree	summaries
Default	true
Introduced	16.0.R1
Platforms	All

virtual-link [router-id] *string* transit-area *reference*

Synopsis	Enter the **virtual-link** list instance
Context	**configure** router *string* ospf3 *number* area *string* virtual-link *string* transit-area *reference*
Tree	virtual-link
Introduced	16.0.R1
Platforms	All

[**router-id**] *string*

Synopsis	Router ID of the virtual link neighbor
Context	**configure** router *string* ospf3 *number* area *string* virtual-link *string* transit-area *reference*

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Tree	virtual-link
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

transit-area *reference*

Synopsis	Transit area linking backbone and non-connected area
Context	**configure** router *string* ospf3 *number* area *string* virtual-link *string* transit-area *reference*
Tree	virtual-link
Reference	**configure** router *string* ospf3 *number* area *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OSPF interface
Context	**configure** router *string* ospf3 *number* area *string* virtual-link *string* transit-area *reference* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

authentication

Synopsis	Enable the **authentication** context
Context	**configure** router *string* ospf3 *number* area *string* virtual-link *string* transit-area *reference* authentication
Tree	authentication
Introduced	16.0.R6
Platforms	All

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inbound *reference*

Synopsis	sa-name
Context	**configure** router *string* ospf3 *number* area *string* virtual-link *string* transit-area *reference* authentication inbound *reference*
Tree	inbound
Reference	**configure** ipsec static-sa *string*
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

outbound *reference*

Synopsis	sa-name
Context	**configure** router *string* ospf3 *number* area *string* virtual-link *string* transit-area *reference* authentication outbound *reference*
Tree	outbound
Reference	**configure** ipsec static-sa *string*
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	**configure** router *string* ospf3 *number* area *string* virtual-link *string* transit-area *reference* dead-interval *number*
Tree	dead-interval
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

hello-interval *number*

Synopsis	Time between OSPF Hellos of this interface

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Context	**configure** router *string* ospf3 *number* area *string* virtual-link *string* transit-area *reference* hello-interval *number*
Tree	hello-interval
Range	1 to 65535
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	**configure** router *string* ospf3 *number* area *string* virtual-link *string* transit-area *reference* retransmit-interval *number*
Tree	retransmit-interval
Range	1 to 1800
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

transit-delay *number*

Synopsis	Required LSA transmit time
Context	**configure** router *string* ospf3 *number* area *string* virtual-link *string* transit-area *reference* transit-delay *number*
Tree	transit-delay
Range	1 to 1800
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

asbr

Synopsis	Enable the **asbr** context

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Context	**configure** router *string* ospf3 *number* asbr
Tree	asbr
Introduced	16.0.R1
Platforms	All

database-export

Synopsis	Enable the **database-export** context
Context	**configure** router *string* ospf3 *number* database-export
Tree	database-export
Introduced	16.0.R4
Platforms	All

bgp-ls-identifier

Synopsis	Enable the **bgp-ls-identifier** context
Context	**configure** router *string* ospf3 *number* database-export bgp-ls-identifier
Tree	bgp-ls-identifier
Introduced	16.0.R4
Platforms	All

value *number*

Synopsis	BGP-LS identifier sent in the BGP-LS NLRI
Context	**configure** router *string* ospf3 *number* database-export bgp-ls-identifier value *number*
Tree	value
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R4
Platforms	All

igp-identifier *number*

Synopsis	IGP instance in the BGP-LS NLRI
Context	**configure** router *string* ospf3 *number* database-export igp-identifier *number*

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Tree	igp-identifier
Max. Range	0 to 18446744073709551615
Introduced	16.0.R4
Platforms	All

export-limit

Synopsis	Enable the **export-limit** context
Context	**configure** router *string* ospf3 *number* export-limit
Tree	export-limit
Introduced	16.0.R1
Platforms	All

log-percent *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	**configure** router *string* ospf3 *number* export-limit log-percent *number*
Tree	log-percent
Range	1 to 100
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	**configure** router *string* ospf3 *number* export-limit number *number*
Tree	number
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

export-policy *reference*

Synopsis	Export policies that determine exported routes

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Context	**configure** router *string* ospf3 *number* export-policy *reference*
Tree	export-policy
Description	This command configures export routing policies for the routes exported from the routing table to IS-IS. If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied. If the **aggregate** command is also configured in the **configure router** context, the aggregation is applied before the export policy is applied. Routing policies are created in the **configure router policy-options** context.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

extended-lsa *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Extended LSA format in an OSPFv3 area
Context	**configure** router *string* ospf3 *number* extended-lsa *keyword*
Tree	extended-lsa
Options	sparse, only
Default	sparse
Introduced	16.0.R1
Platforms	All

external-db-overflow

Synopsis	Enable the **external-db-overflow** context
Context	**configure** router *string* ospf3 *number* external-db-overflow
Tree	external-db-overflow

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Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Time during which the router operates in overload
Context	**configure** router *string* ospf3 *number* external-db-overflow interval *number*
Tree	interval
Range	0 to 2147483647
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	All

limit *number*

Synopsis	Number of external LSA at which overload is triggered
Context	**configure** router *string* ospf3 *number* external-db-overflow limit *number*
Tree	limit
Range	0 to 2147483647
Default	0
Introduced	16.0.R1
Platforms	All

external-preference *number*

Synopsis	Preference for OSPF external routes
Context	**configure** router *string* ospf3 *number* external-preference *number*
Tree	external-preference
Range	1 to 255
Default	150
Introduced	16.0.R1
Platforms	All

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graceful-restart

Synopsis	Enable the **graceful-restart** context
Context	**configure** router *string* ospf3 *number* graceful-restart
Tree	graceful-restart
Introduced	16.0.R1
Platforms	All

helper-mode *boolean*

Synopsis	Enable graceful restart helper for OSPF
Context	**configure** router *string* ospf3 *number* graceful-restart helper-mode *boolean*
Tree	helper-mode
Default	true
Introduced	16.0.R1
Platforms	All

strict-lsa-checking *boolean*

Synopsis	Perform strict LSA checking during graceful restart
Context	**configure** router *string* ospf3 *number* graceful-restart strict-lsa-checking *boolean*
Tree	strict-lsa-checking
Default	true
Introduced	16.0.R1
Platforms	All

igp-shortcut

Synopsis	Enter the **igp-shortcut** context
Context	**configure** router *string* ospf3 *number* igp-shortcut
Tree	igp-shortcut
Introduced	16.0.R4
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the IGP shortcuts
Context	**configure** router *string* ospf3 *number* igp-shortcut admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

tunnel-next-hop

Synopsis	Enter the **tunnel-next-hop** context
Context	**configure** router *string* ospf3 *number* igp-shortcut tunnel-next-hop
Tree	tunnel-next-hop
Introduced	16.0.R4
Platforms	All

family [family-type] *keyword*

Synopsis	Enter the **family** list instance
Context	**configure** router *string* ospf3 *number* igp-shortcut tunnel-next-hop family *keyword*
Tree	family
Introduced	16.0.R4
Platforms	All

[**family-type**] *keyword*

Synopsis	Address family type for the tunnel next hop
Context	**configure** router *string* ospf3 *number* igp-shortcut tunnel-next-hop family *keyword*
Tree	family
Options	ipv4, ipv6, srv4, srv6
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

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resolution *keyword*

Synopsis	Resolution state for IGP shortcut tunnels
Context	**configure** router *string* ospf3 *number* igp-shortcut tunnel-next-hop family *keyword* resolution *keyword*
Tree	resolution
Options	none, filter, any, match-family-ip
Default	none
Introduced	16.0.R4
Platforms	All

resolution-filter

Synopsis	Enter the **resolution-filter** context
Context	**configure** router *string* ospf3 *number* igp-shortcut tunnel-next-hop family *keyword* resolution-filter
Tree	resolution-filter
Introduced	16.0.R4
Platforms	All

rsvp *boolean*

Synopsis	Use RSVP tunneling for next-hop resolution
Context	**configure** router *string* ospf3 *number* igp-shortcut tunnel-next-hop family *keyword* resolution-filter rsvp *boolean*
Tree	rsvp
Default	false
Introduced	16.0.R4
Platforms	All

sr-te *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	**configure** router *string* ospf3 *number* igp-shortcut tunnel-next-hop family *keyword* resolution-filter sr-te *boolean*
Tree	sr-te

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Default	false
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Import policy names for routes from IGP to route table
Context	**configure** router *string* ospf3 *number* import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

ldp-sync *boolean*

Synopsis	Configure IGP-LDP synchronization for interfaces
Context	**configure** router *string* ospf3 *number* ldp-sync *boolean*
Tree	ldp-sync
Default	true
Introduced	16.0.R1
Platforms	All

loopfree-alternate

Synopsis	Enable the **loopfree-alternate** context
Context	**configure** router *string* ospf3 *number* loopfree-alternate
Tree	loopfree-alternate
Introduced	16.0.R1
Platforms	All

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exclude

Synopsis	Enter the **exclude** context
Context	**configure** router *string* ospf3 *number* loopfree-alternate exclude
Tree	exclude
Introduced	16.0.R3
Platforms	All

prefix-policy *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	**configure** router *string* ospf3 *number* loopfree-alternate exclude prefix-policy *reference*
Tree	prefix-policy
Description	This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation. An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R3
Platforms	All

remote-lfa

Synopsis	Enable the **remote-lfa** context
Context	**configure** router *string* ospf3 *number* loopfree-alternate remote-lfa
Tree	remote-lfa
Introduced	16.0.R4
Platforms	All

max-pq-cost *number*

Synopsis	Destination max cost for reverse SPF calculation
Context	**configure** router *string* ospf3 *number* loopfree-alternate remote-lfa max-pq-cost *number*
Tree	max-pq-cost

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Max. Range	0 to 4294967295
Default	65535
Introduced	16.0.R4
Platforms	All

node-protect

Synopsis	Enable the **node-protect** context
Context	**configure** router *string* ospf3 *number* loopfree-alternate remote-lfa node-protect
Tree	node-protect
Introduced	16.0.R6
Platforms	All

max-pq-nodes *number*

Synopsis	Maximum number of PQ nodes found in the LFA SPFs
Context	**configure** router *string* ospf3 *number* loopfree-alternate remote-lfa node-protect max-pq-nodes *number*
Tree	max-pq-nodes
Range	1 to 32
Default	16
Introduced	16.0.R6
Platforms	All

ti-lfa

Synopsis	Enable the **ti-lfa** context
Context	**configure** router *string* ospf3 *number* loopfree-alternate ti-lfa
Tree	ti-lfa
Description	Commands in this context configure the Topology Independent Loop-Free Alternate (TI-LFA) algorithm used in the LFA Shortest Path First (SPF) calculation for this OSPFv3 instance.
Introduced	16.0.R5
Platforms	All

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max-sr-frr-labels *number*

Synopsis	Maximum number of labels the TI-LFA backup path can use
Context	**configure** router *string* ospf3 *number* loopfree-alternate ti-lfa max-sr-frr-labels *number*
Tree	max-sr-frr-labels
Description	This command configures the maximum number of labels allowed in the segment list of the TI-LFA repair tunnel. A higher value results in better coverage by TI-LFA at the expense of increased packet encapsulation overhead. The TI-LFA algorithm uses this value to limit the search for the Q-node from the P-node on the post-convergence path.
Range	0 to 3
Default	2
Introduced	16.0.R5
Platforms	All

node-protect

Synopsis	Enable the **node-protect** context
Context	**configure** router *string* ospf3 *number* loopfree-alternate ti-lfa node-protect
Tree	node-protect
Introduced	16.0.R6
Platforms	All

multicast-import *boolean*

Synopsis	Submit routes into the multicast Route Table Manager
Context	**configure** router *string* ospf3 *number* multicast-import *boolean*
Tree	multicast-import
Default	false
Introduced	16.0.R1
Platforms	All

overload *boolean*

Synopsis	Change local router state to appear overloaded
Context	**configure** router *string* ospf3 *number* overload *boolean*
Tree	overload
Default	false

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Introduced	16.0.R1
Platforms	All

overload-include-ext-1 *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	**configure** router *string* ospf3 *number* overload-include-ext-1 *boolean*
Tree	overload-include-ext-1
Default	false
Introduced	19.7.R1
Platforms	All

overload-include-ext-2 *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	**configure** router *string* ospf3 *number* overload-include-ext-2 *boolean*
Tree	overload-include-ext-2
Default	false
Introduced	16.0.R1
Platforms	All

overload-include-stub *boolean*

Synopsis	Advertise all stub interfaces with max metric value
Context	**configure** router *string* ospf3 *number* overload-include-stub *boolean*
Tree	overload-include-stub
Default	false
Introduced	16.0.R1
Platforms	All

overload-on-boot

Synopsis	Enable the **overload-on-boot** context
Context	**configure** router *string* ospf3 *number* overload-on-boot
Tree	overload-on-boot

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Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Router interval in overload before normal operations
Context	**configure** router *string* ospf3 *number* overload-on-boot timeout *number*
Tree	timeout
Range	60 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Preference for OSPF internal routes
Context	**configure** router *string* ospf3 *number* preference *number*
Tree	preference
Range	1 to 255
Default	10
Introduced	16.0.R1
Platforms	All

reference-bandwidth *number*

Synopsis	Bandwidth to reference default costing of interfaces
Context	**configure** router *string* ospf3 *number* reference-bandwidth *number*
Tree	reference-bandwidth
Range	1 to 18446744073709551615
Units	kilobps
Default	100000000
Introduced	16.0.R1
Platforms	All

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rib-priority

Synopsis	Enter the **rib-priority** context
Context	**configure** router *string* ospf3 *number* rib-priority
Tree	rib-priority
Introduced	16.0.R1
Platforms	All

high

Synopsis	Enter the **high** context
Context	**configure** router *string* ospf3 *number* rib-priority high
Tree	high
Introduced	16.0.R1
Platforms	All

prefix-list *reference*

Synopsis	Higher priority list used during OSPF route calculation
Context	**configure** router *string* ospf3 *number* rib-priority high prefix-list *reference*
Tree	prefix-list
Reference	**configure** policy-options prefix-list *string*
Introduced	16.0.R1
Platforms	All

router-id *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique router ID for the OSPF instance
Context	**configure** router *string* ospf3 *number* router-id *string*
Tree	router-id
Introduced	16.0.R1
Platforms	All

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rtr-adv-lsa-limit

Synopsis	Enable the **rtr-adv-lsa-limit** context
Context	**configure** router *string* ospf3 *number* rtr-adv-lsa-limit
Tree	rtr-adv-lsa-limit
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Log the event without triggering overload
Context	**configure** router *string* ospf3 *number* rtr-adv-lsa-limit log-only *boolean*
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

max-lsa-count *number*

Synopsis	Max number of LSAs one router can advertise
Context	**configure** router *string* ospf3 *number* rtr-adv-lsa-limit max-lsa-count *number*
Tree	max-lsa-count
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

overload-timeout *(number | keyword)*

Synopsis	Maximum time in overload after LSA limit is reached
Context	**configure** router *string* ospf3 *number* rtr-adv-lsa-limit overload-timeout *(number | keyword)*
Tree	overload-timeout
Range	1 to 1800
Units	seconds

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Options	forever
Default	forever
Introduced	16.0.R1
Platforms	All

warning-threshold *number*

Synopsis	Percentage of the max LSA count that causes a warning
Context	**configure** router *string* ospf3 *number* rtr-adv-lsa-limit warning-threshold *number*
Tree	warning-threshold
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	All

segment-routing

Synopsis	Enter the **segment-routing** context
Context	**configure** router *string* ospf3 *number* segment-routing
Tree	segment-routing
Introduced	16.0.R4
Platforms	All

adj-sid-hold *(number | keyword)*

Synopsis	Adjacency SID hold time
Context	**configure** router *string* ospf3 *number* segment-routing adj-sid-hold *(number | keyword)*
Tree	adj-sid-hold
Description	This command configures a timer to hold the ILM or LTN of an adjacency SID following a failure of the adjacency. When an adjacency to a neighbor fails, the following procedure is followed for both an LFA protected and the LFA unprotected SID of this adjacency in SR-MPLS. An adjacency can have both types of SIDs assigned by configuration. An LFA protected adjacency SID is eligible for LFA protection, however, the following procedure applies even if an LFA backup is not programmed at the time of the failure. An LFA unprotected adjacency SID is not eligible for LFA protection.

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- IGP withdraws the advertisement of the link TLV as well as its adjacency SID sub-TLV.
- The adjacency SID hold timer starts.
- The LTN and ILM records of the adjacency are kept in the datapath for as long as the adjacency SID hold time is running. This allows packets to flow over the LFA backup path, when the adjacency is protected, and allows the ingress LER or PCE time to compute a new path of the SR-TE LSP after IGP converges.
- If the adjacency is restored while the adjacency SID hold timer is running, the timer is aborted, and the adjacency SID remains programmed in the datapath with the retained SID values. However, the backup NHLFE may change if a new LFA SPF runs while the adjacency SID hold timer running. An update to the backup NHLFE is performed immediately following the LFA SPF. In all cases, the adjacency keeps its assigned SID label value.
- If the adjacency SID hold timer expires before the adjacency is restored, the SID is deprogrammed from the datapath and the label returned into the common pool where it was drawn from. Users of the adjacency (for example, SR policy and SR-TE LSP) are also informed. When the adjacency is subsequently restored, it gets assigned its allocated static-label value or a new dynamic-label value.
- A new PG-ID is assigned each time an adjacency comes back up. This PG-ID is used by the ILM and LTN of the adjacency SID and of all downstream node SIDs that resolve to a next hop over this adjacency.

Range	1 to 1800
Units	seconds
Options	none
Default	15
Introduced	16.0.R4
Platforms	All

adjacency-sid

Synopsis	Enter the **adjacency-sid** context
Context	**configure** router *string* ospf3 *number* segment-routing adjacency-sid
Tree	adjacency-sid
Introduced	22.7.R1
Platforms	All

allocate-dual-sids *boolean*

Synopsis	Allocate dual adjacency SIDs per interface

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Context	**configure** router *string* ospf3 *number* segment-routing adjacency-sid allocate-dual-sids *boolean*
Tree	allocate-dual-sids
Description	When configured to **true**, the router supports two SR-MPLS adjacency SIDs per interface. A protected and unprotected adjacency SID is instantiated and advertised. If an SR-MPLS adjacency SID already exists, an additional complementary (protected or unprotected) adjacency SID is created on the interface. When configured to **false**, the router disables the support of two SR-MPLS adjacency SIDs per interface.
Default	false
Introduced	22.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of segment routing
Context	**configure** router *string* ospf3 *number* segment-routing admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

egress-statistics

Synopsis	Enter the **egress-statistics** context
Context	**configure** router *string* ospf3 *number* segment-routing egress-statistics
Tree	egress-statistics
Introduced	19.10.R1
Platforms	All

adj-sid *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	**configure** router *string* ospf3 *number* segment-routing egress-statistics adj-sid *boolean*
Tree	adj-sid

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Description	When configured to **true**, this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

node-sid *boolean*

Synopsis	Enable the allocation of statistics on node SIDs
Context	**configure** router *string* ospf3 *number* segment-routing egress-statistics node-sid *boolean*
Tree	node-sid
Default	false
Introduced	19.10.R1
Platforms	All

ingress-statistics

Synopsis	Enter the **ingress-statistics** context
Context	**configure** router *string* ospf3 *number* segment-routing ingress-statistics
Tree	ingress-statistics
Introduced	19.10.R1
Platforms	All

adj-sid *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	**configure** router *string* ospf3 *number* segment-routing ingress-statistics adj-sid *boolean*
Tree	adj-sid
Description	When configured to **true**, this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the

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	system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

node-sid *boolean*

Synopsis	Enable the allocation of statistics on node SIDs
Context	**configure** router *string* ospf3 *number* segment-routing ingress-statistics node-sid *boolean*
Tree	node-sid
Default	false
Introduced	19.10.R1
Platforms	All

prefix-sid-range

Synopsis	Enable the **prefix-sid-range** context
Context	**configure** router *string* ospf3 *number* segment-routing prefix-sid-range
Tree	prefix-sid-range
Introduced	16.0.R4
Platforms	All

global

Synopsis	BGP global SR range allocation
Context	**configure** router *string* ospf3 *number* segment-routing prefix-sid-range global
Tree	global
Description	When configured, the system allows BGP to allocate labels from the SRGB space, as defined under the **configure router mpls-labels sr-labels** context.
Notes	The following elements are part of a choice: **global** or (**max-index** and **start-label**).
Introduced	16.0.R4
Platforms	All

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max-index *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound value for the local SID index
Context	**configure** router *string* ospf3 *number* segment-routing prefix-sid-range max-index *number*
Tree	max-index
Range	0 to 524287
Default	1
Notes	The following elements are part of a choice: **global** or (**max-index** and **start-label**).
Introduced	16.0.R4
Platforms	All

start-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound value for the local label offset
Context	**configure** router *string* ospf3 *number* segment-routing prefix-sid-range start-label *number*
Tree	start-label
Range	0 to 524287
Default	0
Notes	The following elements are part of a choice: **global** or (**max-index** and **start-label**).
Introduced	16.0.R4
Platforms	All

tunnel-mtu *number*

Synopsis	Tunnel MTU size
Context	**configure** router *string* ospf3 *number* segment-routing tunnel-mtu *number*
Tree	tunnel-mtu
Range	512 to 9786

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Introduced	16.0.R4
Platforms	All

tunnel-table-pref *number*

Synopsis	Preference of SR tunnels created by the IGP instance
Context	**configure** router *string* ospf3 *number* segment-routing tunnel-table-pref *number*
Tree	tunnel-table-pref
Description	This command configures the TTM preference of shortest path SR tunnels created by the IGP instance. This is used for BGP shortcuts, VPRN auto-bind, or BGP transport tunnel when the tunnel binding commands are configured to the **any** value, which parses the TTM for tunnels in the protocol preference order. The user can choose to either accept the global TTM preference or explicitly list the tunnel types they want to use. If the user lists the tunnel type explicitly, the TTM preference is still used to select one type over the other. In both cases, a fallback to the next preferred tunnel type is performed if the selected type fails. A reversion to a more preferred tunnel type is performed as soon as one is available.

The segment routing module adds to the TTM an SR tunnel entry for each resolved remote node SID prefix and programs the data path having the corresponding LTN with the push operation pointing to the primary and LFA backup NHLFEs.

The default preference for shortest path SR tunnels in the TTM is set lower than LDP tunnels but higher than BGP tunnels to allow controlled migration of customers without disrupting their current deployment when they enable segment routing. The following is the value of the default preference for the various tunnel types. This includes the preference of SR tunnels based on shortest path (referred to as SR-ISIS and SR-OSPF).

Note: The preference of an SR-TE LSP is not configurable and is the second most preferred tunnel type after RSVP-TE. The preference is the same whether if the SR-TE LSP was resolved in IS-IS or OSPF.

The global default TTM preference for the tunnel types is as follows:

- ROUTE_PREF_RSVP 7
- ROUTE_PREF_SR_TE 8
- ROUTE_PREF_LDP 9
- ROUTE_PREF_OSPF_TTM 10
- ROUTE_PREF_ISIS_TTM 11
- ROUTE_PREF_BGP_TTM 12
- ROUTE_PREF_GRE 255

The default value for SR-ISIS or SR-OSPF is the same regardless if one or more IS-IS or OSPF instances programmed a tunnel for the same prefix. The selection of a SR tunnel in this case will be based on the lowest IGP instance ID. Similarly, IPv6 SR-ISIS and SR-OSPF3 tunnels are programmed into TTMv6 with the same default preference value as IPv4 SR-ISIS and IPv4 SR-OSPF respectively.

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Nokia recommends not to set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.

Range	1 to 255
Default	10
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enter the **timers** context
Context	**configure** router *string* ospf3 *number* timers
Tree	timers
Introduced	16.0.R1
Platforms	All

incremental-spf-wait *number*

Synopsis	Delay time before an incremental SPF calculation starts
Context	**configure** router *string* ospf3 *number* timers incremental-spf-wait *number*
Tree	incremental-spf-wait
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

lsa-accumulate *number*

Synopsis	Delay to gather LSAs before advertising to neighbors
Context	**configure** router *string* ospf3 *number* timers lsa-accumulate *number*
Tree	lsa-accumulate
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1

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Platforms	All

lsa-arrival *number*

Synopsis	Min delay between receipt of same LSAs from neighbors
Context	**configure** router *string* ospf3 *number* timers lsa-arrival *number*
Tree	lsa-arrival
Range	0 to 600000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

lsa-generate

Synopsis	Enter the **lsa-generate** context
Context	**configure** router *string* ospf3 *number* timers lsa-generate
Tree	lsa-generate
Introduced	16.0.R1
Platforms	All

lsa-initial-wait *number*

Synopsis	First wait period between OSPF LSA generation
Context	**configure** router *string* ospf3 *number* timers lsa-generate lsa-initial-wait *number*
Tree	lsa-initial-wait
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

lsa-second-wait *number*

Synopsis	Hold time between the first and second LSA generation

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Context	**configure** router *string* ospf3 *number* timers lsa-generate lsa-second-wait *number*
Tree	lsa-second-wait
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

max-lsa-wait *number*

Synopsis	Max time between two LSAs being generated
Context	**configure** router *string* ospf3 *number* timers lsa-generate max-lsa-wait *number*
Tree	max-lsa-wait
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

redistribute-delay *number*

Synopsis	Hold down timer for external routes into OSPF
Context	**configure** router *string* ospf3 *number* timers redistribute-delay *number*
Tree	redistribute-delay
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

spf-wait

Synopsis	Enter the **spf-wait** context
Context	**configure** router *string* ospf3 *number* timers spf-wait
Tree	spf-wait

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Introduced	16.0.R1
Platforms	All

spf-initial-wait *number*

Synopsis	Initial SPF calculation delay after a topology change
Context	**configure** router *string* ospf3 *number* timers spf-wait spf-initial-wait *number*
Tree	spf-initial-wait
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

spf-max-wait *number*

Synopsis	Max interval between two consecutive SPF calculations
Context	**configure** router *string* ospf3 *number* timers spf-wait spf-max-wait *number*
Tree	spf-max-wait
Range	10 to 120000
Units	milliseconds
Default	10000
Introduced	16.0.R1
Platforms	All

spf-second-wait *number*

Synopsis	Hold time between the first and second SPF calculation
Context	**configure** router *string* ospf3 *number* timers spf-wait spf-second-wait *number*
Tree	spf-second-wait
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

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unicast-import *boolean*

Synopsis	Submit routes into the unicast Route Table Manager
Context	**configure** router *string* ospf3 *number* unicast-import *boolean*
Tree	unicast-import
Default	true
Introduced	16.0.R1
Platforms	All

p2mp-sr-tree

Synopsis	Enable the **p2mp-sr-tree** context
Context	**configure** router *string* p2mp-sr-tree
Tree	p2mp-sr-tree
Introduced	21.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the P2MP SR tree
Context	**configure** router *string* p2mp-sr-tree admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	All

bfd-liveness *keyword*

Synopsis	BFD-liveness for P2MP SR tree status entry
Context	**configure** router *string* p2mp-sr-tree bfd-liveness *keyword*
Tree	bfd-liveness
Options	ipv4, ipv6
Max. Instances	2

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Introduced	21.5.R1
Platforms	All

p2mp-policy [p2mp-policy-name] *string*

Synopsis	Enter the **p2mp-policy** list instance
Context	**configure** router *string* p2mp-sr-tree p2mp-policy *string*
Tree	p2mp-policy
Introduced	21.5.R1
Platforms	All

[**p2mp-policy-name**] *string*

Synopsis	P2MP policy name
Context	**configure** router *string* p2mp-sr-tree p2mp-policy *string*
Tree	p2mp-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the P2MP policy
Context	**configure** router *string* p2mp-sr-tree p2mp-policy *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	All

candidate-path [candidate-path-name] *string*

Synopsis	Enter the **candidate-path** list instance
Context	**configure** router *string* p2mp-sr-tree p2mp-policy *string* candidate-path *string*

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Tree	candidate-path
Introduced	21.5.R1
Platforms	All

[**candidate-path-name**] *string*

Synopsis	Candidate path name
Context	**configure** router *string* p2mp-sr-tree p2mp-policy *string* candidate-path *string*
Tree	candidate-path
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

active-instance *reference*

Synopsis	Candidate path active instance
Context	**configure** router *string* p2mp-sr-tree p2mp-policy *string* candidate-path *string* active-instance *reference*
Tree	active-instance
Reference	**configure** router *string* p2mp-sr-tree p2mp-policy *string* candidate-path *string* path-instances *number*
Introduced	21.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the P2MP SR tree
Context	**configure** router *string* p2mp-sr-tree p2mp-policy *string* candidate-path *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	All

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path-instances [index] *number*

Synopsis	Enter the **path-instances** list instance
Context	**configure** router *string* p2mp-sr-tree p2mp-policy *string* candidate-path *string* path-instances *number*
Tree	path-instances
Introduced	21.5.R1
Platforms	All

[**index**] *number*

Synopsis	Instance index
Context	**configure** router *string* p2mp-sr-tree p2mp-policy *string* candidate-path *string* path-instances *number*
Tree	path-instances
Range	1 to 2
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

instance-id *number*

Synopsis	Instance value
Context	**configure** router *string* p2mp-sr-tree p2mp-policy *string* candidate-path *string* path-instances *number* instance-id *number*
Tree	instance-id
Max. Range	0 to 4294967295
Introduced	21.5.R1
Platforms	All

preference *number*

Synopsis	Candidate-path preference
Context	**configure** router *string* p2mp-sr-tree p2mp-policy *string* candidate-path *string* preference *number*
Tree	preference

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Range	0 to 1024
Default	100
Introduced	21.5.R1
Platforms	All

root-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Root address for the P2MP policy
Context	**configure** router *string* p2mp-sr-tree p2mp-policy *string* root-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	root-address
Default	0.0.0.0
Introduced	21.5.R1
Platforms	All

tree-id *number*

Synopsis	Tree ID for the P2MP policy
Context	**configure** router *string* p2mp-sr-tree p2mp-policy *string* tree-id *number*
Tree	tree-id
Range	0 | 8193 to 16286
Default	0
Introduced	21.5.R1
Platforms	All

replication-segment [policy-name] *string*

Synopsis	Enter the **replication-segment** list instance
Context	**configure** router *string* p2mp-sr-tree replication-segment *string*
Tree	replication-segment
Introduced	21.5.R1
Platforms	All

[**policy-name**] *string*

Synopsis	P2MP policy name

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Context	**configure** router *string* p2mp-sr-tree replication-segment *string*
Tree	replication-segment
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the replication segment
Context	**configure** router *string* p2mp-sr-tree replication-segment *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	All

downstream-nodes [downstream-index] *number*

Synopsis	Enter the **downstream-nodes** list instance
Context	**configure** router *string* p2mp-sr-tree replication-segment *string* downstream-nodes *number*
Tree	downstream-nodes
Introduced	21.5.R1
Platforms	All

[**downstream-index**] *number*

Synopsis	Downstream index
Context	**configure** router *string* p2mp-sr-tree replication-segment *string* downstream-nodes *number*
Tree	downstream-nodes
Range	1 to 4096
Notes	This element is part of a list key.
Introduced	21.5.R1

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Platforms	All

admin-state *keyword*

Synopsis	Administrative state of next-hop entries
Context	**configure** router *string* p2mp-sr-tree replication-segment *string* downstream-nodes *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	All

label

Synopsis	Enter the **label** context
Context	**configure** router *string* p2mp-sr-tree replication-segment *string* downstream-nodes *number* label
Tree	label
Introduced	21.5.R1
Platforms	All

sid-list [index] *number*

Synopsis	Enter the **sid-list** list instance
Context	**configure** router *string* p2mp-sr-tree replication-segment *string* downstream-nodes *number* label sid-list *number*
Tree	sid-list
Introduced	21.5.R1
Platforms	All

[**index**] *number*

Synopsis	SID list index
Context	**configure** router *string* p2mp-sr-tree replication-segment *string* downstream-nodes *number* label sid-list *number*
Tree	sid-list

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Range	1 to 11
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

replication-sid *number*

Synopsis	Segment ID for the SID list entry
Context	**configure** router *string* p2mp-sr-tree replication-segment *string* downstream-nodes *number* label sid-list *number* replication-sid *number*
Tree	replication-sid
Range	3 | 16 to 1048575 | 4294967295
Notes	This element is mandatory.
Introduced	21.5.R1
Platforms	All

next-hop-address *(ipv4-address-with-zone | ipv6-address-with-zone)*

Synopsis	Next-hop address for replication segment next hops
Context	**configure** router *string* p2mp-sr-tree replication-segment *string* downstream-nodes *number* next-hop-address *(ipv4-address-with-zone | ipv6-address-with-zone)*
Tree	next-hop-address
Default	0.0.0.0
Introduced	21.5.R1
Platforms	All

next-hop-interface-name *string*

Synopsis	Interface name for replication segment next-hops
Context	**configure** router *string* p2mp-sr-tree replication-segment *string* downstream-nodes *number* next-hop-interface-name *string*
Tree	next-hop-interface-name
String Length	1 to 32
Introduced	21.5.R1
Platforms	All

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protect-nexthop-id *reference*

Synopsis	ID of the protection next hop used for FRR
Context	**configure** router *string* p2mp-sr-tree replication-segment *string* downstream-nodes *number* protect-nexthop-id *reference*
Tree	protect-nexthop-id
Reference	**configure** router *string* p2mp-sr-tree replication-segment *string* downstream-nodes *number*
Introduced	21.5.R1
Platforms	All

instance-id *number*

Synopsis	Instance ID for replication segment entries
Context	**configure** router *string* p2mp-sr-tree replication-segment *string* instance-id *number*
Tree	instance-id
Max. Range	0 to 4294967295
Default	0
Introduced	21.5.R1
Platforms	All

replication-sid *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Segment ID of the replication segment
Context	**configure** router *string* p2mp-sr-tree replication-segment *string* replication-sid *number*
Tree	replication-sid
Max. Range	0 to 4294967295
Default	0
Introduced	21.5.R1
Platforms	All

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root-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Root address for replication segment entries
Context	**configure** router *string* p2mp-sr-tree replication-segment *string* root-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	root-address
Introduced	21.5.R1
Platforms	All

sid-action *keyword*

Synopsis	SID action for replication segment entries
Context	**configure** router *string* p2mp-sr-tree replication-segment *string* sid-action *keyword*
Tree	sid-action
Options	none, push, pop, swap
Default	none
Introduced	21.5.R1
Platforms	All

tree-id *number*

Synopsis	Tree ID for the replication segment of the P2MP SR tree
Context	**configure** router *string* p2mp-sr-tree replication-segment *string* tree-id *number*
Tree	tree-id
Range	0 | 8193 to 16286
Default	0
Introduced	21.5.R1
Platforms	All

reserved-label-block *reference*

Synopsis	Reserved label block name for the P2MP SR tree
Context	**configure** router *string* p2mp-sr-tree reserved-label-block *reference*
Tree	reserved-label-block
Reference	**configure** router *string* mpls-labels reserved-label-block *string*
Introduced	21.5.R1

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Platforms	All

pcep

Synopsis	Enter the **pcep** context
Context	**configure** router *string* pcep
Tree	pcep
Introduced	16.0.R4
Platforms	All

pcc

Synopsis	Enable the **pcc** context
Context	**configure** router *string* pcep pcc
Tree	pcc
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the PCEP session element
Context	**configure** router *string* pcep pcc admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

dead-timer *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure dead timer
Context	**configure** router *string* pcep pcc dead-timer *number*

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Tree	dead-timer
Range	1 to 255
Units	seconds
Default	120
Introduced	16.0.R4
Platforms	All

keepalive *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure keepalive
Context	**configure** router *string* pcep pcc keepalive *number*
Tree	keepalive
Range	1 to 255
Units	seconds
Default	30
Introduced	16.0.R4
Platforms	All

local-address *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPv4 address of the PCEP speaker
Context	**configure** router *string* pcep pcc local-address *string*
Tree	local-address
Description	This command configures the local IPv4 address of the PCEP speaker. See "PCEP session establishment and maintenance" in the *7750 SR and 7950 XRS Segment Routing and PCE User Guide* for more information about configuring a PCEP local IPv4 address to establish a PCEP session.
Introduced	16.0.R4
Platforms	All

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local-address-ipv6 *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPv6 address of the PCEP speaker
Context	**configure** router *string* pcep pcc local-address-ipv6 *string*
Tree	local-address-ipv6
Description	This command configures the local IPv6 address of the PCEP speaker. See "PCEP session establishment and maintenance" in the *7750 SR and 7950 XRS Segment Routing and PCE User Guide* for more information about configuring a PCEP local IPv6 address to establish a PCEP session.
Introduced	20.2.R1
Platforms	All

max-srte-pce-init-lsps *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure max sr te pce init LSP
Context	**configure** router *string* pcep pcc max-srte-pce-init-lsps *number*
Tree	max-srte-pce-init-lsps
Range	0 to 8191
Default	8191
Introduced	16.0.R5
Platforms	All

pce-associations

Synopsis	Enter the **pce-associations** context
Context	**configure** router *string* pcep pcc pce-associations
Tree	pce-associations
Description	Commands in this context configure PCE association groups.
Introduced	22.5.R1

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Platforms	All

diversity [assoc-name] *string*

Synopsis	Enter the **diversity** list instance
Context	**configure** router *string* pcep pcc pce-associations diversity *string*
Tree	diversity
Description	Commands in this context create a named diversity association from which the parameters for the specified diversity association are configured.
Introduced	22.5.R1
Platforms	All

[**assoc-name**] *string*

Synopsis	Name of the association group
Context	**configure** router *string* pcep pcc pce-associations diversity *string*
Tree	diversity
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

association-id *number*

Synopsis	Association ID for the diversity association group
Context	**configure** router *string* pcep pcc pce-associations diversity *string* association-id *number*
Tree	association-id
Description	This command configures the diversity association ID. The user must specify an association ID.
Range	0 to 65535
Default	0
Introduced	22.5.R1
Platforms	All

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association-source *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source IP address of the diversity association
Context	**configure** router *string* pcep pcc pce-associations diversity *string* association-source *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	association-source
Introduced	22.5.R1
Platforms	All

disjointness-reference *boolean*

Synopsis	Configure P-flag in the disjointness configuration TLV
Context	**configure** router *string* pcep pcc pce-associations diversity *string* disjointness-reference *boolean*
Tree	disjointness-reference
Description	When configured to **true**, the router sets the P-flag in the disjointness configuration TLV. When the P-flag is set, it indicates that this LSP path is the reference path for the disjoint set of paths. The PCE must first compute the path of this LSP and then apply the requested disjointness type to compute the path of all other paths in the same diversity association ID. When configured to **false**, the router does not set the P-flag in the disjointness configuration TLV.
Default	false
Introduced	22.5.R1
Platforms	All

disjointness-type *keyword*

Synopsis	Disjointness type for the association group
Context	**configure** router *string* pcep pcc pce-associations diversity *string* disjointness-type *keyword*
Tree	disjointness-type
Options	strict, loose
Default	loose
Introduced	22.5.R1
Platforms	All

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diversity-type *keyword*

Synopsis	Diversity type for the association group
Context	**configure** router *string* pcep pcc pce-associations diversity *string* diversity-type *keyword*
Tree	diversity-type
Description	This command configures the diversity type for the association group.
Options	none, link, node, srlg-link, srlg-node
Default	none
Introduced	22.5.R1
Platforms	All

policy [assoc-name] *string*

Synopsis	Enter the **policy** list instance
Context	**configure** router *string* pcep pcc pce-associations policy *string*
Tree	policy
Description	Commands in this context create a named policy association from which the parameters for the specified policy association are configured.
Introduced	22.5.R1
Platforms	All

[**assoc-name**] *string*

Synopsis	Name of the association group
Context	**configure** router *string* pcep pcc pce-associations policy *string*
Tree	policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

association-id *number*

Synopsis	Association ID for the policy association group
Context	**configure** router *string* pcep pcc pce-associations policy *string* association-id *number*
Tree	association-id

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Description	This command configures the policy association ID. The user must specify an association ID.
Range	0 to 65535
Default	0
Introduced	22.5.R1
Platforms	All

association-source *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source IP address for the association
Context	**configure** router *string* pcep pcc pce-associations policy *string* association-source *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	association-source
Description	This command configures the source IP address of the policy association.
Introduced	22.5.R1
Platforms	All

peer [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **peer** list instance
Context	**configure** router *string* pcep pcc peer *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	peer
Max. Instances	2
Introduced	16.0.R4
Platforms	All

[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Destination IP address of a PCE peer in a PCEP session
Context	**configure** router *string* pcep pcc peer *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	peer
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the PCC peer
Context	**configure** router *string* pcep pcc peer *(ipv4-address-no-zone | ipv6-address-no-zone)* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

authentication-keychain *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Keychain to sign or authenticate PCEP protocol stream
Context	**configure** router *string* pcep pcc peer *(ipv4-address-no-zone | ipv6-address-no-zone)* authentication-keychain *reference*
Tree	authentication-keychain
Reference	**configure** system security keychains keychain *string*
Introduced	23.7.R1
Platforms	All

preference *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Preference value of the peer
Context	**configure** router *string* pcep pcc peer *(ipv4-address-no-zone | ipv6-address-no-zone)* preference *number*
Tree	preference
Range	0 to 100
Default	0

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Introduced	16.0.R4
Platforms	All

route-preference *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Route preference to reach the PCE server
Context	**configure** router *string* pcep pcc peer *(ipv4-address-no-zone | ipv6-address-no-zone)* route-preference *keyword*
Tree	route-preference
Description	This command specifies the routing preference to reach the PCE server. If the configured option is to use both in-band and out-of-band routes, the out-of-band routes in the management routing instance are used to reach the PCE server before the in-band routes in the Base routing instance.
Options	inband, outband, both
Default	both
Introduced	21.10.R1
Platforms	All

tls-client-profile *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TLS client profile name assigned to this PCC peer
Context	**configure** router *string* pcep pcc peer *(ipv4-address-no-zone | ipv6-address-no-zone)* tls-client-profile *reference*
Tree	tls-client-profile
Reference	**configure** system security tls client-tls-profile *string*
Introduced	21.10.R1
Platforms	All

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tls-wait-timer *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time the PCC waits until declaring handshake failure
Context	**configure** router *string* pcep pcc peer *(ipv4-address-no-zone | ipv6-address-no-zone)* tls-wait-timer *number*
Tree	tls-wait-timer
Range	60 to 255
Units	seconds
Default	60
Introduced	21.10.R1
Platforms	All

redelegation-timer *number*

Synopsis	Configure redelegation-timer
Context	**configure** router *string* pcep pcc redelegation-timer *number*
Tree	redelegation-timer
Range	1 to 3600
Units	seconds
Default	90
Introduced	16.0.R4
Platforms	All

report-path-constraints *boolean*

Synopsis	Include LSP path constraints in PCE report messages
Context	**configure** router *string* pcep pcc report-path-constraints *boolean*
Tree	report-path-constraints
Default	true
Introduced	16.0.R4
Platforms	All

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state-timer

Synopsis	Enter the **state-timer** context
Context	**configure** router *string* pcep pcc state-timer
Tree	state-timer
Introduced	16.0.R4
Platforms	All

timer *number*

Synopsis	Configure state-timer
Context	**configure** router *string* pcep pcc state-timer timer *number*
Tree	timer
Range	1 to 3600
Units	seconds
Default	180
Introduced	16.0.R4
Platforms	All

timer-action *keyword*

Synopsis	State timer action remove/none
Context	**configure** router *string* pcep pcc state-timer timer-action *keyword*
Tree	timer-action
Options	none, remove
Default	remove
Introduced	16.0.R4
Platforms	All

unknown-message-rate *number*

Synopsis	Configure unknown message rate
Context	**configure** router *string* pcep pcc unknown-message-rate *number*
Tree	unknown-message-rate
Range	1 to 255
Default	10

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Introduced	16.0.R4
Platforms	All

pcp

Synopsis	Enter the **pcp** context
Context	**configure** router *string* pcp
Tree	pcp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server [name] *string*

Synopsis	Enter the **server** list instance
Context	**configure** router *string* pcp server *string*
Tree	server
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	PCP server name
Context	**configure** router *string* pcp server *string*
Tree	server
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the PCP server
Context	**configure** router *string* pcp server *string* admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** router *string* pcp server *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dual-stack-lite-address *string*

Synopsis	Inside Dual Stack Lite AFTR address
Context	**configure** router *string* pcp server *string* dual-stack-lite-address *string*
Tree	dual-stack-lite-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fwd-inside-router *string*

Synopsis	PCP forwarding inside virtual router instance
Context	**configure** router *string* pcp server *string* fwd-inside-router *string*
Tree	fwd-inside-router
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface [name] *reference*

Synopsis	Add a list entry for **interface**
Context	**configure** router *string* pcp server *string* interface *reference*

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Tree	interface
Max. Instances	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *reference*

Synopsis	Interface name
Context	**configure** router *string* pcp server *string* interface *reference*
Tree	interface
Reference	**configure** router *string* interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	PCP server policy
Context	**configure** router *string* pcp server *string* policy *reference*
Tree	policy
Reference	**configure** service nat pcp-server-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pim

Synopsis	Enable the **pim** context
Context	**configure** router *string* pim
Tree	pim
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of PIM
Context	**configure** router *string* pim admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

apply-to *keyword*

Synopsis	IES and non-IES interfaces to create in PIM
Context	**configure** router *string* pim apply-to *keyword*
Tree	apply-to
Options	ies, non-ies, all, none
Default	none
Introduced	16.0.R1
Platforms	All

import

Synopsis	Enter the **import** context
Context	**configure** router *string* pim import
Tree	import
Introduced	16.0.R1
Platforms	All

join-policy *reference*

Synopsis	Character limit for policy name
Context	**configure** router *string* pim import join-policy *reference*
Tree	join-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5

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Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

register-policy *reference*

Synopsis	Character limit for policy name
Context	**configure** router *string* pim import register-policy *reference*
Tree	register-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

interface [interface-name] *string*

Synopsis	Enter the **interface** list instance
Context	**configure** router *string* pim interface *string*
Tree	interface
Introduced	16.0.R1
Platforms	All

[**interface-name**] *string*

Synopsis	Router interface name
Context	**configure** router *string* pim interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the PIM interface
Context	**configure** router *string* pim interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

assert-period *number*

Synopsis	Time for periodic refreshes of PIM Assert messages on an interface
Context	**configure** router *string* pim interface *string* assert-period *number*
Tree	assert-period
Range	1 to 300
Default	60
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enter the **bfd-liveness** context
Context	**configure** router *string* pim interface *string* bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Use Bidirectional Forwarding Detection for IPv4 on PIM interface
Context	**configure** router *string* pim interface *string* bfd-liveness ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

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ipv6 *boolean*

Synopsis	Use Bidirectional Forwarding Detection for IPv6 on PIM interface
Context	**configure** router *string* pim interface *string* bfd-liveness ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

bier-signaling-type

Synopsis	Enter the **bier-signaling-type** context
Context	**configure** router *string* pim interface *string* bier-signaling-type
Tree	bier-signaling-type
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv4 *boolean*

Synopsis	Enable PIM IPv4 signaling through a BIER domain
Context	**configure** router *string* pim interface *string* bier-signaling-type ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6 *boolean*

Synopsis	Enable PIM IPv6 signaling through a BIER domain
Context	**configure** router *string* pim interface *string* bier-signaling-type ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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bsm-check-rtr-alert *boolean*

Synopsis	Check router alert option in bootstrap messages received
Context	**configure** router *string* pim interface *string* bsm-check-rtr-alert *boolean*
Tree	bsm-check-rtr-alert
Default	false
Introduced	16.0.R1
Platforms	All

hello-interval *number*

Synopsis	Frequency at which PIM Hello messages are sent over this interface
Context	**configure** router *string* pim interface *string* hello-interval *number*
Tree	hello-interval
Range	0 to 255
Default	30
Introduced	16.0.R1
Platforms	All

hello-multiplier *number*

Synopsis	Multiplier to determine the hold time for PIM neighbor
Context	**configure** router *string* pim interface *string* hello-multiplier *number*
Tree	hello-multiplier
Range	20 to 100
Default	35
Introduced	16.0.R1
Platforms	All

improved-assert *boolean*

Synopsis	Allow improved assert processing on interface
Context	**configure** router *string* pim interface *string* improved-assert *boolean*
Tree	improved-assert
Default	true

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Introduced	16.0.R1
Platforms	All

instant-prune-echo *boolean*

Synopsis	Allow PIM to send an instant prune echo when router starts the prune pending timer for PIM interface
Context	**configure** router *string* pim interface *string* instant-prune-echo *boolean*
Tree	instant-prune-echo
Default	false
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** router *string* pim interface *string* ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

monitor-oper-group

Synopsis	Enter the **monitor-oper-group** context
Context	**configure** router *string* pim interface *string* ipv4 monitor-oper-group
Tree	monitor-oper-group
Introduced	16.0.R1
Platforms	All

name *reference*

Synopsis	Operational group identifier
Context	**configure** router *string* pim interface *string* ipv4 monitor-oper-group name *reference*
Tree	name
Reference	**configure** service oper-group *string*

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Introduced	16.0.R1
Platforms	All

operation *keyword*

Synopsis	Operation performed when operational group is active
Context	**configure** router *string* pim interface *string* ipv4 monitor-oper-group operation *keyword*
Tree	operation
Options	add, subtract, set
Introduced	16.0.R1
Platforms	All

priority-delta *number*

Synopsis	Delta priority with operation when operational group is active
Context	**configure** router *string* pim interface *string* ipv4 monitor-oper-group priority-delta *number*
Tree	priority-delta
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

multicast *boolean*

Synopsis	Enable PIM interface operation
Context	**configure** router *string* pim interface *string* ipv4 multicast *boolean*
Tree	multicast
Default	true
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** router *string* pim interface *string* ipv6
Tree	ipv6

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Introduced	16.0.R1
Platforms	All

monitor-oper-group

Synopsis	Enter the **monitor-oper-group** context
Context	**configure** router *string* pim interface *string* ipv6 monitor-oper-group
Tree	monitor-oper-group
Introduced	16.0.R1
Platforms	All

name *reference*

Synopsis	Operational group identifier
Context	**configure** router *string* pim interface *string* ipv6 monitor-oper-group name *reference*
Tree	name
Reference	**configure** service oper-group *string*
Introduced	16.0.R1
Platforms	All

operation *keyword*

Synopsis	Operation performed when operational group is active
Context	**configure** router *string* pim interface *string* ipv6 monitor-oper-group operation *keyword*
Tree	operation
Options	add, subtract, set
Introduced	16.0.R1
Platforms	All

priority-delta *number*

Synopsis	Delta priority with operation when operational group is active
Context	**configure** router *string* pim interface *string* ipv6 monitor-oper-group priority-delta *number*
Tree	priority-delta

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Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

multicast *boolean*

Synopsis	Enable PIM interface operation
Context	**configure** router *string* pim interface *string* ipv6 multicast *boolean*
Tree	multicast
Default	true
Introduced	16.0.R1
Platforms	All

max-groups *number*

Synopsis	Maximum number of groups for the interface
Context	**configure** router *string* pim interface *string* max-groups *number*
Tree	max-groups
Range	0 | 1 to 16000
Default	0
Introduced	16.0.R1
Platforms	All

mcac

Synopsis	Enter the **mcac** context
Context	**configure** router *string* pim interface *string* mcac
Tree	mcac
Introduced	16.0.R1
Platforms	All

bandwidth

Synopsis	Enter the **bandwidth** context
Context	**configure** router *string* pim interface *string* mcac bandwidth

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Tree	bandwidth
Introduced	16.0.R1
Platforms	All

mandatory *(number | keyword)*

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	**configure** router *string* pim interface *string* mcac bandwidth mandatory *(number | keyword)*
Tree	mandatory
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

total *(number | keyword)*

Synopsis	Maximum allowed bandwidth
Context	**configure** router *string* pim interface *string* mcac bandwidth total *(number | keyword)*
Tree	total
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	**configure** router *string* pim interface *string* mcac interface-policy *reference*
Tree	interface-policy
Reference	**configure** mcac interface-policy *string*
Introduced	16.0.R1
Platforms	All

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mc-constraints

Synopsis	Enter the **mc-constraints** context
Context	**configure** router *string* pim interface *string* mcac mc-constraints
Tree	mc-constraints
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the multicast CAC constraints
Context	**configure** router *string* pim interface *string* mcac mc-constraints admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

level [level-id] *number*

Synopsis	Enter the **level** list instance
Context	**configure** router *string* pim interface *string* mcac mc-constraints level *number*
Tree	level
Introduced	16.0.R1
Platforms	All

[level-id] *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	**configure** router *string* pim interface *string* mcac mc-constraints level *number*
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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bandwidth *number*

Synopsis	Bandwidth available for this level
Context	**configure** router *string* pim interface *string* mcac mc-constraints level *number* bandwidth *number*
Tree	bandwidth
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

number-down [number-lag-port-down] *number*

Synopsis	Enter the **number-down** list instance
Context	**configure** router *string* pim interface *string* mcac mc-constraints number-down *number*
Tree	number-down
Introduced	16.0.R1
Platforms	All

[**number-lag-port-down**] *number*

Synopsis	Number of ports that are down in this LAG link
Context	**configure** router *string* pim interface *string* mcac mc-constraints number-down *number*
Tree	number-down
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level ID to associate with number of down LAG ports
Context	**configure** router *string* pim interface *string* mcac mc-constraints number-down *number* level *number*

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Tree	level
Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

use-lag-port-weight *boolean*

Synopsis	Use LAG port weight in calculating MCAC constraints
Context	**configure** router *string* pim interface *string* mcac mc-constraints use-lag-port-weight *boolean*
Tree	use-lag-port-weight
Description	When configured to **true**, port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.
Default	false
Introduced	16.0.R1
Platforms	All

policy *reference*

Synopsis	Multicast CAC policy name
Context	**configure** router *string* pim interface *string* mcac policy *reference*
Tree	policy
Description	This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment. Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode. If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect. Hierarchical MCAC (HMCAC) is supported on two levels simultaneously: • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured

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In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).

Reference	**configure** mcac policy *string*
Introduced	16.0.R1
Platforms	All

multicast-senders *keyword*

Synopsis	Subnet matching for the incoming data packets
Context	**configure** router *string* pim interface *string* multicast-senders *keyword*
Tree	multicast-senders
Options	auto, always, never
Default	auto
Introduced	16.0.R1
Platforms	All

p2mp-ldp-tree-join

Synopsis	Enter the **p2mp-ldp-tree-join** context
Context	**configure** router *string* pim interface *string* p2mp-ldp-tree-join
Tree	p2mp-ldp-tree-join
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv4 *boolean*

Synopsis	Allow dynamic mLDP in-band signaling for IPv4 PIM joins
Context	**configure** router *string* pim interface *string* p2mp-ldp-tree-join ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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ipv6 *boolean*

Synopsis	Allow dynamic mLDP in-band signaling for IPv6 PIM joins
Context	**configure** router *string* pim interface *string* p2mp-ldp-tree-join ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	DR election priority for this interface
Context	**configure** router *string* pim interface *string* priority *number*
Tree	priority
Range	1 to 4294967295
Default	1
Introduced	16.0.R1
Platforms	All

sticky-dr

Synopsis	Enable the **sticky-dr** context
Context	**configure** router *string* pim interface *string* sticky-dr
Tree	sticky-dr
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	DR election priority for this interface
Context	**configure** router *string* pim interface *string* sticky-dr priority *number*
Tree	priority
Range	1 to 4294967295
Default	1024
Introduced	16.0.R1
Platforms	All

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three-way-hello *boolean*

Synopsis	Allow three-way hello compatibility mode
Context	**configure** router *string* pim interface *string* three-way-hello *boolean*
Tree	three-way-hello
Default	false
Introduced	16.0.R1
Platforms	All

tracking-support *boolean*

Synopsis	Allow upstream routers to explicitly track join membership
Context	**configure** router *string* pim interface *string* tracking-support *boolean*
Tree	tracking-support
Default	false
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** router *string* pim ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of PIM operation for IPv4
Context	**configure** router *string* pim ipv4 admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

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gtm

Synopsis	Enter the **gtm** context
Context	**configure** router *string* pim ipv4 gtm
Tree	gtm
Introduced	16.0.R1
Platforms	All

auto-discovery *keyword*

Synopsis	Method for multicast VPN membership auto-discovery
Context	**configure** router *string* pim ipv4 gtm auto-discovery *keyword*
Tree	auto-discovery
Options	bgp
Introduced	16.0.R1
Platforms	All

multicast-fast-failover *boolean*

Synopsis	Use Multicast-Only Fast Reroute (MoFRR) functionality
Context	**configure** router *string* pim ipv4 multicast-fast-failover *boolean*
Tree	multicast-fast-failover
Default	false
Introduced	16.0.R1
Platforms	All

rpf-table *keyword*

Synopsis	Route tables for RPF lookup
Context	**configure** router *string* pim ipv4 rpf-table *keyword*
Tree	rpf-table
Options	rtable-m, rtable-u, both
Default	rtable-u
Introduced	16.0.R1
Platforms	All

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source-address

Synopsis	Enter the **source-address** context
Context	**configure** router *string* pim ipv4 source-address
Tree	source-address
Description	Commands in this context configure the source IP address for PIM messages.
Introduced	23.3.R1
Platforms	All

register-message *string*

Synopsis	Source IPv4 address for PIM register messages
Context	**configure** router *string* pim ipv4 source-address register-message *string*
Tree	register-message
Description	This command configures the source IPv4 address for register messages in this PIM instance. The IP address can be set to any unicast address, regardless of whether it resides on the node. Ensure that the specified IP address is configured on the router as a loopback or interface IP address. When unconfigured, the source IP address for register messages is selected by choosing the smallest IP address from available interfaces on the node.
Introduced	23.3.R1
Platforms	All

ssm-assert-compatible-mode *boolean*

Synopsis	Enable SSM assert compatible mode
Context	**configure** router *string* pim ipv4 ssm-assert-compatible-mode *boolean*
Tree	ssm-assert-compatible-mode
Default	false
Introduced	16.0.R1
Platforms	All

ssm-default-range *boolean*

Synopsis	SSM default range
Context	**configure** router *string* pim ipv4 ssm-default-range *boolean*

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Tree	ssm-default-range
Default	true
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** router *string* pim ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of PIM operation for IPv6
Context	**configure** router *string* pim ipv6 admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

multicast-fast-failover *boolean*

Synopsis	Use Multicast-Only Fast Reroute (MoFRR) functionality
Context	**configure** router *string* pim ipv6 multicast-fast-failover *boolean*
Tree	multicast-fast-failover
Default	false
Introduced	16.0.R1
Platforms	All

rpf-table *keyword*

Synopsis	Route tables for RPF lookup

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Context	**configure** router *string* pim ipv6 rpf-table *keyword*
Tree	rpf-table
Options	rtable-m, rtable-u, both
Default	rtable-u
Introduced	16.0.R1
Platforms	All

source-address

Synopsis	Enter the **source-address** context
Context	**configure** router *string* pim ipv6 source-address
Tree	source-address
Description	Commands in this context configure the source IP address for PIM messages.
Introduced	23.3.R1
Platforms	All

register-message *string*

Synopsis	Source IPv6 address for PIM register messages
Context	**configure** router *string* pim ipv6 source-address register-message *string*
Tree	register-message
Description	This command configures the source IPv6 address for register messages in this PIM instance. The IP address can be set to any unicast address, regardless of whether it resides on the node. Ensure that the specified IP address is configured on the router as a loopback or interface IP address. When unconfigured, the source IP address for register messages is selected by choosing the smallest IP address from available interfaces on the node.
Introduced	23.3.R1
Platforms	All

ssm-default-range *boolean*

Synopsis	SSM default range
Context	**configure** router *string* pim ipv6 ssm-default-range *boolean*
Tree	ssm-default-range
Default	true

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Introduced	16.0.R1
Platforms	All

lag-usage-optimization *boolean*

Synopsis	Optimize LAG usage
Context	**configure** router *string* pim lag-usage-optimization *boolean*
Tree	lag-usage-optimization
Default	false
Introduced	16.0.R1
Platforms	All

mc-ecmp-balance *boolean*

Synopsis	Enable multicast balancing of traffic over ECMP links
Context	**configure** router *string* pim mc-ecmp-balance *boolean*
Tree	mc-ecmp-balance
Default	true
Introduced	16.0.R1
Platforms	All

mc-ecmp-balance-hold *number*

Synopsis	Hold time for multicast balancing over ECMP links
Context	**configure** router *string* pim mc-ecmp-balance-hold *number*
Tree	mc-ecmp-balance-hold
Range	2 to 600
Units	minutes
Introduced	16.0.R1
Platforms	All

mc-ecmp-hashing

Synopsis	Enable the **mc-ecmp-hashing** context
Context	**configure** router *string* pim mc-ecmp-hashing

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Tree	mc-ecmp-hashing
Introduced	16.0.R1
Platforms	All

rebalance *boolean*

Synopsis	Rebalance flows to newly added links immediately instead of waiting until they are pruned
Context	**configure** router *string* pim mc-ecmp-hashing rebalance *boolean*
Tree	rebalance
Default	false
Introduced	16.0.R1
Platforms	All

mdt-spt *boolean*

Synopsis	Use SPT switchover for default MDT
Context	**configure** router *string* pim mdt-spt *boolean*
Tree	mdt-spt
Default	false
Introduced	16.0.R1
Platforms	All

non-dr-attract-traffic *boolean*

Synopsis	Attract traffic when the router is not the designated one
Context	**configure** router *string* pim non-dr-attract-traffic *boolean*
Tree	non-dr-attract-traffic
Default	false
Introduced	16.0.R1
Platforms	All

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pim-ssm-scaling *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable PIM-SSM scaling
Context	**configure** router *string* pim pim-ssm-scaling *boolean*
Tree	pim-ssm-scaling
Description	When configured to **true**, this command enables an increase of PIM SSM (S,G) scaling to a maximum of 256000 per system. The total maximum multicast capacity is, however, constrained by the lowest-performance FP. When the maximum link capacity from the fabric to the lowest-performance FP is reached, the link to that FP is overloaded, resulting in packet loss for all FPs. This capacity constraint is independent of whether the lowest-performance FP has a receiver on it or not. If the multicast management chassis per-plane total capacity is configured to an explicit value larger than that supported by the lowest-performance FP, then IMPM believes that there is more plane capacity available than there actually is and the result is (S,G) packet loss instead of blackholing. By setting the multicast management chassis per-plane total capacity to **dynamic**, the system automatically sets the switch fabric multicast plane capacity to the minimum value supported by the fabric and all line cards in the system. When PIM SSM scaling is enabled, the following multicast features are disabled:• DM• MoFRR• JP policy• SSM groups• InBand features (BIER and MLDP)• Extranet• ASM When configured to **false**, there is no increase of PIM SSM (S,G) scaling.
Default	false
Introduced	19.7.R1
Platforms	All

rp

Synopsis	Enter the **rp** context
Context	**configure** router *string* pim rp
Tree	rp
Introduced	16.0.R1
Platforms	All

bootstrap

Synopsis	Enter the **bootstrap** context

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Context	**configure** router *string* pim rp bootstrap
Tree	bootstrap
Introduced	16.0.R1
Platforms	All

export *reference*

Synopsis	Character limit for policy name
Context	**configure** router *string* pim rp bootstrap export *reference*
Tree	export
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

import *reference*

Synopsis	Character limit for policy name
Context	**configure** router *string* pim rp bootstrap import *reference*
Tree	import
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** router *string* pim rp ipv4
Tree	ipv4
Introduced	16.0.R1

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Platforms	All

anycast [ipv4-address] *string* rp-set-peer *string*

Synopsis	Add a list entry for **anycast**
Context	**configure** router *string* pim rp ipv4 anycast *string* rp-set-peer *string*
Tree	anycast
Introduced	16.0.R1
Platforms	All

[**ipv4-address**] *string*

Synopsis	Loopback IP address shared by routes in RP set
Context	**configure** router *string* pim rp ipv4 anycast *string* rp-set-peer *string*
Tree	anycast
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

rp-set-peer *string*

Synopsis	Configure a peer in the anycast rp-set.
Context	**configure** router *string* pim rp ipv4 anycast *string* rp-set-peer *string*
Tree	anycast
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

auto-rp-discovery *boolean*

Synopsis	Enable auto RP discovery
Context	**configure** router *string* pim rp ipv4 auto-rp-discovery *boolean*
Tree	auto-rp-discovery
Default	false
Introduced	16.0.R1

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Platforms	All

bsr-candidate

Synopsis	Enter the **bsr-candidate** context
Context	**configure** router *string* pim rp ipv4 bsr-candidate
Tree	bsr-candidate
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Candidate BSR IP address for Bootstrap Router election
Context	**configure** router *string* pim rp ipv4 bsr-candidate address *string*
Tree	address
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the Candidate BSR
Context	**configure** router *string* pim rp ipv4 bsr-candidate admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

hash-mask-len *number*

Synopsis	Length for bootstrap hash mask
Context	**configure** router *string* pim rp ipv4 bsr-candidate hash-mask-len *number*
Tree	hash-mask-len
Range	0 to 32
Default	30

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Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Bootstrap priority of the router
Context	**configure** router *string* pim rp ipv4 bsr-candidate priority *number*
Tree	priority
Range	0 to 255
Default	0
Introduced	16.0.R1
Platforms	All

candidate *boolean*

Synopsis	Enable auto-RP to advertise candidate RP information
Context	**configure** router *string* pim rp ipv4 candidate *boolean*
Tree	candidate
Description	When configured to **true**, the auto-RP is enabled to advertise the candidate RP information. The auto-RP candidate RP announces the candidate RP messages on the 224.0.1.39 multicast address. This functionality is in addition to the listener functionality enabled by the auto RP discovery. When configured to **false**, the candidate RP information is not specified.
Default	false
Introduced	20.10.R1
Platforms	All

mapping-agent *boolean*

Synopsis	Enable the mapping agent on the node
Context	**configure** router *string* pim rp ipv4 mapping-agent *boolean*
Tree	mapping-agent
Description	When configured to **true**, the mapping agent is enabled on the node. The auto-RP MA observes the **auto-rp-announcement** messages, selects the RP and generates the RP discovery 224.0.1.40 messages. This functionality is in addition to the auto-RP discovery functionality.
Default	false

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Introduced	20.10.R1
Platforms	All

rp-candidate

Synopsis	Enter the **rp-candidate** context
Context	**configure** router *string* pim rp ipv4 rp-candidate
Tree	rp-candidate
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Local RP address
Context	**configure** router *string* pim rp ipv4 rp-candidate address *string*
Tree	address
Description	This command specifies the local RP address that is sent in the RP candidate advertisements to the Bootstrap Router.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the Candidate RP
Context	**configure** router *string* pim rp ipv4 rp-candidate admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

group-range [ipv4-prefix] *string*

Synopsis	Add a list entry for **group-range**
Context	**configure** router *string* pim rp ipv4 rp-candidate group-range *string*

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Tree	group-range
Introduced	16.0.R1
Platforms	All

[**ipv4-prefix**] *string*

Synopsis	IPv4 address and prefix length
Context	**configure** router *string* pim rp ipv4 rp-candidate group-range *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

holdtime *number*

Synopsis	Time during which the neighboring router considers this router to be up
Context	**configure** router *string* pim rp ipv4 rp-candidate holdtime *number*
Tree	holdtime
Range	5 to 255
Units	seconds
Default	150
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Candidate RP priority
Context	**configure** router *string* pim rp ipv4 rp-candidate priority *number*
Tree	priority
Range	0 to 255
Default	192
Introduced	16.0.R1
Platforms	All

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static

Synopsis	Enter the **static** context
Context	**configure** router *string* pim rp ipv4 static
Tree	static
Introduced	16.0.R1
Platforms	All

address [ipv4-address] *string*

Synopsis	Enter the **address** list instance
Context	**configure** router *string* pim rp ipv4 static address *string*
Tree	address
Introduced	16.0.R1
Platforms	All

[ipv4-address] *string*

Synopsis	IPv4 address for the static RP
Context	**configure** router *string* pim rp ipv4 static address *string*
Tree	address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

group-prefix [ipv4-prefix] *string*

Synopsis	Add a list entry for **group-prefix**
Context	**configure** router *string* pim rp ipv4 static address *string* group-prefix *string*
Tree	group-prefix
Introduced	16.0.R1
Platforms	All

[ipv4-prefix] *string*

Synopsis	IPv4 address and prefix length

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Context	**configure** router *string* pim rp ipv4 static address *string* group-prefix *string*
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

override *boolean*

Synopsis	Change the precedence for static RP over dynamically learnt RP
Context	**configure** router *string* pim rp ipv4 static address *string* override *boolean*
Tree	override
Default	false
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** router *string* pim rp ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

anycast [ipv6-address] *string* rp-set-peer *string*

Synopsis	Add a list entry for **anycast**
Context	**configure** router *string* pim rp ipv6 anycast *string* rp-set-peer *string*
Tree	anycast
Introduced	16.0.R1
Platforms	All

[**ipv6-address**] *string*

Synopsis	Loopback IP address shared by routes in RP set
Context	**configure** router *string* pim rp ipv6 anycast *string* rp-set-peer *string*

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Tree	anycast
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

rp-set-peer *string*

Synopsis	Peer in the anycast RP set
Context	**configure** router *string* pim rp ipv6 anycast *string* rp-set-peer *string*
Tree	anycast
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bsr-candidate

Synopsis	Enter the **bsr-candidate** context
Context	**configure** router *string* pim rp ipv6 bsr-candidate
Tree	bsr-candidate
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Candidate BSR IP address for Bootstrap Router election
Context	**configure** router *string* pim rp ipv6 bsr-candidate address *string*
Tree	address
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the Candidate BSR
Context	**configure** router *string* pim rp ipv6 bsr-candidate admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

hash-mask-len *number*

Synopsis	Length for bootstrap hash mask
Context	**configure** router *string* pim rp ipv6 bsr-candidate hash-mask-len *number*
Tree	hash-mask-len
Range	0 to 128
Default	126
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Bootstrap priority of the router
Context	**configure** router *string* pim rp ipv6 bsr-candidate priority *number*
Tree	priority
Range	0 to 255
Default	0
Introduced	16.0.R1
Platforms	All

embedded-rp

Synopsis	Enable the **embedded-rp** context
Context	**configure** router *string* pim rp ipv6 embedded-rp
Tree	embedded-rp
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of embedded RP
Context	**configure** router *string* pim rp ipv6 embedded-rp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

group-range [ipv6-prefix] *string*

Synopsis	Add a list entry for **group-range**
Context	**configure** router *string* pim rp ipv6 embedded-rp group-range *string*
Tree	group-range
Introduced	16.0.R1
Platforms	All

[**ipv6-prefix**] *string*

Synopsis	IPv6 address and prefix length
Context	**configure** router *string* pim rp ipv6 embedded-rp group-range *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

rp-candidate

Synopsis	Enter the **rp-candidate** context
Context	**configure** router *string* pim rp ipv6 rp-candidate
Tree	rp-candidate
Introduced	16.0.R1
Platforms	All

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address *string*

Synopsis	Local RP address
Context	**configure** router *string* pim rp ipv6 rp-candidate address *string*
Tree	address
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the Candidate RP
Context	**configure** router *string* pim rp ipv6 rp-candidate admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

group-range [ipv6-prefix] *string*

Synopsis	Add a list entry for **group-range**
Context	**configure** router *string* pim rp ipv6 rp-candidate group-range *string*
Tree	group-range
Introduced	16.0.R1
Platforms	All

[**ipv6-prefix**] *string*

Synopsis	IPv6 address and prefix length
Context	**configure** router *string* pim rp ipv6 rp-candidate group-range *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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holdtime *number*

Synopsis	Time during which the neighboring router considers this router to be up
Context	**configure** router *string* pim rp ipv6 rp-candidate holdtime *number*
Tree	holdtime
Range	5 to 255
Units	seconds
Default	150
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Candidate RP priority
Context	**configure** router *string* pim rp ipv6 rp-candidate priority *number*
Tree	priority
Range	0 to 255
Default	192
Introduced	16.0.R1
Platforms	All

static

Synopsis	Enter the **static** context
Context	**configure** router *string* pim rp ipv6 static
Tree	static
Introduced	16.0.R1
Platforms	All

address [ipv6-address] *string*

Synopsis	Enter the **address** list instance
Context	**configure** router *string* pim rp ipv6 static address *string*
Tree	address
Introduced	16.0.R1
Platforms	All

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[**ipv6-address**] *string*

Synopsis	Static IP address of the RP
Context	**configure** router *string* pim rp ipv6 static address *string*
Tree	address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

group-prefix [ipv6-prefix] *string*

Synopsis	Add a list entry for **group-prefix**
Context	**configure** router *string* pim rp ipv6 static address *string* group-prefix *string*
Tree	group-prefix
Introduced	16.0.R1
Platforms	All

[**ipv6-prefix**] *string*

Synopsis	IPv6 address and prefix length
Context	**configure** router *string* pim rp ipv6 static address *string* group-prefix *string*
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

override *boolean*

Synopsis	Change the precedence for static RP over dynamically learnt RP
Context	**configure** router *string* pim rp ipv6 static address *string* override *boolean*
Tree	override
Default	false
Introduced	16.0.R1
Platforms	All

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rpfv

Synopsis	Enter the **rpfv** context
Context	**configure** router *string* pim rpfv
Tree	rpfv
Introduced	16.0.R1
Platforms	All

core *boolean*

Synopsis	Include proxy RPF vector for core
Context	**configure** router *string* pim rpfv core *boolean*
Tree	core
Default	false
Introduced	16.0.R1
Platforms	All

mvpn *boolean*

Synopsis	Include proxy RPF vector for Inter-AS Rosen MVPN
Context	**configure** router *string* pim rpfv mvpn *boolean*
Tree	mvpn
Default	false
Introduced	16.0.R1
Platforms	All

spt-switchover [ip-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **spt-switchover** list instance
Context	**configure** router *string* pim spt-switchover *(ipv4-prefix | ipv6-prefix)*
Tree	spt-switchover
Introduced	16.0.R1
Platforms	All

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[**ip-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP address and mask length
Context	**configure** router *string* pim spt-switchover *(ipv4-prefix | ipv6-prefix)*
Tree	spt-switchover
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

threshold *(number | keyword)*

Synopsis	SPT switchover threshold
Context	**configure** router *string* pim spt-switchover *(ipv4-prefix | ipv6-prefix)* threshold *(number | keyword)*
Tree	threshold
Range	1 to 4294967294
Units	kilobps
Options	infinity
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

ssm-groups

Synopsis	Enter the **ssm-groups** context
Context	**configure** router *string* pim ssm-groups
Tree	ssm-groups
Introduced	16.0.R1
Platforms	All

group-range [ip-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Add a list entry for **group-range**
Context	**configure** router *string* pim ssm-groups group-range *(ipv4-prefix | ipv6-prefix)*
Tree	group-range
Introduced	16.0.R1

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Platforms	All

[**ip-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP address and mask length
Context	**configure** router *string* pim ssm-groups group-range *(ipv4-prefix | ipv6-prefix)*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

radius

Synopsis	Enter the **radius** context
Context	**configure** router *string* radius
Tree	radius
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy [name] *string*

Synopsis	Enter the **proxy** list instance
Context	**configure** router *string* radius proxy *string*
Tree	proxy
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	RADIUS proxy name
Context	**configure** router *string* radius proxy *string*
Tree	proxy
String Length	1 to 32

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of RADIUS proxy
Context	**configure** router *string* radius proxy *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-matching

Synopsis	Enter the **attribute-matching** context
Context	**configure** router *string* radius proxy *string* attribute-matching
Tree	attribute-matching
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [index] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** router *string* radius proxy *string* attribute-matching entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**index**] *number*

Synopsis	Index of this entry
Context	**configure** router *string* radius proxy *string* attribute-matching entry *number*
Tree	entry

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Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-server-policy *string*

Synopsis	Accounting server policy
Context	**configure** router *string* radius proxy *string* attribute-matching entry *number* accounting-server-policy *string*
Tree	accounting-server-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authentication-server-policy *string*

Synopsis	Authentication server policy
Context	**configure** router *string* radius proxy *string* attribute-matching entry *number* authentication-server-policy *string*
Tree	authentication-server-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-string *string*

Synopsis	Prefix string
Context	**configure** router *string* radius proxy *string* attribute-matching entry *number* prefix-string *string*
Tree	prefix-string
String Length	1 to 128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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suffix-string *string*

Synopsis	Prefix string
Context	**configure** router *string* radius proxy *string* attribute-matching entry *number* suffix-string *string*
Tree	suffix-string
String Length	1 to 128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	Matching attribute type to RADIUS server policy
Context	**configure** router *string* radius proxy *string* attribute-matching type *number*
Tree	type
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor *(number | keyword)*

Synopsis	Matching Vendor ID to RADIUS server policy
Context	**configure** router *string* radius proxy *string* attribute-matching vendor *(number | keyword)*
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cache

Synopsis	Enter the **cache** context
Context	**configure** router *string* radius proxy *string* cache
Tree	cache
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of the RADIUS proxy cache
Context	**configure** router *string* radius proxy *string* cache admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

key

Synopsis	Enable the **key** context
Context	**configure** router *string* radius proxy *string* cache key
Tree	key
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-type *number*

Synopsis	RADIUS attribute type to cache for this RADIUS proxy server
Context	**configure** router *string* radius proxy *string* cache key attribute-type *number*
Tree	attribute-type
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

packet-type *keyword*

Synopsis	Packet type of the RADIUS messages
Context	**configure** router *string* radius proxy *string* cache key packet-type *keyword*
Tree	packet-type
Options	access-request, access-accept
Notes	This element is mandatory.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor *(number | keyword)*

Synopsis	RADIUS Vendor ID
Context	**configure** router *string* radius proxy *string* cache key vendor *(number | keyword)*
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Idle timeout value
Context	**configure** router *string* radius proxy *string* cache timeout *number*
Tree	timeout
Range	60 to 3600
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-accounting

Synopsis	Enter the **track-accounting** context
Context	**configure** router *string* radius proxy *string* cache track-accounting
Tree	track-accounting
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-off *boolean*

Synopsis	Remove all ESM hosts associated with the RADIUS client

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Context	**configure** router *string* radius proxy *string* cache track-accounting accounting-off *boolean*
Tree	accounting-off
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-on *boolean*

Synopsis	Remove all ESM hosts associated with the RADIUS client
Context	**configure** router *string* radius proxy *string* cache track-accounting accounting-on *boolean*
Tree	accounting-on
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interim-update *boolean*

Synopsis	Update the ESM host with the RADIUS client that generated the interim update
Context	**configure** router *string* radius proxy *string* cache track-accounting interim-update *boolean*
Tree	interim-update
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *boolean*

Synopsis	Update host with client that generated accounting-start
Context	**configure** router *string* radius proxy *string* cache track-accounting start *boolean*
Tree	start
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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stop *boolean*

Synopsis	Remove ESM host and forward accounting-stop packet
Context	**configure** router *string* radius proxy *string* cache track-accounting stop *boolean*
Tree	stop
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-authentication

Synopsis	Enter the **track-authentication** context
Context	**configure** router *string* radius proxy *string* cache track-authentication
Tree	track-authentication
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accept *boolean*

Synopsis	Track Access-Accept message for mobility
Context	**configure** router *string* radius proxy *string* cache track-authentication accept *boolean*
Tree	accept
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-delete-hold-time *number*

Synopsis	Delete hold time
Context	**configure** router *string* radius proxy *string* cache track-delete-hold-time *number*
Tree	track-delete-hold-time
Range	0 to 6000
Units	seconds
Default	0
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

defaults

Synopsis	Enter the **defaults** context
Context	**configure** router *string* radius proxy *string* defaults
Tree	defaults
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-server-policy *string*

Synopsis	Default accounting RADIUS server policy
Context	**configure** router *string* radius proxy *string* defaults accounting-server-policy *string*
Tree	accounting-server-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authentication-server-policy *string*

Synopsis	Default authentication RADIUS server policy
Context	**configure** router *string* radius proxy *string* defaults authentication-server-policy *string*
Tree	authentication-server-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** router *string* radius proxy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface [interface-name] *string*

Synopsis	Add a list entry for **interface**
Context	**configure** router *string* radius proxy *string* interface *string*
Tree	interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**interface-name**] *string*

Synopsis	IP interface name
Context	**configure** router *string* radius proxy *string* interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

load-balance-key

Synopsis	Enter the **load-balance-key** context
Context	**configure** router *string* radius proxy *string* load-balance-key
Tree	load-balance-key
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-1

Synopsis	Enter the **attribute-1** context
Context	**configure** router *string* radius proxy *string* load-balance-key attribute-1
Tree	attribute-1
Notes	The following elements are part of a choice: (**attribute-1**, **attribute-2**, **attribute-3**, **attribute-4**, and **attribute-5**) or **source-ip-udp**.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	**configure** router *string* radius proxy *string* load-balance-key attribute-1 type *number*
Tree	type
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor *(number | keyword)*

Synopsis	Vendor-Id attribute
Context	**configure** router *string* radius proxy *string* load-balance-key attribute-1 vendor *(number | keyword)*
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-2

Synopsis	Enter the **attribute-2** context
Context	**configure** router *string* radius proxy *string* load-balance-key attribute-2
Tree	attribute-2
Notes	The following elements are part of a choice: (**attribute-1**, **attribute-2**, **attribute-3**, **attribute-4**, and **attribute-5**) or **source-ip-udp**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	Attribute type to cache for this RADIUS Proxy server

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Context	**configure** router *string* radius proxy *string* load-balance-key attribute-2 type *number*
Tree	type
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor *(number | keyword)*

Synopsis	Vendor-Id attribute
Context	**configure** router *string* radius proxy *string* load-balance-key attribute-2 vendor *(number | keyword)*
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-3

Synopsis	Enter the **attribute-3** context
Context	**configure** router *string* radius proxy *string* load-balance-key attribute-3
Tree	attribute-3
Notes	The following elements are part of a choice: (**attribute-1**, **attribute-2**, **attribute-3**, **attribute-4**, and **attribute-5**) or **source-ip-udp**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	**configure** router *string* radius proxy *string* load-balance-key attribute-3 type *number*
Tree	type
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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vendor *(number | keyword)*

Synopsis	Vendor-Id attribute
Context	**configure** router *string* radius proxy *string* load-balance-key attribute-3 vendor *(number | keyword)*
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-4

Synopsis	Enter the **attribute-4** context
Context	**configure** router *string* radius proxy *string* load-balance-key attribute-4
Tree	attribute-4
Notes	The following elements are part of a choice: (**attribute-1**, **attribute-2**, **attribute-3**, **attribute-4**, and **attribute-5**) or **source-ip-udp**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	**configure** router *string* radius proxy *string* load-balance-key attribute-4 type *number*
Tree	type
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor *(number | keyword)*

Synopsis	Vendor-Id attribute
Context	**configure** router *string* radius proxy *string* load-balance-key attribute-4 vendor *(number | keyword)*
Tree	vendor

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Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-5

Synopsis	Enter the **attribute-5** context
Context	**configure** router *string* radius proxy *string* load-balance-key attribute-5
Tree	attribute-5
Notes	The following elements are part of a choice: (**attribute-1**, **attribute-2**, **attribute-3**, **attribute-4**, and **attribute-5**) or **source-ip-udp**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	**configure** router *string* radius proxy *string* load-balance-key attribute-5 type *number*
Tree	type
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor *(number | keyword)*

Synopsis	Vendor-Id attribute
Context	**configure** router *string* radius proxy *string* load-balance-key attribute-5 vendor *(number | keyword)*
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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source-ip-udp

Synopsis	Key to consist of the source IP address and source UDP port of the RADIUS message
Context	**configure** router *string* radius proxy *string* load-balance-key source-ip-udp
Tree	source-ip-udp
Notes	The following elements are part of a choice: (**attribute-1**, **attribute-2**, **attribute-3**, **attribute-4**, and **attribute-5**) or **source-ip-udp**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

purpose *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Purpose of the RADIUS proxy
Context	**configure** router *string* radius proxy *string* purpose *keyword*
Tree	purpose
Options	accounting, authentication, accounting-authentication
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy
Context	**configure** router *string* radius proxy *string* python-policy *reference*
Tree	python-policy
Reference	**configure** python python-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

secret *string*

Synopsis	Format of the secret key to access the RADIUS proxy server
Context	**configure** router *string* radius proxy *string* secret *string*

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Tree	secret
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

send-accounting-response *boolean*

Synopsis	Allow RADIUS proxy server to respond to Accounting-Response messages
Context	**configure** router *string* radius proxy *string* send-accounting-response *boolean*
Tree	send-accounting-response
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wlan-gw

Synopsis	Enter the **wlan-gw** context
Context	**configure** router *string* radius proxy *string* wlan-gw
Tree	wlan-gw
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis	IPv4 address of the distributed RADIUS proxy server
Context	**configure** router *string* radius proxy *string* wlan-gw address *string*
Tree	address
Description	This command configures the IPv4 address of the distributed RADIUS proxy server for use by the access points.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis	IPv6 address of the distributed RADIUS proxy server

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Context	**configure** router *string* radius proxy *string* wlan-gw ipv6-address *string*
Tree	ipv6-address
Description	This command configures the IPv6 address of the distributed RADIUS proxy server for use by the access points.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	ISA WLAN gateway group
Context	**configure** router *string* radius proxy *string* wlan-gw-group *reference*
Tree	wlan-gw-group
Reference	**configure** isa wlan-gw-group *number*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

server [name] *string*

Synopsis	Enter the **server** list instance
Context	**configure** router *string* radius server *string*
Tree	server
Max. Instances	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	External RADIUS server name
Context	**configure** router *string* radius server *string*
Tree	server
String Length	1 to 32

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accept-coa *boolean*

Synopsis	Process Change of Authorization (CoA) messages
Context	**configure** router *string* radius server *string* accept-coa *boolean*
Tree	accept-coa
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-port *number*

Synopsis	UDP port number of the RADIUS for accounting events
Context	**configure** router *string* radius server *string* acct-port *number*
Tree	acct-port
Range	1 to 65535
Default	1813
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the RADIUS server
Context	**configure** router *string* radius server *string* address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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auth-port *number*

Synopsis	UDP port number of the RADIUS to be used as match criteria
Context	**configure** router *string* radius server *string* auth-port *number*
Tree	auth-port
Range	1 to 65535
Default	1812
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** router *string* radius server *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pending-requests-limit *number*

Synopsis	Limit of the number for pending RADIUS requests
Context	**configure** router *string* radius server *string* pending-requests-limit *number*
Tree	pending-requests-limit
Range	1 to 4096
Default	4096
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python script policy to modify CoA messages
Context	**configure** router *string* radius server *string* python-policy *reference*
Tree	python-policy
Reference	**configure** python python-policy *string*
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

secret *string*

Synopsis	Secret key associated with this RADIUS server
Context	**configure** router *string* radius server *string* secret *string*
Tree	secret
String Length	1 to 115
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reassembly

Synopsis	Enable the **reassembly** context
Context	**configure** router *string* reassembly
Tree	reassembly
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group (including WLAN Gateway group) that executes the reassembly
Context	**configure** router *string* reassembly nat-group *number*
Tree	nat-group
Max. Range	0 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

to-base-network *boolean*

Synopsis	Allow reassembled traffic sent to network interface

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Context	**configure** router *string* reassembly to-base-network *boolean*
Tree	to-base-network
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rib-api

Synopsis	Enter the **rib-api** context
Context	**configure** router *string* rib-api
Tree	rib-api
Introduced	16.0.R4
Platforms	All

mpls

Synopsis	Enter the **mpls** context
Context	**configure** router *string* rib-api mpls
Tree	mpls
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MPLS for RIB-API gRPC service
Context	**configure** router *string* rib-api mpls admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

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label-name *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure reserved label block.
Context	**configure** router *string* rib-api mpls label-name *reference*
Tree	label-name
Reference	**configure** router *string* mpls-labels reserved-label-block *string*
Introduced	16.0.R4
Platforms	All

rip

Synopsis	Enable the **rip** context
Context	**configure** router *string* rip
Tree	rip
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the RIP instance
Context	**configure** router *string* rip admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

authentication-key *string*

Synopsis	Authentication password passed between RIP neighbors
Context	**configure** router *string* rip authentication-key *string*
Tree	authentication-key

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Description	This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes. The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed. When unconfigured, this command removes the authentication password from the configuration and disables authentication.
String Length	1 to 51
Introduced	16.0.R4
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type used between RIP neighbors
Context	**configure** router *string* rip authentication-type *keyword*
Tree	authentication-type
Description	This command sets the type of authentication to be used between RIP neighbors. The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed. When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.
Options	none, password, md5, md20
Default	none
Introduced	16.0.R4
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	**configure** router *string* rip bfd-liveness *boolean*
Tree	bfd-liveness
Description	When configured to **true**, this command enables BFD to control the state of the associated protocol adjacency. When configured to **false**, this command removes BFD from the associated protocol adjacency.
Default	false
Introduced	16.0.R4

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Platforms	All

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	**configure** router *string* rip check-zero *boolean*
Tree	check-zero
Description	When configured to **true**, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to **false**, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Default	false
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** router *string* rip description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

export-limit

Synopsis	Enable the **export-limit** context
Context	**configure** router *string* rip export-limit
Tree	export-limit
Introduced	16.0.R4
Platforms	All

log-percent *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	**configure** router *string* rip export-limit log-percent *number*

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Tree	log-percent
Range	1 to 100
Introduced	16.0.R4
Platforms	All

number *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	**configure** router *string* rip export-limit number *number*
Tree	number
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

export-policy *reference*

Synopsis	Policies to determine exported routes
Context	**configure** router *string* rip export-policy *reference*
Tree	export-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

group [group-name] *string*

Synopsis	Enter the **group** list instance
Context	**configure** router *string* rip group *string*
Tree	group
Introduced	16.0.R4
Platforms	All

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[**group-name**] *string*

Synopsis	RIP group name
Context	**configure** router *string* rip group *string*
Tree	group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of RIP neighbor interface group
Context	**configure** router *string* rip group *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

authentication-key *string*

Synopsis	Authentication password passed between RIP neighbors
Context	**configure** router *string* rip group *string* authentication-key *string*
Tree	authentication-key
Description	This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes. The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed. When unconfigured, the authentication password is removed from the configuration and authentication is disabled.
String Length	1 to 51
Introduced	16.0.R4
Platforms	All

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authentication-type *keyword*

Synopsis	Authentication type
Context	**configure** router *string* rip group *string* authentication-type *keyword*
Tree	authentication-type
Description	This command configures the type of authentication to be used. The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed. When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.
Options	none, password, md5, md20
Introduced	16.0.R4
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	**configure** router *string* rip group *string* bfd-liveness *boolean*
Tree	bfd-liveness
Description	When configured to **true**, this command enables BFD to control the state of the associated protocol adjacency. When configured to **false**, this command removes BFD from the associated protocol adjacency.
Introduced	16.0.R4
Platforms	All

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	**configure** router *string* rip group *string* check-zero *boolean*
Tree	check-zero
Description	When configured to **true**, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to **false**, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	16.0.R4

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Platforms	All

description *string*

Synopsis	Text description
Context	**configure** router *string* rip group *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

export-policy *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	**configure** router *string* rip group *string* export-policy *reference*
Tree	export-policy
Description	This command specifies the export route policies used to determine which routes are exported to RIP. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	**configure** router *string* rip group *string* import-policy *reference*
Tree	import-policy
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.

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Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

message-size *number*

Synopsis	Maximum number of routes per RIP update message
Context	**configure** router *string* rip group *string* message-size *number*
Tree	message-size
Range	25 to 255
Introduced	16.0.R4
Platforms	All

metric-in *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	**configure** router *string* rip group *string* metric-in *number*
Tree	metric-in
Range	1 to 16
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIP
Context	**configure** router *string* rip group *string* metric-out *number*
Tree	metric-out
Range	1 to 16
Introduced	16.0.R4
Platforms	All

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neighbor [interface-name] *string*

Synopsis	Enter the **neighbor** list instance
Context	**configure** router *string* rip group *string* neighbor *string*
Tree	neighbor
Introduced	16.0.R4
Platforms	All

[**interface-name**] *string*

Synopsis	Neighbor added through the interface to the RIP group
Context	**configure** router *string* rip group *string* neighbor *string*
Tree	neighbor
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the RIP neighbor interface
Context	**configure** router *string* rip group *string* neighbor *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

authentication-key *string*

Synopsis	Authentication password passed between RIP neighbors
Context	**configure** router *string* rip group *string* neighbor *string* authentication-key *string*
Tree	authentication-key
Description	This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes.

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The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.

When unconfigured, this command removes the authentication password from the configuration and disables authentication.

String Length	1 to 51
Introduced	16.0.R4
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type
Context	**configure** router *string* rip group *string* neighbor *string* authentication-type *keyword*
Tree	authentication-type
Description	This command configures the type of authentication to be used. The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed. When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.
Options	none, password, md5, md20
Introduced	16.0.R4
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	**configure** router *string* rip group *string* neighbor *string* bfd-liveness *boolean*
Tree	bfd-liveness
Description	When configured to **true**, this command enables BFD to control the state of the associated protocol adjacency. When configured to **false**, this command removes BFD from the associated protocol adjacency.
Introduced	16.0.R4
Platforms	All

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields

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Context	**configure** router *string* rip group *string* neighbor *string* check-zero *boolean*
Tree	check-zero
Description	When configured to **true**, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to **false**, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** router *string* rip group *string* neighbor *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

export-policy *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	**configure** router *string* rip group *string* neighbor *string* export-policy *reference*
Tree	export-policy
Description	This command specifies the export route policies used to determine which routes are exported to RIP. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

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import-policy *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	**configure** router *string* rip group *string* neighbor *string* import-policy *reference*
Tree	import-policy
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

message-size *number*

Synopsis	Maximum number of routes per RIP update message
Context	**configure** router *string* rip group *string* neighbor *string* message-size *number*
Tree	message-size
Range	25 to 255
Introduced	16.0.R4
Platforms	All

metric-in *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	**configure** router *string* rip group *string* neighbor *string* metric-in *number*
Tree	metric-in
Range	1 to 16
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIP

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Context	**configure** router *string* rip group *string* neighbor *string* metric-out *number*
Tree	metric-out
Range	1 to 16
Introduced	16.0.R4
Platforms	All

preference *number*

Synopsis	Route preference
Context	**configure** router *string* rip group *string* neighbor *string* preference *number*
Tree	preference
Range	1 to 255
Introduced	16.0.R4
Platforms	All

receive *keyword*

Synopsis	Accepted version on received packets
Context	**configure** router *string* rip group *string* neighbor *string* receive *keyword*
Tree	receive
Options	version-1, version-2, both, none
Introduced	16.0.R4
Platforms	All

send *keyword*

Synopsis	RIP version and method used to send RIP updates
Context	**configure** router *string* rip group *string* neighbor *string* send *keyword*
Tree	send
Options	none, version-1, broadcast, multicast, unicast
Introduced	16.0.R4
Platforms	All

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split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	**configure** router *string* rip group *string* neighbor *string* split-horizon *boolean*
Tree	split-horizon
Description	When configured to **true**, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity). When configured to **false**. this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enable the **timers** context
Context	**configure** router *string* rip group *string* neighbor *string* timers
Tree	timers
Introduced	16.0.R4
Platforms	All

flush *number*

Synopsis	RIP flush timer
Context	**configure** router *string* rip group *string* neighbor *string* timers flush *number*
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

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timeout *number*

Synopsis	RIP timeout timer
Context	**configure** router *string* rip group *string* neighbor *string* timers timeout *number*
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

update *number*

Synopsis	Timer that controls the frequency of updates
Context	**configure** router *string* rip group *string* neighbor *string* timers update *number*
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

unicast-address [address] *string*

Synopsis	Add a list entry for **unicast-address**
Context	**configure** router *string* rip group *string* neighbor *string* unicast-address *string*
Tree	unicast-address
Introduced	16.0.R4
Platforms	All

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[**address**] *string*

Synopsis	Unicast address for the neighbor
Context	**configure** router *string* rip group *string* neighbor *string* unicast-address *string*
Tree	unicast-address
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

preference *number*

Synopsis	Route preference
Context	**configure** router *string* rip group *string* preference *number*
Tree	preference
Range	1 to 255
Introduced	16.0.R4
Platforms	All

receive *keyword*

Synopsis	Accepted version on received packets
Context	**configure** router *string* rip group *string* receive *keyword*
Tree	receive
Options	version-1, version-2, both, none
Introduced	16.0.R4
Platforms	All

send *keyword*

Synopsis	RIP version and method used to send RIP updates
Context	**configure** router *string* rip group *string* send *keyword*
Tree	send
Options	none, version-1, broadcast, multicast
Introduced	16.0.R4
Platforms	All

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split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	**configure** router *string* rip group *string* split-horizon *boolean*
Tree	split-horizon
Description	When configured to **true**, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity). When configured to **false**. this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enable the **timers** context
Context	**configure** router *string* rip group *string* timers
Tree	timers
Introduced	16.0.R4
Platforms	All

flush *number*

Synopsis	RIP flush timer
Context	**configure** router *string* rip group *string* timers flush *number*
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

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timeout *number*

Synopsis	RIP timeout timer
Context	**configure** router *string* rip group *string* timers timeout *number*
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

update *number*

Synopsis	Timer that controls the frequency of updates
Context	**configure** router *string* rip group *string* timers update *number*
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Import policies to decide routes for routing table
Context	**configure** router *string* rip import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4

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Platforms	All

message-size *number*

Synopsis	Maximum number of routes in the RIP message
Context	**configure** router *string* rip message-size *number*
Tree	message-size
Range	25 to 255
Default	25
Introduced	16.0.R4
Platforms	All

metric-in *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	**configure** router *string* rip metric-in *number*
Tree	metric-in
Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIP
Context	**configure** router *string* rip metric-out *number*
Tree	metric-out
Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	All

preference *number*

Synopsis	Route preference

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Context	**configure** router *string* rip preference *number*
Tree	preference
Range	1 to 255
Default	100
Introduced	16.0.R4
Platforms	All

receive *keyword*

Synopsis	Accepted version on received packets
Context	**configure** router *string* rip receive *keyword*
Tree	receive
Options	version-1, version-2, both, none
Default	both
Introduced	16.0.R4
Platforms	All

send *keyword*

Synopsis	RIP version and method used to send RIP updates
Context	**configure** router *string* rip send *keyword*
Tree	send
Options	none, version-1, broadcast, multicast
Default	broadcast
Introduced	16.0.R4
Platforms	All

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	**configure** router *string* rip split-horizon *boolean*
Tree	split-horizon
Description	When configured to **true**, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).

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When configured to **false**. this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.

Default	true
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enable the **timers** context
Context	**configure** router *string* rip timers
Tree	timers
Introduced	16.0.R4
Platforms	All

flush *number*

Synopsis	RIP flush timer
Context	**configure** router *string* rip timers flush *number*
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

timeout *number*

Synopsis	RIP timeout timer
Context	**configure** router *string* rip timers timeout *number*
Tree	timeout

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Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

update *number*

Synopsis	Timer that controls the frequency of updates
Context	**configure** router *string* rip timers update *number*
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

ripng

Synopsis	Enable the **ripng** context
Context	**configure** router *string* ripng
Tree	ripng
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the RIPng instance
Context	**configure** router *string* ripng admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable

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Introduced	16.0.R4
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	**configure** router *string* ripng bfd-liveness *boolean*
Tree	bfd-liveness
Description	When configured to **true**, this command enables BFD to control the state of the associated protocol adjacency. When configured to **false**, this command removes BFD from the associated protocol adjacency.
Default	false
Introduced	16.0.R4
Platforms	All

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	**configure** router *string* ripng check-zero *boolean*
Tree	check-zero
Description	When configured to **true**, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to **false**, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Default	false
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** router *string* ripng description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4

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Platforms	All

export-limit

Synopsis	Enable the **export-limit** context
Context	**configure** router *string* ripng export-limit
Tree	export-limit
Introduced	16.0.R4
Platforms	All

log-percent *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	**configure** router *string* ripng export-limit log-percent *number*
Tree	log-percent
Range	1 to 100
Introduced	16.0.R4
Platforms	All

number *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	**configure** router *string* ripng export-limit number *number*
Tree	number
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

export-policy *reference*

Synopsis	Policies to determine exported routes
Context	**configure** router *string* ripng export-policy *reference*
Tree	export-policy
Reference	**configure** policy-options policy-statement *string*

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Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

group [group-name] *string*

Synopsis	Enter the **group** list instance
Context	**configure** router *string* ripng group *string*
Tree	group
Introduced	16.0.R4
Platforms	All

[**group-name**] *string*

Synopsis	RIP group name
Context	**configure** router *string* ripng group *string*
Tree	group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of RIPng neighbor interface group
Context	**configure** router *string* ripng group *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

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bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	**configure** router *string* ripng group *string* bfd-liveness *boolean*
Tree	bfd-liveness
Description	When configured to **true**, this command enables BFD to control the state of the associated protocol adjacency. When configured to **false**, this command removes BFD from the associated protocol adjacency.
Introduced	16.0.R4
Platforms	All

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	**configure** router *string* ripng group *string* check-zero *boolean*
Tree	check-zero
Description	When configured to **true**, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to **false**, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** router *string* ripng group *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

export-policy *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	**configure** router *string* ripng group *string* export-policy *reference*

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Tree	export-policy
Description	This command specifies the export route policies used to determine which routes are exported to RIP. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	**configure** router *string* ripng group *string* import-policy *reference*
Tree	import-policy
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

message-size *number*

Synopsis	Maximum number of routes in the message
Context	**configure** router *string* ripng group *string* message-size *number*
Tree	message-size
Range	25 to 255
Introduced	16.0.R4
Platforms	All

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metric-in *number*

Synopsis	Metric added to routes received from the neighbor
Context	**configure** router *string* ripng group *string* metric-in *number*
Tree	metric-in
Range	1 to 16
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIPng
Context	**configure** router *string* ripng group *string* metric-out *number*
Tree	metric-out
Range	1 to 16
Introduced	16.0.R4
Platforms	All

neighbor [interface-name] *string*

Synopsis	Enter the **neighbor** list instance
Context	**configure** router *string* ripng group *string* neighbor *string*
Tree	neighbor
Introduced	16.0.R4
Platforms	All

[**interface-name**] *string*

Synopsis	Neighbor added to the RIPng group through the interface
Context	**configure** router *string* ripng group *string* neighbor *string*
Tree	neighbor
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the RIPng neighbor
Context	**configure** router *string* ripng group *string* neighbor *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	**configure** router *string* ripng group *string* neighbor *string* bfd-liveness *boolean*
Tree	bfd-liveness
Description	When configured to **true**, this command enables BFD to control the state of the associated protocol adjacency. When configured to **false**, this command removes BFD from the associated protocol adjacency.
Introduced	16.0.R4
Platforms	All

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	**configure** router *string* ripng group *string* neighbor *string* check-zero *boolean*
Tree	check-zero
Description	When configured to **true**, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to **false**, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	16.0.R4
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** router *string* ripng group *string* neighbor *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

export-policy *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	**configure** router *string* ripng group *string* neighbor *string* export-policy *reference*
Tree	export-policy
Description	This command specifies the export route policies used to determine which routes are exported to RIP. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	**configure** router *string* ripng group *string* neighbor *string* import-policy *reference*
Tree	import-policy
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5

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Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

message-size *number*

Synopsis	Maximum number of routes in the message
Context	**configure** router *string* ripng group *string* neighbor *string* message-size *number*
Tree	message-size
Range	25 to 255
Introduced	16.0.R4
Platforms	All

metric-in *number*

Synopsis	Metric added to routes received from the neighbor
Context	**configure** router *string* ripng group *string* neighbor *string* metric-in *number*
Tree	metric-in
Range	1 to 16
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIPng
Context	**configure** router *string* ripng group *string* neighbor *string* metric-out *number*
Tree	metric-out
Range	1 to 16
Introduced	16.0.R4
Platforms	All

preference *number*

Synopsis	Route preference
Context	**configure** router *string* ripng group *string* neighbor *string* preference *number*

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Tree	preference
Range	1 to 255
Introduced	16.0.R4
Platforms	All

receive *keyword*

Synopsis	Accepted version on received packets
Context	**configure** router *string* ripng group *string* neighbor *string* receive *keyword*
Tree	receive
Options	none, ripng
Introduced	16.0.R4
Platforms	All

send *keyword*

Synopsis	RIPng version and method used to send RIPng updates
Context	**configure** router *string* ripng group *string* neighbor *string* send *keyword*
Tree	send
Options	none, ripng, unicast
Introduced	16.0.R4
Platforms	All

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	**configure** router *string* ripng group *string* neighbor *string* split-horizon *boolean*
Tree	split-horizon
Description	When configured to **true**, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity). When configured to **false**. this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.
Introduced	16.0.R4

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Platforms	All

timers

Synopsis	Enable the **timers** context
Context	**configure** router *string* ripng group *string* neighbor *string* timers
Tree	timers
Introduced	16.0.R4
Platforms	All

flush *number*

Synopsis	RIP flush timer
Context	**configure** router *string* ripng group *string* neighbor *string* timers flush *number*
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

timeout *number*

Synopsis	RIP timeout timer
Context	**configure** router *string* ripng group *string* neighbor *string* timers timeout *number*
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4

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Platforms	All

update *number*

Synopsis	Timer that controls the frequency of updates
Context	**configure** router *string* ripng group *string* neighbor *string* timers update *number*
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

unicast-address [address] *string*

Synopsis	Add a list entry for **unicast-address**
Context	**configure** router *string* ripng group *string* neighbor *string* unicast-address *string*
Tree	unicast-address
Introduced	16.0.R4
Platforms	All

[**address**] *string*

Synopsis	Unicast address for the neighbor
Context	**configure** router *string* ripng group *string* neighbor *string* unicast-address *string*
Tree	unicast-address
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

preference *number*

Synopsis	Route preference
Context	**configure** router *string* ripng group *string* preference *number*
Tree	preference

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Range	1 to 255
Introduced	16.0.R4
Platforms	All

receive *keyword*

Synopsis	Accepted version on received packets
Context	**configure** router *string* ripng group *string* receive *keyword*
Tree	receive
Options	none, ripng
Introduced	16.0.R4
Platforms	All

send *keyword*

Synopsis	RIPng version and method used to send RIPng updates
Context	**configure** router *string* ripng group *string* send *keyword*
Tree	send
Options	none, ripng
Introduced	16.0.R4
Platforms	All

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	**configure** router *string* ripng group *string* split-horizon *boolean*
Tree	split-horizon
Description	When configured to **true**, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity). When configured to **false**. this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.
Introduced	16.0.R4
Platforms	All

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timers

Synopsis	Enable the **timers** context
Context	**configure** router *string* ripng group *string* timers
Tree	timers
Introduced	16.0.R4
Platforms	All

flush *number*

Synopsis	RIP flush timer
Context	**configure** router *string* ripng group *string* timers flush *number*
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

timeout *number*

Synopsis	RIP timeout timer
Context	**configure** router *string* ripng group *string* timers timeout *number*
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

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update *number*

Synopsis	Timer that controls the frequency of updates
Context	**configure** router *string* ripng group *string* timers update *number*
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Import policies to decide routes for routing table
Context	**configure** router *string* ripng import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

message-size *number*

Synopsis	Maximum number of routes in the message
Context	**configure** router *string* ripng message-size *number*
Tree	message-size
Range	25 to 255
Default	25
Introduced	16.0.R4
Platforms	All

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metric-in *number*

Synopsis	Metric added to routes received from the neighbor
Context	**configure** router *string* ripng metric-in *number*
Tree	metric-in
Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIPng
Context	**configure** router *string* ripng metric-out *number*
Tree	metric-out
Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	All

preference *number*

Synopsis	Route preference
Context	**configure** router *string* ripng preference *number*
Tree	preference
Range	1 to 255
Default	100
Introduced	16.0.R4
Platforms	All

receive *keyword*

Synopsis	Accepted version on received packets
Context	**configure** router *string* ripng receive *keyword*
Tree	receive
Options	none, ripng

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Default	ripng
Introduced	16.0.R4
Platforms	All

send *keyword*

Synopsis	RIPng version and method used to send RIPng updates
Context	**configure** router *string* ripng send *keyword*
Tree	send
Options	none, ripng
Default	ripng
Introduced	16.0.R4
Platforms	All

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	**configure** router *string* ripng split-horizon *boolean*
Tree	split-horizon
Description	When configured to **true**, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity). When configured to **false**, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.
Default	true
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enable the **timers** context
Context	**configure** router *string* ripng timers
Tree	timers
Introduced	16.0.R4

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Platforms	All

flush *number*

Synopsis	RIP flush timer
Context	**configure** router *string* ripng timers flush *number*
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

timeout *number*

Synopsis	RIP timeout timer
Context	**configure** router *string* ripng timers timeout *number*
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

update *number*

Synopsis	Timer that controls the frequency of updates
Context	**configure** router *string* ripng timers update *number*
Tree	update
Range	1 to 600

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Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

router-id *string*

Synopsis	Unique router ID for the router in the AS
Context	**configure** router *string* router-id *string*
Tree	router-id
Introduced	16.0.R1
Platforms	All

rsvp

Synopsis	Enable the **rsvp** context
Context	**configure** router *string* rsvp
Tree	rsvp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of RSVP
Context	**configure** router *string* rsvp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

authentication-over-bypass *boolean*

Synopsis	Enable MD5 authentication over bypass LSP of PLR and MP
Context	**configure** router *string* rsvp authentication-over-bypass *boolean*

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Tree	authentication-over-bypass
Description	When configured to **true**, this command configures the MD5 authentication over the bypass LSP of all Point of Local Repairs (PLRs) and Merge Points (MPs) on the router. Only enable this command when the TE interfaces in the RSVP-TE network use the same MD5 authentication parameters. When a Point of Local Repair (PLR) activates a bypass LSP towards a Merge Point (MP), by default, the INTEGRITY object corresponding to the bypass LSP interface is not added to a transmitted RSVP message except for packets of routed RSVP messages (Resv, Srefresh, and ACK), and only when the packet is intended for a bypass LSP endpoint (PLR or MP) that is a directly connected neighbor. When this command is enabled, the INTEGRITY object of the interface corresponding to the bypass LSP is added to a transmitted RSVP message regardless of whether the bypass LSP endpoint (PLR or MP) is a directly connected RSVP neighbor. The INTEGRITY object is included with the following RSVP messages: Path, PathTear, Path Err, Resv, ResvTear, ResvErr, Srefresh, and ACK. In all cases, an RSVP message received from a PLR or a MP (sender address in the SenderTemplate oe FilterSpec is different from an Extended Tunnel Id in a Session Object), and which includes the INTEGRITY object is authenticated against the bypass LSP interface. An RSVP message received from a PLR or MP without the INTEGRITY object is also accepted. When configured to **false**, the router disables MD5 authentication over bypass LSP of the PLRs and MPs.
Default	false
Introduced	22.10.R1
Platforms	All

dbw-accounting

Synopsis	Enable the **dbw-accounting** context
Context	**configure** router *string* rsvp dbw-accounting
Tree	dbw-accounting
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

dbw-multiplier *number*

Synopsis	Dark Bandwidth multiplier
Context	**configure** router *string* rsvp dbw-accounting dbw-multiplier *number*
Tree	dbw-multiplier
Range	0 to 1000

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Units	percent
Default	100
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

down-threshold

Synopsis	Enter the **down-threshold** context
Context	**configure** router *string* rsvp dbw-accounting down-threshold
Tree	down-threshold
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

bw *number*

Synopsis	Minimum difference in MRLB or MRB to trigger an update
Context	**configure** router *string* rsvp dbw-accounting down-threshold bw *number*
Tree	bw
Range	0 to 1000000
Units	megabps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

percent *number*

Synopsis	Minimum difference in percent between dark bandwidth and sampled data rate, to trigger IGP-TE update
Context	**configure** router *string* rsvp dbw-accounting down-threshold percent *number*
Tree	percent
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

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sample-interval *number*

Synopsis	Dark Bandwidth sample interval
Context	**configure** router *string* rsvp dbw-accounting sample-interval *number*
Tree	sample-interval
Range	10 to 600
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

sample-multiplier *number*

Synopsis	Dark Bandwidth sample multiplier
Context	**configure** router *string* rsvp dbw-accounting sample-multiplier *number*
Tree	sample-multiplier
Range	1 to 10
Default	3
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

up-threshold

Synopsis	Enter the **up-threshold** context
Context	**configure** router *string* rsvp dbw-accounting up-threshold
Tree	up-threshold
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

bw *number*

Synopsis	Minimum difference in MRLB or MRB to trigger an update
Context	**configure** router *string* rsvp dbw-accounting up-threshold bw *number*
Tree	bw
Range	0 to 1000000
Units	megabps

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Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

percent *number*

Synopsis	Minimum difference in percent between dark bandwidth and sampled data rate, to trigger IGP-TE update
Context	**configure** router *string* rsvp dbw-accounting up-threshold percent *number*
Tree	percent
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

diffserv-te

Synopsis	Enable the **diffserv-te** context
Context	**configure** router *string* rsvp diffserv-te
Tree	diffserv-te
Introduced	16.0.R1
Platforms	All

admission-control-model *keyword*

Synopsis	Parameters for the DiffServ TE node
Context	**configure** router *string* rsvp diffserv-te admission-control-model *keyword*
Tree	admission-control-model
Options	mam, rdm
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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class-type-bw

Synopsis	Enter the **class-type-bw** context
Context	**configure** router *string* rsvp diffserv-te class-type-bw
Tree	class-type-bw
Introduced	16.0.R1
Platforms	All

ct0 *number*

Synopsis	RSVP interface bandwidth percentage for class type 0
Context	**configure** router *string* rsvp diffserv-te class-type-bw ct0 *number*
Tree	ct0
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

ct1 *number*

Synopsis	RSVP interface bandwidth percentage for class type 1
Context	**configure** router *string* rsvp diffserv-te class-type-bw ct1 *number*
Tree	ct1
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

ct2 *number*

Synopsis	RSVP interface bandwidth percentage for class type 2
Context	**configure** router *string* rsvp diffserv-te class-type-bw ct2 *number*
Tree	ct2
Range	0 to 100
Default	0
Introduced	16.0.R1

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Platforms	All

ct3 *number*

Synopsis	RSVP interface bandwidth percentage for class type 3
Context	**configure** router *string* rsvp diffserv-te class-type-bw ct3 *number*
Tree	ct3
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

ct4 *number*

Synopsis	RSVP interface bandwidth percentage for class type 4
Context	**configure** router *string* rsvp diffserv-te class-type-bw ct4 *number*
Tree	ct4
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

ct5 *number*

Synopsis	RSVP interface bandwidth percentage for class type 5
Context	**configure** router *string* rsvp diffserv-te class-type-bw ct5 *number*
Tree	ct5
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

ct6 *number*

Synopsis	RSVP interface bandwidth percentage for class type 6

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Context	**configure** router *string* rsvp diffserv-te class-type-bw ct6 *number*
Tree	ct6
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

ct7 *number*

Synopsis	RSVP interface bandwidth percentage for class type 7
Context	**configure** router *string* rsvp diffserv-te class-type-bw ct7 *number*
Tree	ct7
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

fc [fc-name] *keyword*

Synopsis	Enter the **fc** list instance
Context	**configure** router *string* rsvp diffserv-te fc *keyword*
Tree	fc
Introduced	16.0.R1
Platforms	All

[**fc-name**] *keyword*

Synopsis	Forwarding class for this mapping
Context	**configure** router *string* rsvp diffserv-te fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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class-type *number*

Synopsis	Diff-Serv Class Type (CT) for an LSP
Context	**configure** router *string* rsvp diffserv-te fc *keyword* class-type *number*
Tree	class-type
Range	0 to 7
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

te-class [te-class-number] *number*

Synopsis	Enter the **te-class** list instance
Context	**configure** router *string* rsvp diffserv-te te-class *number*
Tree	te-class
Introduced	16.0.R1
Platforms	All

[**te-class-number**] *number*

Synopsis	TE class number
Context	**configure** router *string* rsvp diffserv-te te-class *number*
Tree	te-class
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

class-type *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Class type (CT) associated with the TE class
Context	**configure** router *string* rsvp diffserv-te te-class *number* class-type *number*

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Tree	class-type
Range	0 to 7
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

priority *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	TE class priority
Context	**configure** router *string* rsvp diffserv-te te-class *number* priority *number*
Tree	priority
Range	0 to 7
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

entropy-label-capability *boolean*

Synopsis	Allow receiving and processing of the entropy label and ELI on incoming packets of RSVP LSPs
Context	**configure** router *string* rsvp entropy-label-capability *boolean*
Tree	entropy-label-capability
Default	false
Introduced	16.0.R1
Platforms	All

graceful-restart

Synopsis	Enter the **graceful-restart** context
Context	**configure** router *string* rsvp graceful-restart
Tree	graceful-restart
Introduced	16.0.R1

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Platforms	All

max-recovery *number*

Synopsis	Maximum time to wait before a graceful helper recovers the session
Context	**configure** router *string* rsvp graceful-restart max-recovery *number*
Tree	max-recovery
Range	1 to 1800
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	All

max-restart *number*

Synopsis	Maximum time that a graceful helper waits for session restart after the neighbor is considered down
Context	**configure** router *string* rsvp graceful-restart max-restart *number*
Tree	max-restart
Range	1 to 300
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	All

graceful-shutdown *boolean*

Synopsis	Initiate a graceful shutdown of all RSVP interfaces on the node
Context	**configure** router *string* rsvp graceful-shutdown *boolean*
Tree	graceful-shutdown
Default	false
Introduced	16.0.R1
Platforms	All

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implicit-null-label *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Signal the implicit null option for all RSVP LSPs
Context	**configure** router *string* rsvp implicit-null-label *boolean*
Tree	implicit-null-label
Default	false
Introduced	16.0.R1
Platforms	All

include-node-id-in-rro *boolean*

Synopsis	Include the node-id sub-object in the RRO (Record Route Object) on the RSVP instance
Context	**configure** router *string* rsvp include-node-id-in-rro *boolean*
Tree	include-node-id-in-rro
Default	false
Introduced	16.0.R1
Platforms	All

interface [interface-name] *reference*

Synopsis	Enter the **interface** list instance
Context	**configure** router *string* rsvp interface *reference*
Tree	interface
Description	Commands in this context configure the attributes of the RSVP protocol support on an IP interface. RSVP commands are not executed on an IP interface if RSVP is not enabled. The RSVP interface must be administratively disabled before it can be deleted. A corresponding MPLS interface must also be configured. The RSVP interface cannot be deleted without also deleting the MPLS interface.
Introduced	16.0.R1
Platforms	All

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[**interface-name**] *reference*

Synopsis	Index for router RSVP interface
Context	**configure** router *string* rsvp interface *reference*
Tree	interface
Reference	**configure** router *string* interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of RSVP on the IP interface
Context	**configure** router *string* rsvp interface *reference* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Authentication or hash key string
Context	**configure** router *string* rsvp interface *reference* authentication-key *string*
Tree	authentication-key
Description	This command configures the authentication key for use between RSVP neighbors to authenticate RSVP messages. Authentication uses the MD5 message-based digest. When enabled on an RSVP interface, authentication of RSVP messages operates in both directions of the interface. A router maintains a security association using one authentication key for each interface to an RSVP neighbor. An RSVP neighbor transmits an authenticating digest of the RSVP message that is computed using the shared authentication key and a keyed-hash algorithm. The message digest is included in an INTEGRITY object, which also contains a flags field, a key identifier field, and a sequence number field. An RSVP neighbor uses the key together with the authentication algorithm to process received RSVP messages. The RSVP MD5 authentication complies to the procedures for RSVP message generation in RFC 2747, *RSVP Cryptographic Authentication*. The MD5 implementation does not support the authentication challenge procedures in RFC 2747.

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String Length	1 to 51
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	**configure** router *string* rsvp interface *reference* authentication-keychain *reference*
Tree	authentication-keychain
Reference	**configure** system security keychains keychain *string*
Introduced	16.0.R3
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD
Context	**configure** router *string* rsvp interface *reference* bfd-liveness *boolean*
Tree	bfd-liveness
Default	false
Introduced	16.0.R1
Platforms	All

class-type-bw

Synopsis	Enable the **class-type-bw** context
Context	**configure** router *string* rsvp interface *reference* class-type-bw
Tree	class-type-bw
Introduced	16.0.R1
Platforms	All

ct0 *number*

Synopsis	Percentage of link bandwidth for class type (CT) 0
Context	**configure** router *string* rsvp interface *reference* class-type-bw ct0 *number*
Tree	ct0

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Range	0 to 100
Introduced	16.0.R1
Platforms	All

ct1 *number*

Synopsis	Percentage of link bandwidth for class type (CT) 1
Context	**configure** router *string* rsvp interface *reference* class-type-bw ct1 *number*
Tree	ct1
Range	0 to 100
Introduced	16.0.R1
Platforms	All

ct2 *number*

Synopsis	Percentage of link bandwidth for class type (CT) 2
Context	**configure** router *string* rsvp interface *reference* class-type-bw ct2 *number*
Tree	ct2
Range	0 to 100
Introduced	16.0.R1
Platforms	All

ct3 *number*

Synopsis	Percentage of link bandwidth for class type (CT) 3
Context	**configure** router *string* rsvp interface *reference* class-type-bw ct3 *number*
Tree	ct3
Range	0 to 100
Introduced	16.0.R1
Platforms	All

ct4 *number*

Synopsis	Percentage of link bandwidth for class type (CT) 4
Context	**configure** router *string* rsvp interface *reference* class-type-bw ct4 *number*

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Tree	ct4
Range	0 to 100
Introduced	16.0.R1
Platforms	All

ct5 *number*

Synopsis	Percentage of link bandwidth for class type (CT) 5
Context	**configure** router *string* rsvp interface *reference* class-type-bw ct5 *number*
Tree	ct5
Range	0 to 100
Introduced	16.0.R1
Platforms	All

ct6 *number*

Synopsis	Percentage of link bandwidth for class type (CT) 6
Context	**configure** router *string* rsvp interface *reference* class-type-bw ct6 *number*
Tree	ct6
Range	0 to 100
Introduced	16.0.R1
Platforms	All

ct7 *number*

Synopsis	Percentage of link bandwidth for class type (CT) 7
Context	**configure** router *string* rsvp interface *reference* class-type-bw ct7 *number*
Tree	ct7
Range	0 to 100
Introduced	16.0.R1
Platforms	All

dbw-down-threshold

Synopsis	Enable the **dbw-down-threshold** context

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Context	**configure** router *string* rsvp interface *reference* dbw-down-threshold
Tree	dbw-down-threshold
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

bw *number*

Synopsis	Minimum difference in MRLB or MRB to trigger an update
Context	**configure** router *string* rsvp interface *reference* dbw-down-threshold bw *number*
Tree	bw
Range	0 to 1000000
Units	megabps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

percent *number*

Synopsis	Minimum difference in percent between dark bandwidth and sampled data rate, to trigger IGP-TE update
Context	**configure** router *string* rsvp interface *reference* dbw-down-threshold percent *number*
Tree	percent
Range	0 to 100
Units	percent
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

dbw-multiplier *number*

Synopsis	Configure the Dark Bandwidth multiplier.
Context	**configure** router *string* rsvp interface *reference* dbw-multiplier *number*
Tree	dbw-multiplier
Range	0 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

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dbw-up-threshold

Synopsis	Enable the **dbw-up-threshold** context
Context	**configure** router *string* rsvp interface *reference* dbw-up-threshold
Tree	dbw-up-threshold
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

bw *number*

Synopsis	Minimum difference in MRLB or MRB to trigger an update
Context	**configure** router *string* rsvp interface *reference* dbw-up-threshold bw *number*
Tree	bw
Range	0 to 1000000
Units	megabps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

percent *number*

Synopsis	Minimum difference in percent between dark bandwidth and sampled data rate, to trigger IGP-TE update
Context	**configure** router *string* rsvp interface *reference* dbw-up-threshold percent *number*
Tree	percent
Range	0 to 100
Units	percent
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

graceful-restart-helper-mode *boolean*

Synopsis	Enable graceful restart helper for the RSVP interface
Context	**configure** router *string* rsvp interface *reference* graceful-restart-helper-mode *boolean*
Tree	graceful-restart-helper-mode
Default	false

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Introduced	16.0.R1
Platforms	All

graceful-shutdown *boolean*

Synopsis	Initiate a graceful shutdown of RSVP interface
Context	**configure** router *string* rsvp interface *reference* graceful-shutdown *boolean*
Tree	graceful-shutdown
Default	false
Introduced	16.0.R1
Platforms	All

hello-interval *number*

Synopsis	Time between RSVP Hello messages
Context	**configure** router *string* rsvp interface *reference* hello-interval *number*
Tree	hello-interval
Range	0 to 60
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	All

implicit-null-label *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Signal the implicit null label value for all LSPs
Context	**configure** router *string* rsvp interface *reference* implicit-null-label *boolean*
Tree	implicit-null-label
Introduced	16.0.R1
Platforms	All

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refresh-reduction

Synopsis	Enable the **refresh-reduction** context
Context	**configure** router *string* rsvp interface *reference* refresh-reduction
Tree	refresh-reduction
Introduced	16.0.R1
Platforms	All

reliable-delivery *boolean*

Synopsis	Reliable delivery of RSVP messages over the RSVP interface
Context	**configure** router *string* rsvp interface *reference* refresh-reduction reliable-delivery *boolean*
Tree	reliable-delivery
Default	false
Introduced	16.0.R1
Platforms	All

subscription *number*

Synopsis	Percentage of the link bandwidth to use for reservation
Context	**configure** router *string* rsvp interface *reference* subscription *number*
Tree	subscription
Range	0 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

te-down-threshold

Synopsis	Enable the **te-down-threshold** context
Context	**configure** router *string* rsvp interface *reference* te-down-threshold
Tree	te-down-threshold
Introduced	16.0.R1
Platforms	All

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value *number*

Synopsis	Threshold level per interface
Context	**configure** router *string* rsvp interface *reference* te-down-threshold value *number*
Tree	value
Range	0 to 100
Max. Instances	16
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R2
Platforms	All

te-up-threshold

Synopsis	Enable the **te-up-threshold** context
Context	**configure** router *string* rsvp interface *reference* te-up-threshold
Tree	te-up-threshold
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Threshold level per interface
Context	**configure** router *string* rsvp interface *reference* te-up-threshold value *number*
Tree	value
Range	0 to 100
Max. Instances	16
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R2
Platforms	All

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keep-multiplier *number*

Synopsis	Value for the keep-multiplier to declare a reservation or neighbor as down
Context	**configure** router *string* rsvp keep-multiplier *number*
Tree	keep-multiplier
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

msg-pacing

Synopsis	Enable the **msg-pacing** context
Context	**configure** router *string* rsvp msg-pacing
Tree	msg-pacing
Introduced	16.0.R1
Platforms	All

max-burst *number*

Synopsis	Maximum RSVP messages that are sent over a specified period when message pacing is enabled
Context	**configure** router *string* rsvp msg-pacing max-burst *number*
Tree	max-burst
Range	100 to 1000
Default	650
Introduced	16.0.R1
Platforms	All

period *number*

Synopsis	Time for RSVP message pacing
Context	**configure** router *string* rsvp msg-pacing period *number*
Tree	period
Range	100 to 1000
Units	milliseconds

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Default	100
Introduced	16.0.R1
Platforms	All

p2mp-merge-point-abort-timer *number*

Synopsis	Merge pointer timer for abort timer
Context	**configure** router *string* rsvp p2mp-merge-point-abort-timer *number*
Tree	p2mp-merge-point-abort-timer
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

p2p-merge-point-abort-timer *number*

Synopsis	Merge pointer timer for P2P paths
Context	**configure** router *string* rsvp p2p-merge-point-abort-timer *number*
Tree	p2p-merge-point-abort-timer
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

preemption-timer *number*

Synopsis	Preemption timer for the MPLS instance
Context	**configure** router *string* rsvp preemption-timer *number*
Tree	preemption-timer
Range	0 to 1800
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	All

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rapid-retransmit-time *number*

Synopsis	Rapid retransmission interval to reliably deliver RSVP messages
Context	**configure** router *string* rsvp rapid-retransmit-time *number*
Tree	rapid-retransmit-time
Range	1 to 100
Units	deciseconds
Default	5
Introduced	16.0.R1
Platforms	All

rapid-retry-limit *number*

Synopsis	Rapid retry limit to reliably deliver RSVP messages
Context	**configure** router *string* rsvp rapid-retry-limit *number*
Tree	rapid-retry-limit
Range	1 to 6
Default	3
Introduced	16.0.R1
Platforms	All

refresh-reduction-over-bypass *boolean*

Synopsis	Enable refresh reduction capabilities over tunnels
Context	**configure** router *string* rsvp refresh-reduction-over-bypass *boolean*
Tree	refresh-reduction-over-bypass
Default	false
Introduced	16.0.R1
Platforms	All

refresh-time *number*

Synopsis	Interval between refresh messages
Context	**configure** router *string* rsvp refresh-time *number*
Tree	refresh-time

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Range	1 to 65535
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

te-down-threshold *number*

Synopsis	Value for the te-down-threshold
Context	**configure** router *string* rsvp te-down-threshold *number*
Tree	te-down-threshold
Range	0 to 100
Max. Instances	16
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

te-threshold-update

Synopsis	Enable the **te-threshold-update** context
Context	**configure** router *string* rsvp te-threshold-update
Tree	te-threshold-update
Introduced	16.0.R1
Platforms	All

on-cac-failure *boolean*

Synopsis	CAC (Call Admission Control) failure-triggered IGP update
Context	**configure** router *string* rsvp te-threshold-update on-cac-failure *boolean*
Tree	on-cac-failure
Default	false
Introduced	16.0.R1
Platforms	All

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update-timer *number*

Synopsis	Timer-based IGP updates
Context	**configure** router *string* rsvp te-threshold-update update-timer *number*
Tree	update-timer
Range	1 to 300
Units	seconds
Introduced	16.0.R1
Platforms	All

te-up-threshold *number*

Synopsis	Value for the te-up-threshold
Context	**configure** router *string* rsvp te-up-threshold *number*
Tree	te-up-threshold
Range	0 to 100
Max. Instances	16
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

segment-routing

Synopsis	Enter the **segment-routing** context
Context	**configure** router *string* segment-routing
Tree	segment-routing
Introduced	16.0.R1
Platforms	All

maintenance-policy [policy-name] *string*

Synopsis	Enter the **maintenance-policy** list instance
Context	**configure** router *string* segment-routing maintenance-policy *string*
Tree	maintenance-policy

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Description	Commands in this context configure a named maintenance policy that can be applied to SR policy candidate paths that are either statically configured or imported via BGP.
Introduced	20.10.R1
Platforms	All

[**policy-name**] *string*

Synopsis	Maintenance policy name
Context	**configure** router *string* segment-routing maintenance-policy *string*
Tree	maintenance-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the maintenance policy
Context	**configure** router *string* segment-routing maintenance-policy *string* admin-state *keyword*
Tree	admin-state
Description	This command sets the administrative state of the maintenance policy. A maintenance policy must be administratively disabled to change any of the parameters. When a maintenance template is administratively disabled, all applicable candidate paths are removed from the data path.
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	All

bfd-liveness *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable seamless BFD for segment lists of candidate path

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Context	**configure** router *string* segment-routing maintenance-policy *string* bfd-liveness *boolean*
Tree	bfd-liveness
Description	When configured to **true**, this command enables seamless BFD on every segment list of an SR policy candidate path to which the maintenance policy is applied. The BFD template configures the parameters for the BFD session. When configured to **false**, seamless BFD is disabled.
Default	false
Introduced	20.10.R1
Platforms	All

bfd-template *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	BFD template to be used by seamless BFD
Context	**configure** router *string* segment-routing maintenance-policy *string* bfd-template *reference*
Tree	bfd-template
Description	This command references a named BFD template to be used by seamless BFD. A BFD template must exist on the system before being referenced from a maintenance policy. The template specifies parameters that are used by the BFD session, such as the minimum transmit and receive control packet timer intervals.
Reference	**configure** bfd bfd-template *string*
Introduced	20.10.R1
Platforms	All

hold-down-timer *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Hold down timer for SR policy candidate paths
Context	**configure** router *string* segment-routing maintenance-policy *string* hold-down-timer *number*
Tree	hold-down-timer

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Description	This command configures the hold down timer for the maintenance policy. The purpose of the timer is to prevent bouncing of the SR policy path state if S-BFD sessions associated with the segment lists flap, causing the threshold to be repeatedly crossed in a short period of time. The timer is started when the number of up S-BFD sessions drops below the threshold. The SR policy path is not considered to be up again until the hold down timer has expired and the number of up S-BFD sessions reaches or exceeds the threshold and the internal hold timer is not running. If the revert timer is also configured, the revert timer is not started until after the number of up S-BFD sessions equals or exceeds the threshold and the hold down timer for the primary candidate path has expired.
Range	0 to 5000
Units	deciseconds
Default	0
Introduced	20.10.R1
Platforms	All

mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Protection mode for SR policy candidate paths
Context	**configure** router *string* segment-routing maintenance-policy *string* mode *keyword*
Tree	mode
Description	This command specifies the data path programming and protection mechanism for SR policy candidate paths to which the maintenance policy is applied.
Options	none, ecmp-protected, linear
Default	none
Introduced	20.10.R1
Platforms	All

return-path-label *number*

WARNING:
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Synopsis	S-BFD return-path label
Context	**configure** router *string* segment-routing maintenance-policy *string* return-path-label *number*
Tree	return-path-label
Description	This command configures the S-BFD session to echo mode and adds an additional MPLS label to the bottom of the label stack for the S-BFD packet. The command applies to the initiator of the S-BFD sessions. The return-path label may be a binding SID for an SR policy or other MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through this MPLS return path. If the command is deleted, S-BFD returns to asynchronous mode and no return-path label is pushed by the initiator node. Any S-BFD packets for this LSP or path that the reflector receives are routed through the IGP path.
Range	32 to 1048512
Introduced	22.10.R1
Platforms	All

revert-timer *number*

Synopsis	Revert timer for SR policy candidate paths
Context	**configure** router *string* segment-routing maintenance-policy *string* revert-timer *number*
Tree	revert-timer
Description	This command configures the revert timer for SR Policy candidate paths. The revert timer is started when the primary path recovers (the number of S-BFD sessions that are up equals or exceeds the threshold value and the hold down timer has expired). When the timer expires, the system reverts to the primary path.
Range	0 to 4320
Units	minutes
Introduced	20.10.R1
Platforms	All

threshold *number*

WARNING:
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Synopsis	Minimum number of up S-BFD sessions for up path status

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Context	**configure** router *string* segment-routing maintenance-policy *string* threshold *number*
Tree	threshold
Description	This command configures the minimum number of S-BFD sessions that must be up for the SR policy candidate path to be considered up. If the number of up sessions is below this threshold value, the policy candidate path is marked as BFD degraded by the system. This command is only valid in the **ecmp-protected** mode.
Range	1 to 32
Default	1
Introduced	20.10.R1
Platforms	All

segment-routing-v6

Synopsis	Enable the **segment-routing-v6** context
Context	**configure** router *string* segment-routing segment-routing-v6
Tree	segment-routing-v6
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

base-routing-instance

Synopsis	Enter the **base-routing-instance** context
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance
Tree	base-routing-instance
Description	Commands in this context configure SRv6 SID functions for End, End.X, and service SIDs for IPv4 and IPv6 prefixes in the base routing instance.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

locator [locator-name] *reference*

Synopsis	Enter the **locator** list instance
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance locator *reference*
Tree	locator

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Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**locator-name**] *reference*

Synopsis	SRv6 locator name
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance locator *reference*
Tree	locator
Reference	**configure** router *string* segment-routing segment-routing-v6 locator *string*
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function

Synopsis	Enter the **function** context
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance locator *reference* function
Tree	function
Description	Commands in this context configure the function value of SRv6 SIDs. The **end-dt46** command is mutually exclusive with the **end-dt4** and e**nd-dt6** commands.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end [value] *number*

Synopsis	Enter the **end** list instance
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance locator *reference* function end *number*
Tree	end
Description	Commands in this context configure the attributes of SRv6 End SID function. The End SID functions for each SRH mode must be statically allocated. The value is not automatically allocated by default for a locator.
Max. Instances	8
Introduced	21.5.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**value**] *number*

Synopsis	SRv6 SID function value
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance locator *reference* function end *number*
Tree	end
Range	1 to 1048575
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

srh-mode *keyword*

Synopsis	Segment Routing Header (SRH) mode
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance locator *reference* function end *number* srh-mode *keyword*
Tree	srh-mode
Description	This command configures the popping mode for the SID.
Options	psp, usp, psp-usd, usp-usd, psp-usp-usd
Default	psp
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end-dt4

Synopsis	Enable the **end-dt4** context
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance locator *reference* function end-dt4
Tree	end-dt4
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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value *number*

Synopsis	SRv6 function value
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance locator *reference* function end-dt4 value *number*
Tree	value
Range	1 to 1048575
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end-dt46

Synopsis	Enable the **end-dt46** context
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance locator *reference* function end-dt46
Tree	end-dt46
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

Synopsis	SRv6 function value
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance locator *reference* function end-dt46 value *number*
Tree	value
Range	1 to 1048575
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end-dt6

Synopsis	Enable the **end-dt6** context
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance locator *reference* function end-dt6
Tree	end-dt6
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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value *number*

Synopsis	SRv6 function value
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance locator *reference* function end-dt6 value *number*
Tree	value
Range	1 to 1048575
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end-x [value] *number*

Synopsis	Enter the **end-x** list instance
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance locator *reference* function end-x *number*
Tree	end-x
Description	Commands in this context configure the attributes of the End.X SID function associated with a P2P interface. A static function value can be configured for each combination of SRH mode and protection type. For a specific interface, the static function value associated with the same combination of protection type and SRH mode overrides any corresponding function value that is automatically allocated (**end.x-auto-allocate** list configuration). If more than one value is configured for an interface and combination of SRH mode and protection type, they are all advertised in IS-IS. When used in remote TI-LFA repair tunnel programming, IS-IS uses rules to select one End.X value from the multiple values received in IS-IS link advertisements. Values assigned to loopback and system interfaces are not advertised in IS-IS. End.X SID functions for adjacencies over broadcast interfaces are always automatically allocated based on the configuration of the **end.x-auto-allocate** list.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**value**] *number*

Synopsis	SRv6 SID function value
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance locator *reference* function end-x *number*
Tree	end-x

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Range	1 to 1048575
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

interface-name *reference*

Synopsis	Interface name
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance locator *reference* function end-x *number* interface-name *reference*
Tree	interface-name
Reference	**configure** router *string* interface *string*
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

protection *keyword*

Synopsis	Adjacency protection type for the SID function
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance locator *reference* function end-x *number* protection *keyword*
Tree	protection
Options	unprotected, protected
Default	protected
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

srh-mode *keyword*

Synopsis	Segment Routing Header (SRH) mode
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance locator *reference* function end-x *number* srh-mode *keyword*
Tree	srh-mode
Description	This command configures the popping mode for the SID.
Options	psp, usp, psp-usd, usp-usd, psp-usp-usd
Default	psp
Introduced	21.5.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end-x-auto-allocate [srh-mode] *keyword* protection *keyword*

Synopsis	Add a list entry for **end-x-auto-allocate**
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance locator *reference* function end-x-auto-allocate *keyword* protection *keyword*
Tree	end-x-auto-allocate
Description	This command adds a list entry for the automatic allocation of the End.X SID function for all adjacencies over all network interfaces on the router (P2P and broadcast interfaces). A list entry is a combination of the protection type and the SRH mode. Any combinations in addition to the maximum supported by this command must be allocated statically under each P2P interface (**end.x** configuration). When no list entries are configured, no End.X function values are automatically allocated by default for a locator.
Max. Instances	2
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**srh-mode**] *keyword*

Synopsis	Segment Routing Header (SRH) mode
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance locator *reference* function end-x-auto-allocate *keyword* protection *keyword*
Tree	end-x-auto-allocate
Description	This command specifies the popping mode for the automatically allocated SID.
Options	psp, usp, psp-usd, usp-usd, psp-usp-usd
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

protection *keyword*

Synopsis	Adjacency protection for automatic SID function
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance locator *reference* function end-x-auto-allocate *keyword* protection *keyword*

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Tree	end-x-auto-allocate
Description	This command specifies the adjacency protection for the automatically allocated SID function.
Options	unprotected, protected
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

micro-segment-locator [locator-name] *reference*

Synopsis	Enter the **micro-segment-locator** list instance
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance micro-segment-locator *reference*
Tree	micro-segment-locator
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**locator-name**] *reference*

Synopsis	SRv6 micro-segment locator name
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance micro-segment-locator *reference*
Tree	micro-segment-locator
Description	This command references a micro-segment locator name defined in the **configure router segment-routing segment-routing-v6** context. This command assigns a micro-segment locator to BGP for use with Base router routes.
Reference	**configure** router *string* segment-routing segment-routing-v6 micro-segment-locator *string*
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function

Synopsis	Enter the **function** context
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance micro-segment-locator *reference* function

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Tree	function
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

ua [value] *number*

Synopsis	Enter the **ua** list instance
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance micro-segment-locator *reference* function ua *number*
Tree	ua
Description	Commands in this context configure the attributes of the uA micro-SID function associated with a P2P interface. The uA micro-SID function encodes the behavior of an adjacency SID.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**value**] *number*

Synopsis	SRv6 SID function value
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance micro-segment-locator *reference* function ua *number*
Tree	ua
Range	1 to 1048575
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

interface-name *reference*

Synopsis	Interface name
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance micro-segment-locator *reference* function ua *number* interface-name *reference*
Tree	interface-name
Reference	**configure** router *string* interface *string*
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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protection *keyword*

Synopsis	Adjacency protection type for the SID function
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance micro-segment-locator *reference* function ua *number* protection *keyword*
Tree	protection
Options	unprotected, protected
Default	protected
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

srh-mode *keyword*

Synopsis	Segment Routing Header (SRH) mode
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance micro-segment-locator *reference* function ua *number* srh-mode *keyword*
Tree	srh-mode
Description	This command configures the popping mode for the SID.
Options	psp, usp, psp-usd, usp-usd, psp-usp-usd
Default	psp
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

ua-auto-allocate [srh-mode] *keyword* protection *keyword*

Synopsis	Add a list entry for **ua-auto-allocate**
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance micro-segment-locator *reference* function ua-auto-allocate *keyword* protection *keyword*
Tree	ua-auto-allocate
Description	Commands in this context define a list entry for the automatic allocation of the uA micro-SID function for all adjacencies over all network interfaces on the router (P2P and broadcast interfaces).
Max. Instances	2
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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[**srh-mode**] *keyword*

Synopsis	Segment Routing Header (SRH) mode
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance micro-segment-locator *reference* function ua-auto-allocate *keyword* protection *keyword*
Tree	ua-auto-allocate
Description	This command specifies the popping mode for the automatically allocated SID.
Options	psp, usp, psp-usd, usp-usd, psp-usp-usd
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

protection *keyword*

Synopsis	Adjacency protection for automatic SID function
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance micro-segment-locator *reference* function ua-auto-allocate *keyword* protection *keyword*
Tree	ua-auto-allocate
Description	This command specifies the adjacency protection for the automatically allocated SID function.
Options	unprotected, protected
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

udt4

Synopsis	Enable the **udt4** context
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance micro-segment-locator *reference* function udt4
Tree	udt4
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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value *number*

Synopsis	SRv6 function value
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance micro-segment-locator *reference* function udt4 value *number*
Tree	value
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

udt46

Synopsis	Enable the **udt46** context
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance micro-segment-locator *reference* function udt46
Tree	udt46
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

Synopsis	SRv6 function value
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance micro-segment-locator *reference* function udt46 value *number*
Tree	value
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

udt6

Synopsis	Enable the **udt6** context
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance micro-segment-locator *reference* function udt6
Tree	udt6
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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value *number*

Synopsis	SRv6 function value
Context	**configure** router *string* segment-routing segment-routing-v6 base-routing-instance micro-segment-locator *reference* function udt6 value *number*
Tree	value
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

locator [locator-name] *string*

Synopsis	Enter the **locator** list instance
Context	**configure** router *string* segment-routing segment-routing-v6 locator *string*
Tree	locator
Max. Instances	16
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**locator-name**] *string*

Synopsis	SRv6 locator name
Context	**configure** router *string* segment-routing segment-routing-v6 locator *string*
Tree	locator
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis	Administrative state of the locator
Context	**configure** router *string* segment-routing segment-routing-v6 locator *string* admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

algorithm *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IGP flexible algorithm ID
Context	**configure** router *string* segment-routing segment-routing-v6 locator *string* algorithm *number*
Tree	algorithm
Description	This command configures an IGP flexible algorithm for a locator. A locator can only be part of one algorithm but it can be used in multiple IGP instances.
Range	128 to 255
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

block-length *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SRv6 locator block address length
Context	**configure** router *string* segment-routing segment-routing-v6 locator *string* block-length *number*
Tree	block-length
Range	0 to 96
Default	0
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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function-length *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Function length
Context	**configure** router *string* segment-routing segment-routing-v6 locator *string* function-length *number*
Tree	function-length
Description	This command configures the size of the function length. The sum of the function length and the locator prefix length must not exceed 128 bits. Operators can configure the locator level **label-block** command before they configure a function length of 16. If the function length is configured as 16, the locator level **label-block** must be configured rather than the static-function level **label-block**. The validation occurs when committed.
Range	16 | 20 to 96
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

label-block *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reserved label block name for service termination
Context	**configure** router *string* segment-routing segment-routing-v6 locator *string* label-block *reference*
Tree	label-block
Reference	**configure** router *string* mpls-labels reserved-label-block *string*
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

prefix

Synopsis	Enter the **prefix** context
Context	**configure** router *string* segment-routing segment-routing-v6 locator *string* prefix
Tree	prefix
Introduced	21.5.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

ip-prefix *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SRv6 locator prefix
Context	**configure** router *string* segment-routing segment-routing-v6 locator *string* prefix ip-prefix *string*
Tree	ip-prefix
Description	This command configures the IPv6 prefix for the locator. For regular SRv6, the locator prefix length range is the sum of the length of the block field and the length of the node ID field. For micro-segment SRv6, the locator prefix length must be equal to the micro-SID block length.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

static-function

Synopsis	Enter the **static-function** context
Context	**configure** router *string* segment-routing segment-routing-v6 locator *string* static-function
Tree	static-function
Description	Commands in this context configure the attributes of the function field range reserved for static End.d, End.X, and service SID assignment.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

label-block *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Label block for the service SIDs of the SRv6 locator
Context	**configure** router *string* segment-routing segment-routing-v6 locator *string* static-function label-block *reference*

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Tree	label-block
Reference	**configure** router *string* mpls-labels reserved-label-block *string*
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

max-entries *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of static SID functions
Context	**configure** router *string* segment-routing segment-routing-v6 locator *string* static-function max-entries *number*
Tree	max-entries
Description	This command configures the maximum number of values that are reserved from the function field to assign to static SID functions.
Range	1 to 1048575
Default	1
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

termination-fpe *reference*

Synopsis	List of the SRv6 termination FPE
Context	**configure** router *string* segment-routing segment-routing-v6 locator *string* termination-fpe *reference*
Tree	termination-fpe
Description	This command associates the Forwarding Path Extension (FPE) with the locator for terminating SRv6 in local services. Multiple locators can share the same FPE or each locator can use a different FPE. The FPE can be the same or different from the origination FPE.
Reference	**configure** fwd-path-ext fpe *number*
Max. Instances	1
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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micro-segment

Synopsis	Enable the **micro-segment** context
Context	**configure** router *string* segment-routing segment-routing-v6 micro-segment
Tree	micro-segment
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

block [block-name] *string*

Synopsis	Enter the **block** list instance
Context	**configure** router *string* segment-routing segment-routing-v6 micro-segment block *string*
Tree	block
Max. Instances	16
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**block-name**] *string*

Synopsis	Micro-SID block name
Context	**configure** router *string* segment-routing segment-routing-v6 micro-segment block *string*
Tree	block
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis	Administrative state of micro-SID block
Context	**configure** router *string* segment-routing segment-routing-v6 micro-segment block *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable

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Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

label-block *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reserved label block
Context	**configure** router *string* segment-routing segment-routing-v6 micro-segment block *string* label-block *reference*
Tree	label-block
Description	This command associates a pre-configured reserved label block with the micro-SID block.
Reference	**configure** router *string* mpls-labels reserved-label-block *string*
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

prefix

Synopsis	Enter the **prefix** context
Context	**configure** router *string* segment-routing segment-routing-v6 micro-segment block *string* prefix
Tree	prefix
Description	Commands in this context configure the IPv6 prefix for an SRv6 micro-segment locator.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

ip-prefix *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SRv6 locator prefix
Context	**configure** router *string* segment-routing segment-routing-v6 micro-segment block *string* prefix ip-prefix *string*

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Tree	ip-prefix
Description	This command configures the IPv6 prefix for the locator. For regular SRv6, the locator prefix length range is the sum of the length of the block field and the length of the node ID field. For micro-segment SRv6, the locator prefix length must be equal to the micro-SID block length.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

static-function

Synopsis	Enter the **static-function** context
Context	**configure** router *string* segment-routing segment-routing-v6 micro-segment block *string* static-function
Tree	static-function
Description	Commands in this context configure the function field parameters of a static uA or service micro-SID assignment.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

max-entries *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of static SID functions
Context	**configure** router *string* segment-routing segment-routing-v6 micro-segment block *string* static-function max-entries *number*
Tree	max-entries
Description	This command configures the maximum number of values that are reserved from the function field to assign to static SID functions.
Range	1 to 1048575
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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termination-fpe *reference*

Synopsis	FPE ID for SRv6 termination
Context	**configure** router *string* segment-routing segment-routing-v6 micro-segment block *string* termination-fpe *reference*
Tree	termination-fpe
Description	This command associates the FPE ID with the locator for SRv6 termination in local services.
Reference	**configure** fwd-path-ext fpe *number*
Max. Instances	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

block-length *number*

Synopsis	Micro-SID block length
Context	**configure** router *string* segment-routing segment-routing-v6 micro-segment block-length *number*
Tree	block-length
Range	8 | 16 | 24 | 32 | 40 | 48 | 56 | 64
Default	32
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

global-sid-entries *number*

Synopsis	Maximum number of micro-segment locators network wide
Context	**configure** router *string* segment-routing segment-routing-v6 micro-segment global-sid-entries *number*
Tree	global-sid-entries
Description	This command defines the maximum number of unique micro-segment locators that can be configured network wide. The value is expressed in multiples of 1024 and must be the same on every platform network wide.
Range	4 to 60
Default	16
Introduced	22.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

sid-length *number*

Synopsis	Micro-SID length
Context	**configure** router *string* segment-routing segment-routing-v6 micro-segment sid-length *number*
Tree	sid-length
Description	This command configures the length of the micro-SIDs.
Range	16
Default	16
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

micro-segment-locator [locator-name] *string*

Synopsis	Enter the **micro-segment-locator** list instance
Context	**configure** router *string* segment-routing segment-routing-v6 micro-segment-locator *string*
Tree	micro-segment-locator
Max. Instances	16
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**locator-name**] *string*

Synopsis	SRv6 locator name
Context	**configure** router *string* segment-routing segment-routing-v6 micro-segment-locator *string*
Tree	micro-segment-locator
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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admin-state *keyword*

Synopsis	Administrative state of the locator
Context	**configure** router *string* segment-routing segment-routing-v6 micro-segment-locator *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

algorithm *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IGP flexible algorithm ID
Context	**configure** router *string* segment-routing segment-routing-v6 micro-segment-locator *string* algorithm *number*
Tree	algorithm
Description	This command configures an IGP flexible algorithm for a locator. A locator can only be part of one algorithm but it can be used in multiple IGP instances.
Range	128 to 255
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

block *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pre-defined micro-SID block
Context	**configure** router *string* segment-routing segment-routing-v6 micro-segment-locator *string* block *reference*
Tree	block

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Description	This command associates a pre-defined micro-SID block with the micro-segment SRv6 locator.
Reference	**configure** router *string* segment-routing segment-routing-v6 micro-segment block *string*
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

un

Synopsis	Enter the **un** context
Context	**configure** router *string* segment-routing segment-routing-v6 micro-segment-locator *string* un
Tree	un
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

srh-mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Segment Routing Header (SRH) mode
Context	**configure** router *string* segment-routing segment-routing-v6 micro-segment-locator *string* un srh-mode *keyword*
Tree	srh-mode
Description	This command configures the popping mode for the SID.
Options	psp, usp, psp-usd, usp-usd, psp-usp-usd
Default	psp
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

WARNING:
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Synopsis	SRv6 function value
Context	**configure** router *string* segment-routing segment-routing-v6 micro-segment-locator *string* un value *number*
Tree	value
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

origination-fpe *reference*

Synopsis	List of the SRv6 origination FPEs
Context	**configure** router *string* segment-routing segment-routing-v6 origination-fpe *reference*
Tree	origination-fpe
Description	This command configures the origination Forwarding Path Extension (FPE) for SRv6 tunnels on local services. The origination FPE must be different from any of the SRv6 termination FPEs.
Reference	**configure** fwd-path-ext fpe *number*
Max. Instances	1
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

source-address *string*

Synopsis	Source address used in the SRv6 packet
Context	**configure** router *string* segment-routing segment-routing-v6 source-address *string*
Tree	source-address
Description	This command specifies the global default source IPv6 address used in the SA field of the outerIPv6 header of the SRv6 encapsulated packet. The value is inherited in the BGP and services contexts (for example, **configure router "base" bgp segment-routing-v6 source-address** and **configure service vprn bgp-ipvpn segment-routing-v6 source-address**), but is overwritten by the value configured in those contexts. A source IPv6 address must be configured in the global context or in the BGP or services context. The system does not check if the entered address is a valid local address.
Introduced	21.5.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

sr-mpls

Synopsis	Enter the **sr-mpls** context
Context	**configure** router *string* segment-routing sr-mpls
Tree	sr-mpls
Introduced	21.10.R1
Platforms	All

prefix-sids [interface-name] *reference*

Synopsis	Enter the **prefix-sids** list instance
Context	**configure** router *string* segment-routing sr-mpls prefix-sids *reference*
Tree	prefix-sids
Description	Commands in this context configure the prefix SIDs for an interface.
Introduced	21.10.R1
Platforms	All

[**interface-name**] *reference*

Synopsis	Loopback interface name that owns prefix to advertise
Context	**configure** router *string* segment-routing sr-mpls prefix-sids *reference*
Tree	prefix-sids
Reference	**configure** router *string* interface *string*
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

ipv4-sid

Synopsis	Enable the **ipv4-sid** context
Context	**configure** router *string* segment-routing sr-mpls prefix-sids *reference* ipv4-sid
Tree	ipv4-sid
Introduced	21.10.R1

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Platforms	All

index *number*

Synopsis	Node SID index for the interface
Context	**configure** router *string* segment-routing sr-mpls prefix-sids *reference* ipv4-sid index *number*
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: **index** or **label**.
Introduced	21.10.R1
Platforms	All

label *number*

Synopsis	Label value for the node SID
Context	**configure** router *string* segment-routing sr-mpls prefix-sids *reference* ipv4-sid label *number*
Tree	label
Range	32 to 1048575
Notes	The following elements are part of a choice: **index** or **label**.
Introduced	21.10.R1
Platforms	All

ipv6-sid

Synopsis	Enable the **ipv6-sid** context
Context	**configure** router *string* segment-routing sr-mpls prefix-sids *reference* ipv6-sid
Tree	ipv6-sid
Introduced	21.10.R1
Platforms	All

index *number*

Synopsis	Node SID index for the interface

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Context	**configure** router *string* segment-routing sr-mpls prefix-sids *reference* ipv6-sid index *number*
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: **index** or **label**.
Introduced	21.10.R1
Platforms	All

label *number*

Synopsis	Label value for the node SID
Context	**configure** router *string* segment-routing sr-mpls prefix-sids *reference* ipv6-sid label *number*
Tree	label
Range	32 to 1048575
Notes	The following elements are part of a choice: **index** or **label**.
Introduced	21.10.R1
Platforms	All

node-sid *boolean*

Synopsis	Assign a node SID to the prefix referencing the router
Context	**configure** router *string* segment-routing sr-mpls prefix-sids *reference* node-sid *boolean*
Tree	node-sid
Default	true
Introduced	21.10.R1
Platforms	All

sr-policies

Synopsis	Enter the **sr-policies** context
Context	**configure** router *string* segment-routing sr-policies
Tree	sr-policies
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of segment routing policies
Context	**configure** router *string* segment-routing sr-policies admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

egress-statistics

Synopsis	Enable the **egress-statistics** context
Context	**configure** router *string* segment-routing sr-policies egress-statistics
Tree	egress-statistics
Description	Commands in this context configure the collection of egress traffic statistics for all segment routing policies.
Introduced	19.10.R1
Platforms	All

accounting-policy *reference*

Synopsis	Accounting policy ID
Context	**configure** router *string* segment-routing sr-policies egress-statistics accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	23.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the traffic statistics
Context	**configure** router *string* segment-routing sr-policies egress-statistics admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	disable
Introduced	19.10.R1
Platforms	All

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	**configure** router *string* segment-routing sr-policies egress-statistics collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	23.7.R1
Platforms	All

ingress-statistics

Synopsis	Enable the **ingress-statistics** context
Context	**configure** router *string* segment-routing sr-policies ingress-statistics
Tree	ingress-statistics
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the traffic statistics
Context	**configure** router *string* segment-routing sr-policies ingress-statistics admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

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reserved-label-block *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reserved local block for segment routing policies
Context	**configure** router *string* segment-routing sr-policies reserved-label-block *reference*
Tree	reserved-label-block
Reference	**configure** router *string* mpls-labels reserved-label-block *string*
Introduced	16.0.R1
Platforms	All

static-policy [name] *string*

Synopsis	Enter the **static-policy** list instance
Context	**configure** router *string* segment-routing sr-policies static-policy *string*
Tree	static-policy
Max. Instances	8192
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	Name for the segment routing static policy
Context	**configure** router *string* segment-routing sr-policies static-policy *string*
Tree	static-policy
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of segment routing static policy

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Context	**configure** router *string* segment-routing sr-policies static-policy *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

binding-sid *number*

Synopsis	Segment ID that opaquely represents an SR policy to upstream routers
Context	**configure** router *string* segment-routing sr-policies static-policy *string* binding-sid *number*
Tree	binding-sid
Range	32 to 1048575
Introduced	16.0.R1
Platforms	All

color *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Traffic flows to be steered by this policy
Context	**configure** router *string* segment-routing sr-policies static-policy *string* color *number*
Tree	color
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

distinguisher *number*

WARNING:
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Synopsis	Unique value for a policy
Context	**configure** router *string* segment-routing sr-policies static-policy *string* distinguisher *number*
Tree	distinguisher
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

endpoint *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination of the source-routed path
Context	**configure** router *string* segment-routing sr-policies static-policy *string* endpoint *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	endpoint
Introduced	16.0.R1
Platforms	All

head-end *(ipv4-address-no-zone | ipv6-address-no-zone | keyword)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Head end address for this static policy
Context	**configure** router *string* segment-routing sr-policies static-policy *string* head-end *(ipv4-address-no-zone | ipv6-address-no-zone | keyword)*
Tree	head-end
Options	local
Introduced	16.0.R1
Platforms	All

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maintenance-policy *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Policy name
Context	**configure** router *string* segment-routing sr-policies static-policy *string* maintenance-policy *reference*
Tree	maintenance-policy
Reference	**configure** router *string* segment-routing maintenance-policy *string*
Introduced	20.10.R1
Platforms	All

preference *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Preference value of this static policy
Context	**configure** router *string* segment-routing sr-policies static-policy *string* preference *number*
Tree	preference
Max. Range	0 to 4294967295
Default	100
Introduced	16.0.R1
Platforms	All

segment-list [seg-list-index] *number*

Synopsis	Enter the **segment-list** list instance
Context	**configure** router *string* segment-routing sr-policies static-policy *string* segment-list *number*
Tree	segment-list
Max. Instances	32
Introduced	16.0.R1

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Platforms	All

[**seg-list-index**] *number*

Synopsis	Index for identifying a particular segment list
Context	**configure** router *string* segment-routing sr-policies static-policy *string* segment-list *number*
Tree	segment-list
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of segment list for static policy
Context	**configure** router *string* segment-routing sr-policies static-policy *string* segment-list *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

segment [segment-index] *number*

Synopsis	Enter the **segment** list instance
Context	**configure** router *string* segment-routing sr-policies static-policy *string* segment-list *number* segment *number*
Tree	segment
Max. Instances	11
Introduced	16.0.R1
Platforms	All

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[**segment-index**] *number*

Synopsis	Index for identifying a particular segment list
Context	**configure** router *string* segment-routing sr-policies static-policy *string* segment-list *number* segment *number*
Tree	segment
Range	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

mpls-label *number*

Synopsis	Value for the MPLS label
Context	**configure** router *string* segment-routing sr-policies static-policy *string* segment-list *number* segment *number* mpls-label *number*
Tree	mpls-label
Range	0 to 1048575
Introduced	16.0.R1
Platforms	All

srv6-sid *string*

Synopsis	Segment ID for segment routing IPv6
Context	**configure** router *string* segment-routing sr-policies static-policy *string* segment-list *number* segment *number* srv6-sid *string*
Tree	srv6-sid
Description	This command defines the 128-bit SRv6 SID for the segment.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

weight *number*

WARNING:
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Synopsis	Weight of this segment list
Context	**configure** router *string* segment-routing sr-policies static-policy *string* segment-list *number* weight *number*
Tree	weight
Max. Range	0 to 4294967295
Default	1
Introduced	16.0.R1
Platforms	All

segment-routing-v6

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **segment-routing-v6** context
Context	**configure** router *string* segment-routing sr-policies static-policy *string* segment-routing-v6
Tree	segment-routing-v6
Description	Commands in this context configure a static SRv6 policy.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

binding-sid [index] *number*

Synopsis	Enter the **binding-sid** list instance
Context	**configure** router *string* segment-routing sr-policies static-policy *string* segment-routing-v6 binding-sid *number*
Tree	binding-sid
Max. Instances	1
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**index**] *number*

Synopsis	Binding SID index

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Context	**configure** router *string* segment-routing sr-policies static-policy *string* segment-routing-v6 binding-sid *number*
Tree	binding-sid
Range	1
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

ip-address *string*

Synopsis	Remote SRv6 binding SID
Context	**configure** router *string* segment-routing sr-policies static-policy *string* segment-routing-v6 binding-sid *number* ip-address *string*
Tree	ip-address
Description	This command configures an SRv6 binding SID for a remote SRv6 policy. The command cannot be used with a local head end location (**configure router segment-routing sr-policies static-policy head-end local**). This command and the **configure router segment-routing sr-policies static-policy segment-routing-v6 binding-sid locator** command for a local SRv6 policy are mutually exclusive. The format of the binding SID is a 128-bit IPv6 address.
Notes	The following elements are part of a choice: **ip-address** or **locator**.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

locator

Synopsis	Enable the **locator** context
Context	**configure** router *string* segment-routing sr-policies static-policy *string* segment-routing-v6 binding-sid *number* locator
Tree	locator
Description	Commands in this context configure a binding SID locator for a local SRv6 policy. This command and the **configure router segment-routing sr-policies static-policy segment-routing-v6 binding-sid ip-address** command for a non-local SRv6 policy are mutually exclusive.
Notes	The following elements are part of a choice: **ip-address** or **locator**.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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function *keyword*

Synopsis	Local SRv6 binding SID locator function
Context	**configure** router *string* segment-routing sr-policies static-policy *string* segment-routing-v6 binding-sid *number* locator function *keyword*
Tree	function
Description	This command configures an SRv6 binding SID function for a static SRv6 policy with a local head end location (**configure router segment-routing sr-policies static-policy head-end local**).
Options	end-b6-encaps-red
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function-value *number*

Synopsis	Local SRv6 binding SID locator function value
Context	**configure** router *string* segment-routing sr-policies static-policy *string* segment-routing-v6 binding-sid *number* locator function-value *number*
Tree	function-value
Description	This command configures the function value for a static SRv6 policy with a local head end location (**configure router segment-routing sr-policies static-policy head-end local**). If a function value is configured, the router checks whether this function value is available for the named locator. If no function value is configured, the router dynamically allocates a value.
Range	1 to 1048575
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

locator-name *reference*

Synopsis	Local SRv6 binding SID locator name
Context	**configure** router *string* segment-routing sr-policies static-policy *string* segment-routing-v6 binding-sid *number* locator locator-name *reference*
Tree	locator-name
Description	This command configures an SRv6 binding SID locator for a static SRv6 policy with a local head end location (**configure router segment-routing sr-policies static-**

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	policy head-end local). A corresponding locator must exist in the **configure router segment-routing segment-routing-v6** context.
Reference	**configure** router *string* segment-routing segment-routing-v6 locator *string*
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

return-path-bfd-sid *string*

Synopsis	BFD controlled return path for SRv6
Context	**configure** router *string* segment-routing sr-policies static-policy *string* segment-routing-v6 return-path-bfd-sid *string*
Tree	return-path-bfd-sid
Description	This command configures the Seamless Bidirectional Forwarding Detection (S-BFD) session to echo mode and pushes an additional SRv6 SID in the SRH on S-BFD packets only.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

type *keyword*

Synopsis	Static policy type
Context	**configure** router *string* segment-routing sr-policies static-policy *string* type *keyword*
Tree	type
Description	This command configures the type of static policy. Only commands relevant to the type of the static policy can be executed. The type of the static policy can only be changed to a new type if there is no configuration present for the old type, or if all configuration for the old type is deleted.
Options	sr-mpls, srv6
Default	sr-mpls
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

selective-fib *boolean*

Synopsis	Enable selective FIB
Context	**configure** router *string* selective-fib *boolean*

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Tree	selective-fib
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sfm-overload

Synopsis	Enable the **sfm-overload** context
Context	**configure** router *string* sfm-overload
Tree	sfm-overload
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR

holdoff-time *number*

Synopsis	Delay in detecting SFM failures and setting overload
Context	**configure** router *string* sfm-overload holdoff-time *number*
Tree	holdoff-time
Range	1 to 600
Units	seconds
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR

sgt-qos

Synopsis	Enter the **sgt-qos** context
Context	**configure** router *string* sgt-qos
Tree	sgt-qos
Introduced	16.0.R1
Platforms	All

dot1p

Synopsis	Enter the **dot1p** context

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Context	**configure** router *string* sgt-qos dot1p
Tree	dot1p
Introduced	16.0.R1
Platforms	All

application [dot1p-app-name] *keyword*

Synopsis	Enter the **application** list instance
Context	**configure** router *string* sgt-qos dot1p application *keyword*
Tree	application
Introduced	16.0.R1
Platforms	All

[**dot1p-app-name**] *keyword*

Synopsis	Dot1p application ID that generates control traffic
Context	**configure** router *string* sgt-qos dot1p application *keyword*
Tree	application
Options	arp, isis, pppoe
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

dot1p *(keyword | number)*

Synopsis	Dot1p value to the traffic generated by this application
Context	**configure** router *string* sgt-qos dot1p application *keyword* dot1p *(keyword | number)*
Tree	dot1p
Range	0 to 7
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

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dscp

Synopsis	Enter the **dscp** context
Context	**configure** router *string* sgt-qos dscp
Tree	dscp
Introduced	16.0.R1
Platforms	All

application [dscp-app-name] *keyword*

Synopsis	Enter the **application** list instance
Context	**configure** router *string* sgt-qos dscp application *keyword*
Tree	application
Introduced	16.0.R1
Platforms	All

[dscp-app-name] *keyword*

Synopsis	DSCP application identifier on the NOKIA SR OS router that generates control traffic over IP
Context	**configure** router *string* sgt-qos dscp application *keyword*
Tree	application
Options	bgp, cflowd, dhcp, dns, ftp, icmp, igmp, l2tp, ldp, mld, msdp, ndis, ntp, ospf, pim, radius, rip, rsvp, snmp, snmp-notification, srrp, ssh, syslog, tacplus, telnet, tftp, traceroute, vrrp, ptp, igmp-reporter, gtp, sflow, diameter, pcep, call-trace, bmp, grpc, mtrace2, http, mpls-udp-return, pfcp, ibcp, bfd
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

dscp *(keyword | number)*

Synopsis	DSCP value to the traffic generated by this application
Context	**configure** router *string* sgt-qos dscp application *keyword* dscp *(keyword | number)*
Tree	dscp
Range	0 to 63
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31,

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	cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dscp-map [dscp-name] *keyword*

Synopsis	Enter the **dscp-map** list instance
Context	**configure** router *string* sgt-qos dscp dscp-map *keyword*
Tree	dscp-map
Introduced	16.0.R2
Platforms	All

[**dscp-name**] *keyword*

Synopsis	DSCP name mapped to forwarding class
Context	**configure** router *string* sgt-qos dscp dscp-map *keyword*
Tree	dscp-map
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

fc *keyword*

Synopsis	Value for the forwarding class for this mapping
Context	**configure** router *string* sgt-qos dscp dscp-map *keyword* fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R2
Platforms	All

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static-routes

Synopsis	Enter the **static-routes** context
Context	**configure** router *string* static-routes
Tree	static-routes
Introduced	16.0.R1
Platforms	All

hold-down

Synopsis	Enable the **hold-down** context
Context	**configure** router *string* static-routes hold-down
Tree	hold-down
Introduced	16.0.R1
Platforms	All

initial *number*

Synopsis	Value for the initial hold down time
Context	**configure** router *string* static-routes hold-down initial *number*
Tree	initial
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

max-value *number*

Synopsis	Maximum value of the hold down time
Context	**configure** router *string* static-routes hold-down max-value *number*
Tree	max-value
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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multiplier *number*

Synopsis	Value by which the previous hold-down time is multiplied to calculate the new one
Context	**configure** router *string* static-routes hold-down multiplier *number*
Tree	multiplier
Range	1 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

route [ip-prefix] *(ipv4-prefix | ipv6-prefix)* route-type *keyword*

Synopsis	Enter the **route** list instance
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword*
Tree	route
Introduced	16.0.R1
Platforms	All

[**ip-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP prefix and prefix length for the static routes
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword*
Tree	route
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

route-type *keyword*

Synopsis	Static route type for unicast or multicast RPF
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword*
Tree	route
Options	unicast, multicast
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

backup-tag *number*

Synopsis	Static route backup tag
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* backup-tag *number*
Tree	backup-tag
Description	This command associates a 4-byte backup route tag with the static route when the backup next-hop functionality is activated. The tag value is used in route policies to control distribution of the static route into other protocols when the backup next-hop function is activated for the associated static route. The tag specified at this level of the static route causes the tag values that are configured under the **next-hop**, **black-hole**, and **indirect** contexts of the static route to be ignored.
Range	1 to 4294967295
Introduced	21.2.R1
Platforms	All

blackhole

Synopsis	Enable the **blackhole** context
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* blackhole
Tree	blackhole
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* blackhole admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

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community *string*

Synopsis	Community ID associated with the static route
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* blackhole community *string*
Tree	community
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* blackhole description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dynamic-bgp *boolean*

Synopsis	Derive static route next hop from BGP next hop value
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* blackhole dynamic-bgp *boolean*
Tree	dynamic-bgp
Default	false
Introduced	16.0.R1
Platforms	All

generate-icmp *boolean*

Synopsis	Send ICMP unreachable messages when received packets match a static route with black-hole next-hop
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* blackhole generate-icmp *boolean*
Tree	generate-icmp

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Default	false
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	Static route metric
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* blackhole metric *number*
Tree	metric
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Priority of this static route over the routes from different sources
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* blackhole preference *number*
Tree	preference
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

prefix-list

Synopsis	Enter the **prefix-list** context
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* blackhole prefix-list
Tree	prefix-list
Introduced	16.0.R1
Platforms	All

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flag *keyword*

Synopsis	Static route match condition from prefix list
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* blackhole prefix-list flag *keyword*
Tree	flag
Options	any, all, none
Default	any
Introduced	16.0.R1
Platforms	All

name *reference*

Synopsis	Prefix list name
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* blackhole prefix-list name *reference*
Tree	name
Reference	**configure** policy-options prefix-list *string*
Introduced	16.0.R1
Platforms	All

tag *number*

Synopsis	Static route tag
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* blackhole tag *number*
Tree	tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

community *string*

Synopsis	Community ID associated with the static route
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* community *string*
Tree	community

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String Length	1 to 72
Max. Instances	12
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

indirect [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **indirect** list instance
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	indirect
Introduced	16.0.R1
Platforms	All

[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Next-hop IP address used to reach the destination
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	indirect
Description	This command specifies the next-hop IP address used to reach the destination. The specified IP address can be either on the network side or the access side and is typically at least one hop away from the node.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1

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Platforms	All

community *string*

Synopsis	Community ID associated with the static route
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* community *string*
Tree	community
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

cpe-check [address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **cpe-check** list instance
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	cpe-check
Description	When configured, this command enables the Customer Premises Equipment (CPE) check feature and specifies the IP address of the target CPE device. This option initiates a background ICMP ping test to the configured target IP address. The IP address can either be an IPv4 address for IPv4 static routes or an IPv6 address for IPv6 static routes. To avoid possible circular references, the target IP address cannot exist in the same subnet as the static route subnet. This command is mutually exclusive with BFD support on a specific static route. **Note**: A node that is sourcing CPE-check packets waits an additional full interval before taking action, which gives the CPE time to respond. For example, with a drop-count of 3 and an interval of 1s, three CPE-check packets are sent out and the node waits for the duration of another interval before acting on the loss. Failure declaration may take extra time depending on the load, interval, and other factors. In line with multitasking, multi-priority operating principles of the node, and the relative priority of **cpe-ping**, the node paces these minor events.
Max. Instances	1
Introduced	16.0.R1
Platforms	All

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[**address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the target CPE device
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	cpe-check
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)* drop-count *number*
Tree	drop-count
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Interval between ICMP pings to target CPE IP address
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)* interval *number*
Tree	interval
Range	1 to 255
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

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log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)* log *boolean*
Tree	log
Default	false
Introduced	16.0.R1
Platforms	All

padding-size *number*

Synopsis	Padding size for CPE connectivity checks
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)* padding-size *number*
Tree	padding-size
Range	0 to 16384
Units	bytes
Default	56
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

destination-class *number*

Synopsis	Destination class for this static route

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Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* destination-class *number*
Tree	destination-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

metric *number*

Synopsis	Static route metric
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* metric *number*
Tree	metric
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Priority of this static route over the routes from different sources
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* preference *number*
Tree	preference
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

prefix-list

Synopsis	Enter the **prefix-list** context
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* prefix-list
Tree	prefix-list
Introduced	16.0.R1

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Platforms	All

flag *keyword*

Synopsis	Static route match condition from prefix list
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* prefix-list flag *keyword*
Tree	flag
Options	any, all, none
Default	any
Introduced	16.0.R1
Platforms	All

name *reference*

Synopsis	Prefix list name
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* prefix-list name *reference*
Tree	name
Reference	**configure** policy-options prefix-list *string*
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

forwarding-class *keyword*

Synopsis	Forwarding class associated with the static route

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Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* qos forwarding-class *keyword*
Tree	forwarding-class
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *keyword*

Synopsis	Static route priority
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* qos priority *keyword*
Tree	priority
Options	low, high
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-class *number*

Synopsis	Source class for the static route
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* source-class *number*
Tree	source-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

tag *number*

Synopsis	Static route tag
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* tag *number*
Tree	tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

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tunnel-next-hop

Synopsis	Enter the **tunnel-next-hop** context
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* tunnel-next-hop
Tree	tunnel-next-hop
Introduced	16.0.R1
Platforms	All

disallow-igp *boolean*

Synopsis	Do not resolve indirect static routes using IGP next-hops in RTM if no tunnel next-hops found in TTM
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* tunnel-next-hop disallow-igp *boolean*
Tree	disallow-igp
Default	false
Introduced	16.0.R1
Platforms	All

flex-algo *number*

Synopsis	Flexible Algorithm ID
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* tunnel-next-hop flex-algo *number*
Tree	flex-algo
Range	128 to 255
Introduced	20.7.R1
Platforms	All

resolution *keyword*

Synopsis	Tunnel next hop resolution to resolve indirect static route
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* tunnel-next-hop resolution *keyword*

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Tree	resolution
Options	none, filter, any
Default	none
Introduced	16.0.R1
Platforms	All

resolution-filter

Synopsis	Enter the **resolution-filter** context
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* tunnel-next-hop resolution-filter
Tree	resolution-filter
Introduced	16.0.R1
Platforms	All

ldp *boolean*

Synopsis	Use LDP Route Forwarding Equivalence Class (FEC) tunneling for next-hop resolution
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* tunnel-next-hop resolution-filter ldp *boolean*
Tree	ldp
Default	false
Introduced	16.0.R1
Platforms	All

mpls-fwd-policy *boolean*

Synopsis	Use MPLS forwarding policy for tunnel-next-hop
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* tunnel-next-hop resolution-filter mpls-fwd-policy *boolean*
Tree	mpls-fwd-policy
Default	false
Introduced	16.0.R4
Platforms	All

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rib-api *boolean*

Synopsis	Set RIB API type for use with tunnel next-hop
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* tunnel-next-hop resolution-filter rib-api *boolean*
Tree	rib-api
Default	false
Introduced	16.0.R4
Platforms	All

rsvp-te

Synopsis	Enable the **rsvp-te** context
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* tunnel-next-hop resolution-filter rsvp-te
Tree	rsvp-te
Introduced	16.0.R1
Platforms	All

lsp [lsp-name] *string*

Synopsis	Add a list entry for **lsp**
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* tunnel-next-hop resolution-filter rsvp-te lsp *string*
Tree	lsp
Introduced	16.0.R1
Platforms	All

[**lsp-name**] *string*

Synopsis	Labeled Switch Path name
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* tunnel-next-hop resolution-filter rsvp-te lsp *string*
Tree	lsp

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String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

sr-isis *boolean*

Synopsis	Use the SR ISIS tunneling mechanism to resolve next hop for the static route
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* tunnel-next-hop resolution-filter sr-isis *boolean*
Tree	sr-isis
Default	false
Introduced	16.0.R1
Platforms	All

sr-ospf *boolean*

Synopsis	Use SR OSPF tunneling for next-hop resolution
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* tunnel-next-hop resolution-filter sr-ospf *boolean*
Tree	sr-ospf
Default	false
Introduced	16.0.R1
Platforms	All

sr-ospf3 *boolean*

Synopsis	Use SR OSPFv3 tunneling mechanism to resolve next-hop
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* tunnel-next-hop resolution-filter sr-ospf3 *boolean*
Tree	sr-ospf3
Default	false
Introduced	16.0.R6
Platforms	All

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sr-te

Synopsis	Enable the **sr-te** context
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* tunnel-next-hop resolution-filter sr-te
Tree	sr-te
Introduced	16.0.R1
Platforms	All

lsp [lsp-name] *string*

Synopsis	Add a list entry for **lsp**
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* tunnel-next-hop resolution-filter sr-te lsp *string*
Tree	lsp
Introduced	16.0.R1
Platforms	All

[**lsp-name**] *string*

Synopsis	Labeled Switch Path name
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* tunnel-next-hop resolution-filter sr-te lsp *string*
Tree	lsp
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

interface [interface-name] *string*

Synopsis	Enter the **interface** list instance
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string*

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Tree	interface
Introduced	16.0.R1
Platforms	All

[**interface-name**] *string*

Synopsis	Router interface name
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

community *string*

Synopsis	Community ID associated with the static route
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* community *string*
Tree	community
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

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cpe-check [address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **cpe-check** list instance
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	cpe-check
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[**address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the target CPE device
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	cpe-check
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)* drop-count *number*
Tree	drop-count
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Interval between ICMP pings to target CPE IP address

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Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)* interval *number*
Tree	interval
Range	1 to 255
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)* log *boolean*
Tree	log
Default	false
Introduced	16.0.R1
Platforms	All

padding-size *number*

Synopsis	Padding size for CPE connectivity checks
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)* padding-size *number*
Tree	padding-size
Range	0 to 16384
Units	bytes
Default	56
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description

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Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

destination-class *number*

Synopsis	Destination class for this static route
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* destination-class *number*
Tree	destination-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

load-balancing-weight *number*

Synopsis	Load-balancing weight for all of the ECMP next hops
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* load-balancing-weight *number*
Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	Static route metric
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* metric *number*
Tree	metric
Range	0 to 65535
Default	1
Introduced	16.0.R1

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Platforms	All

preference *number*

Synopsis	Priority of this static route over the routes from different sources
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* preference *number*
Tree	preference
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

prefix-list

Synopsis	Enter the **prefix-list** context
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* prefix-list
Tree	prefix-list
Introduced	16.0.R1
Platforms	All

flag *keyword*

Synopsis	Static route match condition from prefix list
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* prefix-list flag *keyword*
Tree	flag
Options	any, all, none
Default	any
Introduced	16.0.R1
Platforms	All

name *reference*

Synopsis	Prefix list name

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Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* prefix-list name *reference*
Tree	name
Reference	**configure** policy-options prefix-list *string*
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

forwarding-class *keyword*

Synopsis	Forwarding class associated with the static route
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* qos forwarding-class *keyword*
Tree	forwarding-class
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *keyword*

Synopsis	Static route priority
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* qos priority *keyword*
Tree	priority
Options	low, high
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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source-class *number*

Synopsis	Source class for the static route
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* source-class *number*
Tree	source-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

tag *number*

Synopsis	Static route tag
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* tag *number*
Tree	tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

ipsec-tunnel [ipsec-tunnel-name] *string*

Synopsis	Enter the **ipsec-tunnel** list instance
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* ipsec-tunnel *string*
Tree	ipsec-tunnel
Introduced	22.7.R1
Platforms	VSR

[**ipsec-tunnel-name**] *string*

Synopsis	IPsec tunnel name.
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* ipsec-tunnel *string*
Tree	ipsec-tunnel
String Length	1 to 32
Notes	This element is part of a list key.

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Introduced	22.7.R1
Platforms	VSR

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* ipsec-tunnel *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	22.7.R1
Platforms	VSR

community *string*

Synopsis	Community ID associated with the static route
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* ipsec-tunnel *string* community *string*
Tree	community
String Length	1 to 72
Introduced	22.7.R1
Platforms	VSR

description *string*

Synopsis	Text description
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* ipsec-tunnel *string* description *string*
Tree	description
String Length	1 to 80
Introduced	22.7.R1
Platforms	VSR

metric *number*

Synopsis	Static route metric

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Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* ipsec-tunnel *string* metric *number*
Tree	metric
Range	0 to 65535
Default	1
Introduced	22.7.R1
Platforms	VSR

preference *number*

Synopsis	Priority of this static route over the routes from different sources
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* ipsec-tunnel *string* preference *number*
Tree	preference
Range	1 to 255
Default	5
Introduced	22.7.R1
Platforms	VSR

tag *number*

Synopsis	Static route tag
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* ipsec-tunnel *string* tag *number*
Tree	tag
Range	1 to 4294967295
Introduced	22.7.R1
Platforms	VSR

next-hop [ip-address] *(ipv4-address-with-zone | ipv6-address-with-zone)*

Synopsis	Enter the **next-hop** list instance
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)*
Tree	next-hop
Introduced	16.0.R1

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Platforms	All

[**ip-address**] *(ipv4-address-with-zone | ipv6-address-with-zone)*

Synopsis	IP address of the directly-connected next hop
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)*
Tree	next-hop
Description	This command specifies the IP address of the directly-connected next hop. The IP address can either be on the network side or the access side on the node. The address must be associated with a network directly connected to a network configured on the node.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

backup-next-hop

Synopsis	Enter the **backup-next-hop** context
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* backup-next-hop
Tree	backup-next-hop
Description	Commands in this context configure static route entry fast failover.
Introduced	21.2.R1
Platforms	All

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address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Backup next-hop IP address
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* backup-next-hop address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	address
Description	This command specifies the backup IP forwarding address that is used for static route Fast ReRoute (FRR). The configured address, if reachable, acts as pre-installed backup forwarding information that can be used when the primary IP next-hop suddenly fails. The configured backup next-hop IP address can be directly or indirectly connected (using an IGP or tunnel) to the node. The backup next-hop forwarding information or the Next-hop Label Forwarding Entry (NHLFE) tunnel forwarding information from the IP Routing Table Manager (RTM) is used to preconfigure an IP fast-reroute backup path. One backup next-hop address can protect a single primary static route entry next-hop address without ECMP and it is only activated when the primary next-hop has no active ECMP. The configured IP address can be either on the network or the access side.
Introduced	21.2.R1
Platforms	All

bfd-liveness *boolean*

Synopsis	Use Bidirectional Forwarding Detection on this static route
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* bfd-liveness *boolean*
Tree	bfd-liveness
Default	false
Introduced	16.0.R1
Platforms	All

community *string*

Synopsis	Community ID associated with the static route
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* community *string*
Tree	community
String Length	1 to 72
Introduced	16.0.R1

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Platforms All

cpe-check [address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis Enter the **cpe-check** list instance

Context **configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)*

Tree cpe-check

Description When configured, this command enables the Customer Premises Equipment (CPE) check feature and specifies the IP address of the target CPE device.

This option initiates a background ICMP ping test to the configured target IP address. The IP address can either be an IPv4 address for IPv4 static routes or an IPv6 address for IPv6 static routes. To avoid possible circular references, the target IP address cannot exist in the same subnet as the static route subnet. This command is mutually exclusive with BFD support on a specific static route.

Note: A node that is sourcing CPE-check packets waits an additional full interval before taking action, which gives the CPE time to respond. For example, with a drop-count of 3 and an interval of 1s, three CPE-check packets are sent out and the node waits for the duration of another interval before acting on the loss. Failure declaration may take extra time depending on the load, interval, and other factors. In line with multitasking, multi-priority operating principles of the node, and the relative priority of **cpe-ping**, the node paces these minor events.

Max. Instances 1

Introduced 16.0.R1

Platforms All

[**address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis IP address of the target CPE device

Context **configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)*

Tree cpe-check

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

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drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)* drop-count *number*
Tree	drop-count
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Interval between ICMP pings to target CPE IP address
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)* interval *number*
Tree	interval
Range	1 to 255
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)* log *boolean*
Tree	log
Default	false
Introduced	16.0.R1
Platforms	All

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padding-size *number*

Synopsis	Padding size for CPE connectivity checks
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)* padding-size *number*
Tree	padding-size
Range	0 to 16384
Units	bytes
Default	56
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

destination-class *number*

Synopsis	Destination class for this static route
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* destination-class *number*
Tree	destination-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

ldp-sync *boolean*

Synopsis	Use LDP synchronization feature for a static route

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Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* ldp-sync *boolean*
Tree	ldp-sync
Default	false
Introduced	16.0.R1
Platforms	All

load-balancing-weight *number*

Synopsis	Load-balancing weight for all of the ECMP next hops
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* load-balancing-weight *number*
Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	Static route metric
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* metric *number*
Tree	metric
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Priority of this static route over the routes from different sources
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* preference *number*
Tree	preference
Range	1 to 255
Default	5

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Introduced	16.0.R1
Platforms	All

prefix-list

Synopsis	Enter the **prefix-list** context
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* prefix-list
Tree	prefix-list
Introduced	16.0.R1
Platforms	All

flag *keyword*

Synopsis	Static route match condition from prefix list
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* prefix-list flag *keyword*
Tree	flag
Options	any, all, none
Default	any
Introduced	16.0.R1
Platforms	All

name *reference*

Synopsis	Prefix list name
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* prefix-list name *reference*
Tree	name
Reference	**configure** policy-options prefix-list *string*
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the **qos** context

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Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

forwarding-class *keyword*

Synopsis	Forwarding class associated with the static route
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* qos forwarding-class *keyword*
Tree	forwarding-class
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *keyword*

Synopsis	Static route priority
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* qos priority *keyword*
Tree	priority
Options	low, high
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-class *number*

Synopsis	Source class for the static route
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* source-class *number*
Tree	source-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

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tag *number*

Synopsis	Static route tag
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* tag *number*
Tree	tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

validate-next-hop *boolean*

Synopsis	Track the state of the next hop in the IPv4 ARP Cache or the IPv6 Neighbor Cache
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* validate-next-hop *boolean*
Tree	validate-next-hop
Default	false
Introduced	16.0.R1
Platforms	All

tag *number*

Synopsis	Static route tag
Context	**configure** router *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* tag *number*
Tree	tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

subscriber-mgmt

Synopsis	Enter the **subscriber-mgmt** context
Context	**configure** router *string* subscriber-mgmt
Tree	subscriber-mgmt
Introduced	23.3.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcpv4

Synopsis	Enter the **dhcpv4** context
Context	**configure** router *string* subscriber-mgmt dhcpv4
Tree	dhcpv4
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

routed-subnet-transparent-forward *boolean*

Synopsis	Transparently forward DHCPv4 from CPE LAN over IPoE
Context	**configure** router *string* subscriber-mgmt dhcpv4 routed-subnet-transparent-forward *boolean*
Tree	routed-subnet-transparent-forward
Description	When configured to **true**, the router transparently forwards DHCPv4 packets received on a subscriber interface with a source IP in a routed subnet that is associated with a routed IPoE session or host. Supported routed subnets are: • RADIUS and NASREQ framed routes • routes learned via an ESM dynamic BGP peer • managed routes that are associated with a static IPv4 host When configured to **false**, the system disables transparent forwarding of DHCPv4 packets.
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

triggered-policy *boolean*

Synopsis	Trigger route policy re-evaluation
Context	**configure** router *string* triggered-policy *boolean*
Tree	triggered-policy
Default	false
Introduced	16.0.R1

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Platforms	All

ttl-propagate

Synopsis	Enter the **ttl-propagate** context
Context	**configure** router *string* ttl-propagate
Tree	ttl-propagate
Introduced	16.0.R1
Platforms	All

label-route-local *keyword*

Synopsis	TTL propagation from IP header into label stack for local packets
Context	**configure** router *string* ttl-propagate label-route-local *keyword*
Tree	label-route-local
Options	none, all
Default	none
Introduced	16.0.R1
Platforms	All

label-route-transit *keyword*

Synopsis	TTL propagation from IP header into label stack for transit packets
Context	**configure** router *string* ttl-propagate label-route-transit *keyword*
Tree	label-route-transit
Options	none, all
Default	none
Introduced	16.0.R1
Platforms	All

lsr-label-route *keyword*

Synopsis	TTL propagation from IP header into label stack
Context	**configure** router *string* ttl-propagate lsr-label-route *keyword*
Tree	lsr-label-route

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Options	none, all
Default	none
Introduced	16.0.R1
Platforms	All

vprn-local *keyword*

Synopsis	TTL propagation from IP header into label stack for VPRN local packets
Context	**configure** router *string* ttl-propagate vprn-local *keyword*
Tree	vprn-local
Options	none, all, vc-only
Default	vc-only
Introduced	16.0.R1
Platforms	All

vprn-transit *keyword*

Synopsis	TTL propagation from IP header into label stack for VPRN transit packets
Context	**configure** router *string* ttl-propagate vprn-transit *keyword*
Tree	vprn-transit
Options	none, all, vc-only
Default	vc-only
Introduced	16.0.R1
Platforms	All

tunnel-interface

Synopsis	Enter the **tunnel-interface** context
Context	**configure** router *string* tunnel-interface
Tree	tunnel-interface
Introduced	16.0.R1
Platforms	All

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ldp-p2mp-leaf [p2mp-id] *number* sender-address *string*

Synopsis	Enter the **ldp-p2mp-leaf** list instance
Context	**configure** router *string* tunnel-interface ldp-p2mp-leaf *number* sender-address *string*
Tree	ldp-p2mp-leaf
Introduced	16.0.R1
Platforms	All

[**p2mp-id**] *number*

Synopsis	Identifier used for signaling MLDP P2MP LSP
Context	**configure** router *string* tunnel-interface ldp-p2mp-leaf *number* sender-address *string*
Tree	ldp-p2mp-leaf
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

sender-address *string*

Synopsis	Address of an LDP sender for the P2MP RSVP tunnel interface instance
Context	**configure** router *string* tunnel-interface ldp-p2mp-leaf *number* sender-address *string*
Tree	ldp-p2mp-leaf
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** router *string* tunnel-interface ldp-p2mp-leaf *number* sender-address *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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ldp-p2mp-root [p2mp-id] *number* sender-address *string*

Synopsis	Enter the **ldp-p2mp-root** list instance
Context	**configure** router *string* tunnel-interface ldp-p2mp-root *number* sender-address *string*
Tree	ldp-p2mp-root
Introduced	16.0.R1
Platforms	All

[**p2mp-id**] *number*

Synopsis	Identifier used for signaling MLDP P2MP LSP
Context	**configure** router *string* tunnel-interface ldp-p2mp-root *number* sender-address *string*
Tree	ldp-p2mp-root
Range	1 to 8192
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

sender-address *string*

Synopsis	Address of an LDP sender for the P2MP RSVP tunnel interface instance
Context	**configure** router *string* tunnel-interface ldp-p2mp-root *number* sender-address *string*
Tree	ldp-p2mp-root
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** router *string* tunnel-interface ldp-p2mp-root *number* sender-address *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1

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Platforms	All

rsvp-p2mp-leaf [lsp-name] *string* sender-address *string*

Synopsis	Enter the **rsvp-p2mp-leaf** list instance
Context	**configure** router *string* tunnel-interface rsvp-p2mp-leaf *string* sender-address *string*
Tree	rsvp-p2mp-leaf
Introduced	16.0.R1
Platforms	All

[**lsp-name**] *string*

Synopsis	LSP name of the P2MP RSVP tunnel interface
Context	**configure** router *string* tunnel-interface rsvp-p2mp-leaf *string* sender-address *string*
Tree	rsvp-p2mp-leaf
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

sender-address *string*

Synopsis	Address of a sender for the P2MP RSVP tunnel interface instance
Context	**configure** router *string* tunnel-interface rsvp-p2mp-leaf *string* sender-address *string*
Tree	rsvp-p2mp-leaf
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** router *string* tunnel-interface rsvp-p2mp-leaf *string* sender-address *string* description *string*
Tree	description

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String Length	1 to 80
Introduced	16.0.R1
Platforms	All

rsvp-p2mp-root [lsp-name] *string*

Synopsis	Enter the **rsvp-p2mp-root** list instance
Context	**configure** router *string* tunnel-interface rsvp-p2mp-root *string*
Tree	rsvp-p2mp-root
Introduced	16.0.R1
Platforms	All

[**lsp-name**] *string*

Synopsis	LSP name of the P2MP RSVP tunnel interface
Context	**configure** router *string* tunnel-interface rsvp-p2mp-root *string*
Tree	rsvp-p2mp-root
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** router *string* tunnel-interface rsvp-p2mp-root *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

twamp-light

Synopsis	Enter the **twamp-light** context
Context	**configure** router *string* twamp-light

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Tree	twamp-light
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

reflector

Synopsis	Enable the **reflector** context
Context	**configure** router *string* twamp-light reflector
Tree	reflector
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of TWAMP Light functionality
Context	**configure** router *string* twamp-light reflector admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

allow-ipv6-udp-checksum-zero *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Process IPv6 packets with a zero UDP checksum
Context	**configure** router *string* twamp-light reflector allow-ipv6-udp-checksum-zero *boolean*
Tree	allow-ipv6-udp-checksum-zero
Description	When configured to **true**, this command allows the processing of IPv6 packets that arrive with a UDP checksum of zero. The destination UDP ports that are registered as TWAMP Test packets as part of this template allow this behavior. When configured to **false**, IPv6 packets that arrive with a UDP checksum of zero are discarded.
Default	false

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Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** router *string* twamp-light reflector description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

prefix [ip-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **prefix** list instance
Context	**configure** router *string* twamp-light reflector prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Max. Instances	50
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**ip-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Source prefix for the TWAMP-Light reflector
Context	**configure** router *string* twamp-light reflector prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** router *string* twamp-light reflector prefix *(ipv4-prefix | ipv6-prefix)* description *string*

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Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type *keyword*

Synopsis	Processing behavior type for the reflector
Context	**configure** router *string* twamp-light reflector type *keyword*
Tree	type
Description	This command configures the processing behavior of the TWAMP Light reflector. When the value is **twamp-light** the reflector does not check the received PDU as a traditional base TWAMP Light packet without TLV processing. When the value is **stamp**, the reflector attempts to find and process supported STAMP TLVs that follow the base STAMP packet. In mixed environments where different types of Session-Senders may be targeting a common TWAMP Light reflector, set the value to **stamp**. When the reflector is operating in **stamp** mode, the primary parsing is based on STAMP, checking and processing known TLVs, or determining if the arriving PDU is a TWAMP Light PDU. A Session-Sender launching a TWAMP Light-based packet must use all zeros padding pattern when the pad size is non zero.
Options	stamp, twamp-light
Default	twamp-light
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

udp-port *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	UDP port on which the specified TWAMP-Light reflector listens for TWAMP PDUs
Context	**configure** router *string* twamp-light reflector udp-port *number*
Tree	udp-port
Range	862 | 64364 to 64373
Notes	This element is mandatory.
Introduced	16.0.R4

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vrgw

Synopsis	Enter the **vrgw** context
Context	**configure** router *string* vrgw
Tree	vrgw
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lanext

Synopsis	Enable the **lanext** context
Context	**configure** router *string* vrgw lanext
Tree	lanext
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of Home LAN Extension
Context	**configure** router *string* vrgw lanext admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

vxlan-port *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	UDP port to be used by local or remote VXLAN VTEP
Context	**configure** router *string* vrgw lanext vxlan-port *number*

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Tree	vxlan-port
Range	4789 | 8472
Default	4789
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

vxlan-vtep-range

Synopsis	Enter the **vxlan-vtep-range** context
Context	**configure** router *string* vrgw lanext vxlan-vtep-range
Tree	vxlan-vtep-range
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the VXLAN VTEP range
Context	**configure** router *string* vrgw lanext vxlan-vtep-range end *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	end
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

start *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the VXLAN VTEP range
Context	**configure** router *string* vrgw lanext vxlan-vtep-range start *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	start

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Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	WLAN-GW group used for Home LAN Extension
Context	**configure** router *string* vrgw lanext wlan-gw-group *reference*
Tree	wlan-gw-group
Reference	**configure** isa wlan-gw-group *number*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

weighted-ecmp *keyword*

Synopsis	Weighted load-balancing capability for ECMP routes
Context	**configure** router *string* weighted-ecmp *keyword*
Tree	weighted-ecmp
Options	false, true, strict
Default	false
Introduced	16.0.R1
Platforms	All

wlan-gw

Synopsis	Enable the **wlan-gw** context
Context	**configure** router *string* wlan-gw
Tree	wlan-gw
Introduced	16.0.R1

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Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

distributed-subscriber-mgmt

Synopsis	Enter the **distributed-subscriber-mgmt** context
Context	**configure** router *string* wlan-gw distributed-subscriber-mgmt
Tree	distributed-subscriber-mgmt
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-tcp-mss-adjust *number*

Synopsis	TCP-MSS adjustment value in upstream direction for DSM
Context	**configure** router *string* wlan-gw distributed-subscriber-mgmt ipv6-tcp-mss-adjust *number*
Tree	ipv6-tcp-mss-adjust
Range	160 to 10240
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mobility-triggered-accounting

Synopsis	Enter the **mobility-triggered-accounting** context
Context	**configure** router *string* wlan-gw mobility-triggered-accounting
Tree	mobility-triggered-accounting
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of mobility triggered accounting
Context	**configure** router *string* wlan-gw mobility-triggered-accounting admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4

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Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-down *number*

Synopsis	Hold additional mobility-triggered update until this timer expires
Context	**configure** router *string* wlan-gw mobility-triggered-accounting hold-down *number*
Tree	hold-down
Range	60 to 86400
Units	seconds
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

include-counters *boolean*

Synopsis	Include counters in interim updates
Context	**configure** router *string* wlan-gw mobility-triggered-accounting include-counters *boolean*
Tree	include-counters
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect

Synopsis	Enter the **xconnect** context
Context	**configure** router *string* wlan-gw xconnect
Tree	xconnect
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the WLAN-GW cross-connect
Context	**configure** router *string* wlan-gw xconnect admin-state *keyword*
Tree	admin-state
Options	enable, disable

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Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-source-ip *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 address and prefix for the tunnel source
Context	**configure** router *string* wlan-gw xconnect tunnel-source-ip *string*
Tree	tunnel-source-ip
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA WLAN-GW Group
Context	**configure** router *string* wlan-gw xconnect wlan-gw-group *reference*
Tree	wlan-gw-group
Reference	**configure** isa wlan-gw-group *number*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wpp

Synopsis	Enable the **wpp** context
Context	**configure** router *string* wpp
Tree	wpp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of WPP
Context	**configure** router *string* wpp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

portal [name] *string*

Synopsis	Enter the **portal** list instance
Context	**configure** router *string* wpp portal *string*
Tree	portal
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Web portal name
Context	**configure** router *string* wpp portal *string*
Tree	portal
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ack-auth-retry-count *number*

Synopsis	Number of retransmissions of an ACK_OUT message
Context	**configure** router *string* wpp portal *string* ack-auth-retry-count *number*
Tree	ack-auth-retry-count
Range	0 to 5
Default	5

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	WPP portal address
Context	**configure** router *string* wpp portal *string* address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the WPP portal server
Context	**configure** router *string* wpp portal *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ntf-logout-retry-count *number*

Synopsis	Number of retransmissions of an NTF_LOGOUT message
Context	**configure** router *string* wpp portal *string* ntf-logout-retry-count *number*
Tree	ntf-logout-retry-count
Range	0 to 5
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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port-format *keyword*

Synopsis	Format of the port in the ACK_INO message
Context	**configure** router *string* wpp portal *string* port-format *keyword*
Tree	port-format
Options	standard, vendor-specific
Default	standard
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retry-interval *number*

Synopsis	Time between two consecutive retransmissions
Context	**configure** router *string* wpp portal *string* retry-interval *number*
Tree	retry-interval
Range	10 to 2000
Units	milliseconds
Default	2000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

secret *string*

Synopsis	Message authentication between portal and BRAS by applying the secret used by WPPv2
Context	**configure** router *string* wpp portal *string* secret *string*
Tree	secret
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *number*

Synopsis	Protocol version to be expected by the WPP portal
Context	**configure** router *string* wpp portal *string* version *number*

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Tree	version
Range	1 | 2
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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3.40 routing-options commands

```
configure
   – routing-options
      – admin-tags
         – admin-tag string
         – route-admin-tag-policy string
            – apply-groups reference
            – apply-groups-exclude reference
            – exclude reference
            – include reference
      – apply-groups reference
      – apply-groups-exclude reference
      – flexible-algorithm-definitions
         – apply-groups reference
         – apply-groups-exclude reference
         – flex-algo string
            – admin-state keyword
            – apply-groups reference
            – apply-groups-exclude reference
            – description string
            – exclude
               – admin-group reference
            – flags-tlv boolean
            – include-all
               – admin-group reference
            – include-any
               – admin-group reference
            – metric-type keyword
            – priority number
      – if-attribute
         – admin-group string
            – apply-groups reference
            – apply-groups-exclude reference
            – value number
         – apply-groups reference
         – apply-groups-exclude reference
         – srlg-group string
            – apply-groups reference
            – apply-groups-exclude reference
            – penalty-weight number
            – value number
      – ip-fast-reroute boolean
      – policy-accounting
         – apply-groups reference
         – apply-groups-exclude reference
         – policy-acct-template string
            – apply-groups reference
            – apply-groups-exclude reference
            – destination-class number
               – apply-groups reference
               – apply-groups-exclude reference
               – policer reference
            – policer number
               – apply-groups reference
               – apply-groups-exclude reference
               – max-burst-size (number | keyword)
               – peak-rate (number | keyword)
            – source-class number
      – route-next-hop-policy
         – apply-groups reference
```


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configure routing-options route-next-hop-policy apply-groups-exclude

```
        - apply-groups-exclude reference
        - template string
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - exclude-group reference
          - include-group reference
            - apply-groups reference
            - apply-groups-exclude reference
            - preference number
          - nh-type keyword
          - protection-type keyword
          - srlg boolean
```


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3.40.1 routing-options command descriptions

routing-options

Synopsis	Enter the **routing-options** context
Context	**configure** routing-options
Tree	routing-options
Introduced	16.0.R1
Platforms	All

admin-tags

Synopsis	Enter the **admin-tags** context
Context	**configure** routing-options admin-tags
Tree	admin-tags
Introduced	16.0.R1
Platforms	All

admin-tag [tag] *string*

Synopsis	Add a list entry for **admin-tag**
Context	**configure** routing-options admin-tags admin-tag *string*
Tree	admin-tag
Max. Instances	256
Introduced	16.0.R1
Platforms	All

[**tag**] *string*

Synopsis	Administrative tag value
Context	**configure** routing-options admin-tags admin-tag *string*
Tree	admin-tag
String Length	1 to 32
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	All

route-admin-tag-policy [policy-name] *string*

Synopsis	Enter the **route-admin-tag-policy** list instance
Context	**configure** routing-options admin-tags route-admin-tag-policy *string*
Tree	route-admin-tag-policy
Max. Instances	2048
Introduced	16.0.R1
Platforms	All

[**policy-name**] *string*

Synopsis	Name of the route admin tag policy
Context	**configure** routing-options admin-tags route-admin-tag-policy *string*
Tree	route-admin-tag-policy
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

exclude [tag] *reference*

Synopsis	Add a list entry for **exclude**
Context	**configure** routing-options admin-tags route-admin-tag-policy *string* exclude *reference*
Tree	exclude
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[**tag**] *reference*

Synopsis	Administrative tag value

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Context	**configure** routing-options admin-tags route-admin-tag-policy *string* exclude *reference*
Tree	exclude
Reference	**configure** routing-options admin-tags admin-tag *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

include [tag] *reference*

Synopsis	Add a list entry for **include**
Context	**configure** routing-options admin-tags route-admin-tag-policy *string* include *reference*
Tree	include
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[**tag**] *reference*

Synopsis	Administrative tag value
Context	**configure** routing-options admin-tags route-admin-tag-policy *string* include *reference*
Tree	include
Reference	**configure** routing-options admin-tags admin-tag *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

flexible-algorithm-definitions

Synopsis	Enter the **flexible-algorithm-definitions** context
Context	**configure** routing-options flexible-algorithm-definitions
Tree	flexible-algorithm-definitions
Description	Commands in this context enable locally-configured algorithm definitions and configure administrative groups.
Introduced	20.7.R1

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Platforms	All

flex-algo [flex-algo-name] *string*

Synopsis	Enter the **flex-algo** list instance
Context	**configure** routing-options flexible-algorithm-definitions flex-algo *string*
Tree	flex-algo
Description	Commands in this context configure the definition context for a Flexible Algorithm Definition (FAD).
Max. Instances	256
Introduced	20.7.R1
Platforms	All

[**flex-algo-name**] *string*

Synopsis	Flexible Algorithm Definition (FAD) name
Context	**configure** routing-options flexible-algorithm-definitions flex-algo *string*
Tree	flex-algo
Description	This command specifies the name of the flexible algorithm definition that is used as a reference anchor for the configuration.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the FAD
Context	**configure** routing-options flexible-algorithm-definitions flex-algo *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.7.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** routing-options flexible-algorithm-definitions flex-algo *string* description *string*
Tree	description
String Length	1 to 80
Introduced	20.7.R1
Platforms	All

exclude

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **exclude** context
Context	**configure** routing-options flexible-algorithm-definitions flex-algo *string* exclude
Tree	exclude
Description	Commands in this context define administrative groups that are used to exclude links from the Flexible Algorithm topology graph. Administrative groups, also known as link colors, are attributes associated with a link. The exclude rule that is part of the FAD specifies that links with the named administrative groups set are to be excluded from the topology graph.
Introduced	20.7.R1
Platforms	All

admin-group [group-name] *reference*

Synopsis	Add a list entry for **admin-group**
Context	**configure** routing-options flexible-algorithm-definitions flex-algo *string* exclude admin-group *reference*
Tree	admin-group
Introduced	20.7.R1
Platforms	All

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[**group-name**] *reference*

Synopsis	Administrative group name
Context	**configure** routing-options flexible-algorithm-definitions flex-algo *string* exclude admin-group *reference*
Tree	admin-group
Reference	**configure** routing-options if-attribute admin-group *string*
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

flags-tlv *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Advertise the FAD Flags TLV
Context	**configure** routing-options flexible-algorithm-definitions flex-algo *string* flags-tlv *boolean*
Tree	flags-tlv
Description	When configured to **true**, the router advertises the FAD Flags TLV within the FAD. The M-flag within the TLV is set to 1, specifying the use of a Flex-Algorithm specific prefix metric. A router receiving the TLV modifies the constrained SPF (cSPF) based on the M-flag status. When configured to **false**, the FAD Flags TLV is not included with the FAD advertisement.
Default	true
Introduced	20.10.R1
Platforms	All

include-all

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **include-all** context
Context	**configure** routing-options flexible-algorithm-definitions flex-algo *string* include-all
Tree	include-all

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Description	Commands in this context define administrative groups that are used to include links from the Flexible Algorithm topology graph. Administrative groups, also known as link colors, are attributes associated with a link. The include-all rule that is part of the FAD specifies that all named administrative groups must be present in a link to be included in the topology graph.
Introduced	20.7.R1
Platforms	All

admin-group [group-name] *reference*

Synopsis	Add a list entry for **admin-group**
Context	**configure** routing-options flexible-algorithm-definitions flex-algo *string* include-all admin-group *reference*
Tree	admin-group
Introduced	20.7.R1
Platforms	All

[**group-name**] *reference*

Synopsis	Administrative group name
Context	**configure** routing-options flexible-algorithm-definitions flex-algo *string* include-all admin-group *reference*
Tree	admin-group
Reference	**configure** routing-options if-attribute admin-group *string*
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

include-any

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **include-any** context
Context	**configure** routing-options flexible-algorithm-definitions flex-algo *string* include-any
Tree	include-any

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Description	Commands in this context define administrative groups that are used to include links from the Flexible Algorithm topology graph. Administrative groups, also known as link colors, are attributes associated with a link. The include-all rule that is part of the FAD specifies that any link with the named administrative groups is included in the topology graph.
Introduced	20.7.R1
Platforms	All

admin-group [group-name] *reference*

Synopsis	Add a list entry for **admin-group**
Context	**configure** routing-options flexible-algorithm-definitions flex-algo *string* include-any admin-group *reference*
Tree	admin-group
Introduced	20.7.R1
Platforms	All

[**group-name**] *reference*

Synopsis	Administrative group name
Context	**configure** routing-options flexible-algorithm-definitions flex-algo *string* include-any admin-group *reference*
Tree	admin-group
Reference	**configure** routing-options if-attribute admin-group *string*
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

metric-type *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FAD metric type
Context	**configure** routing-options flexible-algorithm-definitions flex-algo *string* metric-type *keyword*
Tree	metric-type

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Options	igp, delay, te-metric
Default	igp
Introduced	20.7.R1
Platforms	All

priority *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FAD priority
Context	**configure** routing-options flexible-algorithm-definitions flex-algo *string* priority *number*
Tree	priority
Description	This command configures the priority of the FAD. The priority is used as a tie-breaker when the router has received multiple FADs for the same flexible algorithm.
Range	0 to 255
Default	100
Introduced	20.7.R1
Platforms	All

if-attribute

Synopsis	Enter the **if-attribute** context
Context	**configure** routing-options if-attribute
Tree	if-attribute
Introduced	16.0.R1
Platforms	All

admin-group [group-name] *string*

Synopsis	Enter the **admin-group** list instance
Context	**configure** routing-options if-attribute admin-group *string*
Tree	admin-group
Max. Instances	256

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Introduced	16.0.R1
Platforms	All

[**group-name**] *string*

Synopsis	Interface group name
Context	**configure** routing-options if-attribute admin-group *string*
Tree	admin-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

value *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Integer value associated with the group
Context	**configure** routing-options if-attribute admin-group *string* value *number*
Tree	value
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

srlg-group [name] *string*

Synopsis	Enter the **srlg-group** list instance
Context	**configure** routing-options if-attribute srlg-group *string*
Tree	srlg-group
Max. Instances	1024
Introduced	16.0.R1
Platforms	All

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[**name**] *string*

Synopsis	SRLG name
Context	**configure** routing-options if-attribute srlg-group *string*
Tree	srlg-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

penalty-weight *number*

Synopsis	Integer value of the penalty weight assigned to SRLG
Context	**configure** routing-options if-attribute srlg-group *string* penalty-weight *number*
Tree	penalty-weight
Description	This command specifies the penalty weight associated with a SRLG. The higher the penalty weight, the less desirable it is to use the link with a given SRLG.
Range	0 to 65535
Default	0
Introduced	16.0.R1
Platforms	All

value *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Integer value associated with the SRLG
Context	**configure** routing-options if-attribute srlg-group *string* value *number*
Tree	value
Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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ip-fast-reroute *boolean*

Synopsis	Enable IP fast reroute capability
Context	**configure** routing-options ip-fast-reroute *boolean*
Tree	ip-fast-reroute
Default	false
Introduced	16.0.R1
Platforms	All

policy-accounting

Synopsis	Enter the **policy-accounting** context
Context	**configure** routing-options policy-accounting
Tree	policy-accounting
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

policy-acct-template [name] *string*

Synopsis	Enter the **policy-acct-template** list instance
Context	**configure** routing-options policy-accounting policy-acct-template *string*
Tree	policy-acct-template
Max. Instances	1024
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

[**name**] *string*

Synopsis	Policy accounting template name
Context	**configure** routing-options policy-accounting policy-acct-template *string*
Tree	policy-acct-template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

destination-class [index] *number*

Synopsis	Enter the **destination-class** list instance
Context	**configure** routing-options policy-accounting policy-acct-template *string* destination-class *number*
Tree	destination-class
Max. Instances	255
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

[**index**] *number*

Synopsis	Destination class index
Context	**configure** routing-options policy-accounting policy-acct-template *string* destination-class *number*
Tree	destination-class
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

policer *reference*

Synopsis	Policer ID
Context	**configure** routing-options policy-accounting policy-acct-template *string* destination-class *number* policer *reference*
Tree	policer
Reference	**configure** routing-options policy-accounting policy-acct-template *string* policer *number*
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

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policer [policer-id] *number*

Synopsis	Enter the **policer** list instance
Context	**configure** routing-options policy-accounting policy-acct-template *string* policer *number*
Tree	policer
Description	Commands in this context configure the policer definition for the instance. Policing by action of a policy accounting template is only supported by cards and systems that are FP4 and later.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

[**policer-id**] *number*

Synopsis	Policer ID
Context	**configure** routing-options policy-accounting policy-acct-template *string* policer *number*
Tree	policer
Range	1 to 63
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

max-burst-size *(number | keyword)*

Synopsis	Exceed threshold to drop packets from PIR leaky bucket
Context	**configure** routing-options policy-accounting policy-acct-template *string* policer *number* max-burst-size *(number | keyword)*
Tree	max-burst-size
Description	This command specifies the maximum burst size for the policer. When this value is exceeded, packets are considered violating and are dropped.
Range	0 to 16777216
Units	bytes
Options	auto
Default	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

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peak-rate *(number | keyword)*

Synopsis	Peak rate of the policy accounting policer
Context	**configure** routing-options policy-accounting policy-acct-template *string* policer *number* peak-rate *(number | keyword)*
Tree	peak-rate
Description	This command configures the peak rate of the policy accounting policer, which is the fill or drain rate of the bucket.
Range	1 to 6400000000
Options	max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

source-class [index] *number*

Synopsis	Add a list entry for **source-class**
Context	**configure** routing-options policy-accounting policy-acct-template *string* source-class *number*
Tree	source-class
Max. Instances	255
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

[**index**] *number*

Synopsis	Source-class index
Context	**configure** routing-options policy-accounting policy-acct-template *string* source-class *number*
Tree	source-class
Range	1 to 255
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

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route-next-hop-policy

Synopsis	Enter the **route-next-hop-policy** context
Context	**configure** routing-options route-next-hop-policy
Tree	route-next-hop-policy
Introduced	16.0.R1
Platforms	All

template [template-name] *string*

Synopsis	Enter the **template** list instance
Context	**configure** routing-options route-next-hop-policy template *string*
Tree	template
Introduced	16.0.R1
Platforms	All

[**template-name**] *string*

Synopsis	Template name
Context	**configure** routing-options route-next-hop-policy template *string*
Tree	template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** routing-options route-next-hop-policy template *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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exclude-group [group-name] *reference*

Synopsis	Add a list entry for **exclude-group**
Context	**configure** routing-options route-next-hop-policy template *string* exclude-group *reference*
Tree	exclude-group
Max. Instances	32
Introduced	16.0.R1
Platforms	All

[**group-name**] *reference*

Synopsis	Administrative group name
Context	**configure** routing-options route-next-hop-policy template *string* exclude-group *reference*
Tree	exclude-group
Description	This command specifies the name of the administrative group. If the same group name is part of both include and exclude statements, the exclude statement wins. In other words, the exclude statement can be viewed as having an implicit preference value of 0.
Reference	**configure** routing-options if-attribute admin-group *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

include-group [group-name] *reference*

Synopsis	Enter the **include-group** list instance
Context	**configure** routing-options route-next-hop-policy template *string* include-group *reference*
Tree	include-group
Max. Instances	32
Introduced	16.0.R1
Platforms	All

[**group-name**] *reference*

Synopsis	Administrative group name

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Context	**configure** routing-options route-next-hop-policy template *string* include-group *reference*
Tree	include-group
Description	This command specifies the name of the administrative group. If the same group name is part of both include and exclude statements, the exclude statement wins. In other words, the exclude statement can be viewed as having an implicit preference value of 0.
Reference	**configure** routing-options if-attribute admin-group *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Preference number for configured admin-group.
Context	**configure** routing-options route-next-hop-policy template *string* include-group *reference* preference *number*
Tree	preference
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

nh-type *keyword*

Synopsis	Preferred next hop
Context	**configure** routing-options route-next-hop-policy template *string* nh-type *keyword*
Tree	nh-type
Options	ip, tunnel
Default	ip
Introduced	16.0.R1
Platforms	All

protection-type *keyword*

Synopsis	Protection type used
Context	**configure** routing-options route-next-hop-policy template *string* protection-type *keyword*

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Tree	protection-type
Options	link, node
Default	node
Introduced	16.0.R1
Platforms	All

srlg *boolean*

Synopsis	Select next hops from the SRLG
Context	**configure** routing-options route-next-hop-policy template *string* srlg *boolean*
Tree	srlg
Default	false
Introduced	16.0.R1
Platforms	All

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3.41 saa commands

```
configure
   - saa
      - apply-groups reference
      - apply-groups-exclude reference
      - owner string test string
         - accounting-policy reference
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - continuous boolean
         - description string
         - jitter-event keyword threshold-type keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - threshold number
         - latency-event keyword threshold-type keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - threshold number
         - loss-event keyword threshold-type keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - threshold number
         - probe-history keyword
         - type
            - dns
               - apply-groups reference
               - apply-groups-exclude reference
               - count number
               - interval number
               - name-server (ipv4-address-no-zone | ipv6-address-no-zone)
               - record-type keyword
               - router-instance string
               - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
               - target-address string
               - timeout number
               - trap-generation
                  - probe-fail boolean
                  - probe-fail-threshold number
                  - test-complete boolean
                  - test-fail boolean
                  - test-fail-threshold number
            - icmp-ping
               - apply-groups reference
               - apply-groups-exclude reference
               - bypass-routing boolean
               - count number
               - destination-address (ipv4-address-no-zone | ipv6-address-no-zone | string-
not-all-spaces)
               - do-not-fragment boolean
               - interface string
               - interval (number | decimal-number)
               - next-hop-address (ipv4-address-no-zone | ipv6-address-no-zone)
               - pattern (keyword | number)
               - qos
                  - fc keyword
                  - tos number
               - router-instance string
               - size number
```


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configure saa owner type icmp-ping source-address

```
            - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
            - timeout number
            - trap-generation
              - probe-fail boolean
              - probe-fail-threshold number
              - test-complete boolean
              - test-fail boolean
              - test-fail-threshold number
            - ttl number
         - lsp-ping
            - apply-groups reference
            - apply-groups-exclude reference
            - interval number
            - qos
              - fc keyword
              - profile keyword
            - send-count number
            - size number
            - source-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
            - sub-type
              - bgp-label
                - path-destination
                  - interface string
                  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
                  - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
                - prefix (ipv4-prefix | ipv6-prefix)
              - ldp
                - path-destination
                  - interface string
                  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
                  - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
                - prefix (ipv4-prefix | ipv6-prefix)
              - rsvp-te
                - lsp-name string
                - path string
              - sr-isis
                - igp-instance number
                - path-destination
                  - interface string
                  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
                  - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
                - prefix (ipv4-prefix | ipv6-prefix)
              - sr-ospf
                - igp-instance number
                - path-destination
                  - interface string
                  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
                  - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
                - prefix (ipv4-prefix | ipv6-prefix)
              - sr-ospf3
                - igp-instance number
                - path-destination
                  - interface string
                  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
                  - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
                - prefix (ipv4-prefix | ipv6-prefix)
              - sr-policy
                - color number
                - endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
                - path-destination
                  - interface string
                  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
                  - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
                - segment-list number
```


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configure saa owner type lsp-ping sub-type sr-te

```
                  -  sr-te
                     -  lsp-name string
                     -  path string
                     -  path-destination
                        -  interface string
                        -  ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
                        -  next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
               -  timeout number
               -  trap-generation
                  -  probe-fail boolean
                  -  probe-fail-threshold number
                  -  test-complete boolean
                  -  test-fail boolean
                  -  test-fail-threshold number
               -  ttl number
```


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3.41.1 saa command descriptions

saa

Synopsis	Enter the **saa** context
Context	**configure** saa
Tree	saa
Description	Commands in this context configure the Service Assurance Agent (SAA) tests.
Introduced	16.0.R4
Platforms	All

owner [owner-name] *string* test *string*

Synopsis	Enter the **owner** list instance
Context	**configure** saa owner *string* test *string*
Tree	owner
Introduced	16.0.R4
Platforms	All

[**owner-name**] *string*

Synopsis	Optional owner name of the SAA operation
Context	**configure** saa owner *string* test *string*
Tree	owner
Description	This command configures the owner associated with the SAA operation. The owner is optional and "TiMOS CLI" is used if an owner is not specified.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

test *string*

Synopsis	SAA test name

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Context	**configure** saa owner *string* test *string*
Tree	owner
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

accounting-policy *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accounting policy associated with the SAA test
Context	**configure** saa owner *string* test *string* accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the SAA test
Context	**configure** saa owner *string* test *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

continuous *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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Synopsis	Execute the SAA tests as continuous
Context	**configure** saa owner *string* test *string* continuous *boolean*
Tree	continuous
Description	When configured to **true**, the SAA test execution is continuous, that is, it cannot be started or stopped with the **oam saa test start** or **stop** commands. The SAA test types supported by this command include the following: • **cpe-ping** • **dns** • **eth-cfm-loopback** • **eth-cfm-two-way-delay** • **eth-cfm-two-way-slm** • **icmp-ping** (not applicable to **rapid** type) • **lsp-ping** • **mac-ping** • **sdp-ping** • **vccv-ping** • **vprn-ping**
Default	false
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** saa owner *string* test *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

jitter-event [direction] *keyword* threshold-type *keyword*

Synopsis	Enter the **jitter-event** list instance
Context	**configure** saa owner *string* test *string* jitter-event *keyword* threshold-type *keyword*
Tree	jitter-event

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Description	Commands in this context configure the jitter event thresholds used to evaluate the jitter event value at the termination of an SAA test probe. The system generates SAA threshold events as required.
Introduced	16.0.R4
Platforms	All

[**direction**] *keyword*

Synopsis	Direction for OAM ping responses for OAM ping test run
Context	**configure** saa owner *string* test *string* jitter-event *keyword* threshold-type *keyword*
Tree	jitter-event
Options	inbound, outbound, round-trip
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

threshold-type *keyword*

Synopsis	Threshold type
Context	**configure** saa owner *string* test *string* jitter-event *keyword* threshold-type *keyword*
Tree	jitter-event
Options	rising, falling
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

threshold *number*

Synopsis	Threshold jitter value
Context	**configure** saa owner *string* test *string* jitter-event *keyword* threshold-type *keyword* threshold *number*
Tree	threshold
Description	This command specifies the threshold jitter value. The system generates an SAA threshold event when the jitter value of the test run crosses the threshold value.
Range	0 to 2147483647
Units	microseconds

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Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

latency-event [direction] *keyword* threshold-type *keyword*

Synopsis	Enter the **latency-event** list instance
Context	**configure** saa owner *string* test *string* latency-event *keyword* threshold-type *keyword*
Tree	latency-event
Description	Commands in this context configure the latency event thresholds used to evaluate the latency event value at the termination of an SAA test probe. The system generates SAA threshold events as required.
Introduced	16.0.R4
Platforms	All

[**direction**] *keyword*

Synopsis	Direction for OAM ping responses for OAM ping test run
Context	**configure** saa owner *string* test *string* latency-event *keyword* threshold-type *keyword*
Tree	latency-event
Options	inbound, outbound, round-trip
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

threshold-type *keyword*

Synopsis	Threshold type
Context	**configure** saa owner *string* test *string* latency-event *keyword* threshold-type *keyword*
Tree	latency-event
Options	rising, falling
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

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threshold *number*

Synopsis	Threshold latency value
Context	**configure** saa owner *string* test *string* latency-event *keyword* threshold-type *keyword* threshold *number*
Tree	threshold
Description	This command specifies the threshold latency value. The system generates an SAA threshold event when the latency value of the test run crosses the threshold value.
Range	0 to 2147483647
Units	microseconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

loss-event [direction] *keyword* threshold-type *keyword*

Synopsis	Enter the **loss-event** list instance
Context	**configure** saa owner *string* test *string* loss-event *keyword* threshold-type *keyword*
Tree	loss-event
Description	Commands in this context configure the loss event thresholds used to evaluate the loss event value at the termination of an SAA test probe. The system generates SAA threshold events as required.
Introduced	16.0.R4
Platforms	All

[**direction**] *keyword*

Synopsis	Direction for OAM ping responses for OAM ping test run
Context	**configure** saa owner *string* test *string* loss-event *keyword* threshold-type *keyword*
Tree	loss-event
Options	inbound, outbound, round-trip
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

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threshold-type *keyword*

Synopsis	Threshold type
Context	**configure** saa owner *string* test *string* loss-event *keyword* threshold-type *keyword*
Tree	loss-event
Options	rising, falling
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

threshold *number*

Synopsis	Threshold loss event value
Context	**configure** saa owner *string* test *string* loss-event *keyword* threshold-type *keyword* threshold *number*
Tree	threshold
Description	This command specifies the threshold loss value. The system generates an SAA threshold event when the loss value of the test run crosses the threshold value.
Range	0 to 2147483647
Units	packets
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

probe-history *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	History probe behavior
Context	**configure** saa owner *string* test *string* probe-history *keyword*
Tree	probe-history
Options	keep, drop, auto
Default	auto
Introduced	16.0.R4
Platforms	All

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type

Synopsis	Enter the **type** context
Context	**configure** saa owner *string* test *string* type
Tree	type
Introduced	16.0.R4
Platforms	All

dns

Synopsis	Enable the **dns** context
Context	**configure** saa owner *string* test *string* type dns
Tree	dns
Notes	The following elements are part of a choice: **dns**, **icmp-ping**, or **lsp-ping**.
Introduced	22.10.R1
Platforms	All

count *number*

Synopsis	Number of messages to send in a sample window
Context	**configure** saa owner *string* test *string* type dns count *number*
Tree	count
Description	This command specifies the number of messages to send. Each message request must either time out or receive a reply before the next message request is sent.
Range	1 to 100
Units	packets
Default	1
Introduced	22.10.R1
Platforms	All

interval *number*

Synopsis	Minimum time before the next message request is sent
Context	**configure** saa owner *string* test *string* type dns interval *number*
Tree	interval

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Range	1 to 10
Units	seconds
Default	1
Introduced	22.10.R1
Platforms	All

name-server *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the DNS name server used for the test
Context	**configure** saa owner *string* test *string* type dns name-server *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	name-server
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

record-type *keyword*

Synopsis	Record type
Context	**configure** saa owner *string* test *string* type dns record-type *keyword*
Tree	record-type
Options	ipv4-a-record, ipv6-aaaa-record
Default	ipv4-a-record
Introduced	22.10.R1
Platforms	All

router-instance *string*

Synopsis	Router name or VPRN service name
Context	**configure** saa owner *string* test *string* type dns router-instance *string*
Tree	router-instance
Default	_Base_and_management
Introduced	22.10.R1
Platforms	All

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source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address on the local system
Context	**configure** saa owner *string* test *string* type dns source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-address
Description	This command configures the IP address on the local system. If unconfigured, the router uses a system selected local IP address.
Introduced	22.10.R1
Platforms	All

target-address *string*

Synopsis	DNS name to be resolved to an IP address
Context	**configure** saa owner *string* test *string* type dns target-address *string*
Tree	target-address
String Length	1 to 255
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

timeout *number*

Synopsis	Maximum time to wait for a reply message
Context	**configure** saa owner *string* test *string* type dns timeout *number*
Tree	timeout
Description	This command specifies the maximum time the router waits for a message response after sending the message request. When the timeout expires, the requesting router assumes the message response is not received. Any response received after the request times out is silently discarded.
Range	1 to 120
Units	seconds
Default	5
Introduced	22.10.R1
Platforms	All

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trap-generation

Synopsis	Enter the **trap-generation** context
Context	**configure** saa owner *string* test *string* type dns trap-generation
Tree	trap-generation
Introduced	22.10.R1
Platforms	All

probe-fail *boolean*

Synopsis	Enable the generation of probe fail notifications
Context	**configure** saa owner *string* test *string* type dns trap-generation probe-fail *boolean*
Tree	probe-fail
Description	When configured to **true**, the system generates an SNMP trap if the consecutive probe failure threshold is reached during the execution of the SAA ping test. This command is not applicable to SAA traceroute tests.
Default	false
Introduced	22.10.R1
Platforms	All

probe-fail-threshold *number*

Synopsis	Consecutive probe failure count
Context	**configure** saa owner *string* test *string* type dns trap-generation probe-fail-threshold *number*
Tree	probe-fail-threshold
Description	This command configures the number of consecutive ping probe failures required to generate a trap. This command has no effect if the **probe-fail** command is set to **false**. This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	22.10.R1
Platforms	All

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test-complete *boolean*

Synopsis	Enable generation of test complete notifications
Context	**configure** saa owner *string* test *string* type dns trap-generation test-complete *boolean*
Tree	test-complete
Default	false
Introduced	22.10.R1
Platforms	All

test-fail *boolean*

Synopsis	Enable the generation of test fail notifications
Context	**configure** saa owner *string* test *string* type dns trap-generation test-fail *boolean*
Tree	test-fail
Description	When configured to **true**, the system generates a trap if a test fails. In the case of a ping test, the test is considered to have failed (for trap generation) if the number of failed probes is at least the value of the **test-fail-threshold** setting.
Default	false
Introduced	22.10.R1
Platforms	All

test-fail-threshold *number*

Synopsis	Total probe failures for trap generation
Context	**configure** saa owner *string* test *string* type dns trap-generation test-fail-threshold *number*
Tree	test-fail-threshold
Description	This command configures the number of consecutive test failures required to generate a trap. This command has no effect when **test-fail** is set to **false**. This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	22.10.R1
Platforms	All

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icmp-ping

Synopsis	Enable the **icmp-ping** context
Context	**configure** saa owner *string* test *string* type icmp-ping
Tree	icmp-ping
Description	Commands in this context configure an ICMP ping test.
Notes	The following elements are part of a choice: **dns**, **icmp-ping**, or **lsp-ping**.
Introduced	16.0.R4
Platforms	All

bypass-routing *boolean*

Synopsis	Bypass routing table for directly connected interfaces
Context	**configure** saa owner *string* test *string* type icmp-ping bypass-routing *boolean*
Tree	bypass-routing
Default	false
Notes	The following elements are part of a choice: **bypass-routing**, **interface**, or **next-hop-address**.
Introduced	16.0.R4
Platforms	All

count *number*

Synopsis	ICMP Echo Request packets to send in a sample window
Context	**configure** saa owner *string* test *string* type icmp-ping count *number*
Tree	count
Range	1 to 100000
Units	packets
Default	5
Introduced	16.0.R4
Platforms	All

destination-address *(ipv4-address-no-zone | ipv6-address-no-zone | string-not-all-spaces)*

Synopsis	Destination IP address or DNS name to send ping request

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Context	**configure** saa owner *string* test *string* type icmp-ping destination-address *(ipv4-address-no-zone* | *ipv6-address-no-zone* | *string-not-all-spaces)*
Tree	destination-address
String Length	1 to 128
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

do-not-fragment *boolean*

Synopsis	Prevent fragmentation of the ICMP Echo Request packet
Context	**configure** saa owner *string* test *string* type icmp-ping do-not-fragment *boolean*
Tree	do-not-fragment
Default	false
Introduced	16.0.R4
Platforms	All

interface *string*

Synopsis	Interface name
Context	**configure** saa owner *string* test *string* type icmp-ping interface *string*
Tree	interface
String Length	1 to 32
Notes	The following elements are part of a choice: **bypass-routing**, **interface**, or **next-hop-address**.
Introduced	16.0.R4
Platforms	All

interval *(number* \| *decimal-number)*

Synopsis	Minimum time to expire before message request is sent
Context	**configure** saa owner *string* test *string* type icmp-ping interval *(number* | *decimal-number)*
Tree	interval
Range	1 to 10000
Units	seconds

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Default	1
Introduced	16.0.R4
Platforms	All

next-hop-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Next-hop IP address to reach destination
Context	**configure** saa owner *string* test *string* type icmp-ping next-hop-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	next-hop-address
Notes	The following elements are part of a choice: **bypass-routing**, **interface**, or **next-hop-address**.
Introduced	16.0.R4
Platforms	All

pattern *(keyword | number)*

Synopsis	Pattern to fill the data portion in a ping packet
Context	**configure** saa owner *string* test *string* type icmp-ping pattern *(keyword | number)*
Tree	pattern
Range	0 to 65535
Options	sequential
Default	sequential
Introduced	16.0.R4
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** saa owner *string* test *string* type icmp-ping qos
Tree	qos
Introduced	16.0.R4
Platforms	All

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fc *keyword*

Synopsis	Forwarding class
Context	**configure** saa owner *string* test *string* type icmp-ping qos fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Default	nc
Introduced	16.0.R4
Platforms	All

tos *number*

Synopsis	Type of service
Context	**configure** saa owner *string* test *string* type icmp-ping qos tos *number*
Tree	tos
Range	0 to 255
Default	0
Introduced	16.0.R4
Platforms	All

router-instance *string*

Synopsis	Router name or VPRN service name
Context	**configure** saa owner *string* test *string* type icmp-ping router-instance *string*
Tree	router-instance
Default	Base
Introduced	16.0.R4
Platforms	All

size *number*

Synopsis	Packet padding size
Context	**configure** saa owner *string* test *string* type icmp-ping size *number*
Tree	size
Description	This command configures the number of bytes in the combined ICMP Header (8 bytes) and ICMP Payload (variable size) of the ICMP Echo Request packets.

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Range	0 to 16384
Units	bytes
Default	56
Introduced	16.0.R4
Platforms	All

source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source IP address
Context	**configure** saa owner *string* test *string* type icmp-ping source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-address
Description	This command configures the source IP address to be loaded into the IP header of the ICMP Echo Request packet. If unconfigured, the router uses a system-selected local address.
Introduced	16.0.R4
Platforms	All

timeout *number*

Synopsis	Time router waits for a reply after sending last probe
Context	**configure** saa owner *string* test *string* type icmp-ping timeout *number*
Tree	timeout
Range	1 to 10
Units	seconds
Default	5
Introduced	16.0.R4
Platforms	All

trap-generation

Synopsis	Enter the **trap-generation** context
Context	**configure** saa owner *string* test *string* type icmp-ping trap-generation
Tree	trap-generation
Introduced	22.10.R1

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Platforms	All

probe-fail *boolean*

Synopsis	Enable the generation of probe fail notifications
Context	**configure** saa owner *string* test *string* type icmp-ping trap-generation probe-fail *boolean*
Tree	probe-fail
Description	When configured to **true**, the system generates an SNMP trap if the consecutive probe failure threshold is reached during the execution of the SAA ping test. This command is not applicable to SAA traceroute tests.
Default	false
Introduced	22.10.R1
Platforms	All

probe-fail-threshold *number*

Synopsis	Consecutive probe failure count
Context	**configure** saa owner *string* test *string* type icmp-ping trap-generation probe-fail-threshold *number*
Tree	probe-fail-threshold
Description	This command configures the number of consecutive ping probe failures required to generate a trap. This command has no effect if the **probe-fail** command is set to **false**. This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	22.10.R1
Platforms	All

test-complete *boolean*

Synopsis	Enable generation of test complete notifications
Context	**configure** saa owner *string* test *string* type icmp-ping trap-generation test-complete *boolean*
Tree	test-complete
Default	false

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Introduced	22.10.R1
Platforms	All

test-fail *boolean*

Synopsis	Enable the generation of test fail notifications
Context	**configure** saa owner *string* test *string* type icmp-ping trap-generation test-fail *boolean*
Tree	test-fail
Description	When configured to **true**, the system generates a trap if a test fails. In the case of a ping test, the test is considered to have failed (for trap generation) if the number of failed probes is at least the value of the **test-fail-threshold** setting.
Default	false
Introduced	22.10.R1
Platforms	All

test-fail-threshold *number*

Synopsis	Total probe failures for trap generation
Context	**configure** saa owner *string* test *string* type icmp-ping trap-generation test-fail-threshold *number*
Tree	test-fail-threshold
Description	This command configures the number of consecutive test failures required to generate a trap. This command has no effect when **test-fail** is set to **false**. This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	22.10.R1
Platforms	All

ttl *number*

Synopsis	Time to live in the IP header
Context	**configure** saa owner *string* test *string* type icmp-ping ttl *number*
Tree	ttl
Range	1 to 128

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Default	64
Introduced	16.0.R4
Platforms	All

lsp-ping

Synopsis	Enable the **lsp-ping** context
Context	**configure** saa owner *string* test *string* type lsp-ping
Tree	lsp-ping
Description	Commands in this context configure the command options to perform in-band LSP connectivity tests. LSP ping uses the protocol and data structures defined in RFC 8029, *Detecting Multiprotocol Label Switched (MPLS) Data-Plane Failures*.
Notes	The following elements are part of a choice: **dns**, **icmp-ping**, or **lsp-ping**.
Introduced	22.10.R1
Platforms	All

interval *number*

Synopsis	Minimum time before the next lsp-ping request is sent
Context	**configure** saa owner *string* test *string* type lsp-ping interval *number*
Tree	interval
Range	1 to 10
Units	seconds
Default	1
Introduced	22.10.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** saa owner *string* test *string* type lsp-ping qos
Tree	qos
Introduced	22.10.R1
Platforms	All

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fc *keyword*

Synopsis	Forwarding class
Context	**configure** saa owner *string* test *string* type lsp-ping qos fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	22.10.R1
Platforms	All

profile *keyword*

Synopsis	Profile
Context	**configure** saa owner *string* test *string* type lsp-ping qos profile *keyword*
Tree	profile
Options	in, out
Default	out
Introduced	22.10.R1
Platforms	All

send-count *number*

Synopsis	Number of request packets to send in a sample window
Context	**configure** saa owner *string* test *string* type lsp-ping send-count *number*
Tree	send-count
Range	1 to 100
Units	packets
Default	1
Introduced	22.10.R1
Platforms	All

size *number*

Synopsis	Packet pad size
Context	**configure** saa owner *string* test *string* type lsp-ping size *number*

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Tree	size
Range	1 to 9786
Units	bytes
Default	1
Introduced	22.10.R1
Platforms	All

source-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source IP address
Context	**configure** saa owner *string* test *string* type lsp-ping source-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-ip-address
Introduced	22.10.R1
Platforms	All

sub-type

Synopsis	Enter the **sub-type** context
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type
Tree	sub-type
Introduced	22.10.R1
Platforms	All

bgp-label

Synopsis	Enable the **bgp-label** context
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type bgp-label
Tree	bgp-label
Notes	The following elements are part of a choice: **bgp-label**, **ldp**, **rsvp-te**, **sr-isis**, **sr-ospf**, **sr-ospf3**, **sr-policy**, or **sr-te**.
Introduced	22.10.R1
Platforms	All

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path-destination

Synopsis	Enter the **path-destination** context
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type bgp-label path-destination
Tree	path-destination
Introduced	22.10.R1
Platforms	All

interface *string*

Synopsis	Egress router interface used with the path destination
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type bgp-label path-destination interface *string*
Tree	interface
String Length	1 to 32
Notes	The following elements are part of a choice: **interface** or **next-hop**.
Introduced	22.10.R1
Platforms	All

ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the path destination
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type bgp-label path-destination ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-address
Introduced	22.10.R1
Platforms	All

next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Egress IP next hop address used with path destination
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type bgp-label path-destination next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	next-hop
Notes	The following elements are part of a choice: **interface** or **next-hop**.
Introduced	22.10.R1

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Platforms	All

prefix *(ipv4-prefix | ipv6-prefix)*

Synopsis	Destination IP prefix for the test
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type bgp-label prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

ldp

Synopsis	Enable the **ldp** context
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type ldp
Tree	ldp
Notes	The following elements are part of a choice: **bgp-label**, **ldp**, **rsvp-te**, **sr-isis**, **sr-ospf**, **sr-ospf3**, **sr-policy**, or **sr-te**.
Introduced	22.10.R1
Platforms	All

path-destination

Synopsis	Enter the **path-destination** context
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type ldp path-destination
Tree	path-destination
Introduced	22.10.R1
Platforms	All

interface *string*

Synopsis	Egress router interface used with the path destination
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type ldp path-destination interface *string*
Tree	interface

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String Length	1 to 32
Notes	The following elements are part of a choice: **interface** or **next-hop**.
Introduced	22.10.R1
Platforms	All

ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the path destination
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type ldp path-destination ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-address
Introduced	22.10.R1
Platforms	All

next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Egress IP next hop address used with path destination
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type ldp path-destination next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	next-hop
Notes	The following elements are part of a choice: **interface** or **next-hop**.
Introduced	22.10.R1
Platforms	All

prefix *(ipv4-prefix | ipv6-prefix)*

Synopsis	Destination IP prefix for the test
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type ldp prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

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rsvp-te

Synopsis	Enable the **rsvp-te** context
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type rsvp-te
Tree	rsvp-te
Notes	The following elements are part of a choice: **bgp-label**, **ldp**, **rsvp-te**, **sr-isis**, **sr-ospf**, **sr-ospf3**, **sr-policy**, or **sr-te**.
Introduced	22.10.R1
Platforms	All

lsp-name *string*

Synopsis	Name of the LSP to be tested
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type rsvp-te lsp-name *string*
Tree	lsp-name
String Length	1 to 64
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

path *string*

Synopsis	Name of the MPLS path to be tested
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type rsvp-te path *string*
Tree	path
String Length	1 to 64
Introduced	22.10.R1
Platforms	All

sr-isis

Synopsis	Enable the **sr-isis** context
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-isis
Tree	sr-isis
Notes	The following elements are part of a choice: **bgp-label**, **ldp**, **rsvp-te**, **sr-isis**, **sr-ospf**, **sr-ospf3**, **sr-policy**, or **sr-te**.

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Introduced	22.10.R1
Platforms	All

igp-instance *number*

Synopsis	IGP instance for the SR IS-IS test
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-isis igp-instance *number*
Tree	igp-instance
Range	0 to 127
Default	0
Introduced	22.10.R1
Platforms	All

path-destination

Synopsis	Enter the **path-destination** context
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-isis path-destination
Tree	path-destination
Introduced	22.10.R1
Platforms	All

interface *string*

Synopsis	Egress router interface used with the path destination
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-isis path-destination interface *string*
Tree	interface
String Length	1 to 32
Notes	The following elements are part of a choice: **interface** or **next-hop**.
Introduced	22.10.R1
Platforms	All

ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the path destination

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Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-isis path-destination ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-address
Introduced	22.10.R1
Platforms	All

next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Egress IP next hop address used with path destination
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-isis path-destination next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	next-hop
Notes	The following elements are part of a choice: **interface** or **next-hop**.
Introduced	22.10.R1
Platforms	All

prefix *(ipv4-prefix | ipv6-prefix)*

Synopsis	Destination IP prefix for the test
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-isis prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

sr-ospf

Synopsis	Enable the **sr-ospf** context
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-ospf
Tree	sr-ospf
Notes	The following elements are part of a choice: **bgp-label**, **ldp**, **rsvp-te**, **sr-isis**, **sr-ospf**, **sr-ospf3**, **sr-policy**, or **sr-te**.
Introduced	22.10.R1
Platforms	All

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igp-instance *number*

Synopsis	IGP instance for the SR OSPF test
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-ospf igp-instance *number*
Tree	igp-instance
Range	0 to 31
Default	0
Introduced	22.10.R1
Platforms	All

path-destination

Synopsis	Enter the **path-destination** context
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-ospf path-destination
Tree	path-destination
Introduced	22.10.R1
Platforms	All

interface *string*

Synopsis	Egress router interface used with the path destination
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-ospf path-destination interface *string*
Tree	interface
String Length	1 to 32
Notes	The following elements are part of a choice: **interface** or **next-hop**.
Introduced	22.10.R1
Platforms	All

ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the path destination
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-ospf path-destination ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-address

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Introduced	22.10.R1
Platforms	All

next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Egress IP next hop address used with path destination
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-ospf path-destination next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	next-hop
Notes	The following elements are part of a choice: **interface** or **next-hop**.
Introduced	22.10.R1
Platforms	All

prefix *(ipv4-prefix | ipv6-prefix)*

Synopsis	Destination IP prefix for the test
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-ospf prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

sr-ospf3

Synopsis	Enable the **sr-ospf3** context
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-ospf3
Tree	sr-ospf3
Notes	The following elements are part of a choice: **bgp-label**, **ldp**, **rsvp-te**, **sr-isis**, **sr-ospf**, **sr-ospf3**, **sr-policy**, or **sr-te**.
Introduced	22.10.R1
Platforms	All

igp-instance *number*

Synopsis	IGP instance for the SR OSPFv3 test

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Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-ospf3 igp-instance *number*
Tree	igp-instance
Range	0 to 31 | 64 to 95
Default	0
Introduced	22.10.R1
Platforms	All

path-destination

Synopsis	Enter the **path-destination** context
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-ospf3 path-destination
Tree	path-destination
Introduced	22.10.R1
Platforms	All

interface *string*

Synopsis	Egress router interface used with the path destination
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-ospf3 path-destination interface *string*
Tree	interface
String Length	1 to 32
Notes	The following elements are part of a choice: **interface** or **next-hop**.
Introduced	22.10.R1
Platforms	All

ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the path destination
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-ospf3 path-destination ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-address
Introduced	22.10.R1
Platforms	All

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next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Egress IP next hop address used with path destination
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-ospf3 path-destination next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	next-hop
Notes	The following elements are part of a choice: **interface** or **next-hop**.
Introduced	22.10.R1
Platforms	All

prefix *(ipv4-prefix | ipv6-prefix)*

Synopsis	Destination IP prefix for the test
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-ospf3 prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

sr-policy

Synopsis	Enable the **sr-policy** context
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-policy
Tree	sr-policy
Notes	The following elements are part of a choice: **bgp-label**, **ldp**, **rsvp-te**, **sr-isis**, **sr-ospf**, **sr-ospf3**, **sr-policy**, or **sr-te**.
Introduced	22.10.R1
Platforms	All

color *number*

Synopsis	Segment Routing color for the test
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-policy color *number*
Tree	color
Range	0 to 4294967295

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Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

endpoint *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Segment Routing endpoint for the test
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-policy endpoint *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	endpoint
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

path-destination

Synopsis	Enter the **path-destination** context
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-policy path-destination
Tree	path-destination
Introduced	22.10.R1
Platforms	All

interface *string*

Synopsis	Egress router interface used with the path destination
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-policy path-destination interface *string*
Tree	interface
String Length	1 to 32
Notes	The following elements are part of a choice: **interface** or **next-hop**.
Introduced	22.10.R1
Platforms	All

ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the path destination

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Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-policy path-destination ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-address
Introduced	22.10.R1
Platforms	All

next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Egress IP next hop address used with path destination
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-policy path-destination next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	next-hop
Notes	The following elements are part of a choice: **interface** or **next-hop**.
Introduced	22.10.R1
Platforms	All

segment-list *number*

Synopsis	Segment Routing segment list for the test
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-policy segment-list *number*
Tree	segment-list
Range	1 to 32
Introduced	22.10.R1
Platforms	All

sr-te

Synopsis	Enable the **sr-te** context
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-te
Tree	sr-te
Notes	The following elements are part of a choice: **bgp-label**, **ldp**, **rsvp-te**, **sr-isis**, **sr-ospf**, **sr-ospf3**, **sr-policy**, or **sr-te**.
Introduced	22.10.R1
Platforms	All

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lsp-name *string*

Synopsis	Name of the LSP to be tested
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-te lsp-name *string*
Tree	lsp-name
String Length	1 to 64
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

path *string*

Synopsis	Name of the MPLS path to be tested
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-te path *string*
Tree	path
String Length	1 to 64
Introduced	22.10.R1
Platforms	All

path-destination

Synopsis	Enter the **path-destination** context
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-te path-destination
Tree	path-destination
Introduced	22.10.R1
Platforms	All

interface *string*

Synopsis	Egress router interface used with the path destination
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-te path-destination interface *string*
Tree	interface
String Length	1 to 32
Notes	The following elements are part of a choice: **interface** or **next-hop**.

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Introduced	22.10.R1
Platforms	All

ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the path destination
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-te path-destination ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-address
Introduced	22.10.R1
Platforms	All

next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Egress IP next hop address used with path destination
Context	**configure** saa owner *string* test *string* type lsp-ping sub-type sr-te path-destination next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	next-hop
Notes	The following elements are part of a choice: **interface** or **next-hop**.
Introduced	22.10.R1
Platforms	All

timeout *number*

Synopsis	Time router waits for a reply to an echo request
Context	**configure** saa owner *string* test *string* type lsp-ping timeout *number*
Tree	timeout
Range	1 to 10
Units	seconds
Default	5
Introduced	22.10.R1
Platforms	All

trap-generation

Synopsis	Enter the **trap-generation** context

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Context	**configure** saa owner *string* test *string* type lsp-ping trap-generation
Tree	trap-generation
Introduced	22.10.R1
Platforms	All

probe-fail *boolean*

Synopsis	Enable the generation of probe fail notifications
Context	**configure** saa owner *string* test *string* type lsp-ping trap-generation probe-fail *boolean*
Tree	probe-fail
Description	When configured to **true**, the system generates an SNMP trap if the consecutive probe failure threshold is reached during the execution of the SAA ping test. This command is not applicable to SAA traceroute tests.
Default	false
Introduced	22.10.R1
Platforms	All

probe-fail-threshold *number*

Synopsis	Consecutive probe failure count
Context	**configure** saa owner *string* test *string* type lsp-ping trap-generation probe-fail-threshold *number*
Tree	probe-fail-threshold
Description	This command configures the number of consecutive ping probe failures required to generate a trap. This command has no effect if the **probe-fail** command is set to **false**. This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	22.10.R1
Platforms	All

test-complete *boolean*

Synopsis	Enable generation of test complete notifications

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Context	**configure** saa owner *string* test *string* type lsp-ping trap-generation test-complete *boolean*
Tree	test-complete
Default	false
Introduced	22.10.R1
Platforms	All

test-fail *boolean*

Synopsis	Enable the generation of test fail notifications
Context	**configure** saa owner *string* test *string* type lsp-ping trap-generation test-fail *boolean*
Tree	test-fail
Description	When configured to **true**, the system generates a trap if a test fails. In the case of a ping test, the test is considered to have failed (for trap generation) if the number of failed probes is at least the value of the **test-fail-threshold** setting.
Default	false
Introduced	22.10.R1
Platforms	All

test-fail-threshold *number*

Synopsis	Total probe failures for trap generation
Context	**configure** saa owner *string* test *string* type lsp-ping trap-generation test-fail-threshold *number*
Tree	test-fail-threshold
Description	This command configures the number of consecutive test failures required to generate a trap. This command has no effect when **test-fail** is set to **false**. This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	22.10.R1
Platforms	All

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ttl *number*

Synopsis	TTL value for the echo request MPLS label
Context	**configure** saa owner *string* test *string* type lsp-ping ttl *number*
Tree	ttl
Range	1 to 255
Default	255
Introduced	22.10.R1
Platforms	All

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3.42 satellite commands

```
configure
   - satellite
      - apply-groups reference
      - apply-groups-exclude reference
      - ethernet-satellite number
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - client-down-delay number
         - console-access keyword
         - description string
         - dynamic-uplink boolean
         - feature keyword
         - mac-address string
         - port-map reference
            - apply-groups reference
            - apply-groups-exclude reference
            - primary reference
            - secondary reference
         - port-template string
         - ptp-tc boolean
         - sat-type keyword
         - software-repository reference
         - sync-e boolean
         - uplink-distribution keyword
      - file-transfer
         - apply-groups reference
         - apply-groups-exclude reference
         - ftp boolean
         - scp boolean
      - port-template string
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - port string
            - apply-groups reference
            - apply-groups-exclude reference
            - role keyword
            - uplink reference
         - sat-type keyword
      - port-topology reference
         - apply-groups reference
         - apply-groups-exclude reference
         - far-end-port-id reference
```


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3.42.1 satellite command descriptions

satellite

Synopsis	Enter the **satellite** context
Context	**configure** satellite
Tree	satellite
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ethernet-satellite [satellite-id] *number*

Synopsis	Enter the **ethernet-satellite** list instance
Context	**configure** satellite ethernet-satellite *number*
Tree	ethernet-satellite
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**satellite-id**] *number*

Synopsis	The unique index identifying this satellite
Context	**configure** satellite ethernet-satellite *number*
Tree	ethernet-satellite
Range	1 to 20
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the satellite
Context	**configure** satellite ethernet-satellite *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable

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Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

client-down-delay *number*

Synopsis	Delay between uplink as unavailable and disabling ports
Context	**configure** satellite ethernet-satellite *number* client-down-delay *number*
Tree	client-down-delay
Range	0 to 1800
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

console-access *keyword*

Synopsis	Satellite console interface access
Context	**configure** satellite ethernet-satellite *number* console-access *keyword*
Tree	console-access
Options	enable, disable
Default	disable
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** satellite ethernet-satellite *number* description *string*
Tree	description
String Length	1 to 80
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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dynamic-uplink *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable dynamic uplink resilience for Ethernet satellite
Context	**configure** satellite ethernet-satellite *number* dynamic-uplink *boolean*
Tree	dynamic-uplink
Default	false
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

feature *keyword*

Synopsis	Functionality to enable
Context	**configure** satellite ethernet-satellite *number* feature *keyword*
Tree	feature
Options	local-forward, ptp-tc
Max. Instances	2
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address for the satellite chassis
Context	**configure** satellite ethernet-satellite *number* mac-address *string*
Tree	mac-address
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-map [client-port-id] *reference*

Synopsis	Enter the **port-map** list instance
Context	**configure** satellite ethernet-satellite *number* port-map *reference*
Tree	port-map

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Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**client-port-id**] *reference*

Synopsis	Satellite client port associated with the port mapping
Context	**configure** satellite ethernet-satellite *number* port-map *reference*
Tree	port-map
Reference	**configure** port *string*
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

primary *reference*

Synopsis	Primary satellite uplink for the associate client port
Context	**configure** satellite ethernet-satellite *number* port-map *reference* primary *reference*
Tree	primary
Reference	**configure** port *string*
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

secondary *reference*

Synopsis	Secondary satellite uplink for associate client port
Context	**configure** satellite ethernet-satellite *number* port-map *reference* secondary *reference*
Tree	secondary
Reference	**configure** port *string*
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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port-template *string*

WARNING:
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Synopsis	Port template name
Context	**configure** satellite ethernet-satellite *number* port-template *string*
Tree	port-template
String Length	1 to 32
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ptp-tc *boolean*

Synopsis	Enable the 1EEE 1588 transparent clock function
Context	**configure** satellite ethernet-satellite *number* ptp-tc *boolean*
Tree	ptp-tc
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sat-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Type of satellite variant for the associated chassis
Context	**configure** satellite ethernet-satellite *number* sat-type *keyword*
Tree	sat-type
Options	es48-1gb-sfp, es24-1gb-sfp, es48-1gb-tx, es24-1gb-tx, es64-10gb-sfpp+4-100gb-cfp4, es24-sass-1gb-sfp, es48-sass-1gb-sfp, es24-sasmxp-1gb-sfp, es64-10gb-sfpp+4-100gb-qsfp28, es24-sfpp+8-sfp28+2-qsfp28, es32-qsfp28+4-qsfpdd, es6-qsfpdd+48-sfp56
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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software-repository *reference*

Synopsis	Software repository bound to the associated satellite
Context	**configure** satellite ethernet-satellite *number* software-repository *reference*
Tree	software-repository
Reference	**configure** system software-repository *string*
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sync-e *boolean*

Synopsis	Enable the synchronous Ethernet operation
Context	**configure** satellite ethernet-satellite *number* sync-e *boolean*
Tree	sync-e
Description	When configured to **true**, this command enables the Ethernet satellite for synchronous Ethernet operation so that the transmit timing of the satellite access ports use the frequency of the central clock of the host router. To enable this functionality, both host ports on the router that connect to the U1 and U2 ports of the satellite must be synchronous Ethernet-capable ports. When configured to **false**, the command disables the Ethernet satellite for synchronous Ethernet operation.
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

uplink-distribution *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Forwarding complex type for uplink distribution
Context	**configure** satellite ethernet-satellite *number* uplink-distribution *keyword*
Tree	uplink-distribution
Description	This command specifies the forwarding complex used for the satellite uplink association to the ports. With **single-complex**, all uplinks for the associated satellite must be connected to ports using a single forwarding complex.

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	With **dual-complex**, all uplinks for the associated satellite must be connected to ports using a double forwarding complex. This option optimizes the resources across the two complexes.
Options	single-complex, dual-complex
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

file-transfer

Synopsis	Enter the **file-transfer** context
Context	**configure** satellite file-transfer
Tree	file-transfer
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ftp *boolean*

Synopsis	Use FTP between host and satellite
Context	**configure** satellite file-transfer ftp *boolean*
Tree	ftp
Description	When configured to **true**, the file transfer FTP is used between 7750 SR or 7950 XRS host and the 7210 SAS Ethernet satellite.
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

scp *boolean*

Synopsis	Use FTP between host and satellite
Context	**configure** satellite file-transfer scp *boolean*
Tree	scp
Description	When configured to **true**, the file transfer SCP protocol is used between 7750 SR or 7950 XRS host and the 7210 SAS Ethernet satellite. When configured to **false**, the file transfer FTP protocol is used between 7750 SR or 7950 XRS host and the 7210 SAS Ethernet satellite.
Default	false

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Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-template [template-name] *string*

Synopsis	Enter the **port-template** list instance
Context	**configure** satellite port-template *string*
Tree	port-template
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**template-name**] *string*

Synopsis	Associated port template name
Context	**configure** satellite port-template *string*
Tree	port-template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the port template
Context	**configure** satellite port-template *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** satellite port-template *string* description *string*

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Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port [sat-phys-port-id] *string*

Synopsis	Enter the **port** list instance
Context	**configure** satellite port-template *string* port *string*
Tree	port
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**sat-phys-port-id**] *string*

Synopsis	Satellite physical port ID
Context	**configure** satellite port-template *string* port *string*
Tree	port
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

role *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Satellite port role
Context	**configure** satellite port-template *string* port *string* role *keyword*
Tree	role
Options	none, uplink, client
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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uplink *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Uplink association used for associated satellite port
Context	**configure** satellite port-template *string* port *string* uplink *reference*
Tree	uplink
Reference	**configure** satellite port-template *string* port *string*
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sat-type *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Satellite type for use with the port template
Context	**configure** satellite port-template *string* sat-type *keyword*
Tree	sat-type
Options	es48-1gb-sfp, es24-1gb-sfp, es48-1gb-tx, es24-1gb-tx, es64-10gb-sfpp+4-100gb-cfp4, es24-sass-1gb-sfp, es48-sass-1gb-sfp, es24-sasmxp-1gb-sfp, es64-10gb-sfpp+4-100gb-qsfp28, es24-sfpp+8-sfp28+2-qsfp28, es32-qsfp28+4-qsfpdd, es6-qsfpdd+48-sfp56
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-topology [local-port-id] *reference*

Synopsis	Enter the **port-topology** list instance
Context	**configure** satellite port-topology *reference*
Tree	port-topology

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Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**local-port-id**] *reference*

Synopsis	Local port identifier
Context	**configure** satellite port-topology *reference*
Tree	port-topology
Reference	**configure** port *string*
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

far-end-port-id *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Far end port identifier.
Context	**configure** satellite port-topology *reference* far-end-port-id *reference*
Tree	far-end-port-id
Reference	**configure** port *string*
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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3.43 service commands

```
configure
   –  service
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  cpipe string
         –  admin-state keyword
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  customer reference
         –  description string
         –  endpoint string
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  description string
            –  hold-time-active number
            –  revert-time (number | keyword)
         –  sap string
            –  accounting-policy reference
            –  admin-state keyword
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  cem
               –  packet
                  –  jitter-buffer number
                  –  payload-size number
               –  report-alarm
                  –  buffer-overrun boolean
                  –  buffer-underrun boolean
                  –  malformed-packets boolean
                  –  packet-loss boolean
                  –  remote-fault boolean
                  –  remote-packet-loss boolean
                  –  remote-rdi boolean
                  –  stray-packets boolean
               –  rtp-header boolean
            –  collect-stats boolean
            –  description string
            –  dist-cpu-protection reference
            –  egress
               –  agg-rate
                  –  adaptation-rule keyword
                  –  burst-limit (number | keyword)
                  –  limit-unused-bandwidth boolean
                  –  rate number
               –  qos
                  –  policer-control-policy
                     –  overrides
                        –  apply-groups reference
                        –  apply-groups-exclude reference
                        –  root
                           –  max-rate (number | keyword)
                           –  priority-mbs-thresholds
                              –  min-thresh-separation (number | keyword)
                              –  priority number
                                 –  apply-groups reference
                                 –  apply-groups-exclude reference
                                 –  mbs-contribution (number | keyword)
                     –  policy-name reference
                  –  sap-egress
```


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configure service cpipe sap egress qos sap-egress overrides

```
                    - overrides
                      - policer reference
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - cbs (number | keyword)
                        - mbs (number | keyword)
                        - packet-byte-offset number
                        - percent-rate
                          - cir decimal-number
                          - pir decimal-number
                        - rate
                          - cir (number | keyword)
                          - pir (number | keyword)
                        - stat-mode keyword
                      - queue reference
                        - adaptation-rule
                          - cir keyword
                          - pir keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - avg-frame-overhead decimal-number
                        - burst-limit (number | keyword)
                        - cbs (number | keyword)
                        - drop-tail
                          - low
                            - percent-reduction-from-mbs (number | keyword)
                        - hs-class-weight number
                        - hs-wred-queue
                          - policy reference
                        - hs-wrr-weight number
                        - mbs (number | keyword)
                        - monitor-queue-depth
                          - fast-polling boolean
                          - violation-threshold decimal-number
                        - parent
                          - cir-weight number
                          - weight number
                        - percent-rate
                          - cir decimal-number
                          - pir decimal-number
                        - rate
                          - cir (number | keyword)
                          - pir (number | keyword)
                    - policy-name reference
                  - scheduler-policy
                    - overrides
                      - scheduler string
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - parent
                          - cir-weight number
                          - weight number
                        - rate
                          - cir (number | keyword)
                          - pir (number | keyword)
                    - policy-name reference
            - endpoint reference
            - ingress
              - qos
                - policer-control-policy
                  - overrides
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - root
```


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configure service cpipe sap ingress qos policer-control-policy overrides root max-rate

```
                        - max-rate (number | keyword)
                        - priority-mbs-thresholds
                           - min-thresh-separation (number | keyword)
                           - priority number
                              - apply-groups reference
                              - apply-groups-exclude reference
                              - mbs-contribution (number | keyword)
                     - policy-name reference
                  - sap-ingress
                     - overrides
                        - ip-criteria
                           - activate-entry-tag number
                        - ipv6-criteria
                           - activate-entry-tag number
                        - policer reference
                           - apply-groups reference
                           - apply-groups-exclude reference
                           - cbs (number | keyword)
                           - mbs (number | keyword)
                           - packet-byte-offset number
                           - percent-rate
                              - cir decimal-number
                              - pir decimal-number
                           - rate
                              - cir (number | keyword)
                              - pir (number | keyword)
                           - stat-mode keyword
                        - queue reference
                           - adaptation-rule
                              - cir keyword
                              - pir keyword
                           - apply-groups reference
                           - apply-groups-exclude reference
                           - cbs (number | keyword)
                           - drop-tail
                              - low
                                 - percent-reduction-from-mbs (number | keyword)
                           - mbs (number | keyword)
                           - monitor-queue-depth
                              - fast-polling boolean
                           - parent
                              - cir-weight number
                              - weight number
                           - percent-rate
                              - cir decimal-number
                              - pir decimal-number
                           - rate
                              - cir (number | keyword)
                              - pir (number | keyword)
                     - policy-name reference
                     - queuing-type keyword
                  - scheduler-policy
                     - overrides
                        - scheduler string
                           - apply-groups reference
                           - apply-groups-exclude reference
                           - parent
                              - cir-weight number
                              - weight number
                           - rate
                              - cir (number | keyword)
                              - pir (number | keyword)
                     - policy-name reference
            - lag
```


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```
            - multi-service-site reference
         - service-id number
         - service-mtu number
         - spoke-sdp string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - bandwidth (number | keyword)
            - bfd
               - bfd-liveness
                  - encap keyword
               - bfd-template reference
            - control-word boolean
            - description string
            - egress
               - qos
                  - network
                     - policy-name reference
                     - port-redirect-group
                        - group-name reference
                        - instance number
               - vc-label number
            - endpoint
               - icb boolean
               - name reference
               - precedence (number | keyword)
            - ingress
               - qos
                  - network
                     - fp-redirect-group
                        - group-name reference
                        - instance number
                     - policy-name reference
               - vc-label number
         - test boolean
         - vc-switching boolean
         - vc-type keyword
         - vpn-id number
      - customer string
         - apply-groups reference
         - apply-groups-exclude reference
         - contact string
         - customer-id number
         - description string
         - multi-service-site string
            - apply-groups reference
            - apply-groups-exclude reference
            - assignment
               - card number
               - fpe reference
               - port string
            - description string
            - egress
               - agg-rate
                  - limit-unused-bandwidth boolean
                  - queue-frame-based-accounting boolean
                  - rate number
               - policer-control-policy reference
               - scheduler-policy
                  - overrides
                     - scheduler string
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - parent
```


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configure service customer multi-service-site egress scheduler-policy overrides scheduler parent cir-weight

```
                        - cir-weight number
                        - weight number
                     - rate
                        - cir (number | keyword)
                        - pir (number | keyword)
                  - policy-name reference
            - ingress
               - policer-control-policy reference
               - scheduler-policy
                  - overrides
                     - scheduler string
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - parent
                           - cir-weight number
                           - weight number
                        - rate
                           - cir (number | keyword)
                           - pir (number | keyword)
                  - policy-name reference
         - phone string
      - epipe string
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - bgp number
            - adv-service-mtu number
            - apply-groups reference
            - apply-groups-exclude reference
            - pw-template-binding reference
               - apply-groups reference
               - apply-groups-exclude reference
               - bfd-liveness boolean
               - bfd-template reference
               - endpoint reference
               - import-rt string
            - route-distinguisher (keyword | vpn-route-distinguisher)
            - route-target
               - export string
               - import string
            - vsi-export reference
            - vsi-import reference
         - bgp-evpn
            - apply-groups reference
            - apply-groups-exclude reference
            - evi number
            - local-attachment-circuit string
               - apply-groups reference
               - apply-groups-exclude reference
               - endpoint reference
               - eth-tag number
            - mpls number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - auto-bind-tunnel
                  - allow-flex-algo-fallback boolean
                  - ecmp number
                  - enforce-strict-tunnel-tagging boolean
                  - resolution keyword
                  - resolution-filter
                     - bgp boolean
                     - ldp boolean
                     - mpls-fwd-policy boolean
```


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configure service epipe bgp-evpn mpls auto-bind-tunnel resolution-filter rib-api

```
                    - rib-api boolean
                    - rsvp boolean
                    - sr-isis boolean
                    - sr-ospf boolean
                    - sr-ospf3 boolean
                    - sr-policy boolean
                    - sr-te boolean
                    - udp boolean
                  - weighted-ecmp boolean
               - control-word boolean
               - default-route-tag string
               - dynamic-egress-label-limit boolean
               - ecmp number
               - entropy-label boolean
               - evi-three-byte-auto-rt boolean
               - force-vc-forwarding keyword
               - oper-group reference
               - route-next-hop
                  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
                  - system-ipv4
                  - system-ipv6
               - send-tunnel-encap
                  - mpls boolean
                  - mpls-over-udp boolean
            - remote-attachment-circuit string
               - apply-groups reference
               - apply-groups-exclude reference
               - endpoint reference
               - eth-tag number
            - segment-routing-v6 number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - default-route-tag string
               - ecmp number
               - evi-three-byte-auto-rt boolean
               - force-vc-forwarding keyword
               - oper-group reference
               - resolution keyword
               - route-next-hop
                  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
                  - system-ipv4
                  - system-ipv6
               - source-address string
               - srv6
                  - default-locator string
                  - instance reference
            - vxlan number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - default-route-tag string
               - ecmp number
               - evi-three-byte-auto-rt boolean
               - send-tunnel-encap boolean
               - vxlan-instance reference
         - bgp-mh-site string
            - activation-timer number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - boot-timer number
            - id number
            - min-down-timer number
```


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configure service epipe bgp-mh-site preference

```
            - preference number
            - sap string
         - bgp-vpws
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - local-ve
               - id number
               - name string
            - remote-ve string
               - apply-groups reference
               - apply-groups-exclude reference
               - id number
         - customer reference
         - description string
         - endpoint string
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - hold-time-active number
            - revert-time (number | keyword)
            - standby-signaling keyword
         - eth-cfm
            - apply-groups reference
            - apply-groups-exclude reference
         - ignore-l2vpn-mtu-mismatch boolean
         - load-balancing
            - lbl-eth-or-ip-l4-teid boolean
            - per-service-hashing boolean
         - nat-outside number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
         - oper-group reference
         - pbb
            - force-qtag-forwarding boolean
            - local-switch-service-state keyword
            - tunnel
               - apply-groups reference
               - apply-groups-exclude reference
               - backbone-dest-mac string
               - backbone-dest-mac-name reference
               - backbone-vpls-service-name reference
               - isid number
         - sap string
            - aarp
               - id reference
               - type keyword
            - accounting-policy reference
            - admin-state keyword
            - app-profile reference
            - apply-groups reference
            - apply-groups-exclude reference
            - bandwidth number
            - cflowd boolean
            - collect-stats boolean
            - cpu-protection
               - eth-cfm-monitoring
                  - aggregate
                  - car
               - mac-monitoring
               - policy-id reference
            - description string
            - dist-cpu-protection reference
```


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configure service epipe sap egress

```
            - egress
              - agg-rate
                - adaptation-rule keyword
                - burst-limit (number | keyword)
                - limit-unused-bandwidth boolean
                - queue-frame-based-accounting boolean
                - rate number
              - filter
                - ip reference
                - ipv6 reference
                - mac reference
              - qos
                - policer-control-policy
                  - overrides
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - root
                      - max-rate (number | keyword)
                      - priority-mbs-thresholds
                        - min-thresh-separation (number | keyword)
                        - priority number
                          - apply-groups reference
                          - apply-groups-exclude reference
                          - mbs-contribution (number | keyword)
                  - policy-name reference
                - qinq-mark-top-only boolean
                - sap-egress
                  - overrides
                    - hs-secondary-shaper string
                    - hs-wrr-group reference
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - hs-class-weight number
                      - percent-rate decimal-number
                      - rate (number | keyword)
                    - policer reference
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - cbs (number | keyword)
                      - mbs (number | keyword)
                      - packet-byte-offset number
                      - percent-rate
                        - cir decimal-number
                        - pir decimal-number
                      - rate
                        - cir (number | keyword)
                        - pir (number | keyword)
                      - stat-mode keyword
                    - queue reference
                      - adaptation-rule
                        - cir keyword
                        - pir keyword
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - avg-frame-overhead decimal-number
                      - burst-limit (number | keyword)
                      - cbs (number | keyword)
                      - drop-tail
                        - low
                          - percent-reduction-from-mbs (number | keyword)
                      - hs-class-weight number
                      - hs-wred-queue
                        - policy reference
                      - hs-wrr-weight number
```


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configure service epipe sap egress qos sap-egress overrides queue mbs

```
                        - mbs (number | keyword)
                        - monitor-queue-depth
                           - fast-polling boolean
                           - violation-threshold decimal-number
                        - parent
                           - cir-weight number
                           - weight number
                        - percent-rate
                           - cir decimal-number
                           - pir decimal-number
                        - rate
                           - cir (number | keyword)
                           - pir (number | keyword)
                     - policy-name reference
                     - port-redirect-group
                        - group-name reference
                        - instance number
                  - scheduler-policy
                     - overrides
                        - scheduler string
                           - apply-groups reference
                           - apply-groups-exclude reference
                           - parent
                              - cir-weight number
                              - weight number
                           - rate
                              - cir (number | keyword)
                              - pir (number | keyword)
                     - policy-name reference
            - endpoint reference
            - eth-cfm
               - ais boolean
               - apply-groups reference
               - apply-groups-exclude reference
               - collect-lmm-fc-stats
                  - fc keyword
                  - fc-in-profile keyword
               - collect-lmm-stats boolean
               - mep md-admin-name reference ma-admin-name reference mep-id number
                  - admin-state keyword
                  - ais
                     - client-meg-level number
                     - interface-support boolean
                     - interval number
                     - low-priority-defect keyword
                     - priority number
                  - alarm-notification
                     - fng-alarm-time number
                     - fng-reset-time number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - ccm boolean
                  - ccm-ltm-priority number
                  - ccm-padding-size number
                  - cfm-vlan-tag string
                  - csf
                     - multiplier decimal-number
                  - description string
                  - direction keyword
                  - eth-test
                     - bit-error-threshold number
                     - test-pattern
                        - crc-tlv boolean
                        - pattern keyword
```


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configure service epipe sap eth-cfm mep fault-propagation

```
                  - fault-propagation keyword
                  - grace
                     - eth-ed
                        - max-rx-defect-window number
                        - priority number
                        - rx-eth-ed boolean
                        - tx-eth-ed boolean
                     - eth-vsm-grace
                        - rx-eth-vsm-grace boolean
                        - tx-eth-vsm-grace boolean
                  - lbm-svc-act-responder boolean
                  - low-priority-defect keyword
                  - mac-address string
                  - one-way-delay-threshold number
                  - primary-vlan boolean
               - mip primary-vlan (number | keyword)
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - cfm-vlan-tag string
                  - mac-address string
               - squelch-ingress-ctag-levels number
               - squelch-ingress-levels number
            - ethernet
               - llf
                  - admin-state keyword
            - ignore-oper-down boolean
            - ingress
               - filter
                  - ip reference
                  - ipv6 reference
                  - mac reference
               - qos
                  - match-qinq-dot1p keyword
                  - policer-control-policy
                     - overrides
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - root
                           - max-rate (number | keyword)
                           - priority-mbs-thresholds
                              - min-thresh-separation (number | keyword)
                              - priority number
                                 - apply-groups reference
                                 - apply-groups-exclude reference
                                 - mbs-contribution (number | keyword)
                     - policy-name reference
                  - sap-ingress
                     - fp-redirect-group
                        - group-name reference
                        - instance number
                     - overrides
                        - ip-criteria
                           - activate-entry-tag number
                        - ipv6-criteria
                           - activate-entry-tag number
                        - policer reference
                           - apply-groups reference
                           - apply-groups-exclude reference
                           - cbs (number | keyword)
                           - mbs (number | keyword)
                           - packet-byte-offset number
                           - percent-rate
                              - cir decimal-number
                              - pir decimal-number
```


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configure service epipe sap ingress qos sap-ingress overrides policer rate

```
                        - rate
                           - cir (number | keyword)
                           - pir (number | keyword)
                        - stat-mode keyword
                     - queue reference
                        - adaptation-rule
                           - cir keyword
                           - pir keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - cbs (number | keyword)
                        - drop-tail
                           - low
                              - percent-reduction-from-mbs (number | keyword)
                        - mbs (number | keyword)
                        - monitor-queue-depth
                           - fast-polling boolean
                        - parent
                           - cir-weight number
                           - weight number
                        - percent-rate
                           - cir decimal-number
                           - pir decimal-number
                        - rate
                           - cir (number | keyword)
                           - pir (number | keyword)
                  - policy-name reference
                  - queuing-type keyword
               - scheduler-policy
                  - overrides
                     - scheduler string
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - parent
                           - cir-weight number
                           - weight number
                        - rate
                           - cir (number | keyword)
                           - pir (number | keyword)
                  - policy-name reference
            - qtag-manipulation
               - c-tag (number | keyword)
               - push-dot1q-vlan (number | keyword)
               - s-tag number
         - l2tpv3-session
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - pseudo-wire
               - ethernet
               - ethernet-vlan-id number
            - router
               - group string
               - router-instance string
            - vc-id number
         - lag
            - link-map-profile number
            - per-link-hash
               - class number
               - weight number
         - mc-ring
            - apply-groups reference
            - apply-groups-exclude reference
            - ring-node string
```


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configure service epipe sap monitor-oper-group

```
            - monitor-oper-group reference
            - multi-service-site reference
            - oper-group reference
            - transit-policy
               - ip reference
               - prefix reference
         - segment-routing-v6 number
            - apply-groups reference
            - apply-groups-exclude reference
            - locator reference
               - apply-groups reference
               - apply-groups-exclude reference
               - function
                  - end-dx2
                     - value number
            - micro-segment-locator reference
               - apply-groups reference
               - apply-groups-exclude reference
               - function
                  - udx2
                     - value number
         - service-id number
         - service-mtu number
         - spoke-sdp string
            - aarp
               - id reference
               - type keyword
            - accounting-policy reference
            - admin-state keyword
            - adv-service-mtu number
            - app-profile reference
            - apply-groups reference
            - apply-groups-exclude reference
            - bandwidth (number | keyword)
            - bfd
               - bfd-liveness
                  - encap keyword
               - bfd-template reference
               - failure-action keyword
               - wait-for-up-timer number
            - collect-stats boolean
            - control-word boolean
            - cpu-protection
               - eth-cfm-monitoring
                  - aggregate
                  - car
               - mac-monitoring
               - policy-id reference
            - description string
            - egress
               - filter
                  - ip reference
                  - ipv6 reference
                  - mac reference
               - l2tpv3
                  - cookie string
               - qos
                  - network
                     - policy-name reference
                     - port-redirect-group
                        - group-name reference
                        - instance number
               - vc-label number
            - endpoint
```


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configure service epipe spoke-sdp endpoint icb

```
                - icb boolean
                - name reference
                - precedence (number | keyword)
            - entropy-label
            - eth-cfm
                - apply-groups reference
                - apply-groups-exclude reference
                - collect-lmm-fc-stats
                    - fc keyword
                    - fc-in-profile keyword
                - collect-lmm-stats boolean
                - mep md-admin-name reference ma-admin-name reference mep-id number
                    - admin-state keyword
                    - ais
                        - client-meg-level number
                        - interface-support boolean
                        - interval number
                        - low-priority-defect keyword
                        - priority number
                    - alarm-notification
                        - fng-alarm-time number
                        - fng-reset-time number
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - ccm boolean
                    - ccm-ltm-priority number
                    - ccm-padding-size number
                    - cfm-vlan-tag string
                    - csf
                        - multiplier decimal-number
                    - description string
                    - direction keyword
                    - eth-test
                        - bit-error-threshold number
                        - test-pattern
                            - crc-tlv boolean
                            - pattern keyword
                    - fault-propagation keyword
                    - grace
                        - eth-ed
                            - max-rx-defect-window number
                            - priority number
                            - rx-eth-ed boolean
                            - tx-eth-ed boolean
                        - eth-vsm-grace
                            - rx-eth-vsm-grace boolean
                            - tx-eth-vsm-grace boolean
                    - lbm-svc-act-responder boolean
                    - low-priority-defect keyword
                    - mac-address string
                    - one-way-delay-threshold number
                    - primary-vlan boolean
                - mip primary-vlan (number | keyword)
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - cfm-vlan-tag string
                    - mac-address string
                - squelch-ingress-ctag-levels number
                - squelch-ingress-levels number
            - force-vc-forwarding keyword
            - hash-label
                - signal-capability
            - ingress
                - filter
```


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configure service epipe spoke-sdp ingress filter ip

```
                  - ip reference
                  - ipv6 reference
                  - mac reference
               - l2tpv3
                  - cookie
                     - cookie1 string
                     - cookie2 string
               - qos
                  - network
                     - fp-redirect-group
                        - group-name reference
                        - instance number
                     - policy-name reference
               - vc-label number
            - monitor-oper-group reference
            - oper-group reference
            - pw-status
               - block-on-peer-fault boolean
               - signaling boolean
               - standby-signaling-slave boolean
            - source-bmac
               - use-sdp-bmac-lsb boolean
            - transit-policy
               - ip reference
               - prefix reference
            - vc-type keyword
            - vlan-vc-tag number
         - test boolean
         - vc-switching boolean
         - vpn-id number
         - vxlan
            - instance number
               - apply-groups reference
               - apply-groups-exclude reference
               - egress-vtep
                  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
                  - oper-group reference
               - vni number
            - source-vtep (ipv4-address-no-zone | ipv6-address-no-zone)
      - ies string
         - aa-interface string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - ip-mtu number
            - ipv4
               - primary
                  - address string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - prefix-length number
            - sap string
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - description string
               - egress
                  - filter
                     - ip reference
                  - qos
                     - sap-egress
                        - policy-name reference
               - fwd-wholesale
```


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configure service ies aa-interface sap fwd-wholesale pppoe-service

```
                  - pppoe-service reference
               - ingress
                  - qos
                     - sap-ingress
                        - overrides
                        - policy-name reference
               - lag
         - aarp-interface string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - ip-mtu number
            - spoke-sdp string
               - aarp
                  - id reference
                  - type keyword
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - description string
               - egress
                  - filter
                     - ip reference
                  - vc-label number
               - ingress
                  - filter
                     - ip reference
                  - vc-label number
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - customer reference
         - description string
         - eth-cfm
            - apply-groups reference
            - apply-groups-exclude reference
         - igmp-host-tracking
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - expiry-time number
         - interface string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - cflowd-parameters
               - sampling keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - direction keyword
                  - sample-profile (keyword | number)
                  - type keyword
            - cpu-protection reference
            - description string
            - dynamic-tunnel-redundant-nexthop string
            - hold-time
               - ipv4
                  - down
                     - init-only boolean
                     - seconds number
                  - up
                     - seconds number
               - ipv6
```


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configure service ies interface hold-time ipv6 down

```
                  - down
                     - init-only boolean
                     - seconds number
                  - up
                     - seconds number
            - if-attribute
               - admin-group reference
               - srlg-group reference
            - ingress
               - destination-class-lookup boolean
               - policy-accounting reference
            - ingress-stats boolean
            - ip-mtu number
            - ipsec
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - ip-exception reference
               - ipsec-tunnel string
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - bfd
                     - bfd-designate boolean
                     - bfd-liveness
                        - dest-ip string
                        - interface string
                        - service-name string
                  - clear-df-bit boolean
                  - copy-traffic-class-upon-decapsulation boolean
                  - description string
                  - encapsulated-ip-mtu number
                  - icmp-generation
                     - frag-required
                        - admin-state keyword
                        - interval number
                        - message-count number
                  - icmp6-generation
                     - packet-too-big
                        - admin-state keyword
                        - interval number
                        - message-count number
                  - ip-mtu number
                  - key-exchange
                     - dynamic
                        - auto-establish boolean
                        - cert
                           - cert-profile reference
                           - status-verify
                              - default-result keyword
                              - primary keyword
                              - secondary keyword
                           - trust-anchor-profile reference
                        - id
                           - fqdn string
                           - ipv4 string
                           - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
                        - ike-policy reference
                        - ipsec-transform reference
                        - pre-shared-key string
                     - manual
                        - keys number direction keyword
                           - apply-groups reference
                           - apply-groups-exclude reference
```


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configure service ies interface ipsec ipsec-tunnel key-exchange manual keys authentication-key

```
                        – authentication-key string
                        – encryption-key string
                        – ipsec-transform reference
                        – spi number
                – local-gateway-address-override (ipv4-address-no-zone | ipv6-address-no-
zone)
                – max-history-key-records
                  – esp number
                  – ike number
                – pmtu-discovery-aging number
                – private-sap number
                – private-service string
                – private-tcp-mss-adjust number
                – propagate-pmtu-v4 boolean
                – propagate-pmtu-v6 boolean
                – public-tcp-mss-adjust (number | keyword)
                – remote-gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
                – replay-window number
                – security-policy
                  – id number
                  – strict-match boolean
              – ipv6-exception reference
              – public-sap number
              – tunnel-group reference
            – ipv4
              – addresses
                – address string
                  – apply-groups reference
                  – apply-groups-exclude reference
                  – prefix-length number
              – allow-directed-broadcasts boolean
              – bfd
                – admin-state keyword
                – echo-receive number
                – multiplier number
                – receive number
                – transmit-interval number
                – type keyword
              – dhcp
                – admin-state keyword
                – apply-groups reference
                – apply-groups-exclude reference
                – description string
                – gi-address string
                – lease-populate
                  – max-leases number
                – option-82
                  – action keyword
                  – circuit-id
                    – ascii-tuple
                    – ifindex
                    – none
                    – sap-id
                    – vlan-ascii-tuple
                  – remote-id
                    – ascii-string string
                    – mac
                    – none
                  – vendor-specific-option
                    – client-mac-address boolean
                    – pool-name boolean
                    – sap-id boolean
                    – service-id boolean
                    – string string
```


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configure service ies interface ipv4 dhcp option-82 vendor-specific-option system-id

```
                    - system-id boolean
                - proxy-server
                    - admin-state keyword
                    - emulated-server string
                    - lease-time
                        - radius-override boolean
                        - value number
                - python-policy reference
                - relay-plain-bootp boolean
                - relay-proxy
                    - release-update-src-ip boolean
                    - siaddr-override string
                - release-include-gi-address boolean
                - server string
                - src-ip-addr keyword
                - trusted boolean
                - use-arp boolean
            - icmp
                - mask-reply boolean
                - param-problem
                    - admin-state keyword
                    - number number
                    - seconds number
                - redirects
                    - admin-state keyword
                    - number number
                    - seconds number
                - ttl-expired
                    - admin-state keyword
                    - number number
                    - seconds number
                - unreachables
                    - admin-state keyword
                    - number number
                    - seconds number
            - ip-helper-address string
            - local-dhcp-server reference
            - neighbor-discovery
                - host-route
                    - populate keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - route-tag number
                - learn-unsolicited boolean
                - limit
                    - log-only boolean
                    - max-entries number
                    - threshold number
                - local-proxy-arp boolean
                - populate boolean
                - proactive-refresh boolean
                - proxy-arp-policy reference
                - remote-proxy-arp boolean
                - retry-timer number
                - static-neighbor string
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - mac-address string
                - static-neighbor-unnumbered
                    - mac-address string
                - timeout number
            - primary
                - address string
                - apply-groups reference
```


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configure service ies interface ipv4 primary apply-groups-exclude

```
                  - apply-groups-exclude reference
                  - broadcast keyword
                  - prefix-length number
                  - track-srrp number
               - qos-route-lookup keyword
               - secondary string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - broadcast keyword
                  - igp-inhibit boolean
                  - prefix-length number
                  - track-srrp number
               - tcp-mss number
               - unnumbered
                  - ip-address string
                  - ip-int-name string
                  - system
               - urpf-check
                  - ignore-default boolean
                  - mode keyword
               - vrrp number
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - authentication-key string
                  - backup string
                  - bfd-liveness
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - dest-ip string
                     - interface-name string
                     - service-name string
                  - init-delay number
                  - mac string
                  - master-int-inherit boolean
                  - message-interval number
                  - monitor-oper-group reference
                  - ntp-reply boolean
                  - oper-group reference
                  - owner boolean
                  - passive boolean
                  - ping-reply boolean
                  - policy reference
                  - preempt boolean
                  - priority number
                  - ssh-reply boolean
                  - standby-forwarding boolean
                  - telnet-reply boolean
                  - traceroute-reply boolean
            - ipv6
               - address string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - duplicate-address-detection boolean
                  - eui-64 boolean
                  - prefix-length number
                  - primary-preference number
                  - track-srrp number
               - bfd
                  - admin-state keyword
                  - echo-receive number
                  - multiplier number
                  - receive number
                  - transmit-interval number
```


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configure service ies interface ipv6 bfd type

```
                  - type keyword
               - dhcp6
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - relay
                     - admin-state keyword
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - description string
                     - lease-populate
                        - max-nbr-of-leases number
                        - route-populate
                           - na boolean
                           - pd
                              - exclude boolean
                           - ta boolean
                     - link-address string
                     - neighbor-resolution boolean
                     - option
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - interface-id
                           - ascii-tuple
                           - if-index
                           - sap-id
                           - string string
                        - remote-id boolean
                     - python-policy reference
                     - server string
                     - source-address string
                     - user-db reference
                  - server
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - max-nbr-of-leases number
                     - prefix-delegation
                        - admin-state keyword
                        - prefix string
                           - apply-groups reference
                           - apply-groups-exclude reference
                           - client-id
                              - duid string
                              - iaid number
                           - preferred-lifetime (number | keyword)
                           - valid-lifetime (number | keyword)
               - duplicate-address-detection boolean
               - forward-ipv4-packets boolean
               - icmp6
                  - packet-too-big
                     - admin-state keyword
                     - number number
                     - seconds number
                  - param-problem
                     - admin-state keyword
                     - number number
                     - seconds number
                  - redirects
                     - admin-state keyword
                     - number number
                     - seconds number
                  - time-exceeded
                     - admin-state keyword
                     - number number
                     - seconds number
```


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configure service ies interface ipv6 icmp6 unreachables

```
                    - unreachables
                      - admin-state keyword
                      - number number
                      - seconds number
                - link-local-address
                    - address string
                    - duplicate-address-detection boolean
                - local-dhcp-server reference
                - neighbor-discovery
                    - host-route
                      - populate keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - route-tag number
                    - learn-unsolicited keyword
                    - limit
                      - log-only boolean
                      - max-entries number
                      - threshold number
                    - local-proxy-nd boolean
                    - proactive-refresh keyword
                    - proxy-nd-policy reference
                    - reachable-time number
                    - secure-nd
                      - admin-state keyword
                      - allow-unsecured-msgs boolean
                      - public-key-min-bits number
                      - security-parameter number
                    - stale-time number
                    - static-neighbor string
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - mac-address string
                - qos-route-lookup keyword
                - tcp-mss number
                - urpf-check
                    - ignore-default boolean
                    - mode keyword
                - vrrp number
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - backup string
                    - bfd-liveness
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - dest-ip (ipv4-address-no-zone | ipv6-address-no-zone)
                      - interface-name string
                      - service-name string
                    - init-delay number
                    - mac string
                    - master-int-inherit boolean
                    - message-interval number
                    - monitor-oper-group reference
                    - ntp-reply boolean
                    - oper-group reference
                    - owner boolean
                    - passive boolean
                    - ping-reply boolean
                    - policy reference
                    - preempt boolean
                    - priority number
                    - standby-forwarding boolean
                    - telnet-reply boolean
```


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configure service ies interface ipv6 vrrp traceroute-reply

```
                  - traceroute-reply boolean
            - load-balancing
               - flow-label-load-balancing boolean
               - ip-load-balancing keyword
               - spi-load-balancing boolean
               - teid-load-balancing boolean
            - loopback boolean
            - mac string
            - mac-accounting boolean
            - monitor-oper-group reference
            - multi-chassis-shunting-profile reference
            - multicast-network-domain reference
            - ping-template
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - destination-address string
               - name reference
            - ptp-hw-assist
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
            - radius-auth-policy reference
            - sap string
               - aarp
                  - id reference
                  - type keyword
               - accounting-policy reference
               - admin-state keyword
               - anti-spoof keyword
               - app-profile reference
               - apply-groups reference
               - apply-groups-exclude reference
               - bandwidth number
               - calling-station-id string
               - collect-stats boolean
               - cpu-protection
                  - eth-cfm-monitoring
                     - aggregate
                     - car
                  - ip-src-monitoring
                  - mac-monitoring
                  - policy-id reference
               - description string
               - dist-cpu-protection reference
               - egress
                  - agg-rate
                     - adaptation-rule keyword
                     - burst-limit (number | keyword)
                     - limit-unused-bandwidth boolean
                     - queue-frame-based-accounting boolean
                     - rate number
                  - filter
                     - ip reference
                     - ipv6 reference
                  - qos
                     - policer-control-policy
                        - overrides
                           - apply-groups reference
                           - apply-groups-exclude reference
                           - root
                              - max-rate (number | keyword)
                              - priority-mbs-thresholds
                                 - min-thresh-separation (number | keyword)
```


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configure service ies interface sap egress qos policer-control-policy overrides root priority-mbs-thresholds priority

```
                                    - priority number
                                      - apply-groups reference
                                      - apply-groups-exclude reference
                                      - mbs-contribution (number | keyword)
                                - policy-name reference
                            - qinq-mark-top-only boolean
                            - sap-egress
                                - overrides
                                    - hs-secondary-shaper string
                                    - hs-wrr-group reference
                                        - apply-groups reference
                                        - apply-groups-exclude reference
                                        - hs-class-weight number
                                        - percent-rate decimal-number
                                        - rate (number | keyword)
                                    - policer reference
                                        - apply-groups reference
                                        - apply-groups-exclude reference
                                        - cbs (number | keyword)
                                        - mbs (number | keyword)
                                        - packet-byte-offset number
                                        - percent-rate
                                            - cir decimal-number
                                            - pir decimal-number
                                        - rate
                                            - cir (number | keyword)
                                            - pir (number | keyword)
                                        - stat-mode keyword
                                    - queue reference
                                        - adaptation-rule
                                            - cir keyword
                                            - pir keyword
                                        - apply-groups reference
                                        - apply-groups-exclude reference
                                        - avg-frame-overhead decimal-number
                                        - burst-limit (number | keyword)
                                        - cbs (number | keyword)
                                        - drop-tail
                                            - low
                                                - percent-reduction-from-mbs (number | keyword)
                                        - hs-class-weight number
                                        - hs-wred-queue
                                            - policy reference
                                        - hs-wrr-weight number
                                        - mbs (number | keyword)
                                        - monitor-queue-depth
                                            - fast-polling boolean
                                            - violation-threshold decimal-number
                                        - parent
                                            - cir-weight number
                                            - weight number
                                        - percent-rate
                                            - cir decimal-number
                                            - pir decimal-number
                                        - rate
                                            - cir (number | keyword)
                                            - pir (number | keyword)
                                - policy-name reference
                                - port-redirect-group
                                    - group-name reference
                                    - instance number
                            - scheduler-policy
                                - overrides
                                    - scheduler string
```


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configure service ies interface sap egress qos scheduler-policy overrides scheduler apply-groups

```
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - parent
                          - cir-weight number
                          - weight number
                        - rate
                          - cir (number | keyword)
                          - pir (number | keyword)
                    - policy-name reference
                - queue-group-redirect-list reference
            - eth-cfm
                - apply-groups reference
                - apply-groups-exclude reference
                - collect-lmm-fc-stats
                    - fc keyword
                    - fc-in-profile keyword
                - collect-lmm-stats boolean
                - mep md-admin-name reference ma-admin-name reference mep-id number
                    - admin-state keyword
                    - ais boolean
                    - alarm-notification
                        - fng-alarm-time number
                        - fng-reset-time number
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - ccm boolean
                    - ccm-ltm-priority number
                    - ccm-padding-size number
                    - csf
                        - multiplier decimal-number
                    - description string
                    - eth-test
                        - bit-error-threshold number
                        - test-pattern
                            - crc-tlv boolean
                            - pattern keyword
                    - fault-propagation keyword
                    - grace
                        - eth-ed
                            - max-rx-defect-window number
                            - priority number
                            - rx-eth-ed boolean
                            - tx-eth-ed boolean
                        - eth-vsm-grace
                            - rx-eth-vsm-grace boolean
                            - tx-eth-vsm-grace boolean
                    - low-priority-defect keyword
                    - one-way-delay-threshold number
                - squelch-ingress-levels number
            - fwd-wholesale
                - pppoe-service reference
            - host-admin-state keyword
            - host-lockout-policy reference
            - ingress
                - filter
                    - ip reference
                    - ipv6 reference
                - qos
                    - match-qinq-dot1p keyword
                    - policer-control-policy
                        - overrides
                            - apply-groups reference
                            - apply-groups-exclude reference
                            - root
```


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configure service ies interface sap ingress qos policer-control-policy overrides root max-rate

```
                        - max-rate (number | keyword)
                        - priority-mbs-thresholds
                          - min-thresh-separation (number | keyword)
                          - priority number
                            - apply-groups reference
                            - apply-groups-exclude reference
                            - mbs-contribution (number | keyword)
                    - policy-name reference
                - sap-ingress
                    - fp-redirect-group
                        - group-name reference
                        - instance number
                    - overrides
                        - ip-criteria
                            - activate-entry-tag number
                        - ipv6-criteria
                            - activate-entry-tag number
                        - policer reference
                            - apply-groups reference
                            - apply-groups-exclude reference
                            - cbs (number | keyword)
                            - mbs (number | keyword)
                            - packet-byte-offset number
                            - percent-rate
                              - cir decimal-number
                              - pir decimal-number
                            - rate
                              - cir (number | keyword)
                              - pir (number | keyword)
                            - stat-mode keyword
                        - queue reference
                            - adaptation-rule
                              - cir keyword
                              - pir keyword
                            - apply-groups reference
                            - apply-groups-exclude reference
                            - cbs (number | keyword)
                            - drop-tail
                              - low
                                - percent-reduction-from-mbs (number | keyword)
                            - mbs (number | keyword)
                            - monitor-queue-depth
                              - fast-polling boolean
                            - parent
                              - cir-weight number
                              - weight number
                            - percent-rate
                              - cir decimal-number
                              - pir decimal-number
                            - rate
                              - cir (number | keyword)
                              - pir (number | keyword)
                    - policy-name reference
                    - queuing-type keyword
                - scheduler-policy
                    - overrides
                        - scheduler string
                            - apply-groups reference
                            - apply-groups-exclude reference
                            - parent
                              - cir-weight number
                              - weight number
                            - rate
                              - cir (number | keyword)
```


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configure service ies interface sap ingress qos scheduler-policy overrides scheduler rate pir

```
                                  - pir (number | keyword)
                              - policy-name reference
                        - queue-group-redirect-list reference
                    - ip-tunnel string
                        - admin-state keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - backup-remote-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
                        - clear-df-bit boolean
                        - delivery-service string
                        - description string
                        - dest-ip (ipv4-address-no-zone | ipv6-address-no-zone)
                        - dscp keyword
                        - encapsulated-ip-mtu number
                        - gre-header
                            - admin-state keyword
                            - key
                                - admin-state keyword
                                - receive number
                                - send number
                        - icmp-generation
                            - frag-required
                                - admin-state keyword
                                - interval number
                                - message-count number
                        - icmp6-generation
                            - packet-too-big
                                - admin-state keyword
                                - number number
                                - seconds number
                        - ip-mtu number
                        - ipsec-transport-mode-profile reference
                        - local-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
                        - pmtu-discovery-aging number
                        - private-tcp-mss-adjust number
                        - propagate-pmtu-v4 boolean
                        - propagate-pmtu-v6 boolean
                        - public-tcp-mss-adjust (number | keyword)
                        - reassembly (number | keyword)
                        - remote-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
                    - ipsec-gateway string
                        - admin-state keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - cert
                            - cert-profile reference
                            - status-verify
                                - default-result keyword
                                - primary keyword
                                - secondary keyword
                            - trust-anchor-profile reference
                        - client-db
                            - fallback boolean
                            - name reference
                        - default-secure-service
                            - interface string
                            - service-name string
                        - default-tunnel-template reference
                        - dhcp-address-assignment
                            - dhcpv4
                                - admin-state keyword
                                - apply-groups reference
                                - apply-groups-exclude reference
                                - gi-address string
```


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configure service ies interface sap ipsec-gateway dhcp-address-assignment dhcpv4 send-release

```
                    - send-release boolean
                    - server
                      - address string
                      - router-instance string
                - dhcpv6
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - link-address string
                    - send-release boolean
                    - server
                      - address string
                      - router-instance string
            - ike-policy reference
            - local
                - address-assignment
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - ipv4
                      - dhcp-server string
                      - pool string
                      - router-instance string
                      - secondary-pool string
                    - ipv6
                      - dhcp-server string
                      - pool string
                      - router-instance string
                - gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
                - id
                    - auto
                    - fqdn string
                    - ipv4 string
                    - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
            - max-history-key-records
                - esp number
                - ike number
            - pre-shared-key string
            - radius
                - accounting-policy reference
                - authentication-policy reference
            - ts-list reference
        - lag
            - link-map-profile number
            - per-link-hash
                - class number
                - weight number
        - multi-service-site reference
        - static-host
            - ipv4 string mac string
                - admin-state keyword
                - ancp-string string
                - app-profile
                    - profile reference
                - apply-groups reference
                - apply-groups-exclude reference
                - int-dest-id string
                - sla-profile reference
                - sub-profile reference
                - subscriber-id
                    - string string
                    - use-sap-id
        - transit-policy
            - ip reference
```


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configure service ies interface sap transit-policy prefix

```
                - prefix reference
            - shcv-policy-ipv4 reference
            - spoke-sdp string
                - aarp
                    - id reference
                    - type keyword
                - accounting-policy reference
                - admin-state keyword
                - app-profile reference
                - apply-groups reference
                - apply-groups-exclude reference
                - bfd
                    - bfd-liveness
                        - encap keyword
                    - bfd-template reference
                    - failure-action keyword
                    - wait-for-up-timer number
                - collect-stats boolean
                - control-word boolean
                - cpu-protection
                    - eth-cfm-monitoring
                        - aggregate
                        - car
                    - ip-src-monitoring
                    - mac-monitoring
                    - policy-id reference
                - description string
                - egress
                    - filter
                        - ip reference
                        - ipv6 reference
                    - qos
                        - network
                            - policy-name reference
                            - port-redirect-group
                                - group-name reference
                                - instance number
                    - vc-label number
                - entropy-label
                - eth-cfm
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - collect-lmm-fc-stats
                        - fc keyword
                        - fc-in-profile keyword
                    - collect-lmm-stats boolean
                    - mep md-admin-name reference ma-admin-name reference mep-id number
                        - admin-state keyword
                        - ais boolean
                        - alarm-notification
                            - fng-alarm-time number
                            - fng-reset-time number
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - ccm boolean
                        - ccm-ltm-priority number
                        - ccm-padding-size number
                        - csf
                            - multiplier decimal-number
                        - description string
                        - eth-test
                            - bit-error-threshold number
                            - test-pattern
                                - crc-tlv boolean
```


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configure service ies interface spoke-sdp eth-cfm mep eth-test test-pattern pattern

```
                        - pattern keyword
                    - fault-propagation keyword
                    - grace
                        - eth-ed
                            - max-rx-defect-window number
                            - priority number
                            - rx-eth-ed boolean
                            - tx-eth-ed boolean
                        - eth-vsm-grace
                            - rx-eth-vsm-grace boolean
                            - tx-eth-vsm-grace boolean
                    - low-priority-defect keyword
                    - one-way-delay-threshold number
                - squelch-ingress-levels number
            - hash-label
                - signal-capability
            - ingress
                - filter
                    - ip reference
                    - ipv6 reference
                - qos
                    - network
                        - fp-redirect-group
                            - group-name reference
                            - instance number
                        - policy-name reference
                - vc-label number
            - transit-policy
                - ip reference
                - prefix reference
            - vc-type keyword
        - static-tunnel-redundant-nexthop string
        - tos-marking-state keyword
        - tunnel boolean
        - vas-if-type keyword
        - vpls string
            - apply-groups reference
            - apply-groups-exclude reference
            - egress
                - reclassify-using-qos reference
                - routed-override-filter
                    - ip reference
                    - ipv6 reference
            - evpn
                - arp
                    - advertise keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - route-tag number
                    - flood-garp-and-unknown-req boolean
                    - learn-dynamic boolean
                - nd
                    - advertise keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - route-tag number
                    - learn-dynamic boolean
            - ingress
                - routed-override-filter
                    - ip reference
                    - ipv6 reference
    - redundant-interface string
        - admin-state keyword
        - apply-groups reference
```


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configure service ies redundant-interface apply-groups-exclude

```
            - apply-groups-exclude reference
            - description string
            - hold-time
               - ipv4
                  - down
                     - init-only boolean
                     - seconds number
                  - up
                     - seconds number
            - ip-mtu number
            - ipv4
               - primary
                  - address string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - prefix-length number
                  - remote-ip string
            - spoke-sdp string
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - control-word boolean
               - description string
               - egress
                  - filter
                     - ip reference
                  - vc-label number
               - ingress
                  - filter
                     - ip reference
                  - vc-label number
         - service-id number
         - subscriber-interface string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - fwd-service reference
            - fwd-subscriber-interface reference
            - group-interface string
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - bonding-parameters
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - connection number
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - service string
                  - fpe reference
                  - multicast
                     - connection (number | keyword)
               - brg
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - authenticated-brg-only boolean
                  - default-brg-profile reference
               - cflowd-parameters
                  - sampling keyword
                     - apply-groups reference
                     - apply-groups-exclude reference
```


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configure service ies subscriber-interface group-interface cflowd-parameters sampling direction

```
                    - direction keyword
                    - sample-profile (keyword | number)
                    - type keyword
                - data-trigger
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                - description string
                - dynamic-routes-track-srrp
                    - hold-time number
                - gtp-parameters
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - fpe reference
                - gx-policy reference
                - ingress
                    - policy-accounting reference
                - ingress-stats boolean
                - ip-mtu number
                - ipoe-linking
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - gratuitous-router-advertisement boolean
                    - shared-circuit-id boolean
                - ipoe-session
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - description string
                    - force-auth
                        - cid-change boolean
                        - rid-change boolean
                    - ipoe-session-policy reference
                    - min-auth-interval (keyword | number)
                    - radius-session-timeout keyword
                    - sap-session-limit number
                    - session-limit number
                    - stateless-redundancy boolean
                    - user-db reference
                - ipv4
                    - arp-host
                        - admin-state keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - host-limit number
                        - min-auth-interval number
                        - sap-host-limit number
                    - dhcp
                        - admin-state keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - client-applications
                            - dhcp boolean
                            - ppp boolean
                        - description string
                        - filter reference
                        - gi-address string
                        - lease-populate
                            - l2-header
                                - mac string
                            - max-leases number
                        - match-circuit-id boolean
```


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configure service ies subscriber-interface group-interface ipv4 dhcp offer-selection

```
                    - offer-selection
                      - client-mac
                        - discover-delay number
                        - mac-address keyword
                      - discover-delay number
                      - server string
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - discover-delay number
                    - option-82
                      - action keyword
                      - circuit-id
                        - ascii-tuple
                        - ifindex
                        - none
                        - sap-id
                        - vlan-ascii-tuple
                      - remote-id
                        - ascii-string string
                        - mac
                        - none
                      - vendor-specific-option
                        - client-mac-address boolean
                        - pool-name boolean
                        - sap-id boolean
                        - service-id boolean
                        - string string
                        - system-id boolean
                    - proxy-server
                      - admin-state keyword
                      - emulated-server string
                      - lease-time
                        - radius-override boolean
                        - value number
                    - python-policy reference
                    - relay-proxy
                      - release-update-src-ip boolean
                      - siaddr-override string
                    - release-include-gi-address boolean
                    - server string
                    - src-ip-addr keyword
                    - trusted boolean
                    - user-db reference
                  - icmp
                    - mask-reply boolean
                    - param-problem
                      - admin-state keyword
                      - number number
                      - seconds number
                    - redirects
                      - admin-state keyword
                      - number number
                      - seconds number
                    - ttl-expired
                      - admin-state keyword
                      - number number
                      - seconds number
                      - use-matching-address boolean
                    - unreachables
                      - admin-state keyword
                      - number number
                      - seconds number
                  - ignore-df-bit boolean
                  - neighbor-discovery
```


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configure service ies subscriber-interface group-interface ipv4 neighbor-discovery local-proxy-arp

```
                    - local-proxy-arp boolean
                    - populate boolean
                    - proxy-arp-policy reference
                    - remote-proxy-arp boolean
                    - timeout number
                 - qos-route-lookup keyword
                 - urpf-check
                    - mode keyword
              - ipv6
                 - allow-multiple-wan-addresses boolean
                 - auto-reply
                    - neighbor-solicitation boolean
                    - router-solicitation boolean
                 - dhcp6
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - filter reference
                    - option
                       - apply-groups reference
                       - apply-groups-exclude reference
                       - interface-id
                          - ascii-tuple
                          - if-index
                          - sap-id
                          - string string
                       - remote-id boolean
                    - override-slaac boolean
                    - pd-managed-route
                       - next-hop keyword
                    - proxy-server
                       - admin-state keyword
                       - client-applications
                          - dhcp boolean
                          - ppp boolean
                       - preferred-lifetime (number | keyword)
                       - rebind-timer number
                       - renew-timer number
                       - server-id
                          - apply-groups reference
                          - apply-groups-exclude reference
                          - duid-en-ascii string
                          - duid-en-hex string
                          - duid-ll
                       - valid-lifetime (number | keyword)
                    - python-policy reference
                    - relay
                       - admin-state keyword
                       - advertise-selection
                          - client-mac
                             - mac-address keyword
                             - preference-option
                                - value number
                             - solicit-delay number
                          - preference-option
                             - value number
                          - server string
                             - apply-groups reference
                             - apply-groups-exclude reference
                             - preference-option
                                - value number
                             - solicit-delay number
                          - solicit-delay number
                       - client-applications
                          - dhcp boolean
```


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configure service ies subscriber-interface group-interface ipv6 dhcp6 relay client-applications ppp

```
                        - ppp boolean
                     - description string
                     - lease-split
                        - admin-state keyword
                        - valid-lifetime number
                     - link-address string
                     - server string
                     - source-address string
                  - snooping
                     - admin-state keyword
                  - user-db reference
                  - user-ident keyword
               - ipoe-bridged-mode boolean
               - neighbor-discovery
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - dad-snooping boolean
                  - neighbor-limit number
               - qos-route-lookup keyword
               - router-advertisements
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - force-mcast keyword
                  - max-advertisement-interval number
                  - min-advertisement-interval number
                  - options
                     - current-hop-limit number
                     - dns
                        - include-rdnss boolean
                        - rdnss-lifetime (number | keyword)
                     - managed-configuration boolean
                     - mtu (number | keyword)
                     - other-stateful-configuration boolean
                     - reachable-time number
                     - retransmit-timer number
                     - router-lifetime (number | keyword)
                  - prefix-options
                     - autonomous boolean
                     - on-link boolean
                     - preferred-lifetime (number | keyword)
                     - valid-lifetime (number | keyword)
               - router-solicit
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - inactivity-timer (number | keyword)
                  - min-auth-interval number
                  - user-db reference
               - urpf-check
                  - mode keyword
            - local-address-assignment
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - ipv4
                  - client-applications
                     - ipoe boolean
                     - ppp boolean
                  - default-pool string
                  - server reference
               - ipv6
                  - client-applications
                     - ipoe-slaac boolean
```


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configure service ies subscriber-interface group-interface local-address-assignment ipv6 client-applications ipoe-wan

```
                    - ipoe-wan boolean
                    - ppp-slaac boolean
                  - server reference
            - mac string
            - nasreq-auth-policy reference
            - oper-up-while-empty boolean
            - pppoe
              - admin-state keyword
              - anti-spoof keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - description string
              - dhcp-client
                - client-id keyword
              - policy reference
              - python-policy reference
              - sap-session-limit number
              - session-limit number
              - user-db reference
            - radius-auth-policy reference
            - redundant-interface reference
            - sap string
              - accounting-policy reference
              - admin-state keyword
              - anti-spoof keyword
              - app-profile reference
              - apply-groups reference
              - apply-groups-exclude reference
              - calling-station-id string
              - collect-stats boolean
              - cpu-protection
                - eth-cfm-monitoring
                  - aggregate
                  - car
                - ip-src-monitoring
                - mac-monitoring
                - policy-id reference
              - default-host
                - ipv4 reference prefix-length number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - next-hop string
                - ipv6 string prefix-length number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - next-hop string
              - description string
              - dist-cpu-protection reference
              - egress
                - agg-rate
                  - adaptation-rule keyword
                  - burst-limit (number | keyword)
                  - limit-unused-bandwidth boolean
                  - queue-frame-based-accounting boolean
                  - rate number
                - filter
                  - ip reference
                  - ipv6 reference
                - qos
                  - policer-control-policy
                    - policy-name reference
                  - qinq-mark-top-only boolean
                  - sap-egress
                    - policy-name reference
```


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configure service ies subscriber-interface group-interface sap egress qos scheduler-policy

```
                    - scheduler-policy
                      - policy-name reference
                - eth-cfm
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - collect-lmm-fc-stats
                    - fc keyword
                    - fc-in-profile keyword
                  - collect-lmm-stats boolean
                  - mep md-admin-name reference ma-admin-name reference mep-id number
                    - admin-state keyword
                    - ais boolean
                    - alarm-notification
                      - fng-alarm-time number
                      - fng-reset-time number
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - ccm boolean
                    - ccm-ltm-priority number
                    - ccm-padding-size number
                    - csf
                      - multiplier decimal-number
                    - description string
                    - eth-test
                      - bit-error-threshold number
                      - test-pattern
                        - crc-tlv boolean
                        - pattern keyword
                    - fault-propagation keyword
                    - grace
                      - eth-ed
                        - max-rx-defect-window number
                        - priority number
                        - rx-eth-ed boolean
                        - tx-eth-ed boolean
                      - eth-vsm-grace
                        - rx-eth-vsm-grace boolean
                        - tx-eth-vsm-grace boolean
                    - low-priority-defect keyword
                    - one-way-delay-threshold number
                  - squelch-ingress-levels number
                - fwd-wholesale
                  - pppoe-service reference
                - host-admin-state keyword
                - host-lockout-policy reference
                - igmp-host-tracking
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - expiry-time number
                  - import-policy reference
                  - maximum-number-group-sources number
                  - maximum-number-groups number
                  - maximum-number-sources number
                  - router-alert-check boolean
                - ingress
                  - filter
                    - ip reference
                    - ipv6 reference
                  - qos
                    - match-qinq-dot1p keyword
                    - policer-control-policy
                      - policy-name reference
                    - sap-ingress
                      - policy-name reference
```


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configure service ies subscriber-interface group-interface sap ingress qos sap-ingress queuing-type

```
                        - queuing-type keyword
                     - scheduler-policy
                        - policy-name reference
               - lag
                  - link-map-profile number
                  - per-link-hash
                     - class number
                     - weight number
               - monitor-oper-group reference
               - multi-service-site reference
               - oper-group reference
               - static-host
                  - ipv4 string mac string
                     - admin-state keyword
                     - ancp-string string
                     - app-profile
                        - profile reference
                        - scope keyword
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - int-dest-id string
                     - managed-route string
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - cpe-check
                           - apply-groups reference
                           - apply-groups-exclude reference
                           - destination-ip-address (ipv4-address-no-zone | ipv6-address-
no-zone)
                           - drop-count number
                           - failed-action
                              - metric number
                              - preference number
                              - tag number
                              - withdraw boolean
                           - interval number
                           - log boolean
                           - padding-size number
                           - source-ip-address (ipv4-address-no-zone | ipv6-address-no-
zone)
                           - timeout number
                        - metric number
                        - preference number
                        - tag number
                     - rip-policy reference
                     - shcv
                     - sla-profile reference
                     - sub-profile reference
                     - subscriber-id
                        - string string
                        - use-sap-id
                  - ipv6 string mac string
                     - admin-state keyword
                     - ancp-string string
                     - app-profile
                        - profile reference
                        - scope keyword
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - int-dest-id string
                     - mac-linking string
                     - managed-route string
                        - apply-groups reference
                        - apply-groups-exclude reference
```


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configure service ies subscriber-interface group-interface sap static-host ipv6 managed-route cpe-check

```
                        - cpe-check
                          - apply-groups reference
                          - apply-groups-exclude reference
                          - destination-ip-address (ipv4-address-no-zone | ipv6-address-
no-zone)
                          - drop-count number
                          - failed-action
                            - metric number
                            - preference number
                            - tag number
                            - withdraw boolean
                          - interval number
                          - log boolean
                          - padding-size number
                          - source-ip-address (ipv4-address-no-zone | ipv6-address-no-
zone)
                          - timeout number
                        - metric number
                        - preference number
                        - tag number
                      - retail-svc-id number
                      - shcv
                      - sla-profile reference
                      - sub-profile reference
                      - subscriber-id
                        - string string
                        - use-sap-id
                    - mac-learning
                      - data-triggered boolean
                      - single-mac boolean
                  - sub-sla-mgmt
                    - admin-state keyword
                    - defaults
                      - app-profile reference
                      - int-dest-id
                        - string string
                        - top-q-tag
                      - sla-profile reference
                      - sub-profile reference
                      - subscriber-id
                        - auto-id
                        - sap-id
                        - string string
                    - single-sub-parameters
                      - non-sub-traffic
                        - app-profile reference
                        - sla-profile reference
                        - sub-profile reference
                        - subscriber-id string
                      - profiled-traffic-only boolean
                    - sub-ident-policy reference
                    - subscriber-limit (keyword | number)
                - sap-parameters
                  - anti-spoof keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - description string
                  - sub-sla-mgmt
                    - defaults
                      - app-profile reference
                      - sla-profile reference
                      - sub-profile reference
                      - subscriber-id
                        - auto-id
```


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configure service ies subscriber-interface group-interface sap-parameters sub-sla-mgmt defaults subscriber-id string

```
                        –  string string
                     –  sub-ident-policy reference
               –  shcv-policy reference
               –  shcv-policy-ipv4 reference
               –  shcv-policy-ipv6 reference
               –  srrp number
                  –  admin-state keyword
                  –  apply-groups reference
                  –  apply-groups-exclude reference
                  –  bfd-liveness
                     –  apply-groups reference
                     –  apply-groups-exclude reference
                     –  dest-ip string
                     –  interface-name string
                     –  service-name string
                  –  description string
                  –  gw-mac string
                  –  keep-alive-interval number
                  –  message-path reference
                  –  monitor-oper-group
                     –  group-name reference
                     –  priority-step number
                  –  one-garp-per-sap boolean
                  –  policy reference
                  –  preempt boolean
                  –  priority number
                  –  send-fib-population-packets keyword
               –  suppress-aa-sub boolean
               –  tos-marking-state keyword
               –  type keyword
               –  wlan-gw
                  –  admin-state keyword
                  –  apply-groups reference
                  –  apply-groups-exclude reference
                  –  gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
                     –  apply-groups reference
                     –  apply-groups-exclude reference
                     –  purpose
                        –  xconnect boolean
                  –  gateway-router string
                  –  group-encryption
                     –  encryption-keygroup-inbound reference
                     –  encryption-keygroup-outbound reference
                  –  l2-ap
                     –  access-point string
                        –  admin-state keyword
                        –  apply-groups reference
                        –  apply-groups-exclude reference
                        –  encap-type keyword
                        –  epipe-sap-template reference
                     –  auto-sub-id-fmt keyword
                     –  default-encap-type keyword
                  –  lanext
                     –  max-bd number
                  –  learn-ap-mac
                     –  delay-auth boolean
                  –  mobility
                     –  hold-time number
                     –  inter-tunnel-type boolean
                     –  inter-vlan boolean
                     –  trigger
                        –  control boolean
                        –  data boolean
                        –  iapp boolean
```


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configure service ies subscriber-interface group-interface wlan-gw oper-down-on-group-degrade

```
                    - oper-down-on-group-degrade boolean
                    - tcp-mss-adjust number
                    - tunnel-egress-qos
                      - admin-state keyword
                      - agg-rate-limit (number | keyword)
                      - granularity keyword
                      - hold-time (number | keyword)
                      - multi-client-only boolean
                      - qos reference
                      - scheduler-policy reference
                    - tunnel-encaps
                      - learn-l2tp-cookie (keyword | hex-string)
                    - vlan-range string
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - authentication
                        - hold-time number
                        - local
                          - coa-policy reference
                          - default-ue-state keyword
                        - on-control-plane boolean
                        - policy reference
                        - vlan-mismatch-timeout number
                      - data-triggered-ue-creation
                        - admin-state keyword
                        - arp boolean
                        - create-proxy-cache-entry
                          - mac-format string
                          - proxy-server
                            - name string
                            - router-instance string
                        - ospf boolean
                      - dhcp4
                        - admin-state keyword
                        - dns string
                        - l2-aware-ip-address (ipv4-unicast-address | keyword)
                        - lease-time
                          - active number
                          - initial number
                        - nbns string
                      - dhcp6
                        - admin-state keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - preferred-lifetime
                          - active number
                          - initial number
                        - valid-lifetime
                          - active number
                          - initial number
                      - dsm
                        - accounting-policy reference
                        - accounting-update
                          - interval number
                        - admin-state keyword
                        - application-assurance
                          - accounting-statistics boolean
                          - profile reference
                          - url-parameter string
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - egress
                          - policer reference
                        - ingress
```


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configure service ies subscriber-interface group-interface wlan-gw vlan-range dsm ingress ip-filter

```
                        - ip-filter reference
                        - policer reference
                        - soft-quota-exhausted-filter reference
                     - one-time-redirect
                        - port number
                        - url string
                     - volume-quota-direction keyword
                  - dynamic-service boolean
                  - extension string
                  - http-redirect-policy reference
                  - idle-timeout-action keyword
                  - l2-service
                     - admin-state keyword
                     - description string
                     - service reference
                  - nat-policy reference
                  - retail-service string
                  - slaac
                     - admin-state keyword
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - preferred-lifetime
                        - active number
                        - initial number
                     - valid-lifetime
                        - active number
                        - initial number
                  - vrgw
                     - admin-state keyword
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - brg
                        - authenticated-brg-only boolean
                        - default-brg-profile reference
                     - lanext
                        - access
                           - max-mac number
                           - multi-access boolean
                           - policer reference
                        - admin-state keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - assistive-address-resolution boolean
                        - bd-mac-prefix string
                        - mac-translation boolean
                        - network
                           - admin-state keyword
                           - max-mac number
                           - policer reference
                  - xconnect
                     - accounting
                        - mobility-updates boolean
                        - policy reference
                        - update-interval number
                     - admin-state keyword
                     - apply-groups reference
                     - apply-groups-exclude reference
               - wlan-gw-group reference
            - wpp
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - initial
                  - app-profile reference
```


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configure service ies subscriber-interface group-interface wpp initial sla-profile

```
                  - sla-profile reference
                  - sub-profile reference
               - lease-time number
               - portal
                  - name string
                  - portal-group reference
                  - router-instance string
               - restore-to-initial-on-disconnect boolean
               - triggered-hosts boolean
               - user-db reference
         - hold-time
            - ipv4
               - down
                  - init-only boolean
                  - seconds number
               - up
                  - seconds number
            - ipv6
               - down
                  - init-only boolean
                  - seconds number
               - up
                  - seconds number
         - ipoe-linking
            - apply-groups reference
            - apply-groups-exclude reference
            - gratuitous-router-advertisement boolean
         - ipoe-session
            - apply-groups reference
            - apply-groups-exclude reference
            - session-limit number
         - ipv4
            - address string
               - apply-groups reference
               - apply-groups-exclude reference
               - gateway string
               - holdup-time number
               - populate-host-routes boolean
               - prefix-length number
               - track-srrp number
            - allow-unmatching-subnets boolean
            - default-dns string
            - dhcp
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - client-applications
                  - dhcp boolean
                  - ppp boolean
               - description string
               - gi-address string
               - lease-populate
                  - max-leases number
               - option-82
                  - vendor-specific-option
                     - client-mac-address boolean
                     - sap-id boolean
                     - service-id boolean
                     - string string
                     - system-id boolean
               - proxy-server
                  - admin-state keyword
                  - emulated-server string
                  - lease-time
```


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configure service ies subscriber-interface ipv4 dhcp proxy-server lease-time radius-override

```
                    - radius-override boolean
                    - value number
                - python-policy reference
                - relay-proxy
                    - release-update-src-ip boolean
                    - siaddr-override string
                - release-include-gi-address boolean
                - server string
                - src-ip-addr keyword
                - virtual-subnet boolean
            - export-host-routes boolean
            - unnumbered
                - ip-address string
                - ip-int-name string
        - ipv6
            - address string
                - apply-groups reference
                - apply-groups-exclude reference
                - host-type keyword
                - prefix-length number
            - allow-multiple-wan-addresses boolean
            - allow-unmatching-prefixes boolean
            - default-dns string
            - delegated-prefix-length (number | keyword)
            - dhcp6
                - apply-groups reference
                - apply-groups-exclude reference
                - override-slaac boolean
                - pd-managed-route
                    - next-hop keyword
                - proxy-server
                    - admin-state keyword
                    - client-applications
                        - dhcp boolean
                        - ppp boolean
                    - preferred-lifetime (number | keyword)
                    - rebind-timer number
                    - renew-timer number
                    - server-id
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - duid-en-ascii string
                        - duid-en-hex string
                        - duid-ll
                    - valid-lifetime (number | keyword)
                - python-policy reference
                - relay
                    - admin-state keyword
                    - client-applications
                        - dhcp boolean
                        - ppp boolean
                    - description string
                    - lease-split
                        - admin-state keyword
                        - valid-lifetime number
                    - link-address string
                    - server string
                    - source-address string
            - ipoe-bridged-mode boolean
            - link-local-address
                - address string
            - prefix string
                - apply-groups reference
                - apply-groups-exclude reference
```


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configure service ies subscriber-interface ipv6 prefix holdup-time

```
                  - holdup-time number
                  - host-type keyword
                  - track-srrp number
               - router-advertisements
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - force-mcast keyword
                  - max-advertisement-interval number
                  - min-advertisement-interval number
                  - options
                     - current-hop-limit number
                     - dns
                        - include-rdnss boolean
                        - rdnss-lifetime (number | keyword)
                     - managed-configuration boolean
                     - mtu (number | keyword)
                     - other-stateful-configuration boolean
                     - reachable-time number
                     - retransmit-timer number
                     - router-lifetime (number | keyword)
                  - prefix-options
                     - autonomous boolean
                     - on-link boolean
                     - preferred-lifetime (number | keyword)
                     - valid-lifetime (number | keyword)
               - router-solicit
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - inactivity-timer (number | keyword)
            - local-address-assignment
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - ipv4
                  - client-applications
                     - ppp boolean
                  - default-pool string
                  - server reference
               - ipv6
                  - client-applications
                     - ipoe-slaac boolean
                     - ipoe-wan boolean
                     - ppp-slaac boolean
                  - server reference
            - pppoe
               - apply-groups reference
               - apply-groups-exclude reference
               - description string
               - session-limit number
            - wan-mode keyword
            - wlan-gw
               - apply-groups reference
               - apply-groups-exclude reference
               - pool-manager
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - dhcp6-client
                     - dhcpv4-nat
                        - admin-state keyword
                        - link-address string
                        - pool-name string
                     - ia-na
                        - admin-state keyword
```


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configure service ies subscriber-interface wlan-gw pool-manager dhcp6-client ia-na link-address

```
                    - link-address string
                    - pool-name string
                 - lease-query
                    - max-retries number
                 - servers string
                 - slaac
                    - admin-state keyword
                    - link-address string
                    - pool-name string
                 - source-ip (keyword | ipv6-address)
              - watermarks
                 - high number
                 - low number
              - wlan-gw-group reference
           - redundancy
              - admin-state keyword
              - export string
              - monitor string
        - subscriber-mgmt
           - apply-groups reference
           - apply-groups-exclude reference
           - multi-chassis-shunt-id number
           - up-resiliency
              - monitor-oper-group reference
                 - apply-groups reference
                 - apply-groups-exclude reference
                 - health-drop number
        - video-interface string
           - accounting-policy reference
           - address string
           - admin-state keyword
           - apply-groups reference
           - apply-groups-exclude reference
           - channel string source string
              - apply-groups reference
              - apply-groups-exclude reference
              - channel-name string
              - description string
              - scte35-action keyword
              - zone-channel string zone-source string
                 - adi-channel-name string
                 - apply-groups reference
                 - apply-groups-exclude reference
           - cpu-protection reference
           - description string
           - multicast-service number
           - output-format keyword
           - video-sap
              - apply-groups reference
              - apply-groups-exclude reference
              - egress
                 - apply-groups reference
                 - apply-groups-exclude reference
                 - filter
                    - ip reference
                 - qos
                    - policy-name reference
              - ingress
                 - apply-groups reference
                 - apply-groups-exclude reference
                 - filter
                    - ip reference
                 - qos
                    - policy-name reference
```


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configure service ies video-interface video-sap video-group-id

```
            - video-group-id reference
         - vpn-id number
      - ipfix
         - apply-groups reference
         - apply-groups-exclude reference
         - export-policy string
            - apply-groups reference
            - apply-groups-exclude reference
            - collector router-instance string ip-address string
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - mtu number
               - refresh-timeout number
               - source-ip-address string
            - description string
            - template-format keyword
      - ipipe string
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - ce-address-discovery
         - customer reference
         - description string
         - endpoint string
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - hold-time-active number
            - revert-time (number | keyword)
            - standby-signaling keyword
         - sap string
            - accounting-policy reference
            - admin-state keyword
            - app-profile reference
            - apply-groups reference
            - apply-groups-exclude reference
            - bandwidth number
            - ce-address (ipv4-address-no-zone | ipv6-address-no-zone)
            - collect-stats boolean
            - cpu-protection
               - mac-monitoring
               - policy-id reference
            - description string
            - dist-cpu-protection reference
            - egress
               - agg-rate
                  - adaptation-rule keyword
                  - burst-limit (number | keyword)
                  - limit-unused-bandwidth boolean
                  - rate number
               - filter
                  - ip reference
                  - ipv6 reference
               - qos
                  - policer-control-policy
                     - overrides
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - root
                           - max-rate (number | keyword)
                           - priority-mbs-thresholds
                              - min-thresh-separation (number | keyword)
                              - priority number
```


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configure service ipipe sap egress qos policer-control-policy overrides root priority-mbs-thresholds priority apply-groups

```
                                    - apply-groups reference
                                    - apply-groups-exclude reference
                                    - mbs-contribution (number | keyword)
                        - policy-name reference
                    - qinq-mark-top-only boolean
                    - sap-egress
                        - overrides
                            - hs-secondary-shaper string
                            - hs-wrr-group reference
                                - apply-groups reference
                                - apply-groups-exclude reference
                                - hs-class-weight number
                                - percent-rate decimal-number
                                - rate (number | keyword)
                            - policer reference
                                - apply-groups reference
                                - apply-groups-exclude reference
                                - cbs (number | keyword)
                                - mbs (number | keyword)
                                - packet-byte-offset number
                                - percent-rate
                                    - cir decimal-number
                                    - pir decimal-number
                                - rate
                                    - cir (number | keyword)
                                    - pir (number | keyword)
                                - stat-mode keyword
                            - queue reference
                                - adaptation-rule
                                    - cir keyword
                                    - pir keyword
                                - apply-groups reference
                                - apply-groups-exclude reference
                                - avg-frame-overhead decimal-number
                                - burst-limit (number | keyword)
                                - cbs (number | keyword)
                                - drop-tail
                                    - low
                                        - percent-reduction-from-mbs (number | keyword)
                                - hs-class-weight number
                                - hs-wred-queue
                                    - policy reference
                                - hs-wrr-weight number
                                - mbs (number | keyword)
                                - monitor-queue-depth
                                    - fast-polling boolean
                                    - violation-threshold decimal-number
                                - parent
                                    - cir-weight number
                                    - weight number
                                - percent-rate
                                    - cir decimal-number
                                    - pir decimal-number
                                - rate
                                    - cir (number | keyword)
                                    - pir (number | keyword)
                        - policy-name reference
                        - port-redirect-group
                            - group-name reference
                            - instance number
                    - scheduler-policy
                        - overrides
                            - scheduler string
                                - apply-groups reference
```


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configure service ipipe sap egress qos scheduler-policy overrides scheduler apply-groups-exclude

```
                        - apply-groups-exclude reference
                        - parent
                           - cir-weight number
                           - weight number
                        - rate
                           - cir (number | keyword)
                           - pir (number | keyword)
                  - policy-name reference
         - endpoint reference
         - ingress
            - filter
               - ip reference
               - ipv6 reference
            - qos
               - match-qinq-dot1p keyword
               - policer-control-policy
                  - overrides
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - root
                        - max-rate (number | keyword)
                        - priority-mbs-thresholds
                           - min-thresh-separation (number | keyword)
                           - priority number
                              - apply-groups reference
                              - apply-groups-exclude reference
                              - mbs-contribution (number | keyword)
                  - policy-name reference
               - sap-ingress
                  - fp-redirect-group
                     - group-name reference
                     - instance number
                  - overrides
                     - policer reference
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - cbs (number | keyword)
                        - mbs (number | keyword)
                        - packet-byte-offset number
                        - percent-rate
                           - cir decimal-number
                           - pir decimal-number
                        - rate
                           - cir (number | keyword)
                           - pir (number | keyword)
                        - stat-mode keyword
                     - queue reference
                        - adaptation-rule
                           - cir keyword
                           - pir keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - cbs (number | keyword)
                        - drop-tail
                           - low
                              - percent-reduction-from-mbs (number | keyword)
                        - mbs (number | keyword)
                        - monitor-queue-depth
                           - fast-polling boolean
                        - parent
                           - cir-weight number
                           - weight number
                        - percent-rate
                           - cir decimal-number
```


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configure service ipipe sap ingress qos sap-ingress overrides queue percent-rate pir

```
                        - pir decimal-number
                     - rate
                        - cir (number | keyword)
                        - pir (number | keyword)
                  - policy-name reference
                  - queuing-type keyword
               - scheduler-policy
                  - overrides
                     - scheduler string
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - parent
                           - cir-weight number
                           - weight number
                        - rate
                           - cir (number | keyword)
                           - pir (number | keyword)
                  - policy-name reference
            - lag
               - link-map-profile number
               - per-link-hash
                  - class number
                  - weight number
            - mac string
            - mac-refresh number
            - multi-service-site reference
            - transit-policy
               - prefix reference
            - use-broadcast-mac boolean
         - service-id number
         - service-mtu number
         - spoke-sdp string
            - aarp
               - id reference
               - type keyword
            - admin-state keyword
            - app-profile reference
            - apply-groups reference
            - apply-groups-exclude reference
            - bandwidth (number | keyword)
            - bfd
               - bfd-liveness
                  - encap keyword
               - bfd-template reference
            - ce-address (ipv4-address-no-zone | ipv6-address-no-zone)
            - control-word boolean
            - description string
            - egress
               - filter
                  - ip reference
                  - ipv6 reference
               - qos
                  - network
                     - policy-name reference
                     - port-redirect-group
                        - group-name reference
                        - instance number
               - vc-label number
            - endpoint
               - name reference
               - precedence (number | keyword)
            - entropy-label
            - hash-label
               - signal-capability
```


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configure service ipipe spoke-sdp ingress

```
            - ingress
              - filter
                - ip reference
                - ipv6 reference
              - qos
                - network
                  - fp-redirect-group
                    - group-name reference
                    - instance number
                  - policy-name reference
              - vc-label number
            - transit-policy
              - prefix reference
         - vc-switching boolean
         - vpn-id number
      - mac-list string
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - mac string
            - apply-groups reference
            - apply-groups-exclude reference
            - mask string
      - md-auto-id
         - customer-id-range
            - apply-groups reference
            - apply-groups-exclude reference
            - end number
            - start number
         - pw-template-id-range
            - apply-groups reference
            - apply-groups-exclude reference
            - end number
            - start number
         - service-id-range
            - apply-groups reference
            - apply-groups-exclude reference
            - end number
            - start number
      - mrp
         - policy string
            - apply-groups reference
            - apply-groups-exclude reference
            - default-action keyword
            - description string
            - entry number
              - action keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - description string
              - match
                - isid number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - higher-value number
            - scope keyword
      - nat
         - apply-groups reference
         - apply-groups-exclude reference
         - classifier string
            - apply-groups reference
            - apply-groups-exclude reference
            - default
              - action
```


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configure service nat classifier default action destination-nat

```
                  - destination-nat
                     - ip-address string
                  - forward
               - dnat-ip-address string
            - description string
            - entry number
               - action
                  - destination-nat
                     - ip-address string
                  - forward
               - apply-groups reference
               - apply-groups-exclude reference
               - description string
               - match
                  - dst-port-range
                     - end number
                     - start number
                  - foreign-ip-address string
                  - protocol keyword
         - deterministic-script
            - location string
         - firewall-policy string
            - alg
               - ftp boolean
               - rtsp boolean
               - sip boolean
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - domain
               - name string
               - router-instance string
            - filtering keyword
            - l2-outside
            - port-limits
               - forwarding number
            - priority-sessions
               - fc
                  - af boolean
                  - be boolean
                  - ef boolean
                  - h1 boolean
                  - h2 boolean
                  - l1 boolean
                  - l2 boolean
                  - nc boolean
            - session-limits
               - max number
               - reserved number
               - watermarks
                  - high number
                  - low number
            - tcp
               - mss-adjust number
            - timeouts
               - icmp6-query number
               - sip number
               - tcp
                  - established number
                  - rst number
                  - syn number
                  - time-wait number
                  - transitory number
               - udp
```


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configure service nat firewall-policy timeouts udp dns

```
                  - dns number
                  - initial number
                  - normal number
               - unknown-protocol number
            - udp
               - inbound-refresh boolean
            - unknown-protocols
               - all
               - protocol number
         - map-t
            - domain string
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - description string
               - dmr-prefix string
               - ip-fragmentation
                  - v6-frag-header boolean
               - mapping-rule string
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - description string
                  - ea-length number
                  - ipv4-prefix string
                  - psid-offset number
                  - rule-prefix string
               - mtu number
               - tcp-mss-adjust number
         - nat-policy string
            - alg
               - ftp boolean
               - pptp boolean
               - rtsp boolean
               - sip boolean
            - apply-groups reference
            - apply-groups-exclude reference
            - block-limit number
            - description string
            - dnat
               - classifier reference
            - dnat-only
               - nat-group reference
               - router-instance string
               - wlan-gw-group reference
            - filtering keyword
            - flow-log-policy
               - ipfix reference
               - syslog reference
            - l2-outside
            - pool
               - name string
               - router-instance string
            - port-forwarding-range-end number
            - port-limits
               - forwarding number
               - reserved number
               - watermarks
                  - high number
                  - low number
            - priority-sessions
               - fc
                  - af boolean
                  - be boolean
```


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configure service nat nat-policy priority-sessions fc ef

```
                  - ef boolean
                  - h1 boolean
                  - h2 boolean
                  - l1 boolean
                  - l2 boolean
                  - nc boolean
            - session-limits
               - max number
               - reserved number
               - watermarks
                  - high number
                  - low number
            - tcp
               - mss-adjust number
               - reset-unknown boolean
            - timeouts
               - icmp-query number
               - sip number
               - subscriber-retention number
               - tcp
                  - established number
                  - rst number
                  - syn number
                  - time-wait number
                  - transitory number
               - udp
                  - dns number
                  - initial number
                  - normal number
            - udp
               - inbound-refresh boolean
         - pcp-server-policy string
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - lifetime
               - maximum number
               - minimum number
            - max-description-size number
            - opcode
               - announce boolean
               - get boolean
               - map boolean
            - option
               - description boolean
               - next boolean
               - port-reservation boolean
               - port-set boolean
               - prefer-failure boolean
               - third-party boolean
            - reuse-external-ip-address boolean
            - version
               - maximum number
               - minimum number
         - prefix-list string
            - application keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - prefix string
               - apply-groups reference
               - apply-groups-exclude reference
               - nat-policy reference
         - syslog
            - export-policy string
```


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configure service nat syslog export-policy apply-groups

```
            - apply-groups reference
            - apply-groups-exclude reference
            - collector router-instance string ip-address string
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - destination-port number
               - ipv4-source-address string
            - description string
            - facility keyword
            - include
               - destination-ip boolean
               - foreign-ip boolean
               - foreign-port boolean
               - nat-policy-name boolean
               - sub-id boolean
            - log-prefix string
            - max-tx-delay number
            - mtu number
            - rate-limit number
            - severity-level keyword
      - up-nat-policy string
         - alg
            - ftp boolean
            - pptp boolean
            - rtsp boolean
            - sip boolean
         - apply-groups reference
         - apply-groups-exclude reference
         - block-limit number
         - default-host
            - inside-router-instance string
            - ip-address string
            - rate-limit number
         - description string
         - filtering keyword
         - flow-log-policy
            - ipfix reference
         - icmp-echo-reply boolean
         - port-block-extension
            - ports number
            - watermarks
               - high number
               - low number
         - port-limits
            - reserved number
            - watermarks
               - high number
               - low number
         - priority-sessions
            - fc
               - af boolean
               - be boolean
               - ef boolean
               - h1 boolean
               - h2 boolean
               - l1 boolean
               - l2 boolean
               - nc boolean
         - session-limits
            - max number
            - reserved number
            - watermarks
               - high number
```


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configure service nat up-nat-policy session-limits watermarks low

```
                  - low number
            - tcp
               - mss-adjust number
               - reset-unknown boolean
            - timeouts
               - icmp-query number
               - sip number
               - subscriber-retention number
               - tcp
                  - established number
                  - rst number
                  - syn number
                  - time-wait number
                  - transitory number
               - udp
                  - dns number
                  - initial number
                  - normal number
            - udp
               - inbound-refresh boolean
      - oper-group string
         - apply-groups reference
         - apply-groups-exclude reference
         - bfd-liveness
            - apply-groups reference
            - apply-groups-exclude reference
            - dest-ip string
            - interface-name string
            - router-instance string
         - hold-time
            - down number
            - up number
      - pbb
         - apply-groups reference
         - apply-groups-exclude reference
         - mac string
            - address string
            - apply-groups reference
            - apply-groups-exclude reference
         - mac-notification
            - apply-groups reference
            - apply-groups-exclude reference
            - count number
            - interval number
         - source-bmac
            - address string
            - evpn-etree-leaf-address string
      - proxy-arp-nd
         - mac-list
            - list string
               - apply-groups reference
               - apply-groups-exclude reference
               - mac string
      - pw-template string
         - accounting-policy number
         - allow-fragmentation boolean
         - apply-groups reference
         - apply-groups-exclude reference
         - auto-gre-sdp boolean
         - block-on-peer-fault boolean
         - collect-stats boolean
         - control-word boolean
         - egress
            - filter
```


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configure service pw-template egress filter ip

```
            - ip string
            - ipv6 string
            - mac string
         - mfib-allowed-mda-destinations
            - mda string
         - qos
            - network
               - policy-name string
               - port-redirect-group
                  - group-name string
                  - instance number
      - encryption-keygroup
         - inbound number
         - outbound number
      - entropy-label
      - fdb
         - auto-learn-mac-protect boolean
         - auto-learn-mac-protect-exclude-list string
         - discard-unknown-source boolean
         - limit-mac-move keyword
         - mac-learning
            - aging boolean
            - learning boolean
         - mac-pinning boolean
         - maximum-mac-addresses number
         - protected-src-mac-violation-action keyword
      - force-vc-forwarding keyword
      - hash-label
         - signal-capability
      - igmp-snooping
         - fast-leave boolean
         - import-policy string
         - maximum-number-groups number
         - query-interval number
         - query-last-member-interval number
         - query-response-interval number
         - robust-count number
         - send-queries boolean
         - version keyword
      - ingress
         - filter
            - ip string
            - ipv6 string
            - mac string
         - qos
            - network
               - fp-redirect-group
                  - group-name string
                  - instance number
               - policy-name string
      - l2pt
         - termination
            - protocols
               - cdp boolean
               - dtp boolean
               - pagp boolean
               - stp boolean
               - udld boolean
               - vtp boolean
      - provisioned-sdp keyword
      - pw-template-id number
      - sdp-exclude reference
      - sdp-include reference
      - split-horizon-group
```


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configure service pw-template split-horizon-group description

```
            - description string
            - fdb
               - saps
                  - auto-learn-mac-protect boolean
                  - discard-unprotected-dest-mac boolean
                  - protected-src-mac-violation-action keyword
            - name string
         - stp
            - admin-state keyword
            - auto-edge boolean
            - edge-port boolean
            - link-type keyword
            - path-cost number
            - priority number
            - root-guard boolean
         - vc-type keyword
         - vlan-vc-tag number
      - sdp number
         - accounting-policy reference
         - admin-state keyword
         - adv-mtu-override boolean
         - allow-fragmentation boolean
         - apply-groups reference
         - apply-groups-exclude reference
         - bgp-tunnel boolean
         - booking-factor number
         - class-forwarding
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - default-lsp reference
            - enforce-diffserv-lsp-fc boolean
            - fc keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - lsp reference
            - multicast-lsp reference
         - collect-stats boolean
         - delivery-type keyword
         - description string
         - far-end
            - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
         - keep-alive
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - hello-time number
            - hold-down-time number
            - maximum-drop-count number
            - message-length number
            - timeout number
         - ldp boolean
         - local-end (ipv4-address-no-zone | ipv6-address-no-zone)
         - lsp string
         - metric number
         - mixed-lsp-mode
            - revert-time (number | keyword)
         - network-domain reference
         - path-mtu number
         - pbb-etype string
         - pw-port
            - binding-port string
         - sdp-group reference
         - signaling keyword
```


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configure service sdp source-bmac-lsb

```
        - source-bmac-lsb
          - control-pw-vc-id number
          - value string
        - sr-isis boolean
        - sr-ospf boolean
        - tunnel-far-end (ipv4-address-no-zone | ipv6-address-no-zone)
        - vlan-vc-etype string
        - weighted-ecmp boolean
      - sdp-group
        - apply-groups reference
        - apply-groups-exclude reference
        - group-name string
          - apply-groups reference
          - apply-groups-exclude reference
          - value number
      - system
        - apply-groups reference
        - apply-groups-exclude reference
        - bgp
          - evpn
            - ad-per-es-route
              - extended-evi-range boolean
              - route-distinguisher-ip-address string
              - route-target-type keyword
            - ethernet-segment string
              - ac-df-capability keyword
              - admin-state keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - association
                - lag reference
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - virtual-ranges
                    - dot1q
                      - q-tag (number | keyword)
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - end (number | keyword)
                    - qinq
                      - s-tag (number | keyword)
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - end (number | keyword)
                      - s-tag-c-tag (number | keyword) c-tag-start (number | keyword)
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - c-tag-end (number | keyword)
                - network-interconnect-vxlan number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - virtual-ranges
                    - service-id number
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - end number
                - port reference
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - virtual-ranges
                    - dot1q
                      - q-tag (number | keyword)
                        - apply-groups reference
                        - apply-groups-exclude reference
```


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configure service system bgp evpn ethernet-segment association port virtual-ranges dot1q q-tag end

```
                        - end (number | keyword)
                    - qinq
                        - s-tag (number | keyword)
                            - apply-groups reference
                            - apply-groups-exclude reference
                            - end (number | keyword)
                        - s-tag-c-tag (number | keyword) c-tag-start (number | keyword)
                            - apply-groups reference
                            - apply-groups-exclude reference
                            - c-tag-end (number | keyword)
                - pw-port reference
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - pw-port-headend boolean
                    - virtual-ranges
                        - dot1q
                            - q-tag (number | keyword)
                                - apply-groups reference
                                - apply-groups-exclude reference
                                - end (number | keyword)
                        - qinq
                            - s-tag (number | keyword)
                                - apply-groups reference
                                - apply-groups-exclude reference
                                - end (number | keyword)
                            - s-tag-c-tag (number | keyword) c-tag-start (number | keyword)
                                - apply-groups reference
                                - apply-groups-exclude reference
                                - c-tag-end (number | keyword)
                - sdp reference
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - virtual-ranges
                        - vc-id number
                            - apply-groups reference
                            - apply-groups-exclude reference
                            - end number
                - vprn-next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - virtual-ranges
                        - evi number
            - auto-esi keyword
            - df-election
                - es-activation-timer number
                - manual
                    - evi number
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - end number
                    - isid number
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - end number
                    - preference
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - mode keyword
                        - value number
                - service-carving-mode keyword
            - esi string
            - multi-homing-mode keyword
            - oper-group reference
            - orig-ip (ipv4-address-no-zone | ipv6-address-no-zone)
```


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configure service system bgp evpn ethernet-segment pbb

```
                  - pbb
                     - es-bmac-table-size number
                     - source-bmac-lsb string
                  - route-next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
                  - type keyword
               - etree-leaf-label boolean
               - etree-leaf-label-value (number | keyword)
               - ip-prefix-routes
                  - d-path-length-ignore boolean
                  - iff-attribute-uniform-propagation boolean
                  - iff-bgp-path-selection boolean
               - multicast-leave-sync-propagation number
               - route-distinguisher string
         - bgp-auto-rd-range
            - apply-groups reference
            - apply-groups-exclude reference
            - community-value
               - end number
               - start number
            - ip-address string
         - extended-default-qinq-sap-lookup boolean
         - fdb
            - apply-groups reference
            - apply-groups-exclude reference
            - table-size number
         - gre-eth-bridged
            - tunnel-termination (ipv4-address-no-zone | ipv6-address-no-zone)
               - apply-groups reference
               - apply-groups-exclude reference
               - fpe-id reference
         - pw-port-list
            - port string
         - vpn-gre-source-ip string
         - vxlan
            - assisted-replication
               - apply-groups reference
               - apply-groups-exclude reference
               - ip-address string
            - tunnel-termination (ipv4-address-no-zone | ipv6-address-no-zone)
               - apply-groups reference
               - apply-groups-exclude reference
               - fpe-id reference
      - template
         - epipe-sap-template string
            - apply-groups reference
            - apply-groups-exclude reference
            - egress
               - filter
                  - ip reference
                  - ipv6 reference
                  - mac reference
               - qos
                  - policy-name reference
            - ingress
               - filter
                  - ip reference
                  - ipv6 reference
                  - mac reference
               - qos
                  - policy-name reference
                  - queuing-type keyword
      - upnp
         - policy string
            - apply-groups reference
```


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```
            - apply-groups-exclude reference
            - description string
            - mapping-limit number
            - port number
            - strict-mode boolean
      - vpls string
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - bgp number
            - adv-service-mtu number
            - apply-groups reference
            - apply-groups-exclude reference
            - pw-template-binding reference
               - apply-groups reference
               - apply-groups-exclude reference
               - bfd-liveness boolean
               - bfd-template reference
               - import-rt string
               - monitor-oper-group reference
               - oper-group reference
               - split-horizon-group string
            - route-distinguisher (keyword | vpn-route-distinguisher)
            - route-target
               - export string
               - import string
            - vsi-export reference
            - vsi-import reference
         - bgp-ad
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - vpls-id string
            - vsi-id-prefix string
         - bgp-evpn
            - accept-ivpls-evpn-flush boolean
            - apply-groups reference
            - apply-groups-exclude reference
            - evi number
            - ignore-mtu-mismatch boolean
            - incl-mcast-orig-ip string
            - isid-route-target
               - range number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - end number
                  - route-target string
                  - type keyword
            - mac-duplication
               - blackhole boolean
               - detect
                  - num-moves number
                  - trusted-mac-move-factor number
                  - window number
               - retry (number | keyword)
               - trusted-mac-time number
            - mpls number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - auto-bind-tunnel
                  - allow-flex-algo-fallback boolean
                  - ecmp number
                  - enforce-strict-tunnel-tagging boolean
```


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configure service vpls bgp-evpn mpls auto-bind-tunnel resolution

```
                  - resolution keyword
                  - resolution-filter
                     - bgp boolean
                     - ldp boolean
                     - mpls-fwd-policy boolean
                     - rib-api boolean
                     - rsvp boolean
                     - sr-isis boolean
                     - sr-ospf boolean
                     - sr-ospf3 boolean
                     - sr-policy boolean
                     - sr-te boolean
                     - udp boolean
                  - weighted-ecmp boolean
               - control-word boolean
               - default-route-tag string
               - dynamic-egress-label-limit boolean
               - ecmp number
               - entropy-label boolean
               - evi-three-byte-auto-rt boolean
               - fdb
                  - protected-src-mac-violation-action keyword
               - force-vc-forwarding keyword
               - ingress-replication-bum-label boolean
               - mh-mode keyword
               - oper-group reference
               - route-next-hop
                  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
                  - system-ipv4
                  - system-ipv6
               - send-tunnel-encap
                  - mpls boolean
                  - mpls-over-udp boolean
               - split-horizon-group reference
            - routes
               - incl-mcast
                  - advertise-ingress-replication boolean
                  - advertise-l2-attributes boolean
               - ip-prefix
                  - advertise boolean
                  - domain-id string
                  - include-direct-interface-host boolean
                  - link-bandwidth
                     - advertise
                        - max-dynamic-weight number
                        - weight (number | keyword)
                     - weighted-ecmp boolean
               - mac-ip
                  - advertise boolean
                  - arp-nd-extended-community boolean
                  - cfm-mac boolean
                  - unknown-mac boolean
               - sel-mcast
                  - advertise boolean
            - segment-routing-v6 number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - default-route-tag string
               - ecmp number
               - evi-three-byte-auto-rt boolean
               - fdb
                  - protected-src-mac-violation-action keyword
               - force-vc-forwarding keyword
```


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configure service vpls bgp-evpn segment-routing-v6 mh-mode

```
            - mh-mode keyword
            - oper-group reference
            - resolution keyword
            - route-next-hop
               - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
               - system-ipv4
               - system-ipv6
            - source-address string
            - split-horizon-group reference
            - srv6
               - default-locator string
               - instance reference
         - vxlan number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - default-route-tag string
            - ecmp number
            - evi-three-byte-auto-rt boolean
            - mh-mode keyword
            - oper-group reference
            - routes
               - auto-disc
                  - advertise boolean
            - send-incl-mcast-ir-on-ndf boolean
            - send-tunnel-encap boolean
            - vxlan-instance reference
      - bgp-mh-site string
         - activation-timer number
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - boot-timer number
         - failed-threshold (number | keyword)
         - id number
         - mesh-sdp-binds
         - min-down-timer number
         - monitor-oper-group reference
         - sap string
         - shg-name string
         - spoke-sdp string
      - bgp-vpls
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - maximum-ve-id number
         - ve
            - id number
            - name string
      - capture-sap string
         - admin-state keyword
         - allow-dot1q-msaps boolean
         - apply-groups reference
         - apply-groups-exclude reference
         - bandwidth number
         - cpu-protection
            - mac-monitoring
            - policy-id reference
         - description string
         - dhcp
            - python-policy reference
            - user-db reference
         - dhcp6
            - python-policy reference
```


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configure service vpls capture-sap dhcp6 user-db

```
            - user-db reference
         - dist-cpu-protection reference
         - host-lockout-policy reference
         - ingress
            - filter
               - mac reference
         - ipoe-session
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - ipoe-session-policy reference
            - user-db reference
         - msap-defaults
            - group-interface string
            - policy reference
            - service-name string
         - nasreq-auth-policy reference
         - pfcp
            - apply-groups reference
            - apply-groups-exclude reference
            - association reference
            - l2-access-id-alias string
            - up-resiliency
               - monitor-oper-group reference
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - health-drop number
         - pppoe
            - policy reference
            - python-policy reference
            - user-db reference
         - radius-auth-policy reference
         - router-solicit
            - user-db reference
         - track-srrp number
         - trigger-packet
            - arp boolean
            - data boolean
            - dhcp boolean
            - dhcp6 boolean
            - pppoe boolean
            - rtr-solicit boolean
      - customer reference
      - description string
      - endpoint string
         - apply-groups reference
         - apply-groups-exclude reference
         - block-on-mesh-failure boolean
         - description string
         - fdb
            - auto-learn-mac-protect boolean
            - mac-pinning boolean
            - maximum-mac-addresses number
            - protected-src-mac-violation-action keyword
         - ignore-standby-signaling boolean
         - mc-endpoint number
            - apply-groups reference
            - apply-groups-exclude reference
            - mc-ep-peer
               - name string
               - peer-address reference
         - revert-time (number | keyword)
         - suppress-standby-signaling boolean
```


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configure service vpls eth-cfm

```
        - eth-cfm
          - apply-groups reference
          - apply-groups-exclude reference
          - mep md-admin-name reference ma-admin-name reference mep-id number
            - admin-state keyword
            - alarm-notification
              - fng-alarm-time number
              - fng-reset-time number
            - apply-groups reference
            - apply-groups-exclude reference
            - ccm boolean
            - ccm-ltm-priority number
            - ccm-padding-size number
            - cfm-vlan-tag string
            - description string
            - eth-test
              - bit-error-threshold number
              - test-pattern
                - crc-tlv boolean
                - pattern keyword
            - grace
              - eth-ed
                - max-rx-defect-window number
                - priority number
                - rx-eth-ed boolean
                - tx-eth-ed boolean
              - eth-vsm-grace
                - rx-eth-vsm-grace boolean
                - tx-eth-vsm-grace boolean
            - low-priority-defect keyword
            - mac-address string
            - one-way-delay-threshold number
        - etree boolean
        - fdb
          - discard-unknown boolean
          - mac-learning
            - aging boolean
            - learning boolean
            - local-age-time number
            - remote-age-time number
          - mac-move
            - admin-state keyword
            - hold-down-time number
            - move-frequency number
            - primary-cumulative-factor number
            - retry-count (number | keyword)
            - sap reference
              - apply-groups reference
              - apply-groups-exclude reference
              - level keyword
            - secondary-cumulative-factor number
            - spoke-sdp reference
              - apply-groups reference
              - apply-groups-exclude reference
              - level keyword
          - mac-subnet-length number
          - selective-learning boolean
          - static-mac
            - mac string
              - apply-groups reference
              - apply-groups-exclude reference
              - blackhole
              - endpoint reference
              - mesh-sdp reference
```


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configure service vpls fdb static-mac mac monitor

```
                  - monitor keyword
                  - sap reference
                  - spoke-sdp reference
            - table
               - high-wmark number
               - low-wmark number
               - size number
         - gsmp
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - group string
               - admin-state keyword
               - ancp
                  - dynamic-topology-discovery boolean
                  - oam boolean
               - apply-groups reference
               - apply-groups-exclude reference
               - description string
               - hold-multiplier number
               - idle-filter boolean
               - keepalive number
               - neighbor string
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - description string
                  - local-address string
                  - priority-marking
                     - dscp keyword
                     - prec number
               - persistency boolean
         - igmp-host-tracking
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - expiry-time number
         - igmp-snooping
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - evpn-proxy
               - admin-state keyword
            - mvr
               - admin-state keyword
               - description string
               - group-policy string
            - query-interval number
            - query-source-address (keyword | ipv4-address)
            - report-source-address string
            - robust-count number
         - ignore-l2vpn-mtu-mismatch boolean
         - interface string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - hold-time
               - ipv4
                  - down
                     - init-only boolean
                     - seconds number
                  - up
                     - seconds number
```


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```
            - ipv4
              - neighbor-discovery
                - static-neighbor string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - mac-address string
                - timeout number
              - primary
                - address string
                - apply-groups reference
                - apply-groups-exclude reference
                - prefix-length number
            - mac string
          - isid-policy
            - entry number
              - advertise-local boolean
              - apply-groups reference
              - apply-groups-exclude reference
              - range
                - end number
                - start number
              - use-def-mcast boolean
          - load-balancing
            - lbl-eth-or-ip-l4-teid boolean
            - per-service-hashing boolean
            - spi-load-balancing boolean
            - teid-load-balancing boolean
          - m-vpls boolean
          - mac-flush
            - tldp
              - propagate boolean
              - send-on-failure boolean
          - mac-protect
            - mac string
          - mcast-ipv6-snooping-scope keyword
          - mcr-default-gtw
            - apply-groups reference
            - apply-groups-exclude reference
            - ip string
            - mac string
          - mesh-sdp string
            - accounting-policy reference
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - bfd
              - bfd-liveness
                - encap keyword
              - bfd-template reference
            - collect-stats boolean
            - control-word boolean
            - cpu-protection
              - eth-cfm-monitoring
                - aggregate
                - car
              - mac-monitoring
              - policy-id reference
            - description string
            - dhcp
              - apply-groups reference
              - apply-groups-exclude reference
              - description string
              - snoop boolean
            - egress
```


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configure service vpls mesh-sdp egress filter

```
            - filter
              - ip reference
              - ipv6 reference
              - mac reference
            - mfib-allowed-mda-destinations
              - mda string
            - qos
              - network
                - policy-name reference
                - port-redirect-group
                  - group-name reference
                  - instance number
            - vc-label number
        - entropy-label
        - eth-cfm
            - apply-groups reference
            - apply-groups-exclude reference
            - collect-lmm-fc-stats
              - fc keyword
              - fc-in-profile keyword
            - collect-lmm-stats boolean
            - mep md-admin-name reference ma-admin-name reference mep-id number
              - admin-state keyword
              - ais
                - client-meg-level number
                - interface-support boolean
                - interval number
                - low-priority-defect keyword
                - priority number
              - alarm-notification
                - fng-alarm-time number
                - fng-reset-time number
              - apply-groups reference
              - apply-groups-exclude reference
              - ccm boolean
              - ccm-ltm-priority number
              - ccm-padding-size number
              - cfm-vlan-tag string
              - csf
                - multiplier decimal-number
              - description string
              - direction keyword
              - eth-test
                - bit-error-threshold number
                - test-pattern
                  - crc-tlv boolean
                  - pattern keyword
              - fault-propagation keyword
              - grace
                - eth-ed
                  - max-rx-defect-window number
                  - priority number
                  - rx-eth-ed boolean
                  - tx-eth-ed boolean
                - eth-vsm-grace
                  - rx-eth-vsm-grace boolean
                  - tx-eth-vsm-grace boolean
              - lbm-svc-act-responder boolean
              - low-priority-defect keyword
              - mac-address string
              - one-way-delay-threshold number
              - primary-vlan boolean
            - mip primary-vlan (number | keyword)
              - apply-groups reference
```


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configure service vpls mesh-sdp eth-cfm mip apply-groups-exclude

```
                  - apply-groups-exclude reference
                  - cfm-vlan-tag string
                  - mac-address string
               - squelch-ingress-ctag-levels number
               - squelch-ingress-levels number
               - vmep-filter boolean
            - etree-leaf boolean
            - etree-root-leaf-tag boolean
            - fdb
               - auto-learn-mac-protect boolean
               - auto-learn-mac-protect-exclude-list reference
               - mac-pinning boolean
               - protected-src-mac-violation-action keyword
            - force-vc-forwarding keyword
            - hash-label
               - signal-capability
            - igmp-snooping
               - apply-groups reference
               - apply-groups-exclude reference
               - fast-leave boolean
               - import-policy reference
               - maximum-number-group-sources number
               - maximum-number-groups number
               - maximum-number-sources number
               - mcac
                  - bandwidth
                     - mandatory (number | keyword)
                     - total (number | keyword)
                  - interface-policy reference
                  - policy reference
               - mrouter-port boolean
               - query-interval number
               - query-last-member-interval number
               - query-response-interval number
               - robust-count number
               - router-alert-check boolean
               - send-queries boolean
               - static
                  - group string
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - source string
                     - starg
               - version keyword
            - ingress
               - filter
                  - ip reference
                  - ipv6 reference
                  - mac reference
               - qos
                  - network
                     - fp-redirect-group
                        - group-name reference
                        - instance number
                     - policy-name reference
               - vc-label number
            - mld-snooping
               - apply-groups reference
               - apply-groups-exclude reference
               - fast-leave boolean
               - import-policy reference
               - maximum-number-groups number
               - mrouter-port boolean
               - query-interval number
```


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```
            - query-last-member-interval number
            - query-response-interval number
            - robust-count number
            - router-alert-check boolean
            - send-queries boolean
            - static
               - group string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - source string
                  - starg
            - version keyword
         - mrp
            - apply-groups reference
            - apply-groups-exclude reference
            - join-time number
            - leave-all-time number
            - leave-time number
            - periodic-time number
            - periodic-timer boolean
            - policy reference
         - pbb
            - fault-propagation
               - backbone-mac-address string
               - backbone-mac-name reference
         - vc-type keyword
         - vlan-vc-tag number
      - mfib
         - table
            - high-wmark number
            - low-wmark number
            - size number
      - mld-snooping
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - evpn-proxy
            - admin-state keyword
         - mvr
            - admin-state keyword
            - description string
            - group-policy string
         - query-interval number
         - query-source-address (keyword | ipv6-address)
         - report-source-address string
         - robust-count number
      - mrp
         - admin-state keyword
         - mmrp
            - admin-state keyword
            - attribute-table
               - high-wmark number
               - low-wmark number
               - size number
            - end-station-only boolean
            - flood-time number
      - multicast-info-policy reference
      - pbb
         - backbone-vpls reference
            - apply-groups reference
            - apply-groups-exclude reference
            - fdb
               - protected-src-mac-violation-action keyword
            - igmp-snooping
```


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configure service vpls pbb backbone-vpls igmp-snooping mrouter-destination

```
                - mrouter-destination reference
            - isid number
            - mesh-sdp reference
                - apply-groups reference
                - apply-groups-exclude reference
                - igmp-snooping
                    - mrouter-port boolean
                - mld-snooping
                    - mrouter-port boolean
            - mld-snooping
                - mrouter-destination reference
            - sap reference
                - apply-groups reference
                - apply-groups-exclude reference
                - igmp-snooping
                    - mrouter-port boolean
                - mld-snooping
                    - mrouter-port boolean
            - spoke-sdp reference
                - apply-groups reference
                - apply-groups-exclude reference
                - igmp-snooping
                    - mrouter-port boolean
                - mld-snooping
                    - mrouter-port boolean
        - force-qtag-forwarding boolean
        - i-vpls-mac-flush
            - bgp-evpn
                - send-to-bvpls boolean
            - tldp
                - propagate-from-bvpls boolean
                - send-on-bvpls-failure boolean
                - send-to-bvpls
                    - all-but-mine boolean
                    - all-from-me boolean
        - mac-notification
            - admin-state keyword
            - count number
            - interval number
            - renotify (number | keyword)
        - source-bmac
            - address string
            - use-es-bmac-lsb boolean
            - use-mclag-bmac-lsb boolean
    - pbb-type keyword
    - pim-snooping
        - apply-groups reference
        - apply-groups-exclude reference
        - group-policy string
        - hold-time number
        - ipv4
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
        - ipv6
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
    - provider-tunnel
        - apply-groups reference
        - apply-groups-exclude reference
        - inclusive
            - admin-state keyword
            - data-delay-interval number
```


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configure service vpls provider-tunnel inclusive mldp

```
            - mldp
            - owner keyword
            - root-and-leaf boolean
            - rsvp
               - lsp-template reference
         - selective
            - admin-state keyword
            - data-delay-interval number
            - data-threshold
               - group-prefix (ipv4-prefix | ipv6-prefix)
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - pe-threshold-add number
                  - pe-threshold-delete number
                  - threshold number
            - maximum-p2mp-spmsi number
            - mldp boolean
            - owner keyword
            - wildcard-spmsi boolean
      - proxy-arp
         - admin-state keyword
         - age-time (number | keyword)
         - apply-groups reference
         - apply-groups-exclude reference
         - duplicate-detect
            - anti-spoof-mac string
            - hold-down-time (number | keyword)
            - num-moves number
            - static-blackhole boolean
            - window number
         - dynamic-arp
            - ip-address string
               - apply-groups reference
               - apply-groups-exclude reference
               - mac-list reference
               - resolve-retry-time number
         - dynamic-populate boolean
         - evpn
            - flood
               - gratuitous-arp boolean
               - unknown-arp-req boolean
            - route-tag number
         - process-arp-probes boolean
         - send-refresh (number | keyword)
         - static-arp
            - ip-address string
               - apply-groups reference
               - apply-groups-exclude reference
               - mac string
         - table-size number
      - proxy-nd
         - admin-state keyword
         - age-time (number | keyword)
         - apply-groups reference
         - apply-groups-exclude reference
         - duplicate-detect
            - anti-spoof-mac string
            - hold-down-time (number | keyword)
            - num-moves number
            - static-blackhole boolean
            - window number
         - dynamic-neighbor
            - ip-address string
               - apply-groups reference
```


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configure service vpls proxy-nd dynamic-neighbor ip-address apply-groups-exclude

```
                  - apply-groups-exclude reference
                  - mac-list reference
                  - resolve-retry-time number
            - dynamic-populate boolean
            - evpn
               - advertise-neighbor-type keyword
               - flood
                  - unknown-neighbor-advertise-host boolean
                  - unknown-neighbor-advertise-router boolean
                  - unknown-neighbor-solicitation boolean
               - route-tag number
            - process-dad-neighbor-solicitations boolean
            - send-refresh (number | keyword)
            - static-neighbor
               - ip-address string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - mac string
                  - type keyword
            - table-size number
         - routed-vpls
            - evpn-mpls-ecmp boolean
            - multicast
               - apply-groups reference
               - apply-groups-exclude reference
               - evpn-gateway
                  - admin-state keyword
                  - advertise keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - dr-activation-timer number
                  - non-dr-attract-traffic keyword
               - ip-multicast-ecmp boolean
               - ipv4
                  - forward-to-ip-interface boolean
                  - igmp-snooping
                     - mrouter-port boolean
               - ipv6
                  - forward-to-ip-interface boolean
                  - mld-snooping
                     - mrouter-port boolean
            - vxlan-ipv4-tep-ecmp boolean
         - sap string
            - accounting-policy reference
            - admin-state keyword
            - anti-spoof keyword
            - app-profile reference
            - apply-groups reference
            - apply-groups-exclude reference
            - arp-host
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - host-limit number
               - min-auth-interval number
            - arp-reply-agent keyword
            - bandwidth number
            - bgp-vpls-mh-veid number
            - bpdu-translation keyword
            - calling-station-id string
            - cflowd boolean
            - collect-stats boolean
            - cpu-protection
               - eth-cfm-monitoring
```


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configure service vpls sap cpu-protection eth-cfm-monitoring aggregate

```
                  - aggregate
                  - car
               - mac-monitoring
               - policy-id reference
            - description string
            - dhcp
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - description string
               - lease-populate
                  - max-leases number
               - option-82
                  - action keyword
                  - circuit-id
                     - ascii-tuple
                     - hex-string string
                     - none
                     - vlan-ascii-tuple
                  - remote-id
                     - ascii-string string
                     - hex-string string
                     - mac
                     - none
                  - vendor-specific-option
                     - client-mac-address boolean
                     - sap-id boolean
                     - service-id boolean
                     - string string
                     - system-id boolean
               - proxy-server
                  - admin-state keyword
                  - emulated-server string
                  - lease-time
                     - radius-override boolean
                     - value number
               - snoop boolean
            - dist-cpu-protection reference
            - egress
               - agg-rate
                  - adaptation-rule keyword
                  - burst-limit (number | keyword)
                  - limit-unused-bandwidth boolean
                  - queue-frame-based-accounting boolean
                  - rate number
               - dest-mac-rewrite string
               - filter
                  - ip reference
                  - ipv6 reference
                  - mac reference
               - qos
                  - policer-control-policy
                     - overrides
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - root
                           - max-rate (number | keyword)
                           - priority-mbs-thresholds
                              - min-thresh-separation (number | keyword)
                              - priority number
                                 - apply-groups reference
                                 - apply-groups-exclude reference
                                 - mbs-contribution (number | keyword)
                     - policy-name reference
```


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configure service vpls sap egress qos qinq-mark-top-only

```
                    - qinq-mark-top-only boolean
                    - sap-egress
                      - overrides
                        - hs-secondary-shaper string
                        - hs-wrr-group reference
                          - apply-groups reference
                          - apply-groups-exclude reference
                          - hs-class-weight number
                          - percent-rate decimal-number
                          - rate (number | keyword)
                        - policer reference
                          - apply-groups reference
                          - apply-groups-exclude reference
                          - cbs (number | keyword)
                          - mbs (number | keyword)
                          - packet-byte-offset number
                          - percent-rate
                            - cir decimal-number
                            - pir decimal-number
                          - rate
                            - cir (number | keyword)
                            - pir (number | keyword)
                          - stat-mode keyword
                        - queue reference
                          - adaptation-rule
                            - cir keyword
                            - pir keyword
                          - apply-groups reference
                          - apply-groups-exclude reference
                          - avg-frame-overhead decimal-number
                          - burst-limit (number | keyword)
                          - cbs (number | keyword)
                          - drop-tail
                            - low
                              - percent-reduction-from-mbs (number | keyword)
                          - hs-class-weight number
                          - hs-wred-queue
                            - policy reference
                          - hs-wrr-weight number
                          - mbs (number | keyword)
                          - monitor-queue-depth
                            - fast-polling boolean
                            - violation-threshold decimal-number
                          - parent
                            - cir-weight number
                            - weight number
                          - percent-rate
                            - cir decimal-number
                            - pir decimal-number
                          - rate
                            - cir (number | keyword)
                            - pir (number | keyword)
                      - policy-name reference
                      - port-redirect-group
                        - group-name reference
                        - instance number
                    - scheduler-policy
                      - overrides
                        - scheduler string
                          - apply-groups reference
                          - apply-groups-exclude reference
                          - parent
                            - cir-weight number
                            - weight number
```


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configure service vpls sap egress qos scheduler-policy overrides scheduler rate

```
                        - rate
                          - cir (number | keyword)
                          - pir (number | keyword)
                    - policy-name reference
            - eth-cfm
              - apply-groups reference
              - apply-groups-exclude reference
              - collect-lmm-fc-stats
                - fc keyword
                - fc-in-profile keyword
              - collect-lmm-stats boolean
              - mep md-admin-name reference ma-admin-name reference mep-id number
                - admin-state keyword
                - ais
                  - client-meg-level number
                  - interface-support boolean
                  - interval number
                  - low-priority-defect keyword
                  - priority number
                - alarm-notification
                  - fng-alarm-time number
                  - fng-reset-time number
                - apply-groups reference
                - apply-groups-exclude reference
                - ccm boolean
                - ccm-ltm-priority number
                - ccm-padding-size number
                - cfm-vlan-tag string
                - csf
                  - multiplier decimal-number
                - description string
                - direction keyword
                - eth-test
                  - bit-error-threshold number
                  - test-pattern
                    - crc-tlv boolean
                    - pattern keyword
                - fault-propagation keyword
                - grace
                  - eth-ed
                    - max-rx-defect-window number
                    - priority number
                    - rx-eth-ed boolean
                    - tx-eth-ed boolean
                  - eth-vsm-grace
                    - rx-eth-vsm-grace boolean
                    - tx-eth-vsm-grace boolean
                - lbm-svc-act-responder boolean
                - low-priority-defect keyword
                - mac-address string
                - one-way-delay-threshold number
                - primary-vlan boolean
              - mip primary-vlan (number | keyword)
                - apply-groups reference
                - apply-groups-exclude reference
                - cfm-vlan-tag string
                - mac-address string
              - squelch-ingress-ctag-levels number
              - squelch-ingress-levels number
              - vmep-filter boolean
            - eth-ring number
            - etree-leaf boolean
            - etree-root-leaf-tag
              - leaf number
```


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```
            – fdb
              – auto-learn-mac-protect boolean
              – auto-learn-mac-protect-exclude-list reference
              – discard-unknown-source boolean
              – discard-unprotected-dest-mac boolean
              – limit-mac-move keyword
              – mac-learning
                – aging boolean
                – learning boolean
              – mac-pinning boolean
              – maximum-mac-addresses number
              – protected-src-mac-violation-action keyword
            – host-admin-state keyword
            – host-lockout-policy reference
            – i-vpls-mac-flush
              – bgp-evpn
                – send-to-bvpls boolean
            – igmp-host-tracking
              – apply-groups reference
              – apply-groups-exclude reference
              – expiry-time number
              – import-policy reference
              – maximum-number-group-sources number
              – maximum-number-groups number
              – maximum-number-sources number
              – router-alert-check boolean
            – igmp-snooping
              – apply-groups reference
              – apply-groups-exclude reference
              – fast-leave boolean
              – import-policy reference
              – maximum-number-group-sources number
              – maximum-number-groups number
              – maximum-number-sources number
              – mcac
                – bandwidth
                  – mandatory (number | keyword)
                  – total (number | keyword)
                – interface-policy reference
                – mc-constraints
                  – level number
                    – apply-groups reference
                    – apply-groups-exclude reference
                    – bandwidth number
                  – number-down number
                    – apply-groups reference
                    – apply-groups-exclude reference
                    – level number
                  – use-lag-port-weight boolean
                – policy reference
              – mrouter-port boolean
              – mvr
                – from-vpls reference
                – to-sap string
              – query-interval number
              – query-last-member-interval number
              – query-response-interval number
              – robust-count number
              – router-alert-check boolean
              – send-queries boolean
              – static
                – group string
                  – apply-groups reference
                  – apply-groups-exclude reference
```


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configure service vpls sap igmp-snooping static group source

```
                    - source string
                    - starg
                - version keyword
            - ingress
                - filter
                    - ip reference
                    - ipv6 reference
                    - mac reference
                - qos
                    - match-qinq-dot1p keyword
                    - policer-control-policy
                        - overrides
                            - apply-groups reference
                            - apply-groups-exclude reference
                            - root
                                - max-rate (number | keyword)
                                - priority-mbs-thresholds
                                    - min-thresh-separation (number | keyword)
                                    - priority number
                                        - apply-groups reference
                                        - apply-groups-exclude reference
                                        - mbs-contribution (number | keyword)
                        - policy-name reference
                    - sap-ingress
                        - fp-redirect-group
                            - group-name reference
                            - instance number
                        - overrides
                            - ip-criteria
                                - activate-entry-tag number
                            - ipv6-criteria
                                - activate-entry-tag number
                            - policer reference
                                - apply-groups reference
                                - apply-groups-exclude reference
                                - cbs (number | keyword)
                                - mbs (number | keyword)
                                - packet-byte-offset number
                                - percent-rate
                                    - cir decimal-number
                                    - pir decimal-number
                                - rate
                                    - cir (number | keyword)
                                    - pir (number | keyword)
                                - stat-mode keyword
                            - queue reference
                                - adaptation-rule
                                    - cir keyword
                                    - pir keyword
                                - apply-groups reference
                                - apply-groups-exclude reference
                                - cbs (number | keyword)
                                - drop-tail
                                    - low
                                        - percent-reduction-from-mbs (number | keyword)
                                - mbs (number | keyword)
                                - monitor-queue-depth
                                    - fast-polling boolean
                                - parent
                                    - cir-weight number
                                    - weight number
                                - percent-rate
                                    - cir decimal-number
                                    - pir decimal-number
```


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configure service vpls sap ingress qos sap-ingress overrides queue rate

```
                        - rate
                           - cir (number | keyword)
                           - pir (number | keyword)
                     - policy-name reference
                     - queuing-type keyword
                  - scheduler-policy
                     - overrides
                        - scheduler string
                           - apply-groups reference
                           - apply-groups-exclude reference
                           - parent
                              - cir-weight number
                              - weight number
                           - rate
                              - cir (number | keyword)
                              - pir (number | keyword)
                     - policy-name reference
               - qtag-manipulation
                  - c-tag (number | keyword)
                  - push-dot1q-vlan (number | keyword)
                  - s-tag number
            - l2pt
               - force-boundary
                  - protocols
                     - cdp boolean
                     - dtp boolean
                     - pagp boolean
                     - stp boolean
                     - udld boolean
                     - vtp boolean
               - termination
                  - protocols
                     - cdp boolean
                     - dtp boolean
                     - pagp boolean
                     - stp boolean
                     - udld boolean
                     - vtp boolean
            - l2tpv3-session
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - pseudo-wire
                  - ethernet
                  - ethernet-vlan-id number
               - router
                  - group string
                  - router-instance string
               - vc-id number
            - lag
               - link-map-profile number
               - per-link-hash
                  - class number
                  - weight number
            - managed-vlan-list
               - range string
            - mc-ring
               - apply-groups reference
               - apply-groups-exclude reference
               - ring-node string
            - mld-snooping
               - apply-groups reference
               - apply-groups-exclude reference
               - fast-leave boolean
```


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```
                - import-policy reference
                - maximum-number-groups number
                - mrouter-port boolean
                - mvr
                  - from-vpls reference
                  - to-sap string
                - query-interval number
                - query-last-member-interval number
                - query-response-interval number
                - robust-count number
                - router-alert-check boolean
                - send-queries boolean
                - static
                  - group string
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - source string
                    - starg
                - version keyword
            - monitor-oper-group reference
            - mrp
                - join-time number
                - leave-all-time number
                - leave-time number
                - periodic-time number
                - periodic-timer boolean
                - policy reference
            - multi-service-site reference
            - oper-group reference
            - pbb
                - fault-propagation
                  - backbone-mac-address string
                  - backbone-mac-name reference
            - pim-snooping
                - apply-groups reference
                - apply-groups-exclude reference
                - maximum-number-groups number
            - process-cpm-traffic-on-sap-down boolean
            - radius-auth-policy reference
            - shcv-policy-ipv4 reference
            - spb
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - level number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - hello-interval number
                  - hello-multiplier number
                  - metric number
                - lsp-pacing-interval number
                - retransmit-interval number
            - split-horizon-group reference
            - static-host
                - ipv4 string mac string
                  - admin-state keyword
                  - ancp-string string
                  - app-profile
                    - profile reference
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - int-dest-id string
                  - shcv
                  - sla-profile reference
```


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configure service vpls sap static-host ipv4 sub-profile

```
                  - sub-profile reference
                  - subscriber-id
                     - string string
                     - use-sap-id
            - static-isid
               - range number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - end number
                  - start number
            - stp
               - admin-state keyword
               - auto-edge boolean
               - edge-port boolean
               - link-type keyword
               - mst-instance number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - mst-path-cost number
                  - mst-port-priority number
               - path-cost number
               - port-num number
               - priority number
               - root-guard boolean
            - sub-sla-mgmt
               - admin-state keyword
               - defaults
                  - app-profile reference
                  - int-dest-id
                     - string string
                     - top-q-tag
                  - sla-profile reference
                  - sub-profile reference
                  - subscriber-id
                     - auto-id
                     - sap-id
                     - string string
               - mac-da-hashing boolean
               - single-sub-parameters
                  - non-sub-traffic
                     - app-profile reference
                     - sla-profile reference
                     - sub-profile reference
                     - subscriber-id string
                  - profiled-traffic-only boolean
               - sub-ident-policy reference
               - subscriber-limit (keyword | number)
            - transit-policy
               - ip reference
               - prefix reference
         - segment-routing-v6 number
            - apply-groups reference
            - apply-groups-exclude reference
            - locator reference
               - apply-groups reference
               - apply-groups-exclude reference
               - function
                  - end-dt2m
                     - value number
                  - end-dt2u
                     - value number
            - micro-segment-locator reference
               - apply-groups reference
               - apply-groups-exclude reference
```


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configure service vpls segment-routing-v6 micro-segment-locator function

```
            - function
               - udt2m
                  - value number
               - udt2u
                  - value number
      - service-id number
      - service-mtu number
      - shcv-policy-ipv4 reference
      - spb
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - fid number
         - isis-instance number
         - level number
            - apply-groups reference
            - apply-groups-exclude reference
            - bridge-priority number
            - ect-high-path-fid number
            - forwarding-tree
               - topology keyword
         - lsp-lifetime number
         - lsp-refresh-interval
            - half-lifetime boolean
            - interval number
         - overload
            - timeout number
         - overload-on-boot
            - timeout number
         - timers
            - lsp-wait
               - initial-wait number
               - max-wait number
               - second-wait number
            - spf-wait
               - initial-wait number
               - max-wait number
               - second-wait number
      - spbm-control-vpls
         - fid number
         - service-name string
      - split-horizon-group string
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - fdb
            - saps
               - auto-learn-mac-protect boolean
               - auto-learn-mac-protect-exclude-list reference
               - discard-unprotected-dest-mac boolean
               - protected-src-mac-violation-action keyword
         - residential boolean
      - spoke-sdp string
         - accounting-policy reference
         - admin-state keyword
         - app-profile reference
         - apply-groups reference
         - apply-groups-exclude reference
         - bfd
            - bfd-liveness
               - encap keyword
            - bfd-template reference
            - failure-action keyword
            - wait-for-up-timer number
```


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configure service vpls spoke-sdp block-on-mesh-failure

```
            - block-on-mesh-failure boolean
            - bpdu-translation keyword
            - collect-stats boolean
            - control-word boolean
            - cpu-protection
              - eth-cfm-monitoring
                - aggregate
                - car
              - mac-monitoring
              - policy-id reference
            - description string
            - dhcp
              - apply-groups reference
              - apply-groups-exclude reference
              - description string
              - snoop boolean
            - egress
              - filter
                - ip reference
                - ipv6 reference
                - mac reference
              - mfib-allowed-mda-destinations
                - mda string
              - qos
                - network
                  - policy-name reference
                  - port-redirect-group
                    - group-name reference
                    - instance number
              - vc-label number
            - endpoint
              - name reference
              - precedence (number | keyword)
            - entropy-label
            - eth-cfm
              - apply-groups reference
              - apply-groups-exclude reference
              - collect-lmm-fc-stats
                - fc keyword
                - fc-in-profile keyword
              - collect-lmm-stats boolean
              - mep md-admin-name reference ma-admin-name reference mep-id number
                - admin-state keyword
                - ais
                  - client-meg-level number
                  - interface-support boolean
                  - interval number
                  - low-priority-defect keyword
                  - priority number
                - alarm-notification
                  - fng-alarm-time number
                  - fng-reset-time number
                - apply-groups reference
                - apply-groups-exclude reference
                - ccm boolean
                - ccm-ltm-priority number
                - ccm-padding-size number
                - cfm-vlan-tag string
                - csf
                  - multiplier decimal-number
                - description string
                - direction keyword
                - eth-test
                  - bit-error-threshold number
```


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configure service vpls spoke-sdp eth-cfm mep eth-test test-pattern

```
                  - test-pattern
                     - crc-tlv boolean
                     - pattern keyword
               - fault-propagation keyword
               - grace
                  - eth-ed
                     - max-rx-defect-window number
                     - priority number
                     - rx-eth-ed boolean
                     - tx-eth-ed boolean
                  - eth-vsm-grace
                     - rx-eth-vsm-grace boolean
                     - tx-eth-vsm-grace boolean
               - lbm-svc-act-responder boolean
               - low-priority-defect keyword
               - mac-address string
               - one-way-delay-threshold number
               - primary-vlan boolean
            - mip primary-vlan (number | keyword)
               - apply-groups reference
               - apply-groups-exclude reference
               - cfm-vlan-tag string
               - mac-address string
            - squelch-ingress-ctag-levels number
            - squelch-ingress-levels number
            - vmep-filter boolean
         - etree-leaf boolean
         - etree-root-leaf-tag boolean
         - fdb
            - auto-learn-mac-protect boolean
            - auto-learn-mac-protect-exclude-list reference
            - discard-unknown-source boolean
            - limit-mac-move keyword
            - mac-learning
               - aging boolean
               - learning boolean
            - mac-pinning boolean
            - maximum-mac-addresses number
            - protected-src-mac-violation-action keyword
         - force-vc-forwarding keyword
         - hash-label
            - signal-capability
         - i-vpls-mac-flush
            - bgp-evpn
               - send-to-bvpls boolean
         - igmp-snooping
            - apply-groups reference
            - apply-groups-exclude reference
            - fast-leave boolean
            - import-policy reference
            - maximum-number-group-sources number
            - maximum-number-groups number
            - maximum-number-sources number
            - mcac
               - bandwidth
                  - mandatory (number | keyword)
                  - total (number | keyword)
               - interface-policy reference
               - policy reference
            - mrouter-port boolean
            - query-interval number
            - query-last-member-interval number
            - query-response-interval number
            - robust-count number
```


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```
                - router-alert-check boolean
                - send-queries boolean
                - static
                  - group string
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - source string
                    - starg
                - version keyword
            - ignore-standby-signaling boolean
            - ingress
                - filter
                  - ip reference
                  - ipv6 reference
                  - mac reference
                - qos
                  - network
                    - fp-redirect-group
                      - group-name reference
                      - instance number
                    - policy-name reference
                - vc-label number
            - l2pt
                - termination
                  - protocols
                    - cdp boolean
                    - dtp boolean
                    - pagp boolean
                    - stp boolean
                    - udld boolean
                    - vtp boolean
            - mld-snooping
                - apply-groups reference
                - apply-groups-exclude reference
                - fast-leave boolean
                - import-policy reference
                - maximum-number-groups number
                - mrouter-port boolean
                - query-interval number
                - query-last-member-interval number
                - query-response-interval number
                - robust-count number
                - router-alert-check boolean
                - send-queries boolean
                - static
                  - group string
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - source string
                    - starg
                - version keyword
            - monitor-oper-group reference
            - mrp
                - apply-groups reference
                - apply-groups-exclude reference
                - join-time number
                - leave-all-time number
                - leave-time number
                - periodic-time number
                - periodic-timer boolean
                - policy reference
            - oper-group reference
            - pbb
                - fault-propagation
```


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configure service vpls spoke-sdp pbb fault-propagation backbone-mac-address

```
                  - backbone-mac-address string
                  - backbone-mac-name reference
            - pim-snooping
               - apply-groups reference
               - apply-groups-exclude reference
               - maximum-number-groups number
            - pw-status
               - signaling boolean
            - spb
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - level number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - hello-interval number
                  - hello-multiplier number
                  - metric number
               - lsp-pacing-interval number
               - retransmit-interval number
            - split-horizon-group reference
            - static-isid
               - range number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - end number
                  - start number
            - stp
               - admin-state keyword
               - auto-edge boolean
               - edge-port boolean
               - link-type keyword
               - path-cost number
               - port-num number
               - priority number
               - root-guard boolean
            - transit-policy
               - prefix reference
            - vc-type keyword
            - vlan-vc-tag number
         - stp
            - admin-state keyword
            - forward-delay number
            - hello-time number
            - hold-count number
            - maximum-age number
            - mode keyword
            - mst-instance number
               - apply-groups reference
               - apply-groups-exclude reference
               - mst-priority number
               - vlan-range string
            - mst-maximum-hops number
            - mst-name string
            - mst-revision number
            - priority number
         - temp-flooding number
         - tunnel-elmi boolean
         - vpn-id number
         - vxlan
            - instance number
               - apply-groups reference
               - apply-groups-exclude reference
               - assisted-replication
```


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configure service vpls vxlan instance assisted-replication leaf

```
                  - leaf
                     - acttime number
                  - replicator
               - egress-vtep (ipv4-address-no-zone | ipv6-address-no-zone)
               - fdb
                  - discard-unknown-source boolean
                  - mac-learning
                     - aging boolean
                     - learning boolean
                  - maximum-mac-addresses number
                  - protected-src-mac-violation-action keyword
               - igmp-snooping
                  - mrouter-port boolean
               - mld-snooping
                  - mrouter-port boolean
               - network
                  - ingress
                     - qos
                        - network
                           - fp-redirect-group
                              - group-name reference
                              - instance number
                           - policy-name reference
               - rx-discard-on-ndf keyword
               - source-vtep-security boolean
               - vni number
            - source-vtep (ipv4-address-no-zone | ipv6-address-no-zone)
         - wlan-gw
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - wlan-gw-group reference
      - vprn string
         - aa-interface string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - ip-mtu number
            - ipv4
               - primary
                  - address string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - prefix-length number
            - sap string
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - description string
               - egress
                  - filter
                     - ip reference
                  - qos
                     - sap-egress
                        - policy-name reference
               - fwd-wholesale
                  - pppoe-service reference
               - ingress
                  - qos
                     - sap-ingress
                        - overrides
                        - policy-name reference
```


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configure service vprn aa-interface sap lag

```
            - lag
        - aaa
            - remote-servers
                - radius
                    - access-algorithm keyword
                    - accounting boolean
                    - accounting-port number
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - authorization boolean
                    - interactive-authentication boolean
                    - port number
                    - server number
                        - address (ipv4-address-no-zone | ipv6-address-no-zone)
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - authenticator keyword
                        - secret string
                        - tls-client-profile reference
                    - server-retry number
                    - server-timeout number
                    - use-default-template boolean
                - tacplus
                    - accounting
                        - record-type keyword
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - authorization
                        - request-format
                            - access-operation-cmd keyword
                        - use-priv-lvl boolean
                    - interactive-authentication boolean
                    - priv-lvl-map
                        - priv-lvl number
                            - apply-groups reference
                            - apply-groups-exclude reference
                            - user-profile-name reference
                    - server number
                        - address (ipv4-address-no-zone | ipv6-address-no-zone)
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - port number
                        - secret string
                    - server-timeout number
                    - use-default-template boolean
        - aarp-interface string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - ip-mtu number
            - spoke-sdp string
                - aarp
                    - id reference
                    - type keyword
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - description string
                - egress
                    - filter
                        - ip reference
```


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configure service vprn aarp-interface spoke-sdp egress vc-label

```
                - vc-label number
            - ingress
                - filter
                    - ip reference
                - vc-label number
        - admin-state keyword
        - aggregates
            - aggregate (ipv4-prefix | ipv6-prefix)
                - aggregator
                    - address string
                    - as-number number
                - apply-groups reference
                - apply-groups-exclude reference
                - as-set boolean
                - blackhole
                    - generate-icmp boolean
                - community string
                - description string
                - discard-component-communities boolean
                - indirect (ipv4-address-no-zone | ipv6-address-no-zone)
                - local-preference number
                - policy reference
                - summary-only boolean
                - tunnel-group number
            - apply-groups reference
            - apply-groups-exclude reference
        - allow-export-bgp-vpn boolean
        - apply-groups reference
        - apply-groups-exclude reference
        - autonomous-system number
        - bgp
            - admin-state keyword
            - advertise-inactive boolean
            - advertise-ipv6-next-hops
                - ipv4 boolean
            - aggregator-id-zero boolean
            - apply-groups reference
            - apply-groups-exclude reference
            - asn-4-byte boolean
            - authentication-key string
            - authentication-keychain reference
            - backup-path
                - ipv4 boolean
                - ipv6 boolean
                - label-ipv4 boolean
                - label-ipv6 boolean
            - best-path-selection
                - always-compare-med
                    - med-value keyword
                    - strict-as boolean
                - as-path-ignore
                    - ipv4 boolean
                    - ipv6 boolean
                    - label-ipv4 boolean
                    - label-ipv6 boolean
                - compare-origin-validation-state boolean
                - d-path-length-ignore boolean
                - deterministic-med boolean
                - ebgp-ibgp-equal
                    - ipv4 boolean
                    - ipv6 boolean
                    - label-ipv4 boolean
                    - label-ipv6 boolean
                - ignore-nh-metric boolean
```


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configure service vprn bgp best-path-selection ignore-router-id

```
            - ignore-router-id
            - origin-invalid-unusable boolean
         - bfd-liveness boolean
         - bfd-strict-mode
            - advertise
               - holdtime number
            - next-hop-reachability boolean
         - client-reflect boolean
         - cluster
            - cluster-id string
         - connect-retry number
         - convergence
            - family keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - max-wait-to-advertise number
            - min-wait-to-advertise number
         - damp-peer-oscillations
            - error-interval number
            - idle-hold-time
               - initial-wait number
               - max-wait number
               - second-wait number
         - damping boolean
         - default-label-preference
            - ebgp number
            - ibgp number
         - default-preference
            - ebgp number
            - ibgp number
         - description string
         - domain-id string
         - dynamic-neighbor-limit number
         - ebgp-default-reject-policy
            - export boolean
            - import boolean
         - eibgp-loadbalance boolean
         - enforce-first-as boolean
         - error-handling
            - update-fault-tolerance boolean
         - export
            - apply-groups reference
            - apply-groups-exclude reference
            - policy (policy-expr-string | string)
         - extended-nh-encoding
            - ipv4 boolean
         - family
            - flow-ipv4 boolean
            - flow-ipv6 boolean
            - ipv4 boolean
            - ipv6 boolean
            - label-ipv4 boolean
            - mcast-ipv4 boolean
            - mcast-ipv6 boolean
         - fast-external-failover boolean
         - flowspec
            - validate-dest-prefix boolean
            - validate-redirect-ip boolean
         - graceful-restart
            - gr-notification boolean
            - long-lived
               - advertise-stale-to-all-neighbors boolean
               - advertised-stale-time number
               - family keyword
```


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configure service vprn bgp graceful-restart long-lived family advertised-stale-time

```
                    - advertised-stale-time number
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - helper-override-stale-time number
                 - forwarding-bits-set keyword
                 - helper-override-restart-time number
                 - helper-override-stale-time number
                 - without-no-export boolean
              - restart-time number
              - stale-routes-time number
           - group string
              - admin-state keyword
              - advertise-inactive boolean
              - advertise-ipv6-next-hops
                 - ipv4 boolean
              - aggregator-id-zero boolean
              - apply-groups reference
              - apply-groups-exclude reference
              - as-override boolean
              - asn-4-byte boolean
              - authentication-key string
              - authentication-keychain reference
              - bfd-liveness boolean
              - bfd-strict-mode
                 - advertise
                    - holdtime number
                 - next-hop-reachability boolean
              - capability-negotiation boolean
              - client-reflect boolean
              - cluster
                 - cluster-id string
              - connect-retry number
              - damp-peer-oscillations
                 - error-interval number
                 - idle-hold-time
                    - initial-wait number
                    - max-wait number
                    - second-wait number
              - damping boolean
              - default-label-preference
                 - ebgp number
                 - ibgp number
              - default-preference
                 - ebgp number
                 - ibgp number
              - description string
              - dynamic-neighbor
                 - interface reference
                    - allowed-peer-as string
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - max-sessions number
                 - match
                    - prefix (ipv4-prefix | ipv6-prefix)
                       - allowed-peer-as string
                       - apply-groups reference
                       - apply-groups-exclude reference
              - dynamic-neighbor-limit number
              - ebgp-default-reject-policy
                 - export boolean
                 - import boolean
              - enforce-first-as boolean
              - error-handling
                 - update-fault-tolerance boolean
```


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```
                - evpn-link-bandwidth
                  - add-to-received-bgp number
                - export
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - policy (policy-expr-string | string)
                - extended-nh-encoding
                  - ipv4 boolean
                - family
                  - flow-ipv4 boolean
                  - flow-ipv6 boolean
                  - ipv4 boolean
                  - ipv6 boolean
                  - label-ipv4 boolean
                  - mcast-ipv4 boolean
                  - mcast-ipv6 boolean
                - fast-external-failover boolean
                - graceful-restart
                  - gr-notification boolean
                  - long-lived
                    - advertise-stale-to-all-neighbors boolean
                    - advertised-stale-time number
                    - family keyword
                      - advertised-stale-time number
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - helper-override-stale-time number
                    - forwarding-bits-set keyword
                    - helper-override-restart-time number
                    - helper-override-stale-time number
                    - without-no-export boolean
                  - restart-time number
                  - stale-routes-time number
                - hold-time
                  - minimum-hold-time number
                  - seconds number
                - import
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - policy (policy-expr-string | string)
                - initial-send-delay-zero boolean
                - keepalive number
                - label-preference number
                - link-bandwidth
                  - accept-from-ebgp
                    - ipv4 boolean
                    - ipv6 boolean
                    - label-ipv4 boolean
                  - add-to-received-ebgp
                    - ipv4 boolean
                    - ipv6 boolean
                    - label-ipv4 boolean
                  - aggregate-used-paths
                    - ipv4 boolean
                    - ipv6 boolean
                    - label-ipv4 boolean
                  - send-to-ebgp
                    - ipv4 boolean
                    - ipv6 boolean
                    - label-ipv4 boolean
                - local-address (ipv4-address-no-zone | ipv6-address-no-zone | interface-name)
                - local-as
                  - as-number number
                  - prepend-global-as boolean
```


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configure service vprn bgp group local-as private

```
                - private boolean
            - local-preference number
            - loop-detect keyword
            - loop-detect-threshold number
            - med-out (number | keyword)
            - min-route-advertisement number
            - monitor
                - admin-state keyword
                - all-stations boolean
                - apply-groups reference
                - apply-groups-exclude reference
                - route-monitoring
                    - post-policy boolean
                    - pre-policy boolean
                - station reference
            - multihop number
            - multipath-eligible boolean
            - next-hop-self boolean
            - origin-validation
                - ipv4 boolean
                - ipv6 boolean
                - label-ipv4 boolean
            - passive boolean
            - path-mtu-discovery boolean
            - peer-as number
            - peer-ip-tracking boolean
            - preference number
            - prefix-limit keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - hold-excess number
                - idle-timeout number
                - log-only boolean
                - maximum number
                - post-import boolean
                - threshold number
            - remove-private
                - limited boolean
                - replace boolean
                - skip-peer-as boolean
            - send-communities
                - extended boolean
                - large boolean
                - standard boolean
            - send-default
                - export-policy reference
                - ipv4 boolean
                - ipv6 boolean
            - split-horizon boolean
            - static-group boolean
            - tcp-mss (number | keyword)
            - third-party-nexthop boolean
            - ttl-security number
            - type keyword
        - hold-time
            - minimum-hold-time number
            - seconds number
        - ibgp-multipath boolean
        - import
            - apply-groups reference
            - apply-groups-exclude reference
            - policy (policy-expr-string | string)
        - initial-send-delay-zero boolean
        - keepalive number
```


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```
            - label-preference number
            - local-as
              - as-number number
              - prepend-global-as boolean
              - private boolean
            - local-preference number
            - loop-detect keyword
            - loop-detect-threshold number
            - med-out (number | keyword)
            - min-route-advertisement number
            - monitor
              - admin-state keyword
              - all-stations boolean
              - apply-groups reference
              - apply-groups-exclude reference
              - route-monitoring
                - post-policy boolean
                - pre-policy boolean
              - station reference
            - multihop number
            - multipath
              - ebgp number
              - family keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - ebgp number
                - ibgp number
                - max-paths number
                - restrict keyword
                - unequal-cost boolean
              - ibgp number
              - max-paths number
              - restrict keyword
              - unequal-cost boolean
            - neighbor (ipv4-address-with-zone | ipv6-address-with-zone)
              - admin-state keyword
              - advertise-inactive boolean
              - advertise-ipv6-next-hops
                - ipv4 boolean
              - aggregator-id-zero boolean
              - apply-groups reference
              - apply-groups-exclude reference
              - as-override boolean
              - asn-4-byte boolean
              - authentication-key string
              - authentication-keychain reference
              - bfd-liveness boolean
              - bfd-strict-mode
                - advertise
                  - holdtime number
                - next-hop-reachability boolean
              - capability-negotiation boolean
              - client-reflect boolean
              - cluster
                - cluster-id string
              - connect-retry number
              - damp-peer-oscillations
                - error-interval number
                - idle-hold-time
                  - initial-wait number
                  - max-wait number
                  - second-wait number
              - damping boolean
              - default-label-preference
```


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configure service vprn bgp neighbor default-label-preference ebgp

```
                  - ebgp number
                  - ibgp number
               - default-preference
                  - ebgp number
                  - ibgp number
               - description string
               - ebgp-default-reject-policy
                  - export boolean
                  - import boolean
               - enforce-first-as boolean
               - error-handling
                  - update-fault-tolerance boolean
               - evpn-link-bandwidth
                  - add-to-received-bgp number
               - export
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - policy (policy-expr-string | string)
               - extended-nh-encoding
                  - ipv4 boolean
               - family
                  - flow-ipv4 boolean
                  - flow-ipv6 boolean
                  - ipv4 boolean
                  - ipv6 boolean
                  - label-ipv4 boolean
                  - mcast-ipv4 boolean
                  - mcast-ipv6 boolean
               - fast-external-failover boolean
               - graceful-restart
                  - gr-notification boolean
                  - long-lived
                     - advertise-stale-to-all-neighbors boolean
                     - advertised-stale-time number
                     - family keyword
                        - advertised-stale-time number
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - helper-override-stale-time number
                     - forwarding-bits-set keyword
                     - helper-override-restart-time number
                     - helper-override-stale-time number
                     - without-no-export boolean
                  - restart-time number
                  - stale-routes-time number
               - group reference
               - hold-time
                  - minimum-hold-time number
                  - seconds number
               - import
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - policy (policy-expr-string | string)
               - initial-send-delay-zero boolean
               - keepalive number
               - label-preference number
               - link-bandwidth
                  - accept-from-ebgp
                     - ipv4 boolean
                     - ipv6 boolean
                     - label-ipv4 boolean
                  - add-to-received-ebgp
                     - ipv4 boolean
                     - ipv6 boolean
```


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configure service vprn bgp neighbor link-bandwidth add-to-received-ebgp label-ipv4

```
                    - label-ipv4 boolean
                - aggregate-used-paths
                    - ipv4 boolean
                    - ipv6 boolean
                    - label-ipv4 boolean
                - send-to-ebgp
                    - ipv4 boolean
                    - ipv6 boolean
                    - label-ipv4 boolean
            - local-address (ipv4-address-no-zone | ipv6-address-no-zone | interface-name)
            - local-as
                - as-number number
                - prepend-global-as boolean
                - private boolean
            - local-preference number
            - loop-detect keyword
            - loop-detect-threshold number
            - med-out (number | keyword)
            - min-route-advertisement number
            - monitor
                - admin-state keyword
                - all-stations boolean
                - apply-groups reference
                - apply-groups-exclude reference
                - route-monitoring
                    - post-policy boolean
                    - pre-policy boolean
                - station reference
            - multihop number
            - multipath-eligible boolean
            - next-hop-self boolean
            - origin-validation
                - ipv4 boolean
                - ipv6 boolean
                - label-ipv4 boolean
            - passive boolean
            - path-mtu-discovery boolean
            - peer-as number
            - peer-creation-type keyword
            - peer-ip-tracking boolean
            - preference number
            - prefix-limit keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - hold-excess number
                - idle-timeout number
                - log-only boolean
                - maximum number
                - post-import boolean
                - threshold number
            - remove-private
                - limited boolean
                - replace boolean
                - skip-peer-as boolean
            - send-communities
                - extended boolean
                - large boolean
                - standard boolean
            - send-default
                - export-policy reference
                - ipv4 boolean
                - ipv6 boolean
            - split-horizon boolean
            - tcp-mss (number | keyword)
```


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```
                - third-party-nexthop boolean
                - ttl-security number
                - type keyword
            - next-hop-resolution
                - policy reference
                - use-bgp-routes boolean
                - use-leaked-routes
                    - static boolean
            - path-mtu-discovery boolean
            - peer-ip-tracking boolean
            - peer-tracking-policy reference
            - preference number
            - rapid-withdrawal boolean
            - remove-private
                - limited boolean
                - replace boolean
                - skip-peer-as boolean
            - rib-management
                - ipv4
                    - leak-import
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - policy (policy-expr-string | string)
                    - route-table-import
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - policy-name reference
                - ipv6
                    - leak-import
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - policy (policy-expr-string | string)
                    - route-table-import
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - policy-name reference
                - label-ipv4
                    - leak-import
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - policy (policy-expr-string | string)
                    - route-table-import
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - policy-name reference
                - label-ipv6
                    - leak-import
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - policy (policy-expr-string | string)
            - router-id string
            - send-communities
                - extended boolean
                - large boolean
                - standard boolean
            - send-default
                - export-policy reference
                - ipv4 boolean
                - ipv6 boolean
            - split-horizon boolean
            - tcp-mss number
            - third-party-nexthop boolean
        - bgp-evpn
            - mpls number
```


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```
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - auto-bind-tunnel
              - allow-flex-algo-fallback boolean
              - ecmp number
              - enforce-strict-tunnel-tagging boolean
              - resolution keyword
              - resolution-filter
                - bgp boolean
                - ldp boolean
                - mpls-fwd-policy boolean
                - rib-api boolean
                - rsvp boolean
                - sr-isis boolean
                - sr-ospf boolean
                - sr-ospf3 boolean
                - sr-policy boolean
                - sr-te boolean
                - udp boolean
            - default-route-tag string
            - domain-id string
            - dynamic-egress-label-limit boolean
            - evi number
            - evpn-link-bandwidth
              - advertise
                - max-dynamic-weight number
                - weight (number | keyword)
              - weighted-ecmp boolean
            - route-distinguisher (string | keyword)
            - send-tunnel-encap
              - mpls boolean
              - mpls-over-udp boolean
            - vrf-export
              - apply-groups reference
              - apply-groups-exclude reference
              - policy (policy-expr-string | string)
            - vrf-import
              - apply-groups reference
              - apply-groups-exclude reference
              - policy (policy-expr-string | string)
            - vrf-target
              - community string
              - export-community string
              - import-community string
        - segment-routing-v6 number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - default-route-tag string
            - domain-id string
            - evi number
            - evpn-link-bandwidth
              - advertise
                - max-dynamic-weight number
                - weight (number | keyword)
              - weighted-ecmp boolean
            - resolution keyword
            - route-distinguisher (string | keyword)
            - source-address string
            - srv6
              - default-locator string
              - instance reference
            - vrf-export
```


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configure service vprn bgp-evpn segment-routing-v6 vrf-export apply-groups

```
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - policy (policy-expr-string | string)
               - vrf-import
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - policy (policy-expr-string | string)
               - vrf-target
                  - community string
                  - export-community string
                  - import-community string
         - bgp-ipvpn
            - mpls
               - admin-state keyword
               - auto-bind-tunnel
                  - allow-flex-algo-fallback boolean
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - ecmp number
                  - enforce-strict-tunnel-tagging boolean
                  - resolution keyword
                  - resolution-filter
                     - bgp boolean
                     - gre boolean
                     - ldp boolean
                     - mpls-fwd-policy boolean
                     - rib-api boolean
                     - rsvp boolean
                     - sr-isis boolean
                     - sr-ospf boolean
                     - sr-ospf3 boolean
                     - sr-policy boolean
                     - sr-te boolean
                     - udp boolean
                  - weighted-ecmp boolean
               - domain-id string
               - dynamic-egress-label-limit boolean
               - route-distinguisher (string | keyword)
               - vrf-export
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - policy (policy-expr-string | string)
               - vrf-import
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - policy (policy-expr-string | string)
               - vrf-target
                  - community string
                  - export-community string
                  - import-community string
            - segment-routing-v6 number
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - default-route-tag string
               - domain-id string
               - resolution keyword
               - route-distinguisher (string | keyword)
               - source-address string
               - srv6
                  - default-locator string
                  - instance reference
               - vrf-export
                  - apply-groups reference
```


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configure service vprn bgp-ipvpn segment-routing-v6 vrf-export apply-groups-exclude

```
                  - apply-groups-exclude reference
                  - policy (policy-expr-string | string)
               - vrf-import
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - policy (policy-expr-string | string)
               - vrf-target
                  - community string
                  - export-community string
                  - import-community string
         - bgp-shared-queue
            - cir (number | keyword)
            - pir (number | keyword)
         - bgp-vpn-backup
            - ipv4 boolean
            - ipv6 boolean
         - carrier-carrier-vpn boolean
         - class-forwarding boolean
         - confederation
            - confed-as-num number
            - members number
         - customer reference
         - d-path-length-ignore boolean
         - description string
         - dhcp-server
            - apply-groups reference
            - apply-groups-exclude reference
            - dhcpv4 string
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - description string
               - failover
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - ignore-mclt-on-takeover boolean
                  - maximum-client-lead-time number
                  - partner-down-delay number
                  - peer reference
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - sync-tag string
                  - startup-wait-time number
               - force-renews boolean
               - lease-hold
                  - additional-scenarios
                     - internal-lease-ipsec boolean
                     - solicited-release boolean
                  - time number
               - pool string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - description string
                  - failover
                     - admin-state keyword
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - ignore-mclt-on-takeover boolean
                     - maximum-client-lead-time number
                     - partner-down-delay number
                     - peer reference
                        - apply-groups reference
                        - apply-groups-exclude reference
```


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configure service vprn dhcp-server dhcpv4 pool failover peer sync-tag

```
                    - sync-tag string
                  - startup-wait-time number
               - max-lease-time number
               - min-lease-time number
               - minimum-free
                  - absolute number
                  - event-when-depleted boolean
                  - percent number
               - nak-non-matching-subnet boolean
               - offer-time number
               - options
                  - option (number | keyword)
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - ascii-string string
                     - duration number
                     - empty
                     - hex-string string
                     - ipv4-address string
                     - netbios-node-type keyword
               - subnet string
                  - address-range string end string
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - failover-control-type keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - drain boolean
                  - exclude-addresses string end string
                  - maximum-declined number
                  - minimum-free
                     - absolute number
                     - event-when-depleted boolean
                     - percent number
                  - options
                     - option (number | keyword)
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - ascii-string string
                        - duration number
                        - empty
                        - hex-string string
                        - ipv4-address string
                        - netbios-node-type keyword
            - pool-selection
               - use-gi-address
                  - scope keyword
               - use-pool-from-client
                  - delimiter string
            - user-db reference
            - user-identification keyword
         - dhcpv6 string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - auto-provisioned boolean
            - defaults
               - apply-groups reference
               - apply-groups-exclude reference
               - options
                  - option (number | keyword)
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - ascii-string string
```


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configure service vprn dhcp-server dhcpv6 defaults options option domain-string

```
                    - domain-string string
                    - duration number
                    - empty
                    - hex-string string
                    - ipv6-address string
                - preferred-lifetime number
                - rebind-time number
                - renew-time number
                - valid-lifetime number
            - description string
            - failover
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - ignore-mclt-on-takeover boolean
                - maximum-client-lead-time number
                - partner-down-delay number
                - peer reference
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - sync-tag string
                - startup-wait-time number
            - ignore-rapid-commit boolean
            - interface-id-mapping boolean
            - lease-hold
                - additional-scenarios
                    - internal-lease-ipsec boolean
                    - solicited-release boolean
                - time number
            - lease-query boolean
            - pool string
                - apply-groups reference
                - apply-groups-exclude reference
                - delegated-prefix
                    - length number
                    - maximum number
                    - minimum number
                - description string
                - exclude-prefix string
                - failover
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - ignore-mclt-on-takeover boolean
                    - maximum-client-lead-time number
                    - partner-down-delay number
                    - peer reference
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - sync-tag string
                    - startup-wait-time number
                - options
                    - option (number | keyword)
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - ascii-string string
                        - domain-string string
                        - duration number
                        - empty
                        - hex-string string
                        - ipv6-address string
                - prefix string
                    - apply-groups reference
                    - apply-groups-exclude reference
```


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configure service vprn dhcp-server dhcpv6 pool prefix drain

```
                    - drain boolean
                    - failover-control-type keyword
                    - options
                      - option (number | keyword)
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - ascii-string string
                        - domain-string string
                        - duration number
                        - empty
                        - hex-string string
                        - ipv6-address string
                    - preferred-lifetime number
                    - prefix-length-threshold number
                      - absolute number
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - event-when-depleted boolean
                      - percent number
                    - prefix-type
                      - pd boolean
                      - wan-host boolean
                    - rebind-time number
                    - renew-time number
                    - valid-lifetime number
                  - prefix-length-threshold number
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - event-when-depleted boolean
                    - minimum-free-percent number
                - pool-selection
                  - use-link-address
                    - scope keyword
                  - use-pool-from-client
                    - delimiter string
                - server-id
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - duid-enterprise
                    - ascii-string string
                    - hex-string string
                  - duid-link-local
                - user-identification keyword
            - dns
              - admin-state keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - default-domain string
              - ipv4-source-address (keyword | ipv4-unicast-address)
              - ipv6-source-address (keyword | ipv6-unicast-address)
              - server (ipv4-address-no-zone | ipv6-address-no-zone)
            - ecmp number
            - ecmp-unequal-cost boolean
            - entropy-label boolean
            - eth-cfm
              - apply-groups reference
              - apply-groups-exclude reference
            - export-inactive-bgp boolean
            - export-inactive-bgp-enhanced boolean
            - fib-priority keyword
            - firewall
              - apply-groups reference
              - apply-groups-exclude reference
              - domain string
```


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```
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - dhcpv6-server
               - name string
               - router-instance string
            - nat-group reference
            - prefix string
               - apply-groups reference
               - apply-groups-exclude reference
               - description string
            - wlan-gw-group reference
      - flowspec
         - apply-groups reference
         - apply-groups-exclude reference
         - filter-cam-type keyword
         - ip-filter-max-size number
         - ipv6-filter-max-size number
      - grt-leaking
         - allow-local-management boolean
         - apply-groups reference
         - apply-groups-exclude reference
         - export-grt
            - policy-name (policy-expr-string | string)
         - export-limit number
         - export-v6-limit number
         - grt-lookup boolean
         - import-grt
            - policy-name (policy-expr-string | string)
      - gsmp
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - group string
            - admin-state keyword
            - ancp
               - dynamic-topology-discovery boolean
               - oam boolean
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - hold-multiplier number
            - idle-filter boolean
            - keepalive number
            - neighbor string
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - description string
               - local-address string
               - priority-marking
                  - dscp keyword
                  - prec number
            - persistency boolean
      - gtp
         - s11
            - interface reference
               - apn-policy reference
               - apply-groups reference
               - apply-groups-exclude reference
            - peer-profile-map
               - prefix (ipv4-prefix | ipv6-prefix)
                  - apply-groups reference
                  - apply-groups-exclude reference
```


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configure service vprn gtp s11 peer-profile-map prefix peer-profile

```
                    - peer-profile reference
            - upf-data-endpoint
               - apply-groups reference
               - apply-groups-exclude reference
               - fpe reference
               - interface reference
            - uplink
               - apn string
               - apply-groups reference
               - apply-groups-exclude reference
               - pdn-type keyword
               - peer-profile-map
                  - prefix (ipv4-prefix | ipv6-prefix)
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - peer-profile reference
         - hash-label boolean
         - igmp
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - forwarding-group-interface forwarding-service string group-interface-
name reference
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - import-policy reference
               - maximum-number-group-sources number
               - maximum-number-groups number
               - maximum-number-sources number
               - mcac
                  - bandwidth
                     - mandatory (number | keyword)
                     - total (number | keyword)
                  - interface-policy reference
                  - policy reference
               - query-interval number
               - query-last-member-interval number
               - query-response-interval number
               - query-source-address string
               - router-alert-check boolean
               - sub-hosts-only boolean
               - subnet-check boolean
               - version keyword
            - group-if-query-source-address string
            - group-interface reference
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - import-policy reference
               - maximum-number-group-sources number
               - maximum-number-groups number
               - maximum-number-sources number
               - mcac
                  - bandwidth
                     - mandatory (number | keyword)
                     - total (number | keyword)
                  - interface-policy reference
                  - policy reference
               - query-interval number
               - query-last-member-interval number
               - query-response-interval number
               - query-source-address string
               - router-alert-check boolean
```


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configure service vprn igmp group-interface sub-hosts-only

```
                - sub-hosts-only boolean
                - subnet-check boolean
                - version keyword
            - interface string
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - import-policy reference
                - maximum-number-group-sources number
                - maximum-number-groups number
                - maximum-number-sources number
                - mcac
                    - bandwidth
                        - mandatory (number | keyword)
                        - total (number | keyword)
                    - interface-policy reference
                    - mc-constraints
                        - level number
                            - apply-groups reference
                            - apply-groups-exclude reference
                            - bandwidth number
                        - number-down number
                            - apply-groups reference
                            - apply-groups-exclude reference
                            - level number
                        - use-lag-port-weight boolean
                    - policy reference
                - query-interval number
                - query-last-member-interval number
                - query-response-interval number
                - redundant-mcast boolean
                - router-alert-check boolean
                - ssm-translate
                    - group-range start string end string
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - source string
                - static
                    - group string
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - source string
                        - starg
                    - group-range start string end string step string
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - source string
                        - starg
                - subnet-check boolean
                - version keyword
            - query-interval number
            - query-last-member-interval number
            - query-response-interval number
            - robust-count number
            - ssm-translate
                - group-range start string end string
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - source string
        - igmp-host-tracking
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - expiry-time number
```


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configure service vprn ignore-nh-metric

```
        - ignore-nh-metric boolean
        - interface string
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - cflowd-parameters
            - sampling keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - direction keyword
              - sample-profile (keyword | number)
              - type keyword
          - cpu-protection reference
          - description string
          - dynamic-tunnel-redundant-nexthop string
          - hold-time
            - ipv4
              - down
                - init-only boolean
                - seconds number
              - up
                - seconds number
            - ipv6
              - down
                - init-only boolean
                - seconds number
              - up
                - seconds number
          - if-attribute
            - admin-group reference
            - srlg-group reference
          - ingress
            - destination-class-lookup boolean
            - policy-accounting reference
          - ingress-stats boolean
          - ip-mtu number
          - ipsec
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - ip-exception reference
            - ipsec-tunnel string
              - admin-state keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - bfd
                - bfd-designate boolean
                - bfd-liveness
                  - dest-ip string
                  - interface string
                  - service-name string
              - clear-df-bit boolean
              - copy-traffic-class-upon-decapsulation boolean
              - description string
              - encapsulated-ip-mtu number
              - icmp-generation
                - frag-required
                  - admin-state keyword
                  - interval number
                  - message-count number
              - icmp6-generation
                - packet-too-big
                  - admin-state keyword
                  - interval number
```


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configure service vprn interface ipsec ipsec-tunnel icmp6-generation packet-too-big message-count

```
                        - message-count number
                    - ip-mtu number
                    - key-exchange
                        - dynamic
                            - auto-establish boolean
                            - cert
                                - cert-profile reference
                                - status-verify
                                    - default-result keyword
                                    - primary keyword
                                    - secondary keyword
                                - trust-anchor-profile reference
                            - id
                                - fqdn string
                                - ipv4 string
                                - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
                            - ike-policy reference
                            - ipsec-transform reference
                            - pre-shared-key string
                        - manual
                            - keys number direction keyword
                                - apply-groups reference
                                - apply-groups-exclude reference
                                - authentication-key string
                                - encryption-key string
                                - ipsec-transform reference
                                - spi number
                    - local-gateway-address-override (ipv4-address-no-zone | ipv6-address-no-
zone)
                    - max-history-key-records
                        - esp number
                        - ike number
                    - pmtu-discovery-aging number
                    - private-sap number
                    - private-service string
                    - private-tcp-mss-adjust number
                    - propagate-pmtu-v4 boolean
                    - propagate-pmtu-v6 boolean
                    - public-tcp-mss-adjust (number | keyword)
                    - remote-gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
                    - replay-window number
                    - security-policy
                        - id number
                        - strict-match boolean
                - ipv6-exception reference
                - public-sap number
                - tunnel-group reference
            - ipv4
                - addresses
                    - address string
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - prefix-length number
                - allow-directed-broadcasts boolean
                - bfd
                    - admin-state keyword
                    - echo-receive number
                    - multiplier number
                    - receive number
                    - transmit-interval number
                    - type keyword
                - dhcp
                    - admin-state keyword
                    - apply-groups reference
```


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configure service vprn interface ipv4 dhcp apply-groups-exclude

```
                    - apply-groups-exclude reference
                    - description string
                    - gi-address string
                    - lease-populate
                      - max-leases number
                    - option-82
                      - action keyword
                      - circuit-id
                        - ascii-tuple
                        - ifindex
                        - none
                        - sap-id
                        - vlan-ascii-tuple
                      - remote-id
                        - ascii-string string
                        - mac
                        - none
                      - vendor-specific-option
                        - client-mac-address boolean
                        - pool-name boolean
                        - sap-id boolean
                        - service-id boolean
                        - string string
                        - system-id boolean
                    - proxy-server
                      - admin-state keyword
                      - emulated-server string
                      - lease-time
                        - radius-override boolean
                        - value number
                    - python-policy reference
                    - relay-plain-bootp boolean
                    - relay-proxy
                      - release-update-src-ip boolean
                      - siaddr-override string
                    - release-include-gi-address boolean
                    - server string
                    - src-ip-addr keyword
                    - trusted boolean
                    - use-arp boolean
                  - icmp
                    - mask-reply boolean
                    - param-problem
                      - admin-state keyword
                      - number number
                      - seconds number
                    - redirects
                      - admin-state keyword
                      - number number
                      - seconds number
                    - ttl-expired
                      - admin-state keyword
                      - number number
                      - seconds number
                    - unreachables
                      - admin-state keyword
                      - number number
                      - seconds number
                  - ip-helper-address string
                  - local-dhcp-server reference
                  - neighbor-discovery
                    - host-route
                      - populate keyword
                        - apply-groups reference
```


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configure service vprn interface ipv4 neighbor-discovery host-route populate apply-groups-exclude

```
                    - apply-groups-exclude reference
                    - route-tag number
                - learn-unsolicited boolean
                - limit
                    - log-only boolean
                    - max-entries number
                    - threshold number
                - local-proxy-arp boolean
                - populate boolean
                - proactive-refresh boolean
                - proxy-arp-policy reference
                - remote-proxy-arp boolean
                - retry-timer number
                - static-neighbor string
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - mac-address string
                - static-neighbor-unnumbered
                    - mac-address string
                - timeout number
            - primary
                - address string
                - apply-groups reference
                - apply-groups-exclude reference
                - broadcast keyword
                - prefix-length number
                - track-srrp number
            - qos-route-lookup keyword
            - secondary string
                - apply-groups reference
                - apply-groups-exclude reference
                - broadcast keyword
                - igp-inhibit boolean
                - prefix-length number
                - track-srrp number
            - tcp-mss number
            - unnumbered
                - ip-address string
                - ip-int-name string
            - urpf-check
                - ignore-default boolean
                - mode keyword
            - vrrp number
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - authentication-key string
                - backup string
                - bfd-liveness
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - dest-ip string
                    - interface-name string
                    - service-name string
                - init-delay number
                - mac string
                - master-int-inherit boolean
                - message-interval number
                - monitor-oper-group reference
                - ntp-reply boolean
                - oper-group reference
                - owner boolean
                - passive boolean
                - ping-reply boolean
```


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```
                  - policy reference
                  - preempt boolean
                  - priority number
                  - ssh-reply boolean
                  - standby-forwarding boolean
                  - telnet-reply boolean
                  - traceroute-reply boolean
            - ipv6
               - address string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - duplicate-address-detection boolean
                  - eui-64 boolean
                  - prefix-length number
                  - primary-preference number
                  - track-srrp number
               - bfd
                  - admin-state keyword
                  - echo-receive number
                  - multiplier number
                  - receive number
                  - transmit-interval number
                  - type keyword
               - dhcp6
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - relay
                     - admin-state keyword
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - description string
                     - lease-populate
                        - max-nbr-of-leases number
                        - route-populate
                           - na boolean
                           - pd
                              - exclude boolean
                           - ta boolean
                     - link-address string
                     - neighbor-resolution boolean
                     - option
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - interface-id
                           - ascii-tuple
                           - if-index
                           - sap-id
                           - string string
                        - remote-id boolean
                     - python-policy reference
                     - server string
                     - source-address string
                     - user-db reference
                  - server
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - max-nbr-of-leases number
                     - prefix-delegation
                        - admin-state keyword
                        - prefix string
                           - apply-groups reference
                           - apply-groups-exclude reference
                           - client-id
                              - duid string
```


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configure service vprn interface ipv6 dhcp6 server prefix-delegation prefix client-id iaid

```
                        - iaid number
                    - preferred-lifetime (number | keyword)
                    - valid-lifetime (number | keyword)
            - duplicate-address-detection boolean
            - forward-ipv4-packets boolean
            - icmp6
                - packet-too-big
                    - admin-state keyword
                    - number number
                    - seconds number
                - param-problem
                    - admin-state keyword
                    - number number
                    - seconds number
                - redirects
                    - admin-state keyword
                    - number number
                    - seconds number
                - time-exceeded
                    - admin-state keyword
                    - number number
                    - seconds number
                - unreachables
                    - admin-state keyword
                    - number number
                    - seconds number
            - link-local-address
                - address string
                - duplicate-address-detection boolean
            - local-dhcp-server reference
            - neighbor-discovery
                - host-route
                    - populate keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - route-tag number
                - learn-unsolicited keyword
                - limit
                    - log-only boolean
                    - max-entries number
                    - threshold number
                - local-proxy-nd boolean
                - proactive-refresh keyword
                - proxy-nd-policy reference
                - reachable-time number
                - secure-nd
                    - admin-state keyword
                    - allow-unsecured-msgs boolean
                    - public-key-min-bits number
                    - security-parameter number
                - stale-time number
                - static-neighbor string
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - mac-address string
            - qos-route-lookup keyword
            - tcp-mss number
            - urpf-check
                - ignore-default boolean
                - mode keyword
            - vrrp number
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
```


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```
                - backup string
                - bfd-liveness
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - dest-ip (ipv4-address-no-zone | ipv6-address-no-zone)
                  - interface-name string
                  - service-name string
                - init-delay number
                - mac string
                - master-int-inherit boolean
                - message-interval number
                - monitor-oper-group reference
                - ntp-reply boolean
                - oper-group reference
                - owner boolean
                - passive boolean
                - ping-reply boolean
                - policy reference
                - preempt boolean
                - priority number
                - standby-forwarding boolean
                - telnet-reply boolean
                - traceroute-reply boolean
            - load-balancing
              - flow-label-load-balancing boolean
              - ip-load-balancing keyword
              - spi-load-balancing boolean
              - teid-load-balancing boolean
            - loopback boolean
            - mac string
            - mac-accounting boolean
            - monitor-oper-group reference
            - multi-chassis-shunting-profile reference
            - ping-template
              - admin-state keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - destination-address string
              - name reference
            - ptp-hw-assist
              - admin-state keyword
              - apply-groups reference
              - apply-groups-exclude reference
            - radius-auth-policy reference
            - sap string
              - aarp
                - id reference
                - type keyword
              - accounting-policy reference
              - admin-state keyword
              - anti-spoof keyword
              - app-profile reference
              - apply-groups reference
              - apply-groups-exclude reference
              - bandwidth number
              - calling-station-id string
              - collect-stats boolean
              - cpu-protection
                - eth-cfm-monitoring
                  - aggregate
                  - car
                - ip-src-monitoring
                - mac-monitoring
                - policy-id reference
```


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```
                - description string
                - dist-cpu-protection reference
                - egress
                  - agg-rate
                    - adaptation-rule keyword
                    - burst-limit (number | keyword)
                    - limit-unused-bandwidth boolean
                    - queue-frame-based-accounting boolean
                    - rate number
                  - filter
                    - ip reference
                    - ipv6 reference
                  - qos
                    - policer-control-policy
                      - overrides
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - root
                          - max-rate (number | keyword)
                          - priority-mbs-thresholds
                            - min-thresh-separation (number | keyword)
                            - priority number
                              - apply-groups reference
                              - apply-groups-exclude reference
                              - mbs-contribution (number | keyword)
                      - policy-name reference
                    - qinq-mark-top-only boolean
                    - sap-egress
                      - overrides
                        - hs-secondary-shaper string
                        - hs-wrr-group reference
                          - apply-groups reference
                          - apply-groups-exclude reference
                          - hs-class-weight number
                          - percent-rate decimal-number
                          - rate (number | keyword)
                        - policer reference
                          - apply-groups reference
                          - apply-groups-exclude reference
                          - cbs (number | keyword)
                          - mbs (number | keyword)
                          - packet-byte-offset number
                          - percent-rate
                            - cir decimal-number
                            - pir decimal-number
                          - rate
                            - cir (number | keyword)
                            - pir (number | keyword)
                          - stat-mode keyword
                        - queue reference
                          - adaptation-rule
                            - cir keyword
                            - pir keyword
                          - apply-groups reference
                          - apply-groups-exclude reference
                          - avg-frame-overhead decimal-number
                          - burst-limit (number | keyword)
                          - cbs (number | keyword)
                          - drop-tail
                            - low
                              - percent-reduction-from-mbs (number | keyword)
                          - hs-class-weight number
                          - hs-wred-queue
                            - policy reference
```


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configure service vprn interface sap egress qos sap-egress overrides queue hs-wrr-weight

```
                        - hs-wrr-weight number
                        - mbs (number | keyword)
                        - monitor-queue-depth
                          - fast-polling boolean
                          - violation-threshold decimal-number
                        - parent
                          - cir-weight number
                          - weight number
                        - percent-rate
                          - cir decimal-number
                          - pir decimal-number
                        - rate
                          - cir (number | keyword)
                          - pir (number | keyword)
                    - policy-name reference
                    - port-redirect-group
                      - group-name reference
                      - instance number
                - scheduler-policy
                    - overrides
                      - scheduler string
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - parent
                          - cir-weight number
                          - weight number
                        - rate
                          - cir (number | keyword)
                          - pir (number | keyword)
                    - policy-name reference
            - queue-group-redirect-list reference
        - eth-cfm
            - apply-groups reference
            - apply-groups-exclude reference
            - collect-lmm-fc-stats
                - fc keyword
                - fc-in-profile keyword
            - collect-lmm-stats boolean
            - mep md-admin-name reference ma-admin-name reference mep-id number
                - admin-state keyword
                - ais boolean
                - alarm-notification
                    - fng-alarm-time number
                    - fng-reset-time number
                - apply-groups reference
                - apply-groups-exclude reference
                - ccm boolean
                - ccm-ltm-priority number
                - ccm-padding-size number
                - csf
                    - multiplier decimal-number
                - description string
                - eth-test
                    - bit-error-threshold number
                    - test-pattern
                      - crc-tlv boolean
                      - pattern keyword
                - fault-propagation keyword
                - grace
                    - eth-ed
                      - max-rx-defect-window number
                      - priority number
                      - rx-eth-ed boolean
                      - tx-eth-ed boolean
```


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configure service vprn interface sap eth-cfm mep grace eth-vsm-grace

```
                    - eth-vsm-grace
                      - rx-eth-vsm-grace boolean
                      - tx-eth-vsm-grace boolean
                  - low-priority-defect keyword
                  - one-way-delay-threshold number
               - squelch-ingress-levels number
            - fwd-wholesale
               - pppoe-service reference
            - host-admin-state keyword
            - host-lockout-policy reference
            - ingress
               - filter
                  - ip reference
                  - ipv6 reference
               - qos
                  - match-qinq-dot1p keyword
                  - policer-control-policy
                    - overrides
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - root
                        - max-rate (number | keyword)
                        - priority-mbs-thresholds
                          - min-thresh-separation (number | keyword)
                          - priority number
                            - apply-groups reference
                            - apply-groups-exclude reference
                            - mbs-contribution (number | keyword)
                    - policy-name reference
                  - sap-ingress
                    - fp-redirect-group
                      - group-name reference
                      - instance number
                    - overrides
                      - ip-criteria
                        - activate-entry-tag number
                      - ipv6-criteria
                        - activate-entry-tag number
                      - policer reference
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - cbs (number | keyword)
                        - mbs (number | keyword)
                        - packet-byte-offset number
                        - percent-rate
                          - cir decimal-number
                          - pir decimal-number
                        - rate
                          - cir (number | keyword)
                          - pir (number | keyword)
                        - stat-mode keyword
                      - queue reference
                        - adaptation-rule
                          - cir keyword
                          - pir keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - cbs (number | keyword)
                        - drop-tail
                          - low
                            - percent-reduction-from-mbs (number | keyword)
                        - mbs (number | keyword)
                        - monitor-queue-depth
                          - fast-polling boolean
```


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configure service vprn interface sap ingress qos sap-ingress overrides queue parent

```
                        - parent
                          - cir-weight number
                          - weight number
                        - percent-rate
                          - cir decimal-number
                          - pir decimal-number
                        - rate
                          - cir (number | keyword)
                          - pir (number | keyword)
                    - policy-name reference
                    - queuing-type keyword
                  - scheduler-policy
                    - overrides
                      - scheduler string
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - parent
                          - cir-weight number
                          - weight number
                        - rate
                          - cir (number | keyword)
                          - pir (number | keyword)
                    - policy-name reference
                - queue-group-redirect-list reference
            - ip-tunnel string
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - backup-remote-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
                - clear-df-bit boolean
                - delivery-service string
                - description string
                - dest-ip (ipv4-address-no-zone | ipv6-address-no-zone)
                - dscp keyword
                - encapsulated-ip-mtu number
                - gre-header
                  - admin-state keyword
                  - key
                    - admin-state keyword
                    - receive number
                    - send number
                - icmp-generation
                  - frag-required
                    - admin-state keyword
                    - interval number
                    - message-count number
                - icmp6-generation
                  - packet-too-big
                    - admin-state keyword
                    - number number
                    - seconds number
                - ip-mtu number
                - ipsec-transport-mode-profile reference
                - local-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
                - pmtu-discovery-aging number
                - private-tcp-mss-adjust number
                - propagate-pmtu-v4 boolean
                - propagate-pmtu-v6 boolean
                - public-tcp-mss-adjust (number | keyword)
                - reassembly (number | keyword)
                - remote-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
            - ipsec-gateway string
                - admin-state keyword
                - apply-groups reference
```


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configure service vprn interface sap ipsec-gateway apply-groups-exclude

```
                    - apply-groups-exclude reference
                    - cert
                      - cert-profile reference
                      - status-verify
                        - default-result keyword
                        - primary keyword
                        - secondary keyword
                      - trust-anchor-profile reference
                    - client-db
                      - fallback boolean
                      - name reference
                    - default-secure-service
                      - interface string
                      - service-name string
                    - default-tunnel-template reference
                    - dhcp-address-assignment
                      - dhcpv4
                        - admin-state keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - gi-address string
                        - send-release boolean
                        - server
                          - address string
                          - router-instance string
                      - dhcpv6
                        - admin-state keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - link-address string
                        - send-release boolean
                        - server
                          - address string
                          - router-instance string
                    - ike-policy reference
                    - local
                      - address-assignment
                        - admin-state keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - ipv4
                          - dhcp-server string
                          - pool string
                          - router-instance string
                          - secondary-pool string
                        - ipv6
                          - dhcp-server string
                          - pool string
                          - router-instance string
                      - gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
                      - id
                        - auto
                        - fqdn string
                        - ipv4 string
                        - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
                    - max-history-key-records
                      - esp number
                      - ike number
                    - pre-shared-key string
                    - radius
                      - accounting-policy reference
                      - authentication-policy reference
                    - ts-list reference
                  - ipsec-tunnel string
```


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configure service vprn interface sap ipsec-tunnel admin-state

```
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - bfd
                      - bfd-designate boolean
                      - bfd-liveness
                        - dest-ip string
                        - interface string
                        - service-name string
                    - clear-df-bit boolean
                    - copy-traffic-class-upon-decapsulation boolean
                    - description string
                    - dest-ip (ipv4-address-no-zone | ipv6-address-no-zone)
                    - encapsulated-ip-mtu number
                    - icmp-generation
                      - frag-required
                        - admin-state keyword
                        - interval number
                        - message-count number
                    - icmp6-generation
                      - packet-too-big
                        - admin-state keyword
                        - interval number
                        - message-count number
                    - ip-mtu number
                    - key-exchange
                      - dynamic
                        - auto-establish boolean
                        - cert
                          - cert-profile reference
                          - status-verify
                            - default-result keyword
                            - primary keyword
                            - secondary keyword
                          - trust-anchor-profile reference
                        - id
                          - fqdn string
                          - ipv4 string
                          - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
                        - ike-policy reference
                        - ipsec-transform reference
                        - pre-shared-key string
                      - manual
                        - keys number direction keyword
                          - apply-groups reference
                          - apply-groups-exclude reference
                          - authentication-key string
                          - encryption-key string
                          - ipsec-transform reference
                          - spi number
                    - max-history-key-records
                      - esp number
                      - ike number
                    - pmtu-discovery-aging number
                    - private-tcp-mss-adjust number
                    - propagate-pmtu-v4 boolean
                    - propagate-pmtu-v6 boolean
                    - public-tcp-mss-adjust (number | keyword)
                    - replay-window number
                    - security-policy
                      - id reference
                      - strict-match boolean
                    - tunnel-endpoint
                      - delivery-service string
```


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configure service vprn interface sap ipsec-tunnel tunnel-endpoint local-gateway-address

```
                    - local-gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
                    - remote-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
                - lag
                    - link-map-profile number
                    - per-link-hash
                        - class number
                        - weight number
                - multi-service-site reference
                - static-host
                    - ipv4 string mac string
                        - admin-state keyword
                        - ancp-string string
                        - app-profile
                            - profile reference
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - int-dest-id string
                        - sla-profile reference
                        - sub-profile reference
                        - subscriber-id
                            - string string
                            - use-sap-id
                - transit-policy
                    - ip reference
                    - prefix reference
            - shcv-policy-ipv4 reference
            - spoke-sdp string
                - aarp
                    - id reference
                    - type keyword
                - accounting-policy reference
                - admin-state keyword
                - app-profile reference
                - apply-groups reference
                - apply-groups-exclude reference
                - bfd
                    - bfd-liveness
                        - encap keyword
                    - bfd-template reference
                    - failure-action keyword
                    - wait-for-up-timer number
                - collect-stats boolean
                - control-word boolean
                - cpu-protection
                    - eth-cfm-monitoring
                        - aggregate
                        - car
                    - ip-src-monitoring
                    - mac-monitoring
                    - policy-id reference
                - description string
                - egress
                    - filter
                        - ip reference
                        - ipv6 reference
                    - qos
                        - network
                            - policy-name reference
                            - port-redirect-group
                                - group-name reference
                                - instance number
                    - vc-label number
                - entropy-label
                - eth-cfm
```


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configure service vprn interface spoke-sdp eth-cfm apply-groups

```
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - collect-lmm-fc-stats
                     - fc keyword
                     - fc-in-profile keyword
                  - collect-lmm-stats boolean
                  - mep md-admin-name reference ma-admin-name reference mep-id number
                     - admin-state keyword
                     - ais boolean
                     - alarm-notification
                        - fng-alarm-time number
                        - fng-reset-time number
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - ccm boolean
                     - ccm-ltm-priority number
                     - ccm-padding-size number
                     - csf
                        - multiplier decimal-number
                     - description string
                     - eth-test
                        - bit-error-threshold number
                        - test-pattern
                           - crc-tlv boolean
                           - pattern keyword
                     - fault-propagation keyword
                     - grace
                        - eth-ed
                           - max-rx-defect-window number
                           - priority number
                           - rx-eth-ed boolean
                           - tx-eth-ed boolean
                        - eth-vsm-grace
                           - rx-eth-vsm-grace boolean
                           - tx-eth-vsm-grace boolean
                     - low-priority-defect keyword
                     - one-way-delay-threshold number
                  - squelch-ingress-levels number
               - hash-label
                  - signal-capability
               - ingress
                  - filter
                     - ip reference
                     - ipv6 reference
                  - qos
                     - network
                        - fp-redirect-group
                           - group-name reference
                           - instance number
                        - policy-name reference
                  - vc-label number
               - transit-policy
                  - ip reference
                  - prefix reference
               - vc-type keyword
            - static-tunnel-redundant-nexthop string
            - tos-marking-state keyword
            - tunnel boolean
            - vas-if-type keyword
            - vpls string
               - apply-groups reference
               - apply-groups-exclude reference
               - egress
                  - reclassify-using-qos reference
```


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configure service vprn interface vpls egress routed-override-filter

```
                  - routed-override-filter
                     - ip reference
                     - ipv6 reference
               - evpn
                  - arp
                     - advertise keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - route-tag number
                     - flood-garp-and-unknown-req boolean
                     - learn-dynamic boolean
                  - nd
                     - advertise keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - route-tag number
                     - learn-dynamic boolean
               - evpn-tunnel
                  - allow-bfd boolean
                  - ipv6-gateway-address keyword
                  - supplementary-broadcast-domain boolean
               - ingress
                  - routed-override-filter
                     - ip reference
                     - ipv6 reference
         - ip-mirror-interface string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - spoke-sdp string
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - description string
               - ingress
                  - filter
                     - ip reference
                  - vc-label number
         - ipsec
            - allow-reverse-route-override-type keyword
            - multi-chassis-shunt-interface reference
               - apply-groups reference
               - apply-groups-exclude reference
               - next-hop
                  - address (ipv4-address-no-zone | ipv6-address-no-zone)
            - multi-chassis-shunting-profile string
               - apply-groups reference
               - apply-groups-exclude reference
               - peer reference
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - multi-chassis-shunt-interface reference
            - security-policy number
               - apply-groups reference
               - apply-groups-exclude reference
               - entry number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - local-ip
                     - address string
                     - any boolean
                  - local-ipv6
                     - address string
```


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configure service vprn ipsec security-policy entry local-ipv6 any

```
                    - any boolean
                  - remote-ip
                    - address string
                    - any boolean
                  - remote-ipv6
                    - address string
                    - any boolean
        - ipv6
          - neighbor-discovery
            - reachable-time number
            - stale-time number
          - router-advertisement
            - apply-groups reference
            - apply-groups-exclude reference
            - dns-options
              - apply-groups reference
              - apply-groups-exclude reference
              - rdnss-lifetime (keyword | number)
              - server string
            - interface reference
              - admin-state keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - current-hop-limit number
              - dns-options
                - apply-groups reference
                - apply-groups-exclude reference
                - include-rdnss boolean
                - rdnss-lifetime (number | keyword)
                - server string
              - managed-configuration boolean
              - max-advertisement-interval number
              - min-advertisement-interval number
              - mtu number
              - other-stateful-configuration boolean
              - prefix string
                - apply-groups reference
                - apply-groups-exclude reference
                - autonomous boolean
                - on-link boolean
                - preferred-lifetime (keyword | number)
                - valid-lifetime (keyword | number)
              - reachable-time number
              - retransmit-time number
              - router-lifetime number
              - use-virtual-mac boolean
        - isis number
          - admin-state keyword
          - advertise-passive-only boolean
          - advertise-router-capability keyword
          - all-l1isis string
          - all-l2isis string
          - apply-groups reference
          - apply-groups-exclude reference
          - area-address string
          - authentication-check boolean
          - authentication-key string
          - authentication-keychain reference
          - authentication-type keyword
          - csnp-authentication boolean
          - default-route-tag number
          - export-limit
            - log-percent number
            - number number
```


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```
            - export-policy reference
            - graceful-restart
               - helper-mode boolean
            - hello-authentication boolean
            - hello-padding keyword
            - ignore-attached-bit boolean
            - ignore-lsp-errors boolean
            - ignore-narrow-metric boolean
            - iid-tlv boolean
            - import-policy reference
            - interface string
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - bfd-liveness
                  - ipv4
                     - include-bfd-tlv boolean
                  - ipv6
                     - include-bfd-tlv boolean
               - csnp-interval number
               - default-instance boolean
               - hello-authentication boolean
               - hello-authentication-key string
               - hello-authentication-keychain reference
               - hello-authentication-type keyword
               - hello-padding keyword
               - interface-type keyword
               - ipv4-multicast boolean
               - ipv6-unicast boolean
               - level keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - hello-authentication-key string
                  - hello-authentication-keychain reference
                  - hello-authentication-type keyword
                  - hello-interval number
                  - hello-multiplier number
                  - hello-padding keyword
                  - ipv4-multicast-metric number
                  - ipv6-unicast-metric number
                  - metric number
                  - passive boolean
                  - priority number
                  - sd-offset number
                  - sf-offset number
               - level-capability keyword
               - load-balancing-weight number
               - loopfree-alternate
                  - exclude boolean
                  - policy-map
                     - route-nh-template reference
               - lsp-pacing-interval number
               - mesh-group
                  - blocked
                  - value number
               - passive boolean
               - retransmit-interval number
               - tag number
            - ipv4-multicast-routing keyword
            - ipv4-routing boolean
            - ipv6-routing keyword
            - level keyword
               - advertise-router-capability boolean
               - apply-groups reference
```


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configure service vprn isis level apply-groups-exclude

```
            - apply-groups-exclude reference
            - authentication-key string
            - authentication-keychain reference
            - authentication-type keyword
            - csnp-authentication boolean
            - default-ipv4-multicast-metric number
            - default-ipv6-unicast-metric number
            - default-metric number
            - external-preference number
            - hello-authentication boolean
            - hello-padding keyword
            - loopfree-alternate-exclude boolean
            - lsp-mtu-size number
            - preference number
            - psnp-authentication boolean
            - wide-metrics-only boolean
         - level-capability keyword
         - link-group string
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - level keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - ipv4-multicast-metric-offset number
               - ipv4-unicast-metric-offset number
               - ipv6-unicast-metric-offset number
               - member reference
               - oper-members number
               - revert-members number
         - loopfree-alternate
            - exclude
               - prefix-policy reference
         - lsp-lifetime number
         - lsp-minimum-remaining-lifetime number
         - lsp-mtu-size number
         - lsp-refresh
            - half-lifetime boolean
            - interval number
         - mru-mismatch-detection boolean
         - multi-topology
            - ipv4-multicast boolean
            - ipv6-unicast boolean
         - multicast-import
            - ipv4 boolean
         - overload
            - max-metric boolean
         - overload-export-external boolean
         - overload-export-interlevel boolean
         - overload-fib-error-notify-only
            - retry number
         - overload-on-boot
            - max-metric boolean
            - timeout number
         - poi-tlv boolean
         - prefix-attributes-tlv boolean
         - prefix-limit
            - limit number
            - log-only boolean
            - overload-timeout (number | keyword)
            - warning-threshold number
         - psnp-authentication boolean
         - reference-bandwidth number
         - rib-priority
```


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configure service vprn isis rib-priority high

```
                - high
                  - prefix-list reference
                  - tag number
            - router-id string
            - standard-multi-instance boolean
            - strict-adjacency-check boolean
            - summary-address (ipv4-prefix | ipv6-prefix)
                - apply-groups reference
                - apply-groups-exclude reference
                - level-capability keyword
                - route-tag number
            - suppress-attached-bit boolean
            - system-id string
            - timers
                - lsp-wait
                  - lsp-initial-wait number
                  - lsp-max-wait number
                  - lsp-second-wait number
                - spf-wait
                  - spf-initial-wait number
                  - spf-max-wait number
                  - spf-second-wait number
            - unicast-import
                - ipv4 boolean
                - ipv6 boolean
        - l2tp
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - avp-hiding keyword
            - challenge boolean
            - destruct-timeout number
            - ethernet-tunnel
                - reconnect-timeout (number | keyword)
            - exclude-avps
                - calling-number boolean
                - initial-rx-lcp-conf-req boolean
            - failover
                - recovery-max-session-lifetime number
                - recovery-method keyword
                - recovery-time number
                - track-srrp reference
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - peer reference
                  - sync-tag string
            - group string
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - avp-hiding keyword
                - challenge keyword
                - description string
                - destruct-timeout number
                - ethernet-tunnel
                  - reconnect-timeout (number | keyword)
                - failover
                  - recovery-method keyword
                  - recovery-time number
                - hello-interval (number | keyword)
                - idle-timeout (number | keyword)
                - l2tpv3
                  - cookie-length (number | keyword)
                  - digest-type keyword
```


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```
                  - nonce-length number
                  - password string
                  - private-tcp-mss-adjust (number | keyword)
                  - public-tcp-mss-adjust (number | keyword)
                  - pw-cap-list
                     - ethernet boolean
                     - ethernet-vlan boolean
                  - rem-router-id string
                  - track-password-change boolean
               - lac
                  - df-bit keyword
               - lns
                  - lns-group reference
                  - load-balance-method keyword
                  - mlppp
                     - admin-state keyword
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - endpoint
                        - ip (ipv4-address | keyword)
                        - mac (mac-address | keyword)
                     - interleave boolean
                     - max-fragment-delay (number | keyword)
                     - max-links number
                     - reassembly-timeout number
                     - short-sequence-numbers boolean
                  - ppp
                     - authentication keyword
                     - authentication-policy string
                     - chap-challenge-length
                        - end number
                        - start number
                     - default-group-interface
                        - interface string
                        - service-name string
                     - ipcp-subnet-negotiation boolean
                     - keepalive
                        - interval number
                        - multiplier number
                     - lcp-force-ack-accm boolean
                     - lcp-ignore-magic-numbers boolean
                     - mtu number
                     - proxy-authentication boolean
                     - proxy-lcp boolean
                     - reject-disabled-ncp boolean
                     - user-db string
               - local-address string
               - local-name string
               - max-retries-estab number
               - max-retries-not-estab number
               - password string
               - protocol keyword
               - radius-accounting-policy reference
               - receive-window-size number
               - session-assign-method keyword
               - session-limit (number | keyword)
               - tunnel string
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - auto-establish boolean
                  - avp-hiding keyword
                  - challenge keyword
                  - description string
```


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```
                - destruct-timeout number
                - failover
                  - recovery-method keyword
                  - recovery-time number
                - hello-interval (number | keyword)
                - idle-timeout (number | keyword)
                - l2tpv3
                  - private-tcp-mss-adjust (number | keyword)
                  - public-tcp-mss-adjust (number | keyword)
                - lac
                  - df-bit keyword
                - lns
                  - lns-group reference
                  - load-balance-method keyword
                  - mlppp
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - endpoint
                      - ip (ipv4-address | keyword)
                      - mac (mac-address | keyword)
                    - interleave keyword
                    - max-fragment-delay number
                    - max-links number
                    - reassembly-timeout number
                    - short-sequence-numbers keyword
                  - ppp
                    - authentication keyword
                    - authentication-policy string
                    - chap-challenge-length
                      - end number
                      - start number
                    - default-group-interface
                      - interface string
                      - service-name string
                    - ipcp-subnet-negotiation keyword
                    - keepalive
                      - interval number
                      - multiplier number
                    - lcp-force-ack-accm keyword
                    - lcp-ignore-magic-numbers keyword
                    - mtu number
                    - proxy-authentication keyword
                    - proxy-lcp keyword
                    - reject-disabled-ncp keyword
                    - user-db string
                - local-address string
                - local-name string
                - max-retries-estab number
                - max-retries-not-estab number
                - password string
                - peer string
                - preference number
                - radius-accounting-policy reference
                - receive-window-size number
                - remote-name string
                - session-limit (number | keyword)
            - group-session-limit number
            - hello-interval (number | keyword)
            - idle-timeout (number | keyword)
            - ignore-avps
              - sequencing-required boolean
            - l2tpv3
              - cookie-length number
```


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configure service vprn l2tp l2tpv3 digest-type

```
                - digest-type keyword
                - nonce-length number
                - password string
                - private-tcp-mss-adjust number
                - public-tcp-mss-adjust number
                - transport-type
                  - ip boolean
            - lac
                - calling-number-format string
                - cisco-nas-port
                  - ethernet string
                - df-bit boolean
            - local-address string
            - local-name string
            - max-retries-estab number
            - max-retries-not-estab number
            - next-attempt keyword
            - password string
            - peer-address-change-policy keyword
            - radius-accounting-policy reference
            - receive-window-size number
            - replace-result-code
                - cdn-invalid-dst boolean
                - cdn-permanent-no-facilities boolean
                - cdn-temporary-no-facilities boolean
            - rtm-debounce-time (number | keyword)
            - session-assign-method keyword
            - session-limit number
            - tunnel-selection-blacklist
                - add-tunnel-on
                  - address-change-timeout boolean
                  - cdn-err-code boolean
                  - cdn-invalid-dst boolean
                  - cdn-permanent-no-facilities boolean
                  - cdn-temporary-no-facilities boolean
                  - stop-ccn-err-code boolean
                  - stop-ccn-other boolean
                  - tx-cdn-not-established-in-time boolean
                - max-list-length (number | keyword)
                - max-time number
                - timeout-action keyword
            - tunnel-session-limit number
        - label-mode keyword
        - local-routes-domain-id string
        - log
            - apply-groups reference
            - apply-groups-exclude reference
            - filter string
                - apply-groups reference
                - apply-groups-exclude reference
                - default-action keyword
                - description string
                - named-entry string
                  - action keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - description string
                  - match
                    - application
                      - eq keyword
                      - neq keyword
                    - event
                      - eq number
                      - gt number
```


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```
                    - gte number
                    - lt number
                    - lte number
                    - neq number
                 - message
                    - eq string
                    - neq string
                    - regexp boolean
                 - severity
                    - eq keyword
                    - gt keyword
                    - gte keyword
                    - lt keyword
                    - lte keyword
                    - neq keyword
                 - subject
                    - eq string
                    - neq string
                    - regexp boolean
           - log-id string
              - admin-state keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - description string
              - destination
                 - netconf
                    - max-entries number
                 - snmp
                    - max-entries number
                 - syslog reference
              - filter reference
              - netconf-stream string
              - python-policy reference
              - source
                 - change boolean
                 - debug boolean
                 - main boolean
                 - security boolean
              - time-format keyword
           - snmp-trap-group string
              - apply-groups reference
              - apply-groups-exclude reference
              - description string
              - trap-target string
                 - address (ipv4-address-no-zone | ipv6-address-no-zone)
                 - apply-groups reference
                 - apply-groups-exclude reference
                 - description string
                 - notify-community string
                 - port number
                 - replay boolean
                 - security-level keyword
                 - version keyword
           - syslog string
              - address (ipv4-address-no-zone | ipv6-address-no-zone)
              - apply-groups reference
              - apply-groups-exclude reference
              - description string
              - facility keyword
              - hostname
                 - use-system-name
                 - use-vprn-name
                 - value string
              - log-prefix (keyword | string)
```


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configure service vprn log syslog port

```
                - port number
                - severity keyword
                - tls-client-profile reference
            - management
                - allow-ftp boolean
                - allow-grpc boolean
                - allow-netconf boolean
                - allow-ssh boolean
                - allow-telnet boolean
                - allow-telnet6 boolean
                - apply-groups reference
                - apply-groups-exclude reference
            - maximum-ipv4-routes
                - log-only boolean
                - threshold number
                - value number
            - maximum-ipv6-routes
                - log-only boolean
                - threshold number
                - value number
            - mc-maximum-routes
                - log-only boolean
                - threshold number
                - value number
            - mld
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - forwarding-group-interface forwarding-service string group-interface-
name reference
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - import-policy reference
                - maximum-number-group-sources number
                - maximum-number-groups number
                - maximum-number-sources number
                - mcac
                    - bandwidth
                        - mandatory (number | keyword)
                        - total (number | keyword)
                    - interface-policy reference
                    - policy reference
                - query-interval number
                - query-last-member-interval number
                - query-response-interval number
                - query-source-address string
                - router-alert-check boolean
                - sub-hosts-only boolean
                - subnet-check boolean
                - version keyword
                - group-if-query-source-address string
                - group-interface reference
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - import-policy reference
                    - maximum-number-group-sources number
                    - maximum-number-groups number
                    - maximum-number-sources number
                    - mcac
                        - bandwidth
                            - mandatory (number | keyword)
                            - total (number | keyword)
```


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configure service vprn mld group-interface mcac interface-policy

```
                  - interface-policy reference
                  - policy reference
               - query-interval number
               - query-last-member-interval number
               - query-response-interval number
               - query-source-address string
               - router-alert-check boolean
               - sub-hosts-only boolean
               - subnet-check boolean
               - version keyword
            - interface string
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - import-policy reference
               - maximum-number-group-sources number
               - maximum-number-groups number
               - maximum-number-sources number
               - mcac
                  - bandwidth
                     - mandatory (number | keyword)
                     - total (number | keyword)
                  - interface-policy reference
                  - mc-constraints
                     - level number
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - bandwidth number
                     - number-down number
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - level number
                     - use-lag-port-weight boolean
                  - policy reference
               - query-interval number
               - query-last-member-interval number
               - query-response-interval number
               - router-alert-check boolean
               - ssm-translate
                  - group-range start string end string
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - source string
               - static
                  - group string
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - source string
                     - starg
                  - group-range start string end string step string
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - source string
                     - starg
               - version keyword
            - query-interval number
            - query-last-member-interval number
            - query-response-interval number
            - robust-count number
            - ssm-translate
               - group-range start string end string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - source string
```


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```
        - msdp
          - active-source-limit number
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - data-encapsulation boolean
          - export-policy reference
          - group string
            - active-source-limit number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - export-policy reference
            - import-policy reference
            - local-address string
            - mode keyword
            - peer string
              - active-source-limit number
              - admin-state keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - authentication-key string
              - default-peer boolean
              - export-policy reference
              - import-policy reference
              - local-address string
              - receive-message-rate
                - rate number
                - threshold number
                - time number
            - receive-message-rate
              - rate number
              - threshold number
              - time number
          - import-policy reference
          - local-address string
          - peer string
            - active-source-limit number
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - authentication-key string
            - default-peer boolean
            - export-policy reference
            - import-policy reference
            - local-address string
            - receive-message-rate
              - rate number
              - threshold number
              - time number
          - receive-message-rate
            - rate number
            - threshold number
            - time number
          - rpf-table keyword
          - source string
            - active-source-limit number
            - apply-groups reference
            - apply-groups-exclude reference
          - source-active-cache-lifetime number
        - mss-adjust
          - apply-groups reference
          - apply-groups-exclude reference
          - nat-group number
```


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```
            –  segment-size number
         –  mtrace2
            –  admin-state keyword
            –  udp-port number
         –  multicast-info-policy reference
         –  mvpn
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  auto-discovery
               –  source-address string
               –  type keyword
            –  c-mcast-signaling keyword
            –  intersite-shared
               –  admin-state keyword
               –  kat-type5-advertisement-withdraw boolean
               –  persistent-type5-advertisement boolean
            –  mdt-type keyword
            –  provider-tunnel
               –  inclusive
                  –  bier
                     –  admin-state keyword
                     –  sub-domain number
                  –  bsr keyword
                  –  mldp
                     –  admin-state keyword
                  –  p2mp-sr
                     –  admin-state keyword
                     –  bfd-leaf boolean
                     –  bfd-root
                        –  multiplier number
                        –  transmit-interval number
                     –  p2mp-policy boolean
                     –  static-policy reference
                  –  pim
                     –  admin-state keyword
                     –  group-address string
                     –  hello-interval number
                     –  hello-multiplier number
                     –  improved-assert boolean
                     –  mode keyword
                     –  three-way-hello boolean
                     –  tracking-support boolean
                  –  rsvp
                     –  admin-state keyword
                     –  bfd-leaf boolean
                     –  bfd-root
                        –  multiplier number
                        –  transmit-interval number
                     –  lsp-template reference
                  –  umh-rate-monitoring
                     –  revertive-timer number
                     –  traffic-rate-delta number
                  –  wildcard-spmsi boolean
               –  selective
                  –  asm-mdt boolean
                  –  auto-discovery boolean
                  –  bier
                     –  admin-state keyword
                     –  sub-domain number
                  –  data-delay-interval number
                  –  data-threshold
                     –  group-prefix (ipv4-prefix | ipv6-prefix)
                        –  apply-groups reference
                        –  apply-groups-exclude reference
```


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configure service vprn mvpn provider-tunnel selective data-threshold group-prefix pe-threshold-add

```
                        – pe-threshold-add number
                        – pe-threshold-delete number
                        – threshold number
                  – join-tlv-packing boolean
                  – mldp
                     – admin-state keyword
                     – maximum-p2mp-spmsi number
                  – multistream-spmsi number
                     – admin-state keyword
                     – apply-groups reference
                     – apply-groups-exclude reference
                     – group-prefix (ipv4-prefix | ipv6-prefix) source-prefix (ipv4-prefix |
ipv6-prefix)
                     – lsp-template reference
                     – p2mp-sr
                        – p2mp-policy boolean
                        – static-policy reference
                     – pim
                        – group-address string
                        – mode keyword
                  – p2mp-sr
                     – admin-state keyword
                     – p2mp-policy boolean
                     – static-policy reference
                  – pim
                     – group-prefix string
                     – mode keyword
                  – rsvp
                     – admin-state keyword
                     – lsp-template reference
                     – maximum-p2mp-spmsi number
                  – umh-rate-monitoring
                     – group (ipv4-prefix | ipv6-prefix) source (ipv4-prefix | ipv6-prefix)
                        – apply-groups reference
                        – apply-groups-exclude reference
                        – revertive-timer number
                        – traffic-rate-delta number
            – redundant-source-list
               – source-prefix (ipv4-prefix | ipv6-prefix)
            – rpf-select
               – core-mvpn reference
                  – apply-groups reference
                  – apply-groups-exclude reference
                  – group-prefix string
                     – apply-groups reference
                     – apply-groups-exclude reference
                     – starg boolean
            – umh-pe-backup
               – umh-pe string
                  – apply-groups reference
                  – apply-groups-exclude reference
                  – standby string
            – umh-selection keyword
            – vrf-export
               – policy (policy-expr-string | string)
               – unicast boolean
            – vrf-import
               – policy (policy-expr-string | string)
               – unicast boolean
            – vrf-target
               – community string
               – export
                  – community string
                  – unicast boolean
```


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```
            - import
              - community string
              - unicast boolean
            - unicast boolean
      - nat
        - apply-groups reference
        - apply-groups-exclude reference
        - inside
          - l2-aware
            - force-unique-ip-addresses boolean
            - subscribers string
          - large-scale
            - dnat-only
              - source-prefix-list reference
            - dual-stack-lite
              - admin-state keyword
              - deterministic
                - prefix-map string nat-policy reference
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - map string to string
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - first-outside-address string
              - endpoint string
                - apply-groups reference
                - apply-groups-exclude reference
                - ip-fragmentation keyword
                - min-first-fragment-size-rx number
                - reassembly boolean
                - tunnel-mtu number
              - max-subscriber-limit number
              - subscriber-prefix-length number
            - filters
              - downstream
                - ipv4 reference
            - nat-policy reference
            - nat44
              - destination-prefix string
                - apply-groups reference
                - apply-groups-exclude reference
                - nat-policy reference
              - deterministic
                - prefix-map string nat-policy reference
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - map string to string
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - first-outside-address string
              - max-subscriber-limit number
              - nat-import reference
              - source-prefix string
                - apply-groups reference
                - apply-groups-exclude reference
                - nat-policy reference
            - nat64
              - admin-state keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - drop-zero-ipv4-checksum boolean
              - insert-ipv6-fragment-header boolean
```


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configure service vprn nat inside large-scale nat64 ip-fragmentation

```
                    - ip-fragmentation keyword
                    - ipv6-mtu number
                    - prefix string
                    - subscriber-prefix-length number
                    - tos
                      - downstream
                        - use-ipv4 boolean
                      - upstream
                        - set-tos (keyword | number)
                - redundancy
                    - peer string
                    - peer6 string
                    - steering-route string
                - subscriber-identification
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - attribute
                      - type keyword
                      - vendor keyword
                    - description string
                    - drop-unidentified-traffic boolean
                    - radius-proxy-server
                      - router-instance string
                      - server string
                - traffic-identification
                    - source-prefix-only boolean
            - map
                - map-domain reference
            - outside
                - dnat-only
                    - route-limit number
                - filters
                    - downstream
                        - ipv4 reference
                        - ipv6 reference
                    - upstream
                        - ipv4 reference
                        - ipv6 reference
                - mtu number
                - pool string
                    - address-pooling keyword
                    - address-range string end string
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - description string
                        - drain boolean
                    - admin-state keyword
                    - applications
                        - agnostic boolean
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - description string
                    - icmp-echo-reply boolean
                    - l2-aware
                        - default-host
                          - inside-router-instance string
                          - ip-address string
                          - rate-limit number
                        - external-assignment boolean
                        - port-block-extension
                          - ports number
                          - subscriber
                            - watermarks
```


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configure service vprn nat outside pool l2-aware port-block-extension subscriber watermarks high

```
                        - high number
                        - low number
                    - subscriber-limit number
                    - watermarks
                        - high number
                        - low number
                - large-scale
                    - default-host
                        - inside-router-instance string
                        - ip-address string
                        - rate-limit number
                    - deterministic
                        - port-reservation number
                        - watermarks
                            - high number
                            - low number
                    - redundancy
                        - admin-state keyword
                        - export-route string
                        - follow
                            - name string
                            - router-instance string
                        - monitor-route string
                    - subscriber-limit number
                - mode keyword
                - nat-group reference
                - port-forwarding
                    - dynamic-block-reservation boolean
                    - range-end number
                    - range-start number
                - port-reservation
                    - port-blocks number
                    - ports number
                - type keyword
                - watermarks
                    - high number
                    - low number
                - wlan-gw-group reference
        - network
            - apply-groups reference
            - apply-groups-exclude reference
            - ingress
                - filter
                    - ip reference
                    - ipv6 reference
                - qos
                    - fp-redirect-group reference
                    - instance number
                    - network-policy reference
                - urpf-check boolean
        - network-interface string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - cflowd-parameters
                - sampling keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - direction keyword
                    - sample-profile (keyword | number)
                    - type keyword
            - cpu-protection reference
            - description string
            - dist-cpu-protection reference
```


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```
            - egress
              - filter
                - ip reference
            - hold-time
              - ipv4
                - down
                  - init-only boolean
                  - seconds number
                - up
                  - seconds number
            - ingress
              - filter
                - ip reference
            - ingress-stats boolean
            - ip-mtu number
            - ipv4
              - allow-directed-broadcasts boolean
              - bfd
                - admin-state keyword
                - echo-receive number
                - multiplier number
                - receive number
                - transmit-interval number
                - type keyword
              - icmp
                - mask-reply boolean
                - param-problem
                  - admin-state keyword
                  - number number
                  - seconds number
                - redirects
                  - admin-state keyword
                  - number number
                  - seconds number
                - ttl-expired
                  - admin-state keyword
                  - number number
                  - seconds number
                - unreachables
                  - admin-state keyword
                  - number number
                  - seconds number
              - neighbor-discovery
                - retry-timer number
                - static-neighbor string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - mac-address string
                - timeout number
              - primary
                - address string
                - apply-groups reference
                - apply-groups-exclude reference
                - broadcast keyword
                - prefix-length number
              - secondary string
                - apply-groups reference
                - apply-groups-exclude reference
                - broadcast keyword
                - igp-inhibit boolean
                - prefix-length number
              - tcp-mss number
              - urpf-check
                - ignore-default boolean
```


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configure service vprn network-interface ipv4 urpf-check mode

```
                - mode keyword
            - lag
                - link-map-profile number
                - per-link-hash
                    - class number
                    - weight number
            - load-balancing
                - flow-label-load-balancing boolean
                - ip-load-balancing keyword
                - lsr-load-balancing keyword
                - spi-load-balancing boolean
                - teid-load-balancing boolean
            - loopback
            - mac string
            - port string
            - qos
                - apply-groups reference
                - apply-groups-exclude reference
                - egress-instance number
                - egress-port-redirect-group reference
                - ingress-fp-redirect-group reference
                - ingress-instance number
                - network-policy reference
            - tos-marking-state keyword
        - ntp
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - authenticate boolean
            - authentication-check boolean
            - authentication-key number
                - apply-groups reference
                - apply-groups-exclude reference
                - key string
                - type keyword
            - broadcast reference
                - apply-groups reference
                - apply-groups-exclude reference
                - key-id reference
                - ttl number
                - version number
        - ospf number
            - admin-state keyword
            - advertise-router-capability keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - area string
                - advertise-ne-profile reference
                - advertise-router-capability boolean
                - apply-groups reference
                - apply-groups-exclude reference
                - area-range string
                    - advertise boolean
                    - apply-groups reference
                    - apply-groups-exclude reference
                - blackhole-aggregate boolean
                - export-policy reference
                - import-policy reference
                - interface string
                    - admin-state keyword
                    - advertise-router-capability boolean
                    - advertise-subnet boolean
                    - apply-groups reference
                    - apply-groups-exclude reference
```


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```
                    - authentication-key string
                    - authentication-keychain reference
                    - authentication-type keyword
                    - bfd-liveness
                      - remain-down-on-failure boolean
                      - strict boolean
                      - strict-mode-holddown number
                    - dead-interval number
                    - hello-interval number
                    - interface-type keyword
                    - load-balancing-weight number
                    - loopfree-alternate
                      - exclude boolean
                      - policy-map
                        - route-nh-template reference
                    - lsa-filter-out keyword
                    - message-digest-key number
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - md5 string
                    - metric number
                    - mtu number
                    - neighbor string
                    - passive boolean
                    - poll-interval number
                    - priority number
                    - retransmit-interval number
                    - rib-priority keyword
                    - transit-delay number
                - loopfree-alternate-exclude boolean
                - nssa
                    - area-range string
                      - advertise boolean
                      - apply-groups reference
                      - apply-groups-exclude reference
                    - originate-default-route
                      - adjacency-check boolean
                      - type-nssa boolean
                    - redistribute-external boolean
                    - summaries boolean
                - sham-link string ip-address string
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - authentication-key string
                    - authentication-keychain reference
                    - authentication-type keyword
                    - dead-interval number
                    - hello-interval number
                    - message-digest-key number
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - md5 string
                    - metric number
                    - retransmit-interval number
                    - transit-delay number
                - stub
                    - default-metric number
                    - summaries boolean
                - virtual-link string transit-area reference
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - authentication-key string
```


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configure service vprn ospf area virtual-link authentication-keychain

```
                - authentication-keychain reference
                - authentication-type keyword
                - dead-interval number
                - hello-interval number
                - message-digest-key number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - md5 string
                - retransmit-interval number
                - transit-delay number
            - compatible-rfc1583 boolean
            - export-limit
              - log-percent number
              - number number
            - export-policy reference
            - external-db-overflow
              - interval number
              - limit number
            - external-preference number
            - graceful-restart
              - helper-mode boolean
              - strict-lsa-checking boolean
            - ignore-dn-bit boolean
            - import-policy reference
            - loopfree-alternate
              - exclude
                - prefix-policy reference
            - multicast-import boolean
            - overload boolean
            - overload-include-ext-1 boolean
            - overload-include-ext-2 boolean
            - overload-include-stub boolean
            - overload-on-boot
              - timeout number
            - preference number
            - reference-bandwidth number
            - rib-priority
              - high
                - prefix-list reference
            - router-id string
            - rtr-adv-lsa-limit
              - log-only boolean
              - max-lsa-count number
              - overload-timeout (number | keyword)
              - warning-threshold number
            - super-backbone boolean
            - suppress-dn-bit boolean
            - timers
              - incremental-spf-wait number
              - lsa-accumulate number
              - lsa-arrival number
              - lsa-generate
                - lsa-initial-wait number
                - lsa-second-wait number
                - max-lsa-wait number
              - redistribute-delay number
              - spf-wait
                - spf-initial-wait number
                - spf-max-wait number
                - spf-second-wait number
            - unicast-import boolean
            - vpn-domain
              - id string
              - type keyword
```


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```
            - vpn-tag number
         - ospf3 number
            - admin-state keyword
            - advertise-router-capability keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - area string
               - advertise-router-capability boolean
               - apply-groups reference
               - apply-groups-exclude reference
               - area-range (ipv4-prefix | ipv6-prefix)
                  - advertise boolean
                  - apply-groups reference
                  - apply-groups-exclude reference
               - blackhole-aggregate boolean
               - export-policy reference
               - import-policy reference
               - interface string
                  - admin-state keyword
                  - advertise-router-capability boolean
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - authentication
                     - inbound reference
                     - outbound reference
                  - bfd-liveness
                     - remain-down-on-failure boolean
                     - strict boolean
                     - strict-mode-holddown number
                  - dead-interval number
                  - hello-interval number
                  - interface-type keyword
                  - load-balancing-weight number
                  - loopfree-alternate
                     - exclude boolean
                     - policy-map
                        - route-nh-template reference
                  - lsa-filter-out keyword
                  - metric number
                  - mtu number
                  - neighbor (ipv4-address-no-zone | ipv6-address-no-zone)
                  - passive boolean
                  - poll-interval number
                  - priority number
                  - retransmit-interval number
                  - rib-priority keyword
                  - transit-delay number
               - key-rollover-interval number
               - loopfree-alternate-exclude boolean
               - nssa
                  - area-range (ipv4-prefix | ipv6-prefix)
                     - advertise boolean
                     - apply-groups reference
                     - apply-groups-exclude reference
                  - originate-default-route
                     - adjacency-check boolean
                     - type-nssa boolean
                  - redistribute-external boolean
                  - summaries boolean
               - stub
                  - default-metric number
                  - summaries boolean
               - virtual-link string transit-area reference
                  - admin-state keyword
```


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configure service vprn ospf3 area virtual-link apply-groups

```
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - authentication
                     - inbound reference
                     - outbound reference
                  - dead-interval number
                  - hello-interval number
                  - retransmit-interval number
                  - transit-delay number
            - export-limit
               - log-percent number
               - number number
            - export-policy reference
            - external-db-overflow
               - interval number
               - limit number
            - external-preference number
            - graceful-restart
               - helper-mode boolean
               - strict-lsa-checking boolean
            - ignore-dn-bit boolean
            - import-policy reference
            - loopfree-alternate
               - exclude
                  - prefix-policy reference
            - multicast-import boolean
            - overload boolean
            - overload-include-ext-1 boolean
            - overload-include-ext-2 boolean
            - overload-include-stub boolean
            - overload-on-boot
               - timeout number
            - preference number
            - reference-bandwidth number
            - rib-priority
               - high
                  - prefix-list reference
            - router-id string
            - rtr-adv-lsa-limit
               - log-only boolean
               - max-lsa-count number
               - overload-timeout (number | keyword)
               - warning-threshold number
            - suppress-dn-bit boolean
            - timers
               - incremental-spf-wait number
               - lsa-accumulate number
               - lsa-arrival number
               - lsa-generate
                  - lsa-initial-wait number
                  - lsa-second-wait number
                  - max-lsa-wait number
               - redistribute-delay number
               - spf-wait
                  - spf-initial-wait number
                  - spf-max-wait number
                  - spf-second-wait number
            - unicast-import boolean
         - pcp
            - server string
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - description string
```


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```
            - dual-stack-lite-address string
            - fwd-inside-router string
            - interface reference
            - policy reference
      - pim
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - apply-to keyword
         - bgp-nh-override boolean
         - import
            - join-policy reference
            - register-policy reference
         - interface string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - assert-period number
            - bfd-liveness
               - ipv4 boolean
               - ipv6 boolean
            - bsm-check-rtr-alert boolean
            - hello-interval number
            - hello-multiplier number
            - improved-assert boolean
            - instant-prune-echo boolean
            - ipv4
               - apply-groups reference
               - apply-groups-exclude reference
               - monitor-oper-group
                  - name reference
                  - operation keyword
                  - priority-delta number
               - multicast boolean
            - ipv6
               - apply-groups reference
               - apply-groups-exclude reference
               - monitor-oper-group
                  - name reference
                  - operation keyword
                  - priority-delta number
               - multicast boolean
            - max-groups number
            - mcac
               - bandwidth
                  - mandatory (number | keyword)
                  - total (number | keyword)
               - interface-policy reference
               - mc-constraints
                  - admin-state keyword
                  - level number
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - bandwidth number
                  - number-down number
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - level number
                  - use-lag-port-weight boolean
               - policy reference
            - multicast-senders keyword
            - p2mp-ldp-tree-join
               - ipv4 boolean
               - ipv6 boolean
```


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configure service vprn pim interface priority

```
            - priority number
            - sticky-dr
              - priority number
            - three-way-hello boolean
            - tracking-support boolean
        - ipv4
            - admin-state keyword
            - grt-extranet
              - any
              - group-prefix (ipv4-prefix | ipv6-prefix)
                - apply-groups reference
                - apply-groups-exclude reference
                - starg boolean
            - rpf-table keyword
            - source-address
              - register-message string
            - ssm-assert-compatible-mode boolean
            - ssm-default-range boolean
        - ipv6
            - admin-state keyword
            - rpf-table keyword
            - source-address
              - register-message string
            - ssm-default-range boolean
        - mc-ecmp-balance boolean
        - mc-ecmp-balance-hold number
        - mc-ecmp-hashing
            - rebalance boolean
        - mtu-over-head number
        - non-dr-attract-traffic boolean
        - rp
            - bootstrap
              - export reference
              - import reference
            - ipv4
              - anycast string rp-set-peer string
              - auto-rp-discovery boolean
              - bsr-candidate
                - address string
                - admin-state keyword
                - hash-mask-len number
                - priority number
              - candidate boolean
              - mapping-agent boolean
              - rp-candidate
                - address string
                - admin-state keyword
                - group-range string
                - holdtime number
                - priority number
              - static
                - address string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - group-prefix string
                  - override boolean
            - ipv6
              - anycast string rp-set-peer string
              - bsr-candidate
                - address string
                - admin-state keyword
                - hash-mask-len number
                - priority number
              - embedded-rp
```


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configure service vprn pim rp ipv6 embedded-rp admin-state

```
                    - admin-state keyword
                    - group-range string
                 - rp-candidate
                    - address string
                    - admin-state keyword
                    - group-range string
                    - holdtime number
                    - priority number
                 - static
                    - address string
                       - apply-groups reference
                       - apply-groups-exclude reference
                       - group-prefix string
                       - override boolean
           - spt-switchover (ipv4-prefix | ipv6-prefix)
              - apply-groups reference
              - apply-groups-exclude reference
              - threshold (number | keyword)
           - ssm-groups
              - group-range (ipv4-prefix | ipv6-prefix)
        - radius
           - apply-groups reference
           - apply-groups-exclude reference
           - proxy string
              - admin-state keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - attribute-matching
                 - entry number
                    - accounting-server-policy string
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - authentication-server-policy string
                    - prefix-string string
                    - suffix-string string
                 - type number
                 - vendor (number | keyword)
              - cache
                 - admin-state keyword
                 - key
                    - attribute-type number
                    - packet-type keyword
                    - vendor (number | keyword)
                 - timeout number
                 - track-accounting
                    - accounting-off boolean
                    - accounting-on boolean
                    - interim-update boolean
                    - start boolean
                    - stop boolean
                 - track-authentication
                    - accept boolean
                 - track-delete-hold-time number
              - defaults
                 - accounting-server-policy string
                 - authentication-server-policy string
              - description string
              - interface reference
              - load-balance-key
                 - attribute-1
                    - type number
                    - vendor (number | keyword)
                 - attribute-2
                    - type number
```


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```
                    - vendor (number | keyword)
                  - attribute-3
                    - type number
                    - vendor (number | keyword)
                  - attribute-4
                    - type number
                    - vendor (number | keyword)
                  - attribute-5
                    - type number
                    - vendor (number | keyword)
                  - source-ip-udp
               - purpose keyword
               - python-policy reference
               - secret string
               - send-accounting-response boolean
               - wlan-gw
                  - address string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - ipv6-address string
               - wlan-gw-group reference
            - server string
               - accept-coa boolean
               - acct-port number
               - address (ipv4-address-no-zone | ipv6-address-no-zone)
               - apply-groups reference
               - apply-groups-exclude reference
               - auth-port number
               - description string
               - pending-requests-limit number
               - python-policy reference
               - secret string
         - reassembly
            - apply-groups reference
            - apply-groups-exclude reference
            - nat-group number
            - to-base-network boolean
         - redundant-interface string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - hold-time
               - ipv4
                  - down
                    - init-only boolean
                    - seconds number
                  - up
                    - seconds number
            - ip-mtu number
            - ipv4
               - primary
                  - address string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - prefix-length number
                  - remote-ip string
            - spoke-sdp string
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - control-word boolean
               - description string
               - egress
```


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configure service vprn redundant-interface spoke-sdp egress filter

```
                - filter
                  - ip reference
                - vc-label number
            - ingress
                - filter
                  - ip reference
                - vc-label number
    - rip
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - authentication-key string
        - authentication-type keyword
        - bfd-liveness boolean
        - check-zero boolean
        - description string
        - export-limit
            - log-percent number
            - number number
        - export-policy reference
        - group string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - authentication-key string
            - authentication-type keyword
            - bfd-liveness boolean
            - check-zero boolean
            - description string
            - export-policy reference
            - import-policy reference
            - message-size number
            - metric-in number
            - metric-out number
            - neighbor string
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - authentication-key string
                - authentication-type keyword
                - bfd-liveness boolean
                - check-zero boolean
                - description string
                - export-policy reference
                - import-policy reference
                - message-size number
                - metric-in number
                - metric-out number
                - preference number
                - receive keyword
                - send keyword
                - split-horizon boolean
                - timers
                  - flush number
                  - timeout number
                  - update number
                - unicast-address string
            - preference number
            - receive keyword
            - send keyword
            - split-horizon boolean
            - timers
                - flush number
                - timeout number
```


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configure service vprn rip group timers update

```
                - update number
            - import-policy reference
            - message-size number
            - metric-in number
            - metric-out number
            - preference number
            - propagate-metric boolean
            - receive keyword
            - send keyword
            - split-horizon boolean
            - timers
                - flush number
                - timeout number
                - update number
        - ripng
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - bfd-liveness boolean
            - check-zero boolean
            - description string
            - export-limit
                - log-percent number
                - number number
            - export-policy reference
            - group string
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - bfd-liveness boolean
                - check-zero boolean
                - description string
                - export-policy reference
                - import-policy reference
                - message-size number
                - metric-in number
                - metric-out number
                - neighbor reference
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - bfd-liveness boolean
                    - check-zero boolean
                    - description string
                    - export-policy reference
                    - import-policy reference
                    - message-size number
                    - metric-in number
                    - metric-out number
                    - preference number
                    - receive keyword
                    - send keyword
                    - split-horizon boolean
                    - timers
                        - flush number
                        - timeout number
                        - update number
                    - unicast-address string
                - preference number
                - receive keyword
                - send keyword
                - split-horizon boolean
                - timers
                    - flush number
```


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configure service vprn ripng group timers timeout

```
                - timeout number
                - update number
            - import-policy reference
            - message-size number
            - metric-in number
            - metric-out number
            - preference number
            - receive keyword
            - send keyword
            - split-horizon boolean
            - timers
                - flush number
                - timeout number
                - update number
        - router-id string
        - segment-routing-v6 number
            - apply-groups reference
            - apply-groups-exclude reference
            - locator reference
                - apply-groups reference
                - apply-groups-exclude reference
                - function
                    - end-dt4
                        - value number
                    - end-dt46
                        - value number
                    - end-dt6
                        - value number
            - micro-segment-locator reference
                - apply-groups reference
                - apply-groups-exclude reference
                - function
                    - udt4
                        - value number
                    - udt46
                        - value number
                    - udt6
                        - value number
        - selective-fib boolean
        - service-id number
        - sfm-overload
            - holdoff-time number
        - sgt-qos
            - dot1p
                - application keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - dot1p (keyword | number)
            - dscp
                - application keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - dscp (keyword | number)
                - dscp-map keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - fc keyword
        - snmp
            - access boolean
            - community string
                - access-permissions keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - source-access-list reference
```


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configure service vprn snmp community version

```
                - version keyword
            - source-address
                - ipv4 keyword
                    - address string
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - interface-name string
                - ipv6 keyword
                    - address string
                    - apply-groups reference
                    - apply-groups-exclude reference
            - spoke-sdp string
                - apply-groups reference
                - apply-groups-exclude reference
                - description string
            - static-routes
                - apply-groups reference
                - apply-groups-exclude reference
                - hold-down
                    - initial number
                    - max-value number
                    - multiplier number
                - route (ipv4-prefix | ipv6-prefix) route-type keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - backup-tag number
                    - blackhole
                        - admin-state keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - community string
                        - description string
                        - generate-icmp boolean
                        - metric number
                        - preference number
                        - prefix-list
                            - flag keyword
                            - name reference
                        - tag number
                    - community string
                    - grt
                        - admin-state keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - description string
                        - metric number
                        - preference number
                    - indirect (ipv4-address-no-zone | ipv6-address-no-zone)
                        - admin-state keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - community string
                        - cpe-check (ipv4-address-no-zone | ipv6-address-no-zone)
                            - apply-groups reference
                            - apply-groups-exclude reference
                            - drop-count number
                            - interval number
                            - log boolean
                            - padding-size number
                        - description string
                        - destination-class number
                        - metric number
                        - preference number
                        - prefix-list
```


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configure service vprn static-routes route indirect prefix-list flag

```
                    - flag keyword
                    - name reference
                  - qos
                    - forwarding-class keyword
                    - priority keyword
                  - source-class number
                  - tag number
                - interface string
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - community string
                  - cpe-check (ipv4-address-no-zone | ipv6-address-no-zone)
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - drop-count number
                    - interval number
                    - log boolean
                    - padding-size number
                  - description string
                  - destination-class number
                  - load-balancing-weight number
                  - metric number
                  - preference number
                  - prefix-list
                    - flag keyword
                    - name reference
                  - qos
                    - forwarding-class keyword
                    - priority keyword
                  - source-class number
                  - tag number
                - ipsec-tunnel string
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - community string
                  - description string
                  - destination-class number
                  - metric number
                  - preference number
                  - qos
                    - forwarding-class keyword
                    - priority keyword
                  - source-class number
                  - tag number
                - next-hop (ipv4-address-with-zone | ipv6-address-with-zone)
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - backup-next-hop
                    - address (ipv4-address-no-zone | ipv6-address-no-zone)
                  - bfd-liveness boolean
                  - community string
                  - cpe-check (ipv4-address-no-zone | ipv6-address-no-zone)
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - drop-count number
                    - interval number
                    - log boolean
                    - padding-size number
                  - description string
                  - destination-class number
                  - load-balancing-weight number
```


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configure service vprn static-routes route next-hop metric

```
                - metric number
                - preference number
                - prefix-list
                  - flag keyword
                  - name reference
                - qos
                  - forwarding-class keyword
                  - priority keyword
                - source-class number
                - tag number
                - validate-next-hop boolean
              - tag number
        - subscriber-interface string
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - fwd-service reference
          - fwd-subscriber-interface reference
          - group-interface string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - bonding-parameters
              - admin-state keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - connection number
                - apply-groups reference
                - apply-groups-exclude reference
                - service string
              - fpe reference
              - multicast
                - connection (number | keyword)
            - brg
              - admin-state keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - authenticated-brg-only boolean
              - default-brg-profile reference
            - cflowd-parameters
              - sampling keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - direction keyword
                - sample-profile (keyword | number)
                - type keyword
            - data-trigger
              - admin-state keyword
              - apply-groups reference
              - apply-groups-exclude reference
            - description string
            - dynamic-routes-track-srrp
              - hold-time number
            - gtp-parameters
              - admin-state keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - fpe reference
            - gx-policy reference
            - ingress
              - policy-accounting reference
            - ingress-stats boolean
            - ip-mtu number
```


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configure service vprn subscriber-interface group-interface ipoe-linking

```
                - ipoe-linking
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - gratuitous-router-advertisement boolean
                  - shared-circuit-id boolean
                - ipoe-session
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - description string
                  - force-auth
                    - cid-change boolean
                    - rid-change boolean
                  - ipoe-session-policy reference
                  - min-auth-interval (keyword | number)
                  - radius-session-timeout keyword
                  - sap-session-limit number
                  - session-limit number
                  - stateless-redundancy boolean
                  - user-db reference
                - ipv4
                  - arp-host
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - host-limit number
                    - min-auth-interval number
                    - sap-host-limit number
                  - bfd
                    - admin-state keyword
                    - echo-receive number
                    - multiplier number
                    - receive number
                    - transmit-interval number
                    - type keyword
                  - dhcp
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - client-applications
                      - dhcp boolean
                      - ppp boolean
                    - description string
                    - filter reference
                    - gi-address string
                    - lease-populate
                      - l2-header
                        - mac string
                      - max-leases number
                    - match-circuit-id boolean
                    - offer-selection
                      - client-mac
                        - discover-delay number
                        - mac-address keyword
                      - discover-delay number
                      - server string
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - discover-delay number
                    - option-82
                      - action keyword
                      - circuit-id
                        - ascii-tuple
```


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configure service vprn subscriber-interface group-interface ipv4 dhcp option-82 circuit-id ifindex

```
                        - ifindex
                        - none
                        - sap-id
                        - vlan-ascii-tuple
                     - remote-id
                        - ascii-string string
                        - mac
                        - none
                     - vendor-specific-option
                        - client-mac-address boolean
                        - pool-name boolean
                        - sap-id boolean
                        - service-id boolean
                        - string string
                        - system-id boolean
                  - proxy-server
                     - admin-state keyword
                     - emulated-server string
                     - lease-time
                        - radius-override boolean
                        - value number
                  - python-policy reference
                  - relay-proxy
                     - release-update-src-ip boolean
                     - siaddr-override string
                  - release-include-gi-address boolean
                  - server string
                  - src-ip-addr keyword
                  - trusted boolean
                  - user-db reference
               - icmp
                  - mask-reply boolean
                  - param-problem
                     - admin-state keyword
                     - number number
                     - seconds number
                  - redirects
                     - admin-state keyword
                     - number number
                     - seconds number
                  - ttl-expired
                     - admin-state keyword
                     - number number
                     - seconds number
                     - use-matching-address boolean
                  - unreachables
                     - admin-state keyword
                     - number number
                     - seconds number
               - ignore-df-bit boolean
               - neighbor-discovery
                  - local-proxy-arp boolean
                  - populate boolean
                  - proxy-arp-policy reference
                  - remote-proxy-arp boolean
                  - timeout number
               - qos-route-lookup keyword
               - urpf-check
                  - mode keyword
            - ipv6
               - allow-multiple-wan-addresses boolean
               - auto-reply
                  - neighbor-solicitation boolean
                  - router-solicitation boolean
```


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configure service vprn subscriber-interface group-interface ipv6 bfd

```
                    - bfd
                      - admin-state keyword
                      - echo-receive number
                      - multiplier number
                      - receive number
                      - transmit-interval number
                      - type keyword
                    - dhcp6
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - filter reference
                      - option
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - interface-id
                          - ascii-tuple
                          - if-index
                          - sap-id
                          - string string
                        - remote-id boolean
                      - override-slaac boolean
                      - pd-managed-route
                        - next-hop keyword
                      - proxy-server
                        - admin-state keyword
                        - client-applications
                          - dhcp boolean
                          - ppp boolean
                        - preferred-lifetime (number | keyword)
                        - rebind-timer number
                        - renew-timer number
                        - server-id
                          - apply-groups reference
                          - apply-groups-exclude reference
                          - duid-en-ascii string
                          - duid-en-hex string
                          - duid-ll
                        - valid-lifetime (number | keyword)
                      - python-policy reference
                      - relay
                        - admin-state keyword
                        - advertise-selection
                          - client-mac
                            - mac-address keyword
                            - preference-option
                              - value number
                            - solicit-delay number
                          - preference-option
                            - value number
                          - server string
                            - apply-groups reference
                            - apply-groups-exclude reference
                            - preference-option
                              - value number
                            - solicit-delay number
                          - solicit-delay number
                        - client-applications
                          - dhcp boolean
                          - ppp boolean
                        - description string
                        - lease-split
                          - admin-state keyword
                          - valid-lifetime number
                        - link-address string
```


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configure service vprn subscriber-interface group-interface ipv6 dhcp6 relay server

```
                    - server string
                    - source-address string
                  - snooping
                    - admin-state keyword
                  - user-db reference
                  - user-ident keyword
               - ipoe-bridged-mode boolean
               - neighbor-discovery
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - dad-snooping boolean
                  - neighbor-limit number
               - qos-route-lookup keyword
               - router-advertisements
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - force-mcast keyword
                  - max-advertisement-interval number
                  - min-advertisement-interval number
                  - options
                    - current-hop-limit number
                    - dns
                      - include-rdnss boolean
                      - rdnss-lifetime (number | keyword)
                    - managed-configuration boolean
                    - mtu (number | keyword)
                    - other-stateful-configuration boolean
                    - reachable-time number
                    - retransmit-timer number
                    - router-lifetime (number | keyword)
                  - prefix-options
                    - autonomous boolean
                    - on-link boolean
                    - preferred-lifetime (number | keyword)
                    - valid-lifetime (number | keyword)
               - router-solicit
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - inactivity-timer (number | keyword)
                  - min-auth-interval number
                  - user-db reference
               - urpf-check
                  - mode keyword
            - local-address-assignment
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - ipv4
                  - client-applications
                    - ipoe boolean
                    - ppp boolean
                  - default-pool string
                  - server reference
               - ipv6
                  - client-applications
                    - ipoe-slaac boolean
                    - ipoe-wan boolean
                    - ppp-slaac boolean
                  - server reference
            - mac string
            - nasreq-auth-policy reference
            - oper-up-while-empty boolean
```


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```
                - pppoe
                  - admin-state keyword
                  - anti-spoof keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - description string
                  - dhcp-client
                    - client-id keyword
                  - policy reference
                  - python-policy reference
                  - sap-session-limit number
                  - session-limit number
                  - user-db reference
                - radius-auth-policy reference
                - redundant-interface reference
                - sap string
                  - accounting-policy reference
                  - admin-state keyword
                  - anti-spoof keyword
                  - app-profile reference
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - calling-station-id string
                  - collect-stats boolean
                  - cpu-protection
                    - eth-cfm-monitoring
                      - aggregate
                      - car
                    - ip-src-monitoring
                    - mac-monitoring
                    - policy-id reference
                  - default-host
                    - ipv4 reference prefix-length number
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - next-hop string
                    - ipv6 string prefix-length number
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - next-hop string
                  - description string
                  - dist-cpu-protection reference
                  - egress
                    - agg-rate
                      - adaptation-rule keyword
                      - burst-limit (number | keyword)
                      - limit-unused-bandwidth boolean
                      - queue-frame-based-accounting boolean
                      - rate number
                    - filter
                      - ip reference
                      - ipv6 reference
                    - qos
                      - policer-control-policy
                        - policy-name reference
                      - qinq-mark-top-only boolean
                      - sap-egress
                        - policy-name reference
                      - scheduler-policy
                        - policy-name reference
                  - eth-cfm
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - collect-lmm-fc-stats
```


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configure service vprn subscriber-interface group-interface sap eth-cfm collect-lmm-fc-stats fc

```
                    - fc keyword
                    - fc-in-profile keyword
                - collect-lmm-stats boolean
                - mep md-admin-name reference ma-admin-name reference mep-id number
                    - admin-state keyword
                    - ais boolean
                    - alarm-notification
                        - fng-alarm-time number
                        - fng-reset-time number
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - ccm boolean
                    - ccm-ltm-priority number
                    - ccm-padding-size number
                    - csf
                        - multiplier decimal-number
                    - description string
                    - eth-test
                        - bit-error-threshold number
                        - test-pattern
                            - crc-tlv boolean
                            - pattern keyword
                    - fault-propagation keyword
                    - grace
                        - eth-ed
                            - max-rx-defect-window number
                            - priority number
                            - rx-eth-ed boolean
                            - tx-eth-ed boolean
                        - eth-vsm-grace
                            - rx-eth-vsm-grace boolean
                            - tx-eth-vsm-grace boolean
                    - low-priority-defect keyword
                    - one-way-delay-threshold number
                - squelch-ingress-levels number
            - fwd-wholesale
                - pppoe-service reference
            - host-admin-state keyword
            - host-lockout-policy reference
            - igmp-host-tracking
                - apply-groups reference
                - apply-groups-exclude reference
                - expiry-time number
                - import-policy reference
                - maximum-number-group-sources number
                - maximum-number-groups number
                - maximum-number-sources number
                - router-alert-check boolean
            - ingress
                - filter
                    - ip reference
                    - ipv6 reference
                - qos
                    - match-qinq-dot1p keyword
                    - policer-control-policy
                        - policy-name reference
                    - sap-ingress
                        - policy-name reference
                        - queuing-type keyword
                    - scheduler-policy
                        - policy-name reference
            - lag
                - link-map-profile number
                - per-link-hash
```


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configure service vprn subscriber-interface group-interface sap lag per-link-hash class

```
                        – class number
                        – weight number
                  – monitor-oper-group reference
                  – multi-service-site reference
                  – oper-group reference
                  – static-host
                     – ipv4 string mac string
                        – admin-state keyword
                        – ancp-string string
                        – app-profile
                           – profile reference
                           – scope keyword
                        – apply-groups reference
                        – apply-groups-exclude reference
                        – int-dest-id string
                        – managed-route string
                           – apply-groups reference
                           – apply-groups-exclude reference
                           – cpe-check
                              – apply-groups reference
                              – apply-groups-exclude reference
                              – destination-ip-address (ipv4-address-no-zone | ipv6-address-
no-zone)
                              – drop-count number
                              – failed-action
                                 – metric number
                                 – preference number
                                 – tag number
                                 – withdraw boolean
                              – interval number
                              – log boolean
                              – padding-size number
                              – source-ip-address (ipv4-address-no-zone | ipv6-address-no-
zone)
                              – timeout number
                           – metric number
                           – preference number
                           – tag number
                        – rip-policy reference
                        – shcv
                        – sla-profile reference
                        – sub-profile reference
                        – subscriber-id
                           – string string
                           – use-sap-id
                     – ipv6 string mac string
                        – admin-state keyword
                        – ancp-string string
                        – app-profile
                           – profile reference
                           – scope keyword
                        – apply-groups reference
                        – apply-groups-exclude reference
                        – int-dest-id string
                        – mac-linking string
                        – managed-route string
                           – apply-groups reference
                           – apply-groups-exclude reference
                           – cpe-check
                              – apply-groups reference
                              – apply-groups-exclude reference
                              – destination-ip-address (ipv4-address-no-zone | ipv6-address-
no-zone)
                              – drop-count number
```


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configure service vprn subscriber-interface group-interface sap static-host ipv6 managed-route cpe-check failed-action

```
                                – failed-action
                                  – metric number
                                  – preference number
                                  – tag number
                                  – withdraw boolean
                                – interval number
                                – log boolean
                                – padding-size number
                                – source-ip-address (ipv4-address-no-zone | ipv6-address-no-
zone)
                                – timeout number
                              – metric number
                              – preference number
                              – tag number
                            – retail-svc-id number
                            – shcv
                            – sla-profile reference
                            – sub-profile reference
                            – subscriber-id
                              – string string
                              – use-sap-id
                          – mac-learning
                            – data-triggered boolean
                            – single-mac boolean
                        – sub-sla-mgmt
                          – admin-state keyword
                          – defaults
                            – app-profile reference
                            – int-dest-id
                              – string string
                              – top-q-tag
                            – sla-profile reference
                            – sub-profile reference
                            – subscriber-id
                              – auto-id
                              – sap-id
                              – string string
                          – single-sub-parameters
                            – non-sub-traffic
                              – app-profile reference
                              – sla-profile reference
                              – sub-profile reference
                              – subscriber-id string
                            – profiled-traffic-only boolean
                          – sub-ident-policy reference
                          – subscriber-limit (keyword | number)
                      – sap-parameters
                        – anti-spoof keyword
                        – apply-groups reference
                        – apply-groups-exclude reference
                        – description string
                        – sub-sla-mgmt
                          – defaults
                            – app-profile reference
                            – sla-profile reference
                            – sub-profile reference
                            – subscriber-id
                              – auto-id
                              – string string
                          – sub-ident-policy reference
                      – shcv-policy reference
                      – shcv-policy-ipv4 reference
                      – shcv-policy-ipv6 reference
                      – srrp number
```


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configure service vprn subscriber-interface group-interface srrp admin-state

```
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - bfd-liveness
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - dest-ip string
                      - interface-name string
                      - service-name string
                    - description string
                    - gw-mac string
                    - keep-alive-interval number
                    - message-path reference
                    - monitor-oper-group
                      - group-name reference
                      - priority-step number
                    - one-garp-per-sap boolean
                    - policy reference
                    - preempt boolean
                    - priority number
                    - send-fib-population-packets keyword
                  - suppress-aa-sub boolean
                  - tos-marking-state keyword
                  - type keyword
                  - wlan-gw
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
                      - apply-groups reference
                      - apply-groups-exclude reference
                      - purpose
                        - xconnect boolean
                    - gateway-router string
                    - group-encryption
                      - encryption-keygroup-inbound reference
                      - encryption-keygroup-outbound reference
                    - l2-ap
                      - access-point string
                        - admin-state keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - encap-type keyword
                        - epipe-sap-template reference
                      - auto-sub-id-fmt keyword
                      - default-encap-type keyword
                    - lanext
                      - max-bd number
                    - learn-ap-mac
                      - delay-auth boolean
                    - mobility
                      - hold-time number
                      - inter-tunnel-type boolean
                      - inter-vlan boolean
                      - trigger
                        - control boolean
                        - data boolean
                        - iapp boolean
                    - oper-down-on-group-degrade boolean
                    - tcp-mss-adjust number
                    - tunnel-egress-qos
                      - admin-state keyword
                      - agg-rate-limit (number | keyword)
                      - granularity keyword
```


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configure service vprn subscriber-interface group-interface wlan-gw tunnel-egress-qos hold-time

```
                    - hold-time (number | keyword)
                    - multi-client-only boolean
                    - qos reference
                    - scheduler-policy reference
                - tunnel-encaps
                    - learn-l2tp-cookie (keyword | hex-string)
                - vlan-range string
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - authentication
                        - hold-time number
                        - local
                            - coa-policy reference
                            - default-ue-state keyword
                        - on-control-plane boolean
                        - policy reference
                        - vlan-mismatch-timeout number
                    - data-triggered-ue-creation
                        - admin-state keyword
                        - arp boolean
                        - create-proxy-cache-entry
                            - mac-format string
                            - proxy-server
                                - name string
                                - router-instance string
                        - ospf boolean
                    - dhcp4
                        - admin-state keyword
                        - dns string
                        - l2-aware-ip-address (ipv4-unicast-address | keyword)
                        - lease-time
                            - active number
                            - initial number
                        - nbns string
                    - dhcp6
                        - admin-state keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - preferred-lifetime
                            - active number
                            - initial number
                        - valid-lifetime
                            - active number
                            - initial number
                    - dsm
                        - accounting-policy reference
                        - accounting-update
                            - interval number
                        - admin-state keyword
                        - application-assurance
                            - accounting-statistics boolean
                            - profile reference
                            - url-parameter string
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - egress
                            - policer reference
                        - ingress
                            - ip-filter reference
                            - policer reference
                            - soft-quota-exhausted-filter reference
                        - one-time-redirect
                            - port number
                            - url string
```


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configure service vprn subscriber-interface group-interface wlan-gw vlan-range dsm volume-quota-direction

```
                    - volume-quota-direction keyword
                - dynamic-service boolean
                - extension string
                - http-redirect-policy reference
                - idle-timeout-action keyword
                - l2-service
                    - admin-state keyword
                    - description string
                    - service reference
                - nat-policy reference
                - retail-service string
                - slaac
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - preferred-lifetime
                        - active number
                        - initial number
                    - valid-lifetime
                        - active number
                        - initial number
                - vrgw
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - brg
                        - authenticated-brg-only boolean
                        - default-brg-profile reference
                    - lanext
                        - access
                            - max-mac number
                            - multi-access boolean
                            - policer reference
                        - admin-state keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - assistive-address-resolution boolean
                        - bd-mac-prefix string
                        - mac-translation boolean
                        - network
                            - admin-state keyword
                            - max-mac number
                            - policer reference
                - xconnect
                    - accounting
                        - mobility-updates boolean
                        - policy reference
                        - update-interval number
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
            - wlan-gw-group reference
        - wpp
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - initial
                - app-profile reference
                - sla-profile reference
                - sub-profile reference
            - lease-time number
            - portal
                - name string
                - portal-group reference
```


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configure service vprn subscriber-interface group-interface wpp portal router-instance

```
                    - router-instance string
                  - restore-to-initial-on-disconnect boolean
                  - triggered-hosts boolean
                  - user-db reference
            - hold-time
               - ipv4
                  - down
                     - init-only boolean
                     - seconds number
                  - up
                     - seconds number
               - ipv6
                  - down
                     - init-only boolean
                     - seconds number
                  - up
                     - seconds number
            - ipoe-linking
               - apply-groups reference
               - apply-groups-exclude reference
               - gratuitous-router-advertisement boolean
            - ipoe-session
               - apply-groups reference
               - apply-groups-exclude reference
               - session-limit number
            - ipv4
               - address string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - gateway string
                  - holdup-time number
                  - populate-host-routes boolean
                  - prefix-length number
                  - track-srrp number
               - allow-unmatching-subnets boolean
               - arp-host
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - host-limit number
               - bfd
                  - admin-state keyword
                  - echo-receive number
                  - multiplier number
                  - receive number
                  - transmit-interval number
                  - type keyword
               - default-dns string
               - dhcp
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - client-applications
                     - dhcp boolean
                     - ppp boolean
                  - description string
                  - gi-address string
                  - lease-populate
                     - max-leases number
                  - offer-selection
                     - client-mac
                        - discover-delay number
                        - mac-address keyword
                     - discover-delay number
```


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configure service vprn subscriber-interface ipv4 dhcp offer-selection server

```
                    - server string
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - discover-delay number
                - option-82
                    - vendor-specific-option
                        - client-mac-address boolean
                        - sap-id boolean
                        - service-id boolean
                        - string string
                        - system-id boolean
                - proxy-server
                    - admin-state keyword
                    - emulated-server string
                    - lease-time
                        - radius-override boolean
                        - value number
                - python-policy reference
                - relay-proxy
                    - release-update-src-ip boolean
                    - siaddr-override string
                - release-include-gi-address boolean
                - server string
                - src-ip-addr keyword
                - virtual-subnet boolean
            - export-host-routes boolean
            - unnumbered
                - ip-address string
                - ip-int-name string
        - ipv6
            - address string
                - apply-groups reference
                - apply-groups-exclude reference
                - host-type keyword
                - prefix-length number
            - allow-multiple-wan-addresses boolean
            - allow-unmatching-prefixes boolean
            - bfd
                - admin-state keyword
                - echo-receive number
                - multiplier number
                - receive number
                - transmit-interval number
                - type keyword
            - default-dns string
            - delegated-prefix-length (number | keyword)
            - dhcp6
                - apply-groups reference
                - apply-groups-exclude reference
                - override-slaac boolean
                - pd-managed-route
                    - next-hop keyword
                - proxy-server
                    - admin-state keyword
                    - client-applications
                        - dhcp boolean
                        - ppp boolean
                    - preferred-lifetime (number | keyword)
                    - rebind-timer number
                    - renew-timer number
                    - server-id
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - duid-en-ascii string
```


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configure service vprn subscriber-interface ipv6 dhcp6 proxy-server server-id duid-en-hex

```
                    - duid-en-hex string
                    - duid-ll
                 - valid-lifetime (number | keyword)
              - python-policy reference
              - relay
                 - admin-state keyword
                 - advertise-selection
                    - client-mac
                       - mac-address keyword
                       - preference-option
                          - value number
                       - solicit-delay number
                    - preference-option
                       - value number
                    - server string
                       - apply-groups reference
                       - apply-groups-exclude reference
                       - preference-option
                          - value number
                       - solicit-delay number
                    - solicit-delay number
                 - client-applications
                    - dhcp boolean
                    - ppp boolean
                 - description string
                 - lease-split
                    - admin-state keyword
                    - valid-lifetime number
                 - link-address string
                 - server string
                 - source-address string
           - ipoe-bridged-mode boolean
           - link-local-address
              - address string
           - prefix string
              - apply-groups reference
              - apply-groups-exclude reference
              - holdup-time number
              - host-type keyword
              - track-srrp number
           - router-advertisements
              - admin-state keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - force-mcast keyword
              - max-advertisement-interval number
              - min-advertisement-interval number
              - options
                 - current-hop-limit number
                 - dns
                    - include-rdnss boolean
                    - rdnss-lifetime (number | keyword)
                 - managed-configuration boolean
                 - mtu (number | keyword)
                 - other-stateful-configuration boolean
                 - reachable-time number
                 - retransmit-timer number
                 - router-lifetime (number | keyword)
              - prefix-options
                 - autonomous boolean
                 - on-link boolean
                 - preferred-lifetime (number | keyword)
                 - valid-lifetime (number | keyword)
           - router-solicit
```


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```
                - apply-groups reference
                - apply-groups-exclude reference
                - inactivity-timer (number | keyword)
            - local-address-assignment
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - ipv4
                    - client-applications
                        - ppp boolean
                    - default-pool string
                    - server reference
                - ipv6
                    - client-applications
                        - ipoe-slaac boolean
                        - ipoe-wan boolean
                        - ppp-slaac boolean
                    - server reference
            - pppoe
                - apply-groups reference
                - apply-groups-exclude reference
                - description string
                - session-limit number
            - private-retail-subnets boolean
            - wan-mode keyword
            - wlan-gw
                - apply-groups reference
                - apply-groups-exclude reference
                - pool-manager
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - dhcp6-client
                        - dhcpv4-nat
                            - admin-state keyword
                            - link-address string
                            - pool-name string
                        - ia-na
                            - admin-state keyword
                            - link-address string
                            - pool-name string
                        - lease-query
                            - max-retries number
                        - servers string
                        - slaac
                            - admin-state keyword
                            - link-address string
                            - pool-name string
                        - source-ip (keyword | ipv6-address)
                    - watermarks
                        - high number
                        - low number
                    - wlan-gw-group reference
                - redundancy
                    - admin-state keyword
                    - export string
                    - monitor string
        - subscriber-mgmt
            - apply-groups reference
            - apply-groups-exclude reference
            - dhcpv4
                - apply-groups reference
                - apply-groups-exclude reference
                - routed-subnet-transparent-forward boolean
            - multi-chassis-shunt-id number
```


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```
            – up-resiliency
               – monitor-oper-group reference
                  – apply-groups reference
                  – apply-groups-exclude reference
                  – health-drop number
         – ttl-propagate
            – local keyword
            – transit keyword
         – twamp-light
            – apply-groups reference
            – apply-groups-exclude reference
            – reflector
               – admin-state keyword
               – allow-ipv6-udp-checksum-zero boolean
               – apply-groups reference
               – apply-groups-exclude reference
               – description string
               – prefix (ipv4-prefix | ipv6-prefix)
                  – apply-groups reference
                  – apply-groups-exclude reference
                  – description string
               – type keyword
               – udp-port number
         – video-interface string
            – accounting-policy reference
            – address string
            – admin-state keyword
            – apply-groups reference
            – apply-groups-exclude reference
            – channel string source string
               – apply-groups reference
               – apply-groups-exclude reference
               – channel-name string
               – description string
               – scte35-action keyword
               – zone-channel string zone-source string
                  – adi-channel-name string
                  – apply-groups reference
                  – apply-groups-exclude reference
            – cpu-protection reference
            – description string
            – multicast-service number
            – output-format keyword
            – video-sap
               – apply-groups reference
               – apply-groups-exclude reference
               – egress
                  – apply-groups reference
                  – apply-groups-exclude reference
                  – filter
                     – ip reference
                  – qos
                     – policy-name reference
               – ingress
                  – apply-groups reference
                  – apply-groups-exclude reference
                  – filter
                     – ip reference
                  – qos
                     – policy-name reference
               – video-group-id reference
         – vprn-type keyword
         – vxlan
            – tunnel-termination (ipv4-address-no-zone | ipv6-address-no-zone)
```


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configure service vprn vxlan tunnel-termination apply-groups

```
            - apply-groups reference
            - apply-groups-exclude reference
            - fpe-id reference
      - weighted-ecmp keyword
      - wlan-gw
         - apply-groups reference
         - apply-groups-exclude reference
         - distributed-subscriber-mgmt
            - apply-groups reference
            - apply-groups-exclude reference
            - ipv6-tcp-mss-adjust number
         - mobility-triggered-accounting
            - admin-state keyword
            - hold-down number
            - include-counters boolean
         - xconnect
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - tunnel-source-ip string
            - wlan-gw-group reference
      - wpp
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - portal string
            - ack-auth-retry-count number
            - address (ipv4-address-no-zone | ipv6-address-no-zone)
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - ntf-logout-retry-count number
            - port-format keyword
            - retry-interval number
            - secret string
            - version number
```


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3.43.1 service command descriptions

service

Synopsis	Enter the **service** context
Context	**configure** service
Tree	service
Introduced	16.0.R1
Platforms	All

cpipe [service-name] *string*

Synopsis	Enter the **cpipe** list instance
Context	**configure** service cpipe *string*
Tree	cpipe
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**service-name**] *string*

Synopsis	Administrative service name
Context	**configure** service cpipe *string*
Tree	cpipe
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the service
Context	**configure** service cpipe *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable

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Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

customer *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service customer ID
Context	**configure** service cpipe *string* customer *reference*
Tree	customer
Reference	**configure** service customer *string*
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** service cpipe *string* description *string*
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

endpoint [name] *string*

Synopsis	Enter the **endpoint** list instance
Context	**configure** service cpipe *string* endpoint *string*
Tree	endpoint
Max. Instances	2
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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[**name**] *string*

Synopsis	Service endpoint name
Context	**configure** service cpipe *string* endpoint *string*
Tree	endpoint
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** service cpipe *string* endpoint *string* description *string*
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

hold-time-active *number*

Synopsis	Time before entering standby when MC-LAG SAP goes down
Context	**configure** service cpipe *string* endpoint *string* hold-time-active *number*
Tree	hold-time-active
Range	1 to 60
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

revert-time *(number | keyword)*

Synopsis	Time to wait before reverting to primary spoke SDP
Context	**configure** service cpipe *string* endpoint *string* revert-time *(number | keyword)*
Tree	revert-time
Range	1 to 600

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Units	seconds
Options	never, immediate
Default	immediate
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sap [sap-id] *string*

Synopsis	Enter the **sap** list instance
Context	**configure** service cpipe *string* sap *string*
Tree	sap
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**sap-id**] *string*

Synopsis	SAP ID
Context	**configure** service cpipe *string* sap *string*
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

accounting-policy *reference*

Synopsis	Accounting policy
Context	**configure** service cpipe *string* sap *string* accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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admin-state *keyword*

Synopsis	Administrative state of the SAP
Context	**configure** service cpipe *string* sap *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cem

Synopsis	Enter the **cem** context
Context	**configure** service cpipe *string* sap *string* cem
Tree	cem
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

packet

Synopsis	Enter the **packet** context
Context	**configure** service cpipe *string* sap *string* cem packet
Tree	packet
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

jitter-buffer *number*

Synopsis	Jitter buffer size
Context	**configure** service cpipe *string* sap *string* cem packet jitter-buffer *number*
Tree	jitter-buffer
Range	1 to 250
Units	milliseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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payload-size *number*

Synopsis	Size of payload packets transmitted to PSN by CEM SAP
Context	**configure** service cpipe *string* sap *string* cem packet payload-size *number*
Tree	payload-size
Range	2 to 1514
Units	bytes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

report-alarm

Synopsis	Enter the **report-alarm** context
Context	**configure** service cpipe *string* sap *string* cem report-alarm
Tree	report-alarm
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

buffer-overrun *boolean*

Synopsis	Report alarm for buffer overrun
Context	**configure** service cpipe *string* sap *string* cem report-alarm buffer-overrun *boolean*
Tree	buffer-overrun
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

buffer-underrun *boolean*

Synopsis	Report alarm for buffer underrun
Context	**configure** service cpipe *string* sap *string* cem report-alarm buffer-underrun *boolean*
Tree	buffer-underrun
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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malformed-packets *boolean*

Synopsis	Report alarm for malformed packets
Context	**configure** service cpipe *string* sap *string* cem report-alarm malformed-packets *boolean*
Tree	malformed-packets
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

packet-loss *boolean*

Synopsis	Report remote peer is currently in packet loss status
Context	**configure** service cpipe *string* sap *string* cem report-alarm packet-loss *boolean*
Tree	packet-loss
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

remote-fault *boolean*

Synopsis	Report remote TDM interface is currently not in service
Context	**configure** service cpipe *string* sap *string* cem report-alarm remote-fault *boolean*
Tree	remote-fault
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

remote-packet-loss *boolean*

Synopsis	Report remote peer is currently in packet loss status
Context	**configure** service cpipe *string* sap *string* cem report-alarm remote-packet-loss *boolean*
Tree	remote-packet-loss
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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remote-rdi *boolean*

Synopsis	Report remote TDM interface is currently in RDI status
Context	**configure** service cpipe *string* sap *string* cem report-alarm remote-rdi *boolean*
Tree	remote-rdi
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

stray-packets *boolean*

Synopsis	Report alarm for stray packets
Context	**configure** service cpipe *string* sap *string* cem report-alarm stray-packets *boolean*
Tree	stray-packets
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rtp-header *boolean*

Synopsis	Use RTP header for transmitted packets to the PSN
Context	**configure** service cpipe *string* sap *string* cem rtp-header *boolean*
Tree	rtp-header
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

collect-stats *boolean*

Synopsis	Collect accounting statistics
Context	**configure** service cpipe *string* sap *string* collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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description *string*

Synopsis	Text description
Context	**configure** service cpipe *string* sap *string* description *string*
Tree	description
String Length	1 to 160
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dist-cpu-protection *reference*

Synopsis	Distributed CPU protection policy for SAP
Context	**configure** service cpipe *string* sap *string* dist-cpu-protection *reference*
Tree	dist-cpu-protection
Reference	**configure** system security dist-cpu-protection policy *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

egress

Synopsis	Enter the **egress** context
Context	**configure** service cpipe *string* sap *string* egress
Tree	egress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

agg-rate

Synopsis	Enter the **agg-rate** context
Context	**configure** service cpipe *string* sap *string* egress agg-rate
Tree	agg-rate
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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adaptation-rule *keyword*

Synopsis	Adaptation rule to compute the operational PIR value when an aggregate shaper is used
Context	**configure** service cpipe *string* sap *string* egress agg-rate adaptation-rule *keyword*
Tree	adaptation-rule
Options	max, min, closest
Default	closest
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

burst-limit *(number | keyword)*

Synopsis	Shaping burst size when an aggregate shaper is used
Context	**configure** service cpipe *string* sap *string* egress agg-rate burst-limit *(number | keyword)*
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

limit-unused-bandwidth *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	**configure** service cpipe *string* sap *string* egress agg-rate limit-unused-bandwidth *boolean*
Tree	limit-unused-bandwidth
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rate *number*

Synopsis	Enforced aggregate rate for all queues
Context	**configure** service cpipe *string* sap *string* egress agg-rate rate *number*

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Tree	rate
Range	1 to 6400000000
Units	kilobps
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

qos

Synopsis	Enter the **qos** context
Context	**configure** service cpipe *string* sap *string* egress qos
Tree	qos
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policer-control-policy

Synopsis	Enter the **policer-control-policy** context
Context	**configure** service cpipe *string* sap *string* egress qos policer-control-policy
Tree	policer-control-policy
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

overrides

Synopsis	Enable the **overrides** context
Context	**configure** service cpipe *string* sap *string* egress qos policer-control-policy overrides
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

root

Synopsis	Enter the **root** context
Context	**configure** service cpipe *string* sap *string* egress qos policer-control-policy overrides root
Tree	root

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Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rate *(number | keyword)*

Synopsis	Maximum frame-based bandwidth limit
Context	**configure** service cpipe *string* sap *string* egress qos policer-control-policy overrides root max-rate *(number | keyword)*
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

priority-mbs-thresholds

Synopsis	Enter the **priority-mbs-thresholds** context
Context	**configure** service cpipe *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

min-thresh-separation *(number | keyword)*

Synopsis	Minimum amount of separation buffer space
Context	**configure** service cpipe *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation *(number | keyword)*
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

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priority [priority-level] *number*

Synopsis	Enter the **priority** list instance
Context	**configure** service cpipe *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*
Tree	priority
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

[**priority-level**] *number*

Synopsis	Priority level
Context	**configure** service cpipe *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

mbs-contribution *(number | keyword)*

Synopsis	Minimum amount of cumulative buffer space allowed
Context	**configure** service cpipe *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds priority *number* mbs-contribution *(number | keyword)*
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

policy-name *reference*

Synopsis	Policer control policy name
Context	**configure** service cpipe *string* sap *string* egress qos policer-control-policy policy-name *reference*

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Tree	policy-name
Reference	**configure** qos policer-control-policy *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

sap-egress

Synopsis	Enter the **sap-egress** context
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress
Tree	sap-egress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

overrides

Synopsis	Enter the **overrides** context
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policer [policer-id] *reference*

Synopsis	Enter the **policer** list instance
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides policer *reference*
Tree	policer
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

[**policer-id**] *reference*

Synopsis	Policer unique ID
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides policer *reference*
Tree	policer

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Reference	**configure** qos sap-egress *string* policer *number*
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

cbs *(number | keyword)*

Synopsis	CBS
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides policer *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides policer *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides policer *reference* packet-byte-offset *number*
Tree	packet-byte-offset
Range	-64 to 31

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Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides policer *reference* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

cir *decimal-number*

Synopsis	CIR percent rate
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides policer *reference* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

pir *decimal-number*

Synopsis	PIR percent rate
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides policer *reference* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

rate

Synopsis	Enter the **rate** context

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Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides policer *reference* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

cir *(number | keyword)*

Synopsis	CIR rate
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides policer *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

pir *(number | keyword)*

Synopsis	PIR rate
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides policer *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides policer *reference* stat-mode *keyword*

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Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

queue [queue-id] *reference*

Synopsis	Enter the **queue** list instance
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference*
Tree	queue
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**queue-id**] *reference*

Synopsis	Policer unique ID
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference*
Tree	queue
Reference	**configure** qos sap-egress *string* queue *number*
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference* adaptation-rule
Tree	adaptation-rule
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference* adaptation-rule cir *keyword*
Tree	cir
Options	max, min, closest
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

avg-frame-overhead *decimal-number*

Synopsis	Average packet-to-frame encapsulation overhead
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference* avg-frame-overhead *decimal-number*
Tree	avg-frame-overhead
Range	0.00 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

burst-limit *(number | keyword)*

Synopsis	Explicit shaping burst size for the queue
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference* burst-limit *(number | keyword)*
Tree	burst-limit
Range	1 to 14000000

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Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cbs *(number | keyword)*

Synopsis	CBS
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

drop-tail

Synopsis	Enter the **drop-tail** context
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference* drop-tail
Tree	drop-tail
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low

Synopsis	Enter the **low** context
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference* drop-tail low
Tree	low
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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percent-reduction-from-mbs *(number | keyword)*

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference* drop-tail low percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

hs-class-weight *number*

Synopsis	Class weight override for the queue
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference* hs-class-weight *number*
Tree	hs-class-weight
Range	1 | 2 | 4 | 8
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

hs-wred-queue

Synopsis	Enter the **hs-wred-queue** context
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference* hs-wred-queue
Tree	hs-wred-queue
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

policy *reference*

Synopsis	Slope policy applied to the HSQ queue group queue
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference* hs-wred-queue policy *reference*
Tree	policy
Reference	**configure** qos slope-policy *string*

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Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

hs-wrr-weight *number*

Synopsis	WRR weight to parent with the queue into the scheduler
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference* hs-wrr-weight *number*
Tree	hs-wrr-weight
Range	1 to 127
Default	1
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

monitor-queue-depth

Synopsis	Enable the **monitor-queue-depth** context
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference* monitor-queue-depth
Tree	monitor-queue-depth
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference* monitor-queue-depth fast-polling *boolean*
Tree	fast-polling
Description	When configured to **true**, this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

violation-threshold *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference* monitor-queue-depth violation-threshold *decimal-number*
Tree	violation-threshold
Description	This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

parent

Synopsis	Enter the **parent** context
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference* parent
Tree	parent
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference* parent cir-weight *number*

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Tree	cir-weight
Range	0 to 100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

weight *number*

Synopsis	PIR parameter that overrides parent for queue group
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference* parent weight *number*
Tree	weight
Range	0 to 100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir *decimal-number*

Synopsis	CIR percent rate
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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pir *decimal-number*

Synopsis	PIR percent rate
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rate

Synopsis	Enter the **rate** context
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir *(number | keyword)*

Synopsis	CIR rate
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pir *(number | keyword)*

Synopsis	PIR rate
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress overrides queue *reference* rate pir *(number | keyword)*

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Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policy-name *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	**configure** service cpipe *string* sap *string* egress qos sap-egress policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-egress *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

scheduler-policy

Synopsis	Enter the **scheduler-policy** context
Context	**configure** service cpipe *string* sap *string* egress qos scheduler-policy
Tree	scheduler-policy
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

overrides

Synopsis	Enter the **overrides** context
Context	**configure** service cpipe *string* sap *string* egress qos scheduler-policy overrides
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

scheduler [scheduler-name] *string*

Synopsis	Enter the **scheduler** list instance

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Context	**configure** service cpipe *string* sap *string* egress qos scheduler-policy overrides scheduler *string*
Tree	scheduler
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**scheduler-name**] *string*

Synopsis	Scheduler name
Context	**configure** service cpipe *string* sap *string* egress qos scheduler-policy overrides scheduler *string*
Tree	scheduler
Description	This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands. If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name. If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

parent

Synopsis	Enter the **parent** context
Context	**configure** service cpipe *string* sap *string* egress qos scheduler-policy overrides scheduler *string* parent
Tree	parent
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	**configure** service cpipe *string* sap *string* egress qos scheduler-policy overrides scheduler *string* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	**configure** service cpipe *string* sap *string* egress qos scheduler-policy overrides scheduler *string* parent weight *number*
Tree	weight
Range	0 to 100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rate

Synopsis	Enter the **rate** context
Context	**configure** service cpipe *string* sap *string* egress qos scheduler-policy overrides scheduler *string* rate
Tree	rate
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir *(number | keyword)*

Synopsis	CIR at which the queue it to operate
Context	**configure** service cpipe *string* sap *string* egress qos scheduler-policy overrides scheduler *string* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000

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Units	kilobps
Options	sum, max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pir *(number | keyword)*

Synopsis	PIR at which the queue is to operate
Context	**configure** service cpipe *string* sap *string* egress qos scheduler-policy overrides scheduler *string* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policy-name *reference*

Synopsis	Scheduler policy name
Context	**configure** service cpipe *string* sap *string* egress qos scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos scheduler-policy *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

endpoint *reference*

Synopsis	Endpoint name
Context	**configure** service cpipe *string* sap *string* endpoint *reference*
Tree	endpoint
Reference	**configure** service cpipe *string* endpoint *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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ingress

Synopsis	Enter the **ingress** context
Context	**configure** service cpipe *string* sap *string* ingress
Tree	ingress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

qos

Synopsis	Enter the **qos** context
Context	**configure** service cpipe *string* sap *string* ingress qos
Tree	qos
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policer-control-policy

Synopsis	Enter the **policer-control-policy** context
Context	**configure** service cpipe *string* sap *string* ingress qos policer-control-policy
Tree	policer-control-policy
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

overrides

Synopsis	Enable the **overrides** context
Context	**configure** service cpipe *string* sap *string* ingress qos policer-control-policy overrides
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

root

Synopsis	Enter the **root** context

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Context	**configure** service cpipe *string* sap *string* ingress qos policer-control-policy overrides root
Tree	root
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rate *(number | keyword)*

Synopsis	Maximum frame-based bandwidth limit
Context	**configure** service cpipe *string* sap *string* ingress qos policer-control-policy overrides root max-rate *(number | keyword)*
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

priority-mbs-thresholds

Synopsis	Enter the **priority-mbs-thresholds** context
Context	**configure** service cpipe *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

min-thresh-separation *(number | keyword)*

Synopsis	Minimum amount of separation buffer space
Context	**configure** service cpipe *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation *(number | keyword)*
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	20.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

priority [priority-level] *number*

Synopsis	Enter the **priority** list instance
Context	**configure** service cpipe *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*
Tree	priority
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

[**priority-level**] *number*

Synopsis	Priority level
Context	**configure** service cpipe *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

mbs-contribution *(number | keyword)*

Synopsis	Minimum amount of cumulative buffer space allowed
Context	**configure** service cpipe *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds priority *number* mbs-contribution *(number | keyword)*
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

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policy-name *reference*

Synopsis	Policer control policy name
Context	**configure** service cpipe *string* sap *string* ingress qos policer-control-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos policer-control-policy *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

sap-ingress

Synopsis	Enter the **sap-ingress** context
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress
Tree	sap-ingress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

overrides

Synopsis	Enter the **overrides** context
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ip-criteria

Synopsis	Enter the **ip-criteria** context
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides ip-criteria
Tree	ip-criteria
Introduced	20.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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activate-entry-tag *number*

Synopsis	Tag ID activated for IPv4 criteria
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides ip-criteria activate-entry-tag *number*
Tree	activate-entry-tag
Range	1 to 255
Introduced	20.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6-criteria

Synopsis	Enter the **ipv6-criteria** context
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides ipv6-criteria
Tree	ipv6-criteria
Introduced	20.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

activate-entry-tag *number*

Synopsis	Tag ID activated for IPv6 criteria
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides ipv6-criteria activate-entry-tag *number*
Tree	activate-entry-tag
Range	1 to 255
Introduced	20.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policer [policer-id] *reference*

Synopsis	Enter the **policer** list instance
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides policer *reference*
Tree	policer
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

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[**policer-id**] *reference*

Synopsis	Policer unique ID
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides policer *reference*
Tree	policer
Reference	**configure** qos sap-ingress *string* policer *number*
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

cbs *(number | keyword)*

Synopsis	CBS
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

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packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* packet-byte-offset *number*
Tree	packet-byte-offset
Range	-32 to 31
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

cir *decimal-number*

Synopsis	CIR percent rate
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

pir *decimal-number*

Synopsis	PIR percent rate
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00

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Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

rate

Synopsis	Enter the **rate** context
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

cir *(number | keyword)*

Synopsis	CIR rate
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

pir *(number | keyword)*

Synopsis	PIR rate
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

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stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* stat-mode *keyword*
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

queue [queue-id] *reference*

Synopsis	Enter the **queue** list instance
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides queue *reference*
Tree	queue
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**queue-id**] *reference*

Synopsis	Policer unique ID
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides queue *reference*
Tree	queue
Reference	**configure** qos sap-ingress *string* queue *number*
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* adaptation-rule

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Tree	adaptation-rule
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* adaptation-rule cir *keyword*
Tree	cir
Options	max, min, closest
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cbs *(number | keyword)*

Synopsis	CBS
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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drop-tail

Synopsis	Enter the **drop-tail** context
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* drop-tail
Tree	drop-tail
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low

Synopsis	Enter the **low** context
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* drop-tail low
Tree	low
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

percent-reduction-from-mbs *(number | keyword)*

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* drop-tail low percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 1073741824

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Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

monitor-queue-depth

Synopsis	Enable the **monitor-queue-depth** context
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* monitor-queue-depth
Tree	monitor-queue-depth
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* monitor-queue-depth fast-polling *boolean*
Tree	fast-polling
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

parent

Synopsis	Enter the **parent** context
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* parent
Tree	parent
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group

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Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

weight *number*

Synopsis	PIR parameter that overrides parent for queue group
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* parent weight *number*
Tree	weight
Range	0 to 100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir *decimal-number*

Synopsis	CIR percent rate
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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pir *decimal-number*

Synopsis	PIR percent rate
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rate

Synopsis	Enter the **rate** context
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir *(number | keyword)*

Synopsis	CIR rate
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pir *(number | keyword)*

Synopsis	PIR rate

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Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policy-name *reference*

Synopsis	Policy ID
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-ingress *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

queuing-type *keyword*

Synopsis	Queuing type
Context	**configure** service cpipe *string* sap *string* ingress qos sap-ingress queuing-type *keyword*
Tree	queuing-type
Options	shared, multipoint-shared
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

scheduler-policy

Synopsis	Enter the **scheduler-policy** context
Context	**configure** service cpipe *string* sap *string* ingress qos scheduler-policy
Tree	scheduler-policy
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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overrides

Synopsis	Enter the **overrides** context
Context	**configure** service cpipe *string* sap *string* ingress qos scheduler-policy overrides
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

scheduler [scheduler-name] *string*

Synopsis	Enter the **scheduler** list instance
Context	**configure** service cpipe *string* sap *string* ingress qos scheduler-policy overrides scheduler *string*
Tree	scheduler
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**scheduler-name**] *string*

Synopsis	Scheduler name
Context	**configure** service cpipe *string* sap *string* ingress qos scheduler-policy overrides scheduler *string*
Tree	scheduler
Description	This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands. If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name. If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

parent

Synopsis	Enter the **parent** context
Context	**configure** service cpipe *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* parent
Tree	parent
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	**configure** service cpipe *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	**configure** service cpipe *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* parent weight *number*
Tree	weight
Range	0 to 100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rate

Synopsis	Enter the **rate** context
Context	**configure** service cpipe *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* rate
Tree	rate

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Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir *(number | keyword)*

Synopsis	CIR at which the queue it to operate
Context	**configure** service cpipe *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pir *(number | keyword)*

Synopsis	PIR at which the queue is to operate
Context	**configure** service cpipe *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policy-name *reference*

Synopsis	Scheduler policy name
Context	**configure** service cpipe *string* sap *string* ingress qos scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos scheduler-policy *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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lag

Synopsis	Enter the **lag** context
Context	**configure** service cpipe *string* sap *string* lag
Tree	lag
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multi-service-site *reference*

Synopsis	Multi service site name
Context	**configure** service cpipe *string* sap *string* multi-service-site *reference*
Tree	multi-service-site
Reference	**configure** service customer *string* multi-service-site *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

service-id *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	**configure** service cpipe *string* service-id *number*
Tree	service-id
Range	1 to 2147483647
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

service-mtu *number*

Synopsis	MTU size
Context	**configure** service cpipe *string* service-mtu *number*
Tree	service-mtu
Range	1 to 9194

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Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

spoke-sdp [sdp-bind-id] *string*

Synopsis	Enter the **spoke-sdp** list instance
Context	**configure** service cpipe *string* spoke-sdp *string*
Tree	spoke-sdp
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**sdp-bind-id**] *string*

Synopsis	SDP binding ID
Context	**configure** service cpipe *string* spoke-sdp *string*
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the SDP binding to the service
Context	**configure** service cpipe *string* spoke-sdp *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bandwidth *(number | keyword)*

Synopsis	Bandwidth that is reserved for this SDP binding
Context	**configure** service cpipe *string* spoke-sdp *string* bandwidth *(number | keyword)*

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Tree	bandwidth
Range	0 to 100000000
Units	kilobps
Options	max
Default	0
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bfd

Synopsis	Enter the **bfd** context
Context	**configure** service cpipe *string* spoke-sdp *string* bfd
Tree	bfd
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bfd-liveness

Synopsis	Enable the **bfd-liveness** context
Context	**configure** service cpipe *string* spoke-sdp *string* bfd bfd-liveness
Tree	bfd-liveness
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

encap *keyword*

Synopsis	BFD encapsulation used on the SDP binding
Context	**configure** service cpipe *string* spoke-sdp *string* bfd bfd-liveness encap *keyword*
Tree	encap
Options	ipv4
Default	ipv4
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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bfd-template *reference*

Synopsis	BFD template associated with the SDP binding
Context	**configure** service cpipe *string* spoke-sdp *string* bfd bfd-template *reference*
Tree	bfd-template
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the **configure router bfd** context.
Reference	**configure** bfd bfd-template *string*
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

control-word *boolean*

Synopsis	Use control word as part of packet encapsulation
Context	**configure** service cpipe *string* spoke-sdp *string* control-word *boolean*
Tree	control-word
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** service cpipe *string* spoke-sdp *string* description *string*
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

egress

Synopsis	Enter the **egress** context
Context	**configure** service cpipe *string* spoke-sdp *string* egress
Tree	egress
Introduced	20.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

qos

Synopsis	Enter the **qos** context
Context	**configure** service cpipe *string* spoke-sdp *string* egress qos
Tree	qos
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

network

Synopsis	Enter the **network** context
Context	**configure** service cpipe *string* spoke-sdp *string* egress qos network
Tree	network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policy-name *reference*

Synopsis	Network policy ID
Context	**configure** service cpipe *string* spoke-sdp *string* egress qos network policy-name *reference*
Tree	policy-name
Reference	**configure** qos network *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-redirect-group

Synopsis	Enter the **port-redirect-group** context
Context	**configure** service cpipe *string* spoke-sdp *string* egress qos network port-redirect-group
Tree	port-redirect-group
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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group-name *reference*

Synopsis	Name of the egress port queue group
Context	**configure** service cpipe *string* spoke-sdp *string* egress qos network port-redirect-group group-name *reference*
Tree	group-name
Reference	**configure** qos queue-group-templates egress queue-group *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

instance *number*

Synopsis	Queue-group instance ID
Context	**configure** service cpipe *string* spoke-sdp *string* egress qos network port-redirect-group instance *number*
Tree	instance
Range	1 to 65535
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	**configure** service cpipe *string* spoke-sdp *string* egress vc-label *number*
Tree	vc-label
Range	16 to 1048575
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

endpoint

Synopsis	Enter the **endpoint** context

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Context	**configure** service cpipe *string* spoke-sdp *string* endpoint
Tree	endpoint
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

icb *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Bind the SDP as the Inter-Chassis Backup (ICB) type
Context	**configure** service cpipe *string* spoke-sdp *string* endpoint icb *boolean*
Tree	icb
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

name *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Endpoint name to which SDP bind is attached
Context	**configure** service cpipe *string* spoke-sdp *string* endpoint name *reference*
Tree	name
Reference	**configure** service cpipe *string* endpoint *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

precedence *(number | keyword)*

Synopsis	Precedence when multiple SDP binds are on one endpoint
Context	**configure** service cpipe *string* spoke-sdp *string* endpoint precedence *(number | keyword)*
Tree	precedence

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Range	1 to 4
Options	primary
Default	4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service cpipe *string* spoke-sdp *string* ingress
Tree	ingress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

qos

Synopsis	Enter the **qos** context
Context	**configure** service cpipe *string* spoke-sdp *string* ingress qos
Tree	qos
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

network

Synopsis	Enter the **network** context
Context	**configure** service cpipe *string* spoke-sdp *string* ingress qos network
Tree	network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fp-redirect-group

Synopsis	Enter the **fp-redirect-group** context
Context	**configure** service cpipe *string* spoke-sdp *string* ingress qos network fp-redirect-group
Tree	fp-redirect-group

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Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

group-name *reference*

Synopsis	Name of the forwarding plane queue group template
Context	**configure** service cpipe *string* spoke-sdp *string* ingress qos network fp-redirect-group group-name *reference*
Tree	group-name
Reference	**configure** qos queue-group-templates ingress queue-group *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

instance *number*

Synopsis	Instance of FP ingress queue group for the SDP binding
Context	**configure** service cpipe *string* spoke-sdp *string* ingress qos network fp-redirect-group instance *number*
Tree	instance
Range	1 to 65535
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policy-name *reference*

Synopsis	Network policy ID
Context	**configure** service cpipe *string* spoke-sdp *string* ingress qos network policy-name *reference*
Tree	policy-name
Reference	**configure** qos network *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
Context	**configure** service cpipe *string* spoke-sdp *string* ingress vc-label *number*
Tree	vc-label
Range	1 to 1048575
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate as a test service
Context	**configure** service cpipe *string* test *boolean*
Tree	test
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vc-switching *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Use PW switching signaling for spoke SDPs in service
Context	**configure** service cpipe *string* vc-switching *boolean*
Tree	vc-switching
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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vc-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Circuit emulation service type
Context	**configure** service cpipe *string* vc-type *keyword*
Tree	vc-type
Options	satop-e1, satop-t1, cesopsn, cesopsn-cas
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vpn-id *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPN identifier for the service
Context	**configure** service cpipe *string* vpn-id *number*
Tree	vpn-id
Range	1 to 2147483647
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

customer [customer-name] *string*

Synopsis	Enter the **customer** list instance
Context	**configure** service customer *string*
Tree	customer
Introduced	16.0.R1
Platforms	All

[**customer-name**] *string*

Synopsis	Customer name for a service

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Context	**configure** service customer *string*
Tree	customer
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

contact *string*

Synopsis	Service customer contact information
Context	**configure** service customer *string* contact *string*
Tree	contact
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

customer-id *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Customer ID
Context	**configure** service customer *string* customer-id *number*
Tree	customer-id
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service customer *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1

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Platforms	All

multi-service-site [multi-service-site-name] *string*

Synopsis	Enter the **multi-service-site** list instance
Context	**configure** service customer *string* multi-service-site *string*
Tree	multi-service-site
Introduced	16.0.R1
Platforms	All

[**multi-service-site-name**] *string*

Synopsis	Customer site name
Context	**configure** service customer *string* multi-service-site *string*
Tree	multi-service-site
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

assignment

Synopsis	Enter the **assignment** context
Context	**configure** service customer *string* multi-service-site *string* assignment
Tree	assignment
Introduced	16.0.R1
Platforms	All

card *number*

Synopsis	Multi-service-site assignment to the card slot
Context	**configure** service customer *string* multi-service-site *string* assignment card *number*
Tree	card
Range	1 to 20
Notes	The following elements are part of a choice: **card**, **fpe**, or **port**.

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Introduced	16.0.R1
Platforms	All

fpe *reference*

Synopsis	Multi-service-site assignment to the FPE object
Context	**configure** service customer *string* multi-service-site *string* assignment fpe *reference*
Tree	fpe
Description	When configured to **true**, this command identifies the MSS assignment to an FPE object to allow the creation of a scheduling hierarchy used to control bandwidth over a set of PW SAPs belonging to multiple PW ports. These PW ports must be associated with the same FPE to which MSS is assigned. When configured to **false**, this command has no effect and returns no warnings or messages.
Reference	**configure** fwd-path-ext fpe *number*
Notes	The following elements are part of a choice: **card**, **fpe**, or **port**.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port *string*

Synopsis	Multi-service-site assignment to the port
Context	**configure** service customer *string* multi-service-site *string* assignment port *string*
Tree	port
Notes	The following elements are part of a choice: **card**, **fpe**, or **port**.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service customer *string* multi-service-site *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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egress

Synopsis	Enter the **egress** context
Context	**configure** service customer *string* multi-service-site *string* egress
Tree	egress
Introduced	16.0.R1
Platforms	All

agg-rate

Synopsis	Enter the **agg-rate** context
Context	**configure** service customer *string* multi-service-site *string* egress agg-rate
Tree	agg-rate
Introduced	16.0.R1
Platforms	All

limit-unused-bandwidth *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	**configure** service customer *string* multi-service-site *string* egress agg-rate limit-unused-bandwidth *boolean*
Tree	limit-unused-bandwidth
Default	false
Introduced	16.0.R1
Platforms	All

queue-frame-based-accounting *boolean*

Synopsis	Enable frame based accounting for policers and queues
Context	**configure** service customer *string* multi-service-site *string* egress agg-rate queue-frame-based-accounting *boolean*
Tree	queue-frame-based-accounting
Default	false
Introduced	16.0.R1
Platforms	All

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rate *number*

Synopsis	Rate limit
Context	**configure** service customer *string* multi-service-site *string* egress agg-rate rate *number*
Tree	rate
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

policer-control-policy *reference*

Synopsis	Policer control policy
Context	**configure** service customer *string* multi-service-site *string* egress policer-control-policy *reference*
Tree	policer-control-policy
Reference	**configure** qos policer-control-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

scheduler-policy

Synopsis	Enter the **scheduler-policy** context
Context	**configure** service customer *string* multi-service-site *string* egress scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the **overrides** context
Context	**configure** service customer *string* multi-service-site *string* egress scheduler-policy overrides
Tree	overrides
Introduced	16.0.R1

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Platforms All

scheduler [scheduler-name] *string*

Synopsis Enter the **scheduler** list instance

Context **configure** service customer *string* multi-service-site *string* egress scheduler-policy overrides scheduler *string*

Tree scheduler

Introduced 16.0.R1

Platforms All

[**scheduler-name**] *string*

Synopsis Scheduler name

Context **configure** service customer *string* multi-service-site *string* egress scheduler-policy overrides scheduler *string*

Tree scheduler

Description This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.

If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.

If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context does not change.

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

parent

Synopsis Enter the **parent** context

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Context	**configure** service customer *string* multi-service-site *string* egress scheduler-policy overrides scheduler *string* parent
Tree	parent
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	**configure** service customer *string* multi-service-site *string* egress scheduler-policy overrides scheduler *string* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	**configure** service customer *string* multi-service-site *string* egress scheduler-policy overrides scheduler *string* parent weight *number*
Tree	weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** service customer *string* multi-service-site *string* egress scheduler-policy overrides scheduler *string* rate
Tree	rate
Introduced	16.0.R1
Platforms	All

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cir *(number | keyword)*

Synopsis	CIR for the scheduler
Context	**configure** service customer *string* multi-service-site *string* egress scheduler-policy overrides scheduler *string* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	PIR for the scheduler
Context	**configure** service customer *string* multi-service-site *string* egress scheduler-policy overrides scheduler *string* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy name
Context	**configure** service customer *string* multi-service-site *string* egress scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos scheduler-policy *string*
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the **ingress** context

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Context	**configure** service customer *string* multi-service-site *string* ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

policer-control-policy *reference*

Synopsis	Policer control policy
Context	**configure** service customer *string* multi-service-site *string* ingress policer-control-policy *reference*
Tree	policer-control-policy
Reference	**configure** qos policer-control-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

scheduler-policy

Synopsis	Enter the **scheduler-policy** context
Context	**configure** service customer *string* multi-service-site *string* ingress scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the **overrides** context
Context	**configure** service customer *string* multi-service-site *string* ingress scheduler-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

scheduler [scheduler-name] *string*

Synopsis	Enter the **scheduler** list instance

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Context	**configure** service customer *string* multi-service-site *string* ingress scheduler-policy overrides scheduler *string*
Tree	scheduler
Introduced	16.0.R1
Platforms	All

[**scheduler-name**] *string*

Synopsis	Scheduler name
Context	**configure** service customer *string* multi-service-site *string* ingress scheduler-policy overrides scheduler *string*
Tree	scheduler
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

parent

Synopsis	Enter the **parent** context
Context	**configure** service customer *string* multi-service-site *string* ingress scheduler-policy overrides scheduler *string* parent
Tree	parent
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	**configure** service customer *string* multi-service-site *string* ingress scheduler-policy overrides scheduler *string* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

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weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	**configure** service customer *string* multi-service-site *string* ingress scheduler-policy overrides scheduler *string* parent weight *number*
Tree	weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** service customer *string* multi-service-site *string* ingress scheduler-policy overrides scheduler *string* rate
Tree	rate
Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	CIR for the scheduler
Context	**configure** service customer *string* multi-service-site *string* ingress scheduler-policy overrides scheduler *string* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	PIR for the scheduler
Context	**configure** service customer *string* multi-service-site *string* ingress scheduler-policy overrides scheduler *string* rate pir *(number | keyword)*
Tree	pir

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Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy name
Context	**configure** service customer *string* multi-service-site *string* ingress scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos scheduler-policy *string*
Introduced	16.0.R1
Platforms	All

phone *string*

Synopsis	Service customer telephone number information
Context	**configure** service customer *string* phone *string*
Tree	phone
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

epipe [service-name] *string*

Synopsis	Enter the **epipe** list instance
Context	**configure** service epipe *string*
Tree	epipe
Introduced	16.0.R1
Platforms	All

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[**service-name**] *string*

Synopsis	Administrative service name
Context	**configure** service epipe *string*
Tree	epipe
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the service
Context	**configure** service epipe *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

bgp [bgp-instance] *number*

Synopsis	Enter the **bgp** list instance
Context	**configure** service epipe *string* bgp *number*
Tree	bgp
Introduced	16.0.R1
Platforms	All

[**bgp-instance**] *number*

Synopsis	BGP instance
Context	**configure** service epipe *string* bgp *number*
Tree	bgp
Range	1
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

adv-service-mtu *number*

Synopsis	Advertised service MTU value
Context	**configure** service epipe *string* bgp *number* adv-service-mtu *number*
Tree	adv-service-mtu
Description	This command configures the MTU signaled value used in the BGP for the service. When configured, the router uses the value for signaling and for validation with the received MTU instead of the service MTU. However, the value does not affect the locally enforced value, which is still based on the service MTU.
Range	0 to 9782
Introduced	22.2.R1
Platforms	All

pw-template-binding [pw-template-name] *reference*

Synopsis	Enter the **pw-template-binding** list instance
Context	**configure** service epipe *string* bgp *number* pw-template-binding *reference*
Tree	pw-template-binding
Max. Instances	100
Introduced	16.0.R1
Platforms	All

[**pw-template-name**] *reference*

Synopsis	Policy name
Context	**configure** service epipe *string* bgp *number* pw-template-binding *reference*
Tree	pw-template-binding
Reference	**configure** service pw-template *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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bfd-liveness *boolean*

Synopsis	Enable BFD
Context	**configure** service epipe *string* bgp *number* pw-template-binding *reference* bfd-liveness *boolean*
Tree	bfd-liveness
Default	false
Introduced	16.0.R1
Platforms	All

bfd-template *reference*

Synopsis	BFD template name for PW-Template binding
Context	**configure** service epipe *string* bgp *number* pw-template-binding *reference* bfd-template *reference*
Tree	bfd-template
Reference	**configure** bfd bfd-template *string*
Introduced	16.0.R1
Platforms	All

endpoint *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Endpoint name associated with the BGP PW template
Context	**configure** service epipe *string* bgp *number* pw-template-binding *reference* endpoint *reference*
Tree	endpoint
Description	This command specifies the endpoint name associated with the BGP PW template. When an endpoint is associated to the PW template binding of a BGP VPWS service, EVPN MPLS can also be configured and associated to the same endpoint in the same Epipe service.
Reference	**configure** service epipe *string* endpoint *string*
Introduced	20.5.R1
Platforms	All

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import-rt *string*

Synopsis	Import route-target communities
Context	**configure** service epipe *string* bgp *number* pw-template-binding *reference* import-rt *string*
Tree	import-rt
String Length	10 to 28
Max. Instances	5
Introduced	16.0.R1
Platforms	All

route-distinguisher *(keyword | vpn-route-distinguisher)*

Synopsis	RD component for NLRI for L2VPN and EVPN families
Context	**configure** service epipe *string* bgp *number* route-distinguisher *(keyword | vpn-route-distinguisher)*
Tree	route-distinguisher
Options	auto-rd
Introduced	16.0.R1
Platforms	All

route-target

Synopsis	Enter the **route-target** context
Context	**configure** service epipe *string* bgp *number* route-target
Tree	route-target
Introduced	16.0.R1
Platforms	All

export *string*

Synopsis	Extended community name for default import policy
Context	**configure** service epipe *string* bgp *number* route-target export *string*
Tree	export
String Length	10 to 28

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Introduced	16.0.R1
Platforms	All

import *string*

Synopsis	Extended community name for default import policy
Context	**configure** service epipe *string* bgp *number* route-target import *string*
Tree	import
String Length	10 to 28
Introduced	16.0.R1
Platforms	All

vsi-export *reference*

Synopsis	VSI export policies
Context	**configure** service epipe *string* bgp *number* vsi-export *reference*
Tree	vsi-export
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

vsi-import *reference*

Synopsis	VSI import policies
Context	**configure** service epipe *string* bgp *number* vsi-import *reference*
Tree	vsi-import
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

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bgp-evpn

Synopsis	Enable the **bgp-evpn** context
Context	**configure** service epipe *string* bgp-evpn
Tree	bgp-evpn
Introduced	16.0.R1
Platforms	All

evi *number*

Synopsis	EVPN ID
Context	**configure** service epipe *string* bgp-evpn evi *number*
Tree	evi
Description	This command configures an EVPN instance (EVI) unique in the system. It is used for the service-carving algorithm for multi-homing and auto-deriving route target and route distinguishers. The following options are supported: If this EVPN identifier is not specified, the value is zero and no route distinguisher or route target is automatically derived from it.If the specified EVPN identifier is lower than 65535 and no other route distinguisher or route target is configured in the service, the following applies: • the route distinguisher is derived from <system_ip>:evi • the route target is derived from <autonomous-system>:evi If the specified EVPN identifier is higher than 65535 and no other route distinguisher or route target is configured in the service, the following applies. • The route distinguisher cannot be automatically derived. An error is generated if enabling EVPN is attempted without a route distinguisher. A manual or an **auto-rd** route distinguisher must be configured. • The route target can only be automatically derived if the **evi-three-byte-auto-rt** command is configured. If configured, the route target is automatically derived in accordance with the rules described in RFC8365.
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

local-attachment-circuit [name] *string*

Synopsis	Enter the **local-attachment-circuit** list instance

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Context	**configure** service epipe *string* bgp-evpn local-attachment-circuit *string*
Tree	local-attachment-circuit
Max. Instances	2
Introduced	20.10.R1
Platforms	All

[**name**] *string*

Synopsis	Attachment circuit name
Context	**configure** service epipe *string* bgp-evpn local-attachment-circuit *string*
Tree	local-attachment-circuit
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

endpoint *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Endpoint name
Context	**configure** service epipe *string* bgp-evpn local-attachment-circuit *string* endpoint *reference*
Tree	endpoint
Reference	**configure** service epipe *string* endpoint *string*
Introduced	20.10.R1
Platforms	All

eth-tag *number*

Synopsis	Ethernet tag of the attachment circuit
Context	**configure** service epipe *string* bgp-evpn local-attachment-circuit *string* eth-tag *number*
Tree	eth-tag

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Description	This command configures the Ethernet tag value of the attachment circuit. When configured in the local attachment circuit context, the tag value is used in the advertised AD per-EVI route sent for the attachment circuit. When configured in the remote attachment circuit context, the value is compared with the Ethernet tag value of the imported D per-EVI routes for the service. When there is a match, the system creates an EVPN destination for the Epipe.
Range	1 to 16777215
Introduced	20.10.R1
Platforms	All

mpls [bgp-instance] *number*

Synopsis	Enter the **mpls** list instance
Context	**configure** service epipe *string* bgp-evpn mpls *number*
Tree	mpls
Introduced	16.0.R1
Platforms	All

[**bgp-instance**] *number*

Synopsis	BGP instance
Context	**configure** service epipe *string* bgp-evpn mpls *number*
Tree	mpls
Range	1
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BGP EVPN MPLS
Context	**configure** service epipe *string* bgp-evpn mpls *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1

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Platforms	All

auto-bind-tunnel

Synopsis	Enter the **auto-bind-tunnel** context
Context	**configure** service epipe *string* bgp-evpn mpls *number* auto-bind-tunnel
Tree	auto-bind-tunnel
Introduced	16.0.R1
Platforms	All

allow-flex-algo-fallback *boolean*

Synopsis	Enable flexible algorithm fallback
Context	**configure** service epipe *string* bgp-evpn mpls *number* auto-bind-tunnel allow-flex-algo-fallback *boolean*
Tree	allow-flex-algo-fallback
Description	When configured to **true**, a BGP router with a Flex-Algorithm action configured (via the **configure policy-options policy-statement entry action flex-algo** command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available**.** When configured to **false**, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.
Default	false
Introduced	20.10.R1
Platforms	All

ecmp *number*

Synopsis	Maximum ECMP routes information
Context	**configure** service epipe *string* bgp-evpn mpls *number* auto-bind-tunnel ecmp *number*
Tree	ecmp
Range	1 to 32
Default	1
Introduced	19.10.R1
Platforms	All

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enforce-strict-tunnel-tagging *boolean*

Synopsis	Enable/disable enforcement of strict tunnel tagging
Context	**configure** service epipe *string* bgp-evpn mpls *number* auto-bind-tunnel enforce-strict-tunnel-tagging *boolean*
Tree	enforce-strict-tunnel-tagging
Default	false
Introduced	16.0.R4
Platforms	All

resolution *keyword*

Synopsis	Resolution method for tunnel selection
Context	**configure** service epipe *string* bgp-evpn mpls *number* auto-bind-tunnel resolution *keyword*
Tree	resolution
Options	none, filter, any
Default	none
Introduced	16.0.R1
Platforms	All

resolution-filter

Synopsis	Enter the **resolution-filter** context
Context	**configure** service epipe *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter
Tree	resolution-filter
Introduced	16.0.R1
Platforms	All

bgp *boolean*

Synopsis	Use BGP tunneling for next-hop resolution
Context	**configure** service epipe *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter bgp *boolean*
Tree	bgp
Description	When configured to **true**, BGP searches the BGP LSP for the address of the BGP next hop.

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When configured to **false**, BGP tunneling is not used and inter-area or inter-as prefixes are not resolved.

Default	false
Introduced	16.0.R1
Platforms	All

ldp *boolean*

Synopsis	Use LDP tunneling for next-hop resolution
Context	**configure** service epipe *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter ldp *boolean*
Tree	ldp
Description	When configured to **true**, BGP searches for an LDP LSP with a FEC prefix corresponding to the address of the BGP next hop. When configured to **false**, LDP tunneling is not used for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

mpls-fwd-policy *boolean*

Synopsis	Use MPLS forwarding policy for next-hop resolution
Context	**configure** service epipe *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter mpls-fwd-policy *boolean*
Tree	mpls-fwd-policy
Description	When configured to **true**, BGP uses the MPLS forwarding policy to determine the address of the BGP next hop. When configured to **false**, the MPLS forwarding policy is not used for next-hop resolution.
Default	false
Introduced	19.5.R1
Platforms	All

rib-api *boolean*

Synopsis	Use RIB API gRPC service for next-hop resolution

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Context	**configure** service epipe *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter rib-api *boolean*
Tree	rib-api
Description	When configured to **true**, BGP uses tunnels programmed using the RIB API gRPC service to resolve the next hops of routes imported into the EVPN service. When configured to **false**, the RIB API service tunnels are not used for next-hop resolution.
Default	false
Introduced	19.5.R1
Platforms	All

rsvp *boolean*

Synopsis	Use RSVP tunneling for next-hop resolution
Context	**configure** service epipe *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter rsvp *boolean*
Tree	rsvp
Description	When configured to **true**, BGP searches the best metric RSVP LSP to determine the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface used by the BGP instance on the remote node. The LSP metric is provided by MPLS in the tunnel table. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID. When configured to **false**, the RSVP LSP is not used for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

sr-isis *boolean*

Synopsis	Use IS-IS SR tunneling for next-hop resolution
Context	**configure** service epipe *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter sr-isis *boolean*
Tree	sr-isis
Description	When configured to **true**, BGP uses an IS-IS tunnel type to determine the address of the BGP next hop. The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered IS-IS instance. When configured to **false**, IS-IS tunneling is not used for next-hop resolution.

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Default	false
Introduced	16.0.R1
Platforms	All

sr-ospf *boolean*

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	**configure** service epipe *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter sr-ospf *boolean*
Tree	sr-ospf
Description	When configured to **true**, BGP uses an OSPF tunnel type to determine the address of the BGP next hop. The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OPSF instance. When configured to **false**, OSPF tunneling is not used for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

sr-ospf3 *boolean*

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
Context	**configure** service epipe *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter sr-ospf3 *boolean*
Tree	sr-ospf3
Description	When configured to **true**, BGP uses an OSPF3 tunnel type to determine the address of the BGP next hop. The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OPSF3 instance. When configured to **false**, OSPF3 tunneling is not used for next-hop resolution.
Default	false
Introduced	19.10.R1
Platforms	All

sr-policy *boolean*

Synopsis	Use SR policies for next-hop resolution

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Context	**configure** service epipe *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter sr-policy *boolean*
Tree	sr-policy
Description	When configured to **true**, this command instructs BGP to use an SR policy to determine the address of the BGP next hop.The SR policy search criteria includes a non-null endpoint and color value that matches the BGP next hop and color extended community value, respectively, of the EVPN route. When configured to **false**, SR policies are not used for next-hop resolution.
Default	false
Introduced	19.5.R1
Platforms	All

sr-te *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	**configure** service epipe *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter sr-te *boolean*
Tree	sr-te
Description	When configured to **true**, BGP uses an SR-TE tunnel type to determine the address of the BGP next hop. The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered tunnel ID. When configured to **false**, SR-TE tunneling is not used for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

udp *boolean*

Synopsis	Use MPLS over UDP tunneling for next-hop resolution
Context	**configure** service epipe *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter udp *boolean*
Tree	udp
Description	When configured to **true**, BGP uses an MPLS over UDP tunnel type to determine the address of the BGP next hop. When configured to **false**, MPLS over UDP tunneling is not used for next-hop resolution.
Default	false
Introduced	16.0.R1

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Platforms	All

weighted-ecmp *boolean*

Synopsis	Allow weighted load balancing
Context	**configure** service epipe *string* bgp-evpn mpls *number* auto-bind-tunnel weighted-ecmp *boolean*
Tree	weighted-ecmp
Description	When configured to **true**, this router enables weighted ECMP for packets using tunnels that a VPLS or Epipe automatically binds to. Packets are sprayed across LSPs in the ECMP according to the outcome of the hash algorithm and the configured load balancing weight of each LSP. When configured to **false**, this command disables weighted ECMP for next-hop tunnel selection.
Default	false
Introduced	22.7.R1
Platforms	All

control-word *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable support for control word
Context	**configure** service epipe *string* bgp-evpn mpls *number* control-word *boolean*
Tree	control-word
Description	When configured to **true**, the router enables the transmission and reception of the control word for all EVPN-MPLS destinations at the same time.
Default	false
Introduced	16.0.R1
Platforms	All

default-route-tag *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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Synopsis	Default route tag
Context	**configure** service epipe *string* bgp-evpn mpls *number* default-route-tag *string*
Tree	default-route-tag
Description	This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed. When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority. The following are examples of the conflict priority handling: • If a service is configured with both **default-route-tag** *X* and **proxy-arp evpn-route-tag** *Y*, the EVPN uses route tag *Y* when sending EVPN proxy-arp routes to the BGP RIB for advertisement. • If a given IP-prefix route is tagged in the route-table with tag *A* and the R-VPLS, in which the route is advertised, uses *B* as the **default-route-tag**, then EVPN keeps tag *A* when sending the route to the BGP RIB. The **default-route-tag** configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.
Introduced	16.0.R4
Platforms	All

dynamic-egress-label-limit *boolean*

Synopsis	Enables dynamic egress label limit
Context	**configure** service epipe *string* bgp-evpn mpls *number* dynamic-egress-label-limit *boolean*
Tree	dynamic-egress-label-limit
Description	When configured to **true**, this command relaxes the egress MPLS label limit check when resolving BGP next hops in the tunnel table. For VPRN services, the OAM label is never computed and, therefore, one more egress label is allowed. For EVPN (Epipe and VPLS) services, the system only computes the control word and ESI label if they are used. For the control word, the system reduces the egress label limit by one label if the control word is configured in the service. When configured, the ESI label is not counted for Epipes or VPLS services without an ES. When configured to **false** this command, for EVPN, Epipe, and VPLS services, always accounts for the ESI label and control word.
Default	false
Introduced	22.2.R1
Platforms	All

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ecmp *number*

Synopsis	Maximum ECMP routes information
Context	**configure** service epipe *string* bgp-evpn mpls *number* ecmp *number*
Tree	ecmp
Range	1 to 32
Default	1
Introduced	16.0.R1
Platforms	All

entropy-label *boolean*

Synopsis	Enable use of entropy-labels
Context	**configure** service epipe *string* bgp-evpn mpls *number* entropy-label *boolean*
Tree	entropy-label
Default	false
Introduced	16.0.R1
Platforms	All

evi-three-byte-auto-rt *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Auto-derive the BGP EVPN route target
Context	**configure** service epipe *string* bgp-evpn mpls *number* evi-three-byte-auto-rt *boolean*
Tree	evi-three-byte-auto-rt
Description	When configured to **true**, the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID). Where: • Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken • A=0 (for auto-derivation) • Type=4 (EVI-based route-target)

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- D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance
- Service ID=3-octet EVI

When configured to **false**, route target derivation is not allowed.

Default	false
Introduced	21.10.R1
Platforms	All

force-vc-forwarding *keyword*

Synopsis	VC forwarding action
Context	**configure** service epipe *string* bgp-evpn mpls *number* force-vc-forwarding *keyword*
Tree	force-vc-forwarding
Options	vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag
Introduced	16.0.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group identifier
Context	**configure** service epipe *string* bgp-evpn mpls *number* oper-group *reference*
Tree	oper-group
Reference	**configure** service oper-group *string*
Introduced	19.5.R1
Platforms	All

route-next-hop

Synopsis	Enter the **route-next-hop** context
Context	**configure** service epipe *string* bgp-evpn mpls *number* route-next-hop
Tree	route-next-hop
Description	Commands in this context configure the next hop of the EVPN routes.
Introduced	19.10.R1
Platforms	All

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ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address of the next-hop for the service EVPN route
Context	**configure** service epipe *string* bgp-evpn mpls *number* route-next-hop ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-address
Notes	The following elements are part of a choice: **ip-address**, **system-ipv4**, or **system-ipv6**.
Introduced	19.10.R1
Platforms	All

system-ipv4

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System IPv4 address for service EVPN route next hop
Context	**configure** service epipe *string* bgp-evpn mpls *number* route-next-hop system-ipv4
Tree	system-ipv4
Notes	The following elements are part of a choice: **ip-address**, **system-ipv4**, or **system-ipv6**.
Introduced	19.10.R1
Platforms	All

system-ipv6

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System IPv6 address for service EVPN route next hop
Context	**configure** service epipe *string* bgp-evpn mpls *number* route-next-hop system-ipv6
Tree	system-ipv6
Notes	The following elements are part of a choice: **ip-address**, **system-ipv4**, or **system-ipv6**.

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Introduced	19.10.R1
Platforms	All

send-tunnel-encap

Synopsis	Enter the **send-tunnel-encap** context
Context	**configure** service epipe *string* bgp-evpn mpls *number* send-tunnel-encap
Tree	send-tunnel-encap
Introduced	16.0.R1
Platforms	All

mpls *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable MPLS encapsulation
Context	**configure** service epipe *string* bgp-evpn mpls *number* send-tunnel-encap mpls *boolean*
Tree	mpls
Default	true
Introduced	16.0.R1
Platforms	All

mpls-over-udp *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable MPLS over UDP encapsulation
Context	**configure** service epipe *string* bgp-evpn mpls *number* send-tunnel-encap mpls-over-udp *boolean*
Tree	mpls-over-udp
Default	false
Introduced	16.0.R1
Platforms	All

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remote-attachment-circuit [name] *string*

Synopsis	Enter the **remote-attachment-circuit** list instance
Context	**configure** service epipe *string* bgp-evpn remote-attachment-circuit *string*
Tree	remote-attachment-circuit
Max. Instances	2
Introduced	20.10.R1
Platforms	All

[**name**] *string*

Synopsis	Attachment circuit name
Context	**configure** service epipe *string* bgp-evpn remote-attachment-circuit *string*
Tree	remote-attachment-circuit
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

endpoint *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Endpoint name
Context	**configure** service epipe *string* bgp-evpn remote-attachment-circuit *string* endpoint *reference*
Tree	endpoint
Reference	**configure** service epipe *string* endpoint *string*
Introduced	20.10.R1
Platforms	All

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eth-tag *number*

Synopsis	Ethernet tag of the attachment circuit
Context	**configure** service epipe *string* bgp-evpn remote-attachment-circuit *string* eth-tag *number*
Tree	eth-tag
Description	This command configures the Ethernet tag value of the attachment circuit. When configured in the local attachment circuit context, the tag value is used in the advertised AD per-EVI route sent for the attachment circuit. When configured in the remote attachment circuit context, the value is compared with the Ethernet tag value of the imported D per-EVI routes for the service. When there is a match, the system creates an EVPN destination for the Epipe.
Range	1 to 16777215
Introduced	20.10.R1
Platforms	All

segment-routing-v6 [bgp-instance] *number*

Synopsis	Enter the **segment-routing-v6** list instance
Context	**configure** service epipe *string* bgp-evpn segment-routing-v6 *number*
Tree	segment-routing-v6
Description	Commands in this context configure the SRv6 instance that is used in the service.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**bgp-instance**] *number*

Synopsis	BGP instance
Context	**configure** service epipe *string* bgp-evpn segment-routing-v6 *number*
Tree	segment-routing-v6
Range	1
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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admin-state *keyword*

Synopsis	Administrative state of segment routing over IPv6
Context	**configure** service epipe *string* bgp-evpn segment-routing-v6 *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

default-route-tag *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default route tag
Context	**configure** service epipe *string* bgp-evpn segment-routing-v6 *number* default-route-tag *string*
Tree	default-route-tag
Description	This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed. When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority. The following are examples of the conflict priority handling: • If a service is configured with both **default-route-tag** *X* and **proxy-arp evpn-route-tag** *Y*, the EVPN uses route tag *Y* when sending EVPN proxy-arp routes to the BGP RIB for advertisement. • If a given IP-prefix route is tagged in the route-table with tag *A* and the R-VPLS, in which the route is advertised, uses *B* as the **default-route-tag**, then EVPN keeps tag *A* when sending the route to the BGP RIB. The **default-route-tag** configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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ecmp *number*

Synopsis	Maximum ECMP value configured on the service
Context	**configure** service epipe *string* bgp-evpn segment-routing-v6 *number* ecmp *number*
Tree	ecmp
Range	1 to 32
Default	1
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

evi-three-byte-auto-rt *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Auto-derive the BGP EVPN route target
Context	**configure** service epipe *string* bgp-evpn segment-routing-v6 *number* evi-three-byte-auto-rt *boolean*
Tree	evi-three-byte-auto-rt
Description	When configured to **true**, the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID). Where: • Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken • A=0 (for auto-derivation) • Type=4 (EVI-based route-target) • D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance • Service ID=3-octet EVI When configured to **false**, route target derivation is not allowed.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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force-vc-forwarding *keyword*

Synopsis	Datapath forwarding to force vlan-vc-type
Context	**configure** service epipe *string* bgp-evpn segment-routing-v6 *number* force-vc-forwarding *keyword*
Tree	force-vc-forwarding
Description	This command allows the system to preserve the VLAN ID and 802.1p bits of the service-delimiting qtag in a new tag added in the customer frame before sending it to the EVPN destinations. This command may be used in conjunction with the **sap ingress vlan-translation** command. If so used, the configured translated VLAN ID is the VLAN ID sent to the EVPN destinations as opposed to the service-delimiting tag VLAN ID. If the ingress SAP/SDP binding is 'null'-encapsulated, the output VLAN ID and pbits is zero.
Options	vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

oper-group *reference*

Synopsis	Operational group
Context	**configure** service epipe *string* bgp-evpn segment-routing-v6 *number* oper-group *reference*
Tree	oper-group
Description	This command adds the BGP EVPN SRv6 instance or an Ethernet Segment (ES) as a member of the operational group. When configured on a BGP EVPN instance, the operational group is up when it is either empty (meaning that the operational group has no members) or at least an EVPN destination is created under the EVPN instance added as member. When configured, no other SAP, SDP binding, or BGP EVPN instance can be added to the same operational group within the same or different service. The operational group is down when it is applied on a BGP EVPN instance as well as: • the service is administratively disabled • the BGP EVPN MPLS and VXLAN is administratively disabled • all the EVPN destinations in the instance are removed When configured on an ES, the state of the operational group depends on the state of the SAPs contained in the ES. The operational group transitions to up if at least one SAP in the ES is up. The operational group goes down when all the associated SAPs are operationally down. Monitor the ES operational group on the LAG associated with

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the ES, along with single-active multihoming, so that the NDF state can be signaled to the CE by LAG standby signaling.

Reference	**configure** service oper-group *string*
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

resolution *keyword*

Synopsis	Resolution options for routes
Context	**configure** service epipe *string* bgp-evpn segment-routing-v6 *number* resolution *keyword*
Tree	resolution
Options	route-table, tunnel-table, fallback-tunnel-to-route-table
Default	route-table
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

route-next-hop

Synopsis	Enter the **route-next-hop** context
Context	**configure** service epipe *string* bgp-evpn segment-routing-v6 *number* route-next-hop
Tree	route-next-hop
Description	Commands in this context configure the next hop of the EVPN routes.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address of the next-hop for the service EVPN route
Context	**configure** service epipe *string* bgp-evpn segment-routing-v6 *number* route-next-hop ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-address
Notes	The following elements are part of a choice: **ip-address**, **system-ipv4**, or **system-ipv6**.

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Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

system-ipv4

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System IPv4 address for service EVPN route next hop
Context	**configure** service epipe *string* bgp-evpn segment-routing-v6 *number* route-next-hop system-ipv4
Tree	system-ipv4
Notes	The following elements are part of a choice: **ip-address**, **system-ipv4**, or **system-ipv6**.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

system-ipv6

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System IPv6 address for service EVPN route next hop
Context	**configure** service epipe *string* bgp-evpn segment-routing-v6 *number* route-next-hop system-ipv6
Tree	system-ipv6
Notes	The following elements are part of a choice: **ip-address**, **system-ipv4**, or **system-ipv6**.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

source-address *string*

WARNING:
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Synopsis	Source IPv6 address

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Context	**configure** service epipe *string* bgp-evpn segment-routing-v6 *number* source-address *string*
Tree	source-address
Description	When configured, this command specifies the source IPv6 address used in the SA field of the outer IPv6 header of the SRv6 encapsulated packet. When not configured, the source IPv6 address is inherited from the configuration of the global default address in the **router "base" segment-routing segment-routing-v6 source-address** context. A source IPv6 address must be configured in this context or in the base router context. The system does not check if the address entered is a valid local address.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

srv6

Synopsis	Enter the **srv6** context
Context	**configure** service epipe *string* bgp-evpn segment-routing-v6 *number* srv6
Tree	srv6
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

default-locator *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Default route locator
Context	**configure** service epipe *string* bgp-evpn segment-routing-v6 *number* srv6 default-locator *string*
Tree	default-locator
Description	This command specifies the locator that exists in the SRv6 service instance and is used as the default locator for the service.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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instance *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Segment Routing SRv6 instance
Context	**configure** service epipe *string* bgp-evpn segment-routing-v6 *number* srv6 instance *reference*
Tree	instance
Reference	**configure** service epipe *string* segment-routing-v6 *number*
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

vxlan [bgp-instance] *number*

Synopsis	Enter the **vxlan** list instance
Context	**configure** service epipe *string* bgp-evpn vxlan *number*
Tree	vxlan
Introduced	16.0.R1
Platforms	All

[**bgp-instance**] *number*

Synopsis	BGP instance
Context	**configure** service epipe *string* bgp-evpn vxlan *number*
Tree	vxlan
Range	1
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BGP EVPN VXLAN
Context	**configure** service epipe *string* bgp-evpn vxlan *number* admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

default-route-tag *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default route tag
Context	**configure** service epipe *string* bgp-evpn vxlan *number* default-route-tag *string*
Tree	default-route-tag
Description	This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed. When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority. The following are examples of the conflict priority handling: • If a service is configured with both **default-route-tag** *X* and **proxy-arp evpn-route-tag** *Y*, the EVPN uses route tag *Y* when sending EVPN proxy-arp routes to the BGP RIB for advertisement. • If a given IP-prefix route is tagged in the route-table with tag *A* and the R-VPLS, in which the route is advertised, uses *B* as the **default-route-tag**, then EVPN keeps tag *A* when sending the route to the BGP RIB. The **default-route-tag** configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.
Introduced	16.0.R4
Platforms	All

ecmp *number*

Synopsis	Maximum ECMP routes information
Context	**configure** service epipe *string* bgp-evpn vxlan *number* ecmp *number*
Tree	ecmp
Range	1 to 32
Default	1

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Introduced	16.0.R1
Platforms	All

evi-three-byte-auto-rt *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Auto-derive the BGP EVPN route target
Context	**configure** service epipe *string* bgp-evpn vxlan *number* evi-three-byte-auto-rt *boolean*
Tree	evi-three-byte-auto-rt
Description	When configured to **true**, the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID). Where: • Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken • A=0 (for auto-derivation) • Type=4 (EVI-based route-target) • D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance • Service ID=3-octet EVI When configured to **false**, route target derivation is not allowed.
Default	false
Introduced	21.10.R1
Platforms	All

send-tunnel-encap *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send VXLAN value in encapsulation extended community
Context	**configure** service epipe *string* bgp-evpn vxlan *number* send-tunnel-encap *boolean*
Tree	send-tunnel-encap

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Description	When configured to **true**, this command sends the VXLAN value in the encapsulation that is advertised with the EVPN routes for the service. The encapsulation is encoded in RFC5512-based tunnel encapsulation extended communities. When configured to **false**, no encapsulation extended community is sent.
Default	true
Introduced	16.0.R1
Platforms	All

vxlan-instance *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VXLAN instance
Context	**configure** service epipe *string* bgp-evpn vxlan *number* vxlan-instance *reference*
Tree	vxlan-instance
Reference	**configure** service epipe *string* vxlan instance *number*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

bgp-mh-site [site-name] *string*

Synopsis	Enter the **bgp-mh-site** list instance
Context	**configure** service epipe *string* bgp-mh-site *string*
Tree	bgp-mh-site
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[**site-name**] *string*

Synopsis	Name for the specific site
Context	**configure** service epipe *string* bgp-mh-site *string*
Tree	bgp-mh-site

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String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

activation-timer *number*

Synopsis	Time to wait for BGP updates from remote PEs
Context	**configure** service epipe *string* bgp-mh-site *string* activation-timer *number*
Tree	activation-timer
Range	0 to 100
Units	seconds
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the site
Context	**configure** service epipe *string* bgp-mh-site *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

boot-timer *number*

Synopsis	Wait time after reboot to run the DF election algorithm
Context	**configure** service epipe *string* bgp-mh-site *string* boot-timer *number*
Tree	boot-timer
Range	0 to 600
Units	seconds
Introduced	16.0.R1
Platforms	All

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id *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Site ID for the service
Context	**configure** service epipe *string* bgp-mh-site *string* id *number*
Tree	id
Description	This command configures the ID for the site. The ID must match between services but is local to the service.
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

min-down-timer *number*

Synopsis	Minimum down time when site goes operationally down
Context	**configure** service epipe *string* bgp-mh-site *string* min-down-timer *number*
Tree	min-down-timer
Range	0 to 100
Units	seconds
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Preference to advertise in NLRI L2 extended community
Context	**configure** service epipe *string* bgp-mh-site *string* preference *number*
Tree	preference
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

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sap *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SAP to be associated with this site
Context	**configure** service epipe *string* bgp-mh-site *string* sap *string*
Tree	sap
String Length	1 to 45
Introduced	16.0.R1
Platforms	All

bgp-vpws

Synopsis	Enable the **bgp-vpws** context
Context	**configure** service epipe *string* bgp-vpws
Tree	bgp-vpws
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the VPWS edge instance
Context	**configure** service epipe *string* bgp-vpws admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

local-ve

Synopsis	Enter the **local-ve** context
Context	**configure** service epipe *string* bgp-vpws local-ve
Tree	local-ve
Introduced	16.0.R1

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Platforms	All

id *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local VPWS edge ID
Context	**configure** service epipe *string* bgp-vpws local-ve id *number*
Tree	id
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

name *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local VPWS instance name
Context	**configure** service epipe *string* bgp-vpws local-ve name *string*
Tree	name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

remote-ve [name] *string*

Synopsis	Enter the **remote-ve** list instance
Context	**configure** service epipe *string* bgp-vpws remote-ve *string*
Tree	remote-ve
Max. Instances	2
Introduced	16.0.R1
Platforms	All

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[**name**] *string*

Synopsis	Remote PE name to which a PW is to be signaled
Context	**configure** service epipe *string* bgp-vpws remote-ve *string*
Tree	remote-ve
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

id *number*

Synopsis	Remote VPWS edge ID
Context	**configure** service epipe *string* bgp-vpws remote-ve *string* id *number*
Tree	id
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

customer *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service customer ID
Context	**configure** service epipe *string* customer *reference*
Tree	customer
Reference	**configure** service customer *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description

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Context	**configure** service epipe *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

endpoint [name] *string*

Synopsis	Enter the **endpoint** list instance
Context	**configure** service epipe *string* endpoint *string*
Tree	endpoint
Max. Instances	2
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	Service endpoint name
Context	**configure** service epipe *string* endpoint *string*
Tree	endpoint
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service epipe *string* endpoint *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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hold-time-active *number*

Synopsis	Time before entering standby when MC-LAG SAP goes down
Context	**configure** service epipe *string* endpoint *string* hold-time-active *number*
Tree	hold-time-active
Range	1 to 60
Units	deciseconds
Introduced	16.0.R1
Platforms	All

revert-time *(number | keyword)*

Synopsis	Time to wait before reverting to primary spoke SDP
Context	**configure** service epipe *string* endpoint *string* revert-time *(number | keyword)*
Tree	revert-time
Range	1 to 600
Units	seconds
Options	never, immediate
Default	immediate
Introduced	16.0.R1
Platforms	All

standby-signaling *keyword*

Synopsis	Endpoint behavior to handle the PW standby bit
Context	**configure** service epipe *string* endpoint *string* standby-signaling *keyword*
Tree	standby-signaling
Options	master, slave
Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the **eth-cfm** context
Context	**configure** service epipe *string* eth-cfm
Tree	eth-cfm

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Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ignore-l2vpn-mtu-mismatch *boolean*

Synopsis	Ignore the L2 VPN MTU mismatch with local service MTU
Context	**configure** service epipe *string* ignore-l2vpn-mtu-mismatch *boolean*
Tree	ignore-l2vpn-mtu-mismatch
Description	When configured to **true**, the router does not check the value of the Layer 2 MTU in the Layer2 Info Extended Community received in a BGP update message against the local service MTU or locally signaled MTU. It may, therefore, bring up the BGP VPWS service regardless of any MTU mismatch. When configured to **false**, an MTU mismatch prevents the system from bringing up a BGP-VPWS service.
Default	false
Introduced	22.2.R1
Platforms	All

load-balancing

Synopsis	Enter the **load-balancing** context
Context	**configure** service epipe *string* load-balancing
Tree	load-balancing
Introduced	16.0.R1
Platforms	All

lbl-eth-or-ip-l4-teid *boolean*

Synopsis	Enable hashing of MPLS ethernet and IP packets on SAPs
Context	**configure** service epipe *string* load-balancing lbl-eth-or-ip-l4-teid *boolean*
Tree	lbl-eth-or-ip-l4-teid
Description	When configured to **true**, this command enables hashing of MPLS Ethernet and MPLS IP packets received on the Epipe and VPLS service SAP using the MPLS labels, the inner IP addresses, the port numbers, and the GTP TEID field, if read by the system. This capability is supported on line cards that are FP4-based and later.
Default	false
Introduced	22.2.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

per-service-hashing *boolean*

Synopsis	Enable per-service hashing for Ethernet services
Context	**configure** service epipe *string* load-balancing per-service-hashing *boolean*
Tree	per-service-hashing
Default	false
Introduced	16.0.R1
Platforms	All

nat-outside [nat-group] *number*

Synopsis	Enter the **nat-outside** list instance
Context	**configure** service epipe *string* nat-outside *number*
Tree	nat-outside
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**nat-group**] *number*

Synopsis	NAT group
Context	**configure** service epipe *string* nat-outside *number*
Tree	nat-outside
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of Epipe as a NAT outside service
Context	**configure** service epipe *string* nat-outside *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable

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Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

oper-group *reference*

Synopsis	Oper-group name
Context	**configure** service epipe *string* oper-group *reference*
Tree	oper-group
Reference	**configure** service oper-group *string*
Introduced	16.0.R1
Platforms	All

pbb

Synopsis	Enter the **pbb** context
Context	**configure** service epipe *string* pbb
Tree	pbb
Introduced	16.0.R1
Platforms	All

force-qtag-forwarding *boolean*

Synopsis	Add an IEEE 802.1q tag after CMAC addresses PBB header
Context	**configure** service epipe *string* pbb force-qtag-forwarding *boolean*
Tree	force-qtag-forwarding
Default	false
Introduced	16.0.R1
Platforms	All

local-switch-service-state *keyword*

Synopsis	Endpoint state used to determine PBB-Epipe state
Context	**configure** service epipe *string* pbb local-switch-service-state *keyword*
Tree	local-switch-service-state

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Description	In a PBB Epipe with two SAPs and a PBB tunnel, this command controls whether the operational state of the PBB-Epipe service depends on the state of the PBB tunnel only, or on the state of two of the three endpoints (PBB tunnel and two SAPs). The second case implies that at least one of the SAPs must be up for the PBB-Epipe service to be operationally up.
Options	sap, pbb-tunnel
Default	sap
Introduced	21.7.R1
Platforms	All

tunnel

Synopsis	Enable the **tunnel** context
Context	**configure** service epipe *string* pbb tunnel
Tree	tunnel
Introduced	16.0.R1
Platforms	All

backbone-dest-mac *string*

Synopsis	Backbone Destination MAC address
Context	**configure** service epipe *string* pbb tunnel backbone-dest-mac *string*
Tree	backbone-dest-mac
Notes	The following elements are part of a mandatory choice: **backbone-dest-mac** or **backbone-dest-mac-name**.
Introduced	16.0.R1
Platforms	All

backbone-dest-mac-name *reference*

Synopsis	Backbone destination MAC name for PBB packets
Context	**configure** service epipe *string* pbb tunnel backbone-dest-mac-name *reference*
Tree	backbone-dest-mac-name
Reference	**configure** service pbb mac *string*
Notes	The following elements are part of a mandatory choice: **backbone-dest-mac** or **backbone-dest-mac-name**.

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Introduced	16.0.R1
Platforms	All

backbone-vpls-service-name *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Backbone VPLS service
Context	**configure** service epipe *string* pbb tunnel backbone-vpls-service-name *reference*
Tree	backbone-vpls-service-name
Reference	**configure** service vpls *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

isid *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service instance ID
Context	**configure** service epipe *string* pbb tunnel isid *number*
Tree	isid
Range	0 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sap [sap-id] *string*

Synopsis	Enter the **sap** list instance
Context	**configure** service epipe *string* sap *string*
Tree	sap

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Max. Instances	2
Introduced	16.0.R1
Platforms	All

[**sap-id**] *string*

Synopsis	SAP ID
Context	**configure** service epipe *string* sap *string*
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

aarp

Synopsis	Enable the **aarp** context
Context	**configure** service epipe *string* sap *string* aarp
Tree	aarp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id *reference*

Synopsis	AARP instance ID
Context	**configure** service epipe *string* sap *string* aarp id *reference*
Tree	id
Reference	**configure** application-assurance aarp *number*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Role referenced by the AARP

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Context	**configure** service epipe *string* sap *string* aarp type *keyword*
Tree	type
Options	dual-homed, dual-homed-secondary
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	Accounting policy
Context	**configure** service epipe *string* sap *string* accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the SAP
Context	**configure** service epipe *string* sap *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

app-profile *reference*

Synopsis	Application profile name
Context	**configure** service epipe *string* sap *string* app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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bandwidth *number*

Synopsis	SAP bandwidth
Context	**configure** service epipe *string* sap *string* bandwidth *number*
Tree	bandwidth
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

cflowd *boolean*

Synopsis	Enable Cflowd collection and analysis on this SAP
Context	**configure** service epipe *string* sap *string* cflowd *boolean*
Tree	cflowd
Default	false
Introduced	16.0.R1
Platforms	All

collect-stats *boolean*

Synopsis	Collect accounting statistics
Context	**configure** service epipe *string* sap *string* collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

cpu-protection

Synopsis	Enter the **cpu-protection** context
Context	**configure** service epipe *string* sap *string* cpu-protection
Tree	cpu-protection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

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eth-cfm-monitoring

Synopsis	Enable the **eth-cfm-monitoring** context
Context	**configure** service epipe *string* sap *string* cpu-protection eth-cfm-monitoring
Tree	eth-cfm-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

aggregate

Synopsis	Apply rate limit to the sum of the per peer packet rates
Context	**configure** service epipe *string* sap *string* cpu-protection eth-cfm-monitoring aggregate
Tree	aggregate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

car

Synopsis	Ignore Ethernet CFM packets when enforcing overall rate
Context	**configure** service epipe *string* sap *string* cpu-protection eth-cfm-monitoring car
Tree	car
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	**configure** service epipe *string* sap *string* cpu-protection mac-monitoring
Tree	mac-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

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policy-id *reference*

Synopsis	CPM protection policy
Context	**configure** service epipe *string* sap *string* cpu-protection policy-id *reference*
Tree	policy-id
Reference	**configure** system security cpu-protection policy *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** service epipe *string* sap *string* description *string*
Tree	description
String Length	1 to 160
Introduced	16.0.R1
Platforms	All

dist-cpu-protection *reference*

Synopsis	Distributed CPU protection policy for SAP
Context	**configure** service epipe *string* sap *string* dist-cpu-protection *reference*
Tree	dist-cpu-protection
Reference	**configure** system security dist-cpu-protection policy *string*
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** service epipe *string* sap *string* egress
Tree	egress
Introduced	16.0.R1
Platforms	All

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agg-rate

Synopsis	Enter the **agg-rate** context
Context	**configure** service epipe *string* sap *string* egress agg-rate
Tree	agg-rate
Notes	The following elements are part of a choice: **agg-rate** or **percent-agg-rate**.
Introduced	16.0.R1
Platforms	All

adaptation-rule *keyword*

Synopsis	Adaptation rule to compute the operational PIR value when an aggregate shaper is used
Context	**configure** service epipe *string* sap *string* egress agg-rate adaptation-rule *keyword*
Tree	adaptation-rule
Options	max, min, closest
Default	closest
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

burst-limit *(number | keyword)*

Synopsis	Shaping burst size when an aggregate shaper is used
Context	**configure** service epipe *string* sap *string* egress agg-rate burst-limit *(number | keyword)*
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

limit-unused-bandwidth *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	**configure** service epipe *string* sap *string* egress agg-rate limit-unused-bandwidth *boolean*

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Tree	limit-unused-bandwidth
Default	false
Introduced	16.0.R1
Platforms	All

queue-frame-based-accounting *boolean*

Synopsis	Enable frame based accounting on policers and queues
Context	**configure** service epipe *string* sap *string* egress agg-rate queue-frame-based-accounting *boolean*
Tree	queue-frame-based-accounting
Default	false
Introduced	16.0.R1
Platforms	All

rate *number*

Synopsis	Enforced aggregate rate for all queues
Context	**configure** service epipe *string* sap *string* egress agg-rate rate *number*
Tree	rate
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the **filter** context
Context	**configure** service epipe *string* sap *string* egress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name

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Context	**configure** service epipe *string* sap *string* egress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service epipe *string* sap *string* egress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	All

mac *reference*

Synopsis	MAC filter policy name
Context	**configure** service epipe *string* sap *string* egress filter mac *reference*
Tree	mac
Reference	**configure** filter mac-filter *string*
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** service epipe *string* sap *string* egress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

policer-control-policy

Synopsis	Enter the **policer-control-policy** context

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Context	**configure** service epipe *string* sap *string* egress qos policer-control-policy
Tree	policer-control-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis	Enable the **overrides** context
Context	**configure** service epipe *string* sap *string* egress qos policer-control-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

root

Synopsis	Enter the **root** context
Context	**configure** service epipe *string* sap *string* egress qos policer-control-policy overrides root
Tree	root
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate *(number | keyword)*

Synopsis	Maximum frame-based bandwidth limit
Context	**configure** service epipe *string* sap *string* egress qos policer-control-policy overrides root max-rate *(number | keyword)*
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis	Enter the **priority-mbs-thresholds** context

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Context	**configure** service epipe *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-thresh-separation *(number | keyword)*

Synopsis	Minimum amount of separation buffer space
Context	**configure** service epipe *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation *(number | keyword)*
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [priority-level] *number*

Synopsis	Enter the **priority** list instance
Context	**configure** service epipe *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*
Tree	priority
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**priority-level**] *number*

Synopsis	Priority level
Context	**configure** service epipe *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution *(number | keyword)*

Synopsis	Minimum amount of cumulative buffer space allowed
Context	**configure** service epipe *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds priority *number* mbs-contribution *(number | keyword)*
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	**configure** service epipe *string* sap *string* egress qos policer-control-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos policer-control-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

qinq-mark-top-only *boolean*

Synopsis	Mark top Q-tags
Context	**configure** service epipe *string* sap *string* egress qos qinq-mark-top-only *boolean*
Tree	qinq-mark-top-only
Default	false
Introduced	16.0.R1
Platforms	All

sap-egress

Synopsis	Enter the **sap-egress** context

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Context	**configure** service epipe *string* sap *string* egress qos sap-egress
Tree	sap-egress
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the **overrides** context
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

hs-secondary-shaper *string*

Synopsis	HS Secondary Shaper
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides hs-secondary-shaper *string*
Tree	hs-secondary-shaper
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-group [group-id] *reference*

Synopsis	Enter the **hs-wrr-group** list instance
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides hs-wrr-group *reference*
Tree	hs-wrr-group
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[group-id] *reference*

Synopsis	HS WRR group identifier

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Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides hs-wrr-group *reference*
Tree	hs-wrr-group
Reference	**configure** qos sap-egress *string* hs-wrr-group *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-class-weight *number*

Synopsis	Class weight override of the WRR group
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides hs-wrr-group *reference* hs-class-weight *number*
Tree	hs-class-weight
Range	1 | 2 | 4 | 8
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

percent-rate *decimal-number*

Synopsis	Percent rate override applied to the HS WRR group
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides hs-wrr-group *reference* percent-rate *decimal-number*
Tree	percent-rate
Range	0.01 to 100.00
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

rate *(number | keyword)*

Synopsis	Scheduling rate override applied to the HS WRR group
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides hs-wrr-group *reference* rate *(number | keyword)*
Tree	rate
Range	1 to 2000000000

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Units	kilobps
Options	max
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policer [policer-id] *reference*

Synopsis	Enter the **policer** list instance
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides policer *reference*
Tree	policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**policer-id**] *reference*

Synopsis	Policer unique ID
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides policer *reference*
Tree	policer
Reference	**configure** qos sap-egress *string* policer *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs *(number | keyword)*

Synopsis	CBS
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides policer *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides policer *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides policer *reference* packet-byte-offset *number*
Tree	packet-byte-offset
Range	-64 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides policer *reference* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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cir *decimal-number*

Synopsis	CIR percent rate
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides policer *reference* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *decimal-number*

Synopsis	PIR percent rate
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides policer *reference* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis	Enter the **rate** context
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides policer *reference* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *(number | keyword)*

Synopsis	CIR rate
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides policer *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000

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Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *(number | keyword)*

Synopsis	PIR rate
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides policer *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides policer *reference* stat-mode *keyword*
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue [queue-id] *reference*

Synopsis	Enter the **queue** list instance
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference*
Tree	queue
Introduced	16.0.R1

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Platforms	All

[**queue-id**] *reference*

Synopsis	Policer unique ID
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference*
Tree	queue
Reference	**configure** qos sap-egress *string* queue *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference* adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference* adaptation-rule cir *keyword*
Tree	cir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value

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Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

avg-frame-overhead *decimal-number*

Synopsis	Average packet-to-frame encapsulation overhead
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference* avg-frame-overhead *decimal-number*
Tree	avg-frame-overhead
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

burst-limit *(number | keyword)*

Synopsis	Explicit shaping burst size for the queue
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference* burst-limit *(number | keyword)*
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

cbs *(number | keyword)*

Synopsis	CBS
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 1048576

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Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the **drop-tail** context
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference* drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the **low** context
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference* drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs *(number | keyword)*

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference* drop-tail low percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

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hs-class-weight *number*

Synopsis	Class weight override for the queue
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference* hs-class-weight *number*
Tree	hs-class-weight
Range	1 | 2 | 4 | 8
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wred-queue

Synopsis	Enter the **hs-wred-queue** context
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference* hs-wred-queue
Tree	hs-wred-queue
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policy *reference*

Synopsis	Slope policy applied to the HSQ queue group queue
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference* hs-wred-queue policy *reference*
Tree	policy
Reference	**configure** qos slope-policy *string*
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-weight *number*

Synopsis	WRR weight to parent with the queue into the scheduler
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference* hs-wrr-weight *number*
Tree	hs-wrr-weight
Range	1 to 127
Default	1

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Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the **monitor-queue-depth** context
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference* monitor-queue-depth
Tree	monitor-queue-depth
Introduced	20.10.R1
Platforms	All

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference* monitor-queue-depth fast-polling *boolean*
Tree	fast-polling
Description	When configured to **true**, this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth.
Default	false
Introduced	20.10.R1
Platforms	All

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violation-threshold *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference* monitor-queue-depth violation-threshold *decimal-number*
Tree	violation-threshold
Description	This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

parent

Synopsis	Enter the **parent** context
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference* parent
Tree	parent
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	PIR parameter that overrides parent for queue group
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference* parent weight *number*
Tree	weight

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Range	0 to 100
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

cir *decimal-number*

Synopsis	CIR percent rate
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	PIR percent rate
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

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rate

Synopsis	Enter the **rate** context
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	CIR rate
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	PIR rate
Context	**configure** service epipe *string* sap *string* egress qos sap-egress overrides queue *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Policy ID to associate with SAP for mirrored service

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Context	**configure** service epipe *string* sap *string* egress qos sap-egress policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-egress *string*
Introduced	16.0.R1
Platforms	All

port-redirect-group

Synopsis	Enter the **port-redirect-group** context
Context	**configure** service epipe *string* sap *string* egress qos sap-egress port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Name of the queue group redirect list policy
Context	**configure** service epipe *string* sap *string* egress qos sap-egress port-redirect-group group-name *reference*
Tree	group-name
Reference	**configure** qos queue-group-templates egress queue-group *string*
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Instance of port queue group
Context	**configure** service epipe *string* sap *string* egress qos sap-egress port-redirect-group instance *number*
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

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scheduler-policy

Synopsis	Enter the **scheduler-policy** context
Context	**configure** service epipe *string* sap *string* egress qos scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the **overrides** context
Context	**configure** service epipe *string* sap *string* egress qos scheduler-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

scheduler [scheduler-name] *string*

Synopsis	Enter the **scheduler** list instance
Context	**configure** service epipe *string* sap *string* egress qos scheduler-policy overrides scheduler *string*
Tree	scheduler
Introduced	16.0.R1
Platforms	All

[**scheduler-name**] *string*

Synopsis	Scheduler name
Context	**configure** service epipe *string* sap *string* egress qos scheduler-policy overrides scheduler *string*
Tree	scheduler
Description	This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.

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If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.

If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

parent

Synopsis	Enter the **parent** context
Context	**configure** service epipe *string* sap *string* egress qos scheduler-policy overrides scheduler *string* parent
Tree	parent
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	**configure** service epipe *string* sap *string* egress qos scheduler-policy overrides scheduler *string* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	**configure** service epipe *string* sap *string* egress qos scheduler-policy overrides scheduler *string* parent weight *number*
Tree	weight
Range	0 to 100

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Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** service epipe *string* sap *string* egress qos scheduler-policy overrides scheduler *string* rate
Tree	rate
Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	CIR at which the queue it to operate
Context	**configure** service epipe *string* sap *string* egress qos scheduler-policy overrides scheduler *string* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	PIR at which the queue is to operate
Context	**configure** service epipe *string* sap *string* egress qos scheduler-policy overrides scheduler *string* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

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policy-name *reference*

Synopsis	Scheduler policy name
Context	**configure** service epipe *string* sap *string* egress qos scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos scheduler-policy *string*
Introduced	16.0.R1
Platforms	All

endpoint *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the endpoint
Context	**configure** service epipe *string* sap *string* endpoint *reference*
Tree	endpoint
Reference	**configure** service epipe *string* endpoint *string*
Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the **eth-cfm** context
Context	**configure** service epipe *string* sap *string* eth-cfm
Tree	eth-cfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais *boolean*

Synopsis	Enable the generation and the reception of AIS messages
Context	**configure** service epipe *string* sap *string* eth-cfm ais *boolean*
Tree	ais

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Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-fc-stats

Synopsis	Enter the **collect-lmm-fc-stats** context
Context	**configure** service epipe *string* sap *string* eth-cfm collect-lmm-fc-stats
Tree	collect-lmm-fc-stats
Description	Commands in this context configure per forwarding class (FC) LMM information collection. The commands **fc-in-profile** and **fc** in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively. This command and the **collect-lmm-stats** command are mutually exclusive when there is entity resource contention.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc *keyword*

Synopsis	Forwarding class name for profile-unaware counter
Context	**configure** service epipe *string* sap *string* eth-cfm collect-lmm-fc-stats fc *keyword*
Tree	fc
Description	This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter. An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the **fc-in-profile** command under the **collect-lmm-fc-stats** context. When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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fc-in-profile *keyword*

Synopsis	Forwarding class name for profile-aware counter
Context	**configure** service epipe *string* sap *string* eth-cfm collect-lmm-fc-stats fc-in-profile *keyword*
Tree	fc-in-profile
Description	This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter. An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the **fc** command under the **collect-lmm-fc-stats** context. When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	**configure** service epipe *string* sap *string* eth-cfm collect-lmm-stats *boolean*
Tree	collect-lmm-stats
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*

Synopsis	Enter the **mep** list instance
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string* association *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MEP

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Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais

Synopsis	Enable the **ais** context
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais
Tree	ais
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

client-meg-level *number*

Synopsis	Client MEG level for AIS message generation
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais client-meg-level *number*
Tree	client-meg-level
Range	1 to 7
Max. Instances	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interface-support *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais interface-support *boolean*
Tree	interface-support
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number*

Synopsis	Transmission interval for AIS messages
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais interval *number*
Tree	interval
Range	1 | 60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais low-priority-defect *keyword*
Tree	low-priority-defect
Options	all-def, mac-rem-err-xcon
Default	all-def
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Priority of the AIS messages generated by the node
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais priority *number*
Tree	priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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alarm-notification

Synopsis	Enter the **alarm-notification** context
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification
Tree	alarm-notification
Description	Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm. Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-alarm-time *number*
Tree	fng-alarm-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-reset-time *number*
Tree	fng-reset-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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ccm *boolean*

Synopsis	Generate CCM messages
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm *boolean*
Tree	ccm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-ltm-priority *number*
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-padding-size *number*
Tree	ccm-padding-size
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU. This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through **configure eth-cfm domain association ccm-interval)** is less than 1 second.
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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cfm-vlan-tag *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* cfm-vlan-tag *string*
Tree	cfm-vlan-tag
String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

csf

Synopsis	Enable the **csf** context
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* csf
Tree	csf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* csf multiplier *decimal-number*
Tree	multiplier
Range	0.0 | 2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* description *string*
Tree	description
String Length	1 to 80

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

direction *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Direction the MEP faces
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* direction *keyword*
Tree	direction
Options	down, up
Default	down
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the **eth-test** context
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the **oam eth-cfm eth-test** command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test bit-error-threshold *number*
Tree	bit-error-threshold
Range	0 to 11840

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Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis	Enter the **test-pattern** context
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern crc-tlv *boolean*
Tree	crc-tlv
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern pattern *keyword*
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fault-propagation *keyword*

Synopsis	Fault propagation for the MEP
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* fault-propagation *keyword*
Tree	fault-propagation
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the **grace** context
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the **eth-ed** context
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed max-rx-defect-window *number*
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed priority *number*
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed rx-eth-ed *boolean*
Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP

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Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed tx-eth-ed *boolean*
Tree	tx-eth-ed
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis	Enter the **eth-vsm-grace** context
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace rx-eth-vsm-grace *boolean*
Tree	rx-eth-vsm-grace
Description	When configured to **true**, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to **false**, the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace tx-eth-vsm-grace *boolean*
Tree	tx-eth-vsm-grace

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Description	When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards. The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED). When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lbm-svc-act-responder *boolean*

Synopsis	Process service activation streams in ETH-CFM LBM
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* lbm-svc-act-responder *boolean*
Tree	lbm-svc-act-responder
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* low-priority-defect *keyword*
Tree	low-priority-defect
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MEP

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Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* mac-address *string*
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* one-way-delay-threshold *number*
Tree	one-way-delay-threshold
Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

primary-vlan *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MEP provisioned using MA primary VLAN ID
Context	**configure** service epipe *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* primary-vlan *boolean*
Tree	primary-vlan
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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mip primary-vlan *(number | keyword)*

Synopsis	Enter the **mip** list instance
Context	**configure** service epipe *string* sap *string* eth-cfm mip primary-vlan *(number | keyword)*
Tree	mip
Description	This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the **vc-type vlan** or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

primary-vlan *(number | keyword)*

Synopsis	VLAN ID to which the MIP is attached
Context	**configure** service epipe *string* sap *string* eth-cfm mip primary-vlan *(number | keyword)*
Tree	mip
Description	This command provides an option for linking a MIP with a Primary VLAN number or none. When the **none** option is provided, the MIP does not include the primary vlan.
Range	1 to 4094
Options	none
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cfm-vlan-tag *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	**configure** service epipe *string* sap *string* eth-cfm mip primary-vlan *(number | keyword)* cfm-vlan-tag *string*
Tree	cfm-vlan-tag
Description	This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM

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PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration.

String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MIP
Context	**configure** service epipe *string* sap *string* eth-cfm mip primary-vlan *(number | keyword)* mac-address *string*
Tree	mac-address
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch-ingress-ctag-levels *number*

Synopsis	Squelch levels using additional VLAN C-Tag space
Context	**configure** service epipe *string* sap *string* eth-cfm squelch-ingress-ctag-levels *number*
Tree	squelch-ingress-ctag-levels
Description	This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding plus an additional VLAN, up to a maximum tag length of two tags. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option. The list of levels must be a complete contiguous list from 0 up to the highest level to be dropped.
Range	0 to 7
Max. Instances	8
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch-ingress-levels *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded

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Context	**configure** service epipe *string* sap *string* eth-cfm squelch-ingress-levels *number*
Tree	squelch-ingress-levels
Description	This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option. The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.
Range	0 to 7
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ethernet

Synopsis	Enter the **ethernet** context
Context	**configure** service epipe *string* sap *string* ethernet
Tree	ethernet
Introduced	20.5.R1
Platforms	All

llf

Synopsis	Enter the **llf** context
Context	**configure** service epipe *string* sap *string* ethernet llf
Tree	llf
Description	Commands in this context enable Link Loss Forwarding (LLF) on an Ethernet port. This feature provides an end-to-end OAM fault notification for Ethernet VLL service. It brings down the Ethernet port (Ethernet LLF) or sends a SONET/SDH Path AIS (ATM LLF) toward the attached CE when there is a local fault on the pseudowire or service, or a remote fault on the SAP or pseudowire, signaled with label withdrawal or T-LDP status bits. It ceases when the fault disappears. The Ethernet port must be configured for null encapsulation. This feature is also supported in Epipes with BGP-EVPN enabled. In this case, upon removal of the EVPN destination, the port transitions to an operationally down state, however the AD per-EVI route for the SAP is still advertised (the SAP remains

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operationally up). The port transitions to the operationally up state when the EVPN destination is created.

Introduced 20.5.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of Link Loss Forwarding

Context **configure** service epipe *string* sap *string* ethernet llf admin-state *keyword*

Tree admin-state

Options enable, disable

Default disable

Introduced 20.5.R1

Platforms All

ignore-oper-down *boolean*

Synopsis Ignore operational down state of the SAP on SAP failure

Context **configure** service epipe *string* sap *string* ignore-oper-down *boolean*

Tree ignore-oper-down

Description When configured to **true**, the Epipe service does not transition to the operational down state when the SAP fails. This command can only be set to **true** for a single SAP in an Epipe. The command can be used in Epipes with or without EVPN enabled.

When configured to **false**, the Epipe service transitions to the operational down state when SAP fails.

Default false

Introduced 16.0.R1

Platforms All

ingress

Synopsis Enter the **ingress** context

Context **configure** service epipe *string* sap *string* ingress

Tree ingress

Introduced 16.0.R1

Platforms All

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filter

Synopsis	Enter the **filter** context
Context	**configure** service epipe *string* sap *string* ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service epipe *string* sap *string* ingress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service epipe *string* sap *string* ingress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	All

mac *reference*

Synopsis	MAC filter policy name
Context	**configure** service epipe *string* sap *string* ingress filter mac *reference*
Tree	mac
Reference	**configure** filter mac-filter *string*
Introduced	16.0.R1
Platforms	All

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qos

Synopsis	Enter the **qos** context
Context	**configure** service epipe *string* sap *string* ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

match-qinq-dot1p *keyword*

Synopsis	Ingress match QinQ Dot1p
Context	**configure** service epipe *string* sap *string* ingress qos match-qinq-dot1p *keyword*
Tree	match-qinq-dot1p
Options	top, bottom
Introduced	16.0.R1
Platforms	All

policer-control-policy

Synopsis	Enter the **policer-control-policy** context
Context	**configure** service epipe *string* sap *string* ingress qos policer-control-policy
Tree	policer-control-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis	Enable the **overrides** context
Context	**configure** service epipe *string* sap *string* ingress qos policer-control-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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root

Synopsis	Enter the **root** context
Context	**configure** service epipe *string* sap *string* ingress qos policer-control-policy overrides root
Tree	root
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate *(number | keyword)*

Synopsis	Maximum frame-based bandwidth limit
Context	**configure** service epipe *string* sap *string* ingress qos policer-control-policy overrides root max-rate *(number | keyword)*
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis	Enter the **priority-mbs-thresholds** context
Context	**configure** service epipe *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-thresh-separation *(number | keyword)*

Synopsis	Minimum amount of separation buffer space
Context	**configure** service epipe *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation *(number | keyword)*
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes

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Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [priority-level] *number*

Synopsis	Enter the **priority** list instance
Context	**configure** service epipe *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*
Tree	priority
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**priority-level**] *number*

Synopsis	Priority level
Context	**configure** service epipe *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution *(number | keyword)*

Synopsis	Minimum amount of cumulative buffer space allowed
Context	**configure** service epipe *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds priority *number* mbs-contribution *(number | keyword)*
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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policy-name *reference*

Synopsis	Policer control policy name
Context	**configure** service epipe *string* sap *string* ingress qos policer-control-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos policer-control-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

sap-ingress

Synopsis	Enter the **sap-ingress** context
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress
Tree	sap-ingress
Introduced	16.0.R1
Platforms	All

fp-redirect-group

Synopsis	Enter the **fp-redirect-group** context
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress fp-redirect-group
Tree	fp-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Queue group template name created on forwarding plane
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress fp-redirect-group group-name *reference*
Tree	group-name
Reference	**configure** qos queue-group-templates ingress queue-group *string*
Introduced	16.0.R1
Platforms	All

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instance *number*

Synopsis	Queue group instance
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress fp-redirect-group instance *number*
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the **overrides** context
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

ip-criteria

Synopsis	Enter the **ip-criteria** context
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides ip-criteria
Tree	ip-criteria
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

activate-entry-tag *number*

Synopsis	Tag ID activated for IPv4 criteria
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides ip-criteria activate-entry-tag *number*
Tree	activate-entry-tag
Range	1 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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ipv6-criteria

Synopsis	Enter the **ipv6-criteria** context
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides ipv6-criteria
Tree	ipv6-criteria
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

activate-entry-tag *number*

Synopsis	Tag ID activated for IPv6 criteria
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides ipv6-criteria activate-entry-tag *number*
Tree	activate-entry-tag
Range	1 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policer [policer-id] *reference*

Synopsis	Enter the **policer** list instance
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides policer *reference*
Tree	policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[policer-id] *reference*

Synopsis	Policer unique ID
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides policer *reference*
Tree	policer
Reference	**configure** qos sap-ingress *string* policer *number*
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs *(number | keyword)*

Synopsis	CBS
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* packet-byte-offset *number*
Tree	packet-byte-offset
Range	-32 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *decimal-number*

Synopsis	CIR percent rate
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *decimal-number*

Synopsis	PIR percent rate
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis	Enter the **rate** context
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* rate
Tree	rate

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Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *(number | keyword)*

Synopsis	CIR rate
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *(number | keyword)*

Synopsis	PIR rate
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* stat-mode *keyword*
Tree	stat-mode

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Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue [queue-id] *reference*

Synopsis	Enter the **queue** list instance
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides queue *reference*
Tree	queue
Introduced	16.0.R1
Platforms	All

[**queue-id**] *reference*

Synopsis	Policer unique ID
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides queue *reference*
Tree	queue
Reference	**configure** qos sap-ingress *string* queue *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

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cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* adaptation-rule cir *keyword*
Tree	cir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

cbs *(number | keyword)*

Synopsis	CBS
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the **drop-tail** context
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* drop-tail

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Tree	drop-tail
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the **low** context
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs *(number | keyword)*

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* drop-tail low percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

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monitor-queue-depth

Synopsis	Enable the **monitor-queue-depth** context
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* monitor-queue-depth
Tree	monitor-queue-depth
Introduced	21.7.R1
Platforms	All

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* monitor-queue-depth fast-polling *boolean*
Tree	fast-polling
Default	false
Introduced	21.7.R1
Platforms	All

parent

Synopsis	Enter the **parent** context
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* parent
Tree	parent
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1

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Platforms	All

weight *number*

Synopsis	PIR parameter that overrides parent for queue group
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* parent weight *number*
Tree	weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

cir *decimal-number*

Synopsis	CIR percent rate
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	PIR percent rate

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Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	CIR rate
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	PIR rate
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000

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Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Policy ID
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-ingress *string*
Introduced	16.0.R1
Platforms	All

queuing-type *keyword*

Synopsis	Queuing type
Context	**configure** service epipe *string* sap *string* ingress qos sap-ingress queuing-type *keyword*
Tree	queuing-type
Options	shared, multipoint-shared
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR

scheduler-policy

Synopsis	Enter the **scheduler-policy** context
Context	**configure** service epipe *string* sap *string* ingress qos scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the **overrides** context
Context	**configure** service epipe *string* sap *string* ingress qos scheduler-policy overrides

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Tree	overrides
Introduced	16.0.R1
Platforms	All

scheduler [scheduler-name] *string*

Synopsis	Enter the **scheduler** list instance
Context	**configure** service epipe *string* sap *string* ingress qos scheduler-policy overrides scheduler *string*
Tree	scheduler
Introduced	16.0.R1
Platforms	All

[**scheduler-name**] *string*

Synopsis	Scheduler name
Context	**configure** service epipe *string* sap *string* ingress qos scheduler-policy overrides scheduler *string*
Tree	scheduler
Description	This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands. If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name. If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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parent

Synopsis	Enter the **parent** context
Context	**configure** service epipe *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* parent
Tree	parent
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	**configure** service epipe *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	**configure** service epipe *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* parent weight *number*
Tree	weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** service epipe *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* rate
Tree	rate
Introduced	16.0.R1
Platforms	All

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cir *(number | keyword)*

Synopsis	CIR at which the queue it to operate
Context	**configure** service epipe *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	PIR at which the queue is to operate
Context	**configure** service epipe *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy name
Context	**configure** service epipe *string* sap *string* ingress qos scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos scheduler-policy *string*
Introduced	16.0.R1
Platforms	All

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qtag-manipulation

Synopsis	Enter the **qtag-manipulation** context
Context	**configure** service epipe *string* sap *string* ingress qtag-manipulation
Tree	qtag-manipulation
Introduced	16.0.R1
Platforms	All

c-tag *(number | keyword)*

Synopsis	Inner ingress VLAN translation for two service delimiting VLAN values
Context	**configure** service epipe *string* sap *string* ingress qtag-manipulation c-tag *(number | keyword)*
Tree	c-tag
Range	0 to 4094
Options	tag-*
Notes	The following elements are part of a choice: **push-dot1q-vlan** or (**c-tag** and **s-tag**).
Introduced	16.0.R1
Platforms	All

push-dot1q-vlan *(number | keyword)*

Synopsis	VLAN translation information
Context	**configure** service epipe *string* sap *string* ingress qtag-manipulation push-dot1q-vlan *(number | keyword)*
Tree	push-dot1q-vlan
Range	0 to 4094
Options	use-sap-svlan
Notes	The following elements are part of a choice: **push-dot1q-vlan** or (**c-tag** and **s-tag**).
Introduced	16.0.R1
Platforms	All

s-tag *number*

Synopsis	Outer ingress VLN translation for two service delimiting VLAN values
Context	**configure** service epipe *string* sap *string* ingress qtag-manipulation s-tag *number*

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Tree	s-tag
Range	0 to 4094
Notes	The following elements are part of a choice: **push-dot1q-vlan** or (**c-tag** and **s-tag**).
Introduced	16.0.R1
Platforms	All

l2tpv3-session

Synopsis	Enable the **l2tpv3-session** context
Context	**configure** service epipe *string* sap *string* l2tpv3-session
Tree	l2tpv3-session
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the session for the service
Context	**configure** service epipe *string* sap *string* l2tpv3-session admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

pseudo-wire

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **pseudo-wire** context
Context	**configure** service epipe *string* sap *string* l2tpv3-session pseudo-wire
Tree	pseudo-wire
Introduced	16.0.R4
Platforms	All

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ethernet

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the Ethernet PW-type for the L2TPv3 session
Context	**configure** service epipe *string* sap *string* l2tpv3-session pseudo-wire ethernet
Tree	ethernet
Notes	The following elements are part of a choice: **ethernet** or **ethernet-vlan-id**.
Introduced	16.0.R4
Platforms	All

ethernet-vlan-id *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ethernet-VLAN PW-type ID for the L2TPv3 session
Context	**configure** service epipe *string* sap *string* l2tpv3-session pseudo-wire ethernet-vlan-id *number*
Tree	ethernet-vlan-id
Range	0 to 4095
Notes	The following elements are part of a choice: **ethernet** or **ethernet-vlan-id**.
Introduced	16.0.R4
Platforms	All

router

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **router** context
Context	**configure** service epipe *string* sap *string* l2tpv3-session router
Tree	router

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Introduced	16.0.R4
Platforms	All

group *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Tunnel group name
Context	**configure** service epipe *string* sap *string* l2tpv3-session router group *string*
Tree	group
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

router-instance *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router name used to identify the router instance
Context	**configure** service epipe *string* sap *string* l2tpv3-session router router-instance *string*
Tree	router-instance
String Length	1 to 64
Introduced	16.0.R4
Platforms	All

vc-id *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VC ID for the L2TPv3 session
Context	**configure** service epipe *string* sap *string* l2tpv3-session vc-id *number*
Tree	vc-id

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Range	1 to 4294967295
Introduced	16.0.R4
Platforms	All

lag

Synopsis	Enter the **lag** context
Context	**configure** service epipe *string* sap *string* lag
Tree	lag
Introduced	16.0.R1
Platforms	All

link-map-profile *number*

Synopsis	LAG link map profile
Context	**configure** service epipe *string* sap *string* lag link-map-profile *number*
Tree	link-map-profile
Range	1 to 64
Introduced	16.0.R1
Platforms	All

per-link-hash

Synopsis	Enter the **per-link-hash** context
Context	**configure** service epipe *string* sap *string* lag per-link-hash
Tree	per-link-hash
Introduced	16.0.R1
Platforms	All

class *number*

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	**configure** service epipe *string* sap *string* lag per-link-hash class *number*
Tree	class
Range	1 to 3

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Default	1
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	**configure** service epipe *string* sap *string* lag per-link-hash weight *number*
Tree	weight
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	All

mc-ring

Synopsis	Enable the **mc-ring** context
Context	**configure** service epipe *string* sap *string* mc-ring
Tree	mc-ring
Introduced	16.0.R1
Platforms	All

ring-node *string*

Synopsis	Name for the ring node associated with this SAP
Context	**configure** service epipe *string* sap *string* mc-ring ring-node *string*
Tree	ring-node
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference*

Synopsis	Monitor operational group

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Context	**configure** service epipe *string* sap *string* monitor-oper-group *reference*
Tree	monitor-oper-group
Reference	**configure** service oper-group *string*
Notes	The following elements are part of a choice: **monitor-oper-group** or **oper-group**.
Introduced	16.0.R1
Platforms	All

multi-service-site *reference*

Synopsis	Multi service site name
Context	**configure** service epipe *string* sap *string* multi-service-site *reference*
Tree	multi-service-site
Reference	**configure** service customer *string* multi-service-site *string*
Introduced	16.0.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group
Context	**configure** service epipe *string* sap *string* oper-group *reference*
Tree	oper-group
Reference	**configure** service oper-group *string*
Notes	The following elements are part of a choice: **monitor-oper-group** or **oper-group**.
Introduced	16.0.R1
Platforms	All

transit-policy

Synopsis	Enable the **transit-policy** context
Context	**configure** service epipe *string* sap *string* transit-policy
Tree	transit-policy
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ip *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP transit policy ID
Context	**configure** service epipe *string* sap *string* transit-policy ip *reference*
Tree	ip
Reference	**configure** application-assurance group *number* partition *number* transit-ip-policy *number*
Notes	The following elements are part of a mandatory choice: **ip** or **prefix**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	**configure** service epipe *string* sap *string* transit-policy prefix *reference*
Tree	prefix
Reference	**configure** application-assurance group *number* partition *number* transit-prefix-policy *number*
Notes	The following elements are part of a mandatory choice: **ip** or **prefix**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

segment-routing-v6 [instance] *number*

Synopsis	Enter the **segment-routing-v6** list instance
Context	**configure** service epipe *string* segment-routing-v6 *number*
Tree	segment-routing-v6
Description	Commands in this context configure the SRv6 instance that is used in the service.
Introduced	21.7.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**instance**] *number*

Synopsis	Segment routing v6 instance
Context	**configure** service epipe *string* segment-routing-v6 *number*
Tree	segment-routing-v6
Range	1
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

locator [locator-name] *reference*

Synopsis	Enter the **locator** list instance
Context	**configure** service epipe *string* segment-routing-v6 *number* locator *reference*
Tree	locator
Max. Instances	1
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**locator-name**] *reference*

Synopsis	SRv6 locator name
Context	**configure** service epipe *string* segment-routing-v6 *number* locator *reference*
Tree	locator
Reference	**configure** router *string* segment-routing segment-routing-v6 locator *string*
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function

Synopsis	Enter the **function** context

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Context	**configure** service epipe *string* segment-routing-v6 *number* locator *reference* function
Tree	function
Description	Commands in this context configure SRv6 SID function values and parameters for the locator.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end-dx2

Synopsis	Enable the **end-dx2** context
Context	**configure** service epipe *string* segment-routing-v6 *number* locator *reference* function end-dx2
Tree	end-dx2
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

Synopsis	SRv6 function value
Context	**configure** service epipe *string* segment-routing-v6 *number* locator *reference* function end-dx2 value *number*
Tree	value
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

micro-segment-locator [locator-name] *reference*

Synopsis	Enter the **micro-segment-locator** list instance
Context	**configure** service epipe *string* segment-routing-v6 *number* micro-segment-locator *reference*
Tree	micro-segment-locator
Max. Instances	1

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Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**locator-name**] *reference*

Synopsis	Micro-segment SRv6 locator name
Context	**configure** service epipe *string* segment-routing-v6 *number* micro-segment-locator *reference*
Tree	micro-segment-locator
Description	This command associates a pre-defined micro-segment SRv6 locator (defined in the **configure router segment-routing segment-routing-v6** context) with the SRv6 instance in the service. The same micro-segment locator can be referenced in multiple BGP instances used by IPVPN or EVPN.
Reference	**configure** router *string* segment-routing segment-routing-v6 micro-segment-locator *string*
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function

Synopsis	Enter the **function** context
Context	**configure** service epipe *string* segment-routing-v6 *number* micro-segment-locator *reference* function
Tree	function
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

udx2

Synopsis	Enable the **udx2** context
Context	**configure** service epipe *string* segment-routing-v6 *number* micro-segment-locator *reference* function udx2
Tree	udx2
Description	Commands in this context configure the SRv6 micro-segment uDX2 behavior and the function value that is associated with the SRv6 instance in the service. When configured, decapsulation and cross-connect to the egress SAP occurs in the Epipe service.

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Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

Synopsis	SRv6 function value
Context	**configure** service epipe *string* segment-routing-v6 *number* micro-segment-locator *reference* function udx2 value *number*
Tree	value
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

service-id *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	**configure** service epipe *string* service-id *number*
Tree	service-id
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

service-mtu *number*

Synopsis	MTU size
Context	**configure** service epipe *string* service-mtu *number*
Tree	service-mtu
Description	This command configures the Maximum Transmission Unit (MTU) value (payload) for the service. The system uses the value to validate the operational state of the SAP and SDP binding within the service. The value overrides the default MTU for the service type.

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The service MTU and a SAP's service delineation encapsulation overhead (4 bytes for a dot1q tag) are used to derive the required MTU of the physical port or channel on which the SAP was created. If the required payload is larger than the port or channel MTU, the SAP is placed in an inoperative state. If the required MTU is equal to or less than the port or channel MTU, the SAP transitions to the operative state.

When binding an SDP to a service, the service MTU is compared to the path MTU associated with the SDP. The path MTU can be administratively defined in the context of the SDP. The default or administrative path MTU can be dynamically reduced due to the MTU capabilities discovered by the tunneling mechanism of the SDP or the egress interface MTU capabilities based on the next hop in the tunnel path. If the service MTU is larger than the path MTU, the SDP binding for the service is placed in an inoperative state. If the service MTU is equal to or less than the path MTU, the SDP binding is placed in an operational state.

If a service MTU, port or channel MTU, or path MTU is dynamically or administratively modified, all associated SAP and SDP binding operational states are automatically reevaluated.

Binding operational states are automatically reevaluated.

For I-VPLS and Epipes bound to a B-VPLS, the service MTU must be at least 18 bytes smaller than the B-VPLS service MTU to accommodate the PBB header.

Because this connects a Layer 2 to a Layer 3 service, adjust the service MTU under the Epipe service. The MTU that is advertised from the Epipe side is service MTU minus EtherHeaderSize.

In the **configure service epipe spoke-sdp** context, the **adv-service-mtu** command can be used to override the configured MTU value used in T-LDP signaling to the far-end of an Epipe spoke-sdp. The **adv-service-mtu** command is also used to validate the value signaled by the far-end PE.

Range	1 to 9782
Introduced	16.0.R1
Platforms	All

spoke-sdp [sdp-bind-id] *string*

Synopsis	Enter the **spoke-sdp** list instance
Context	**configure** service epipe *string* spoke-sdp *string*
Tree	spoke-sdp
Introduced	16.0.R1
Platforms	All

[**sdp-bind-id**] *string*

Synopsis	SDP binding ID

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Context	**configure** service epipe *string* spoke-sdp *string*
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

aarp

Synopsis	Enable the **aarp** context
Context	**configure** service epipe *string* spoke-sdp *string* aarp
Tree	aarp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id *reference*

Synopsis	AARP instance ID
Context	**configure** service epipe *string* spoke-sdp *string* aarp id *reference*
Tree	id
Reference	**configure** application-assurance aarp *number*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Role referenced by the AARP
Context	**configure** service epipe *string* spoke-sdp *string* aarp type *keyword*
Tree	type
Options	dual-homed, dual-homed-secondary
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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accounting-policy *reference*

Synopsis	Policy to collect accounting statistics
Context	**configure** service epipe *string* spoke-sdp *string* accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the SDP binding to the service
Context	**configure** service epipe *string* spoke-sdp *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

adv-service-mtu *number*

Synopsis	Service MTU used in signaling
Context	**configure** service epipe *string* spoke-sdp *string* adv-service-mtu *number*
Tree	adv-service-mtu
Description	This command configures the MTU value that is signaled in the targeted LDP for the spoke-SDP, instead of the service MTU. However, the configuration does not affect the locally enforced value, which is still based on the service MTU. This MTU value cannot be configured on a spoke-SDP that is bound to an SDP with the **adv-mtu-override** command (**configure service sdp** context). When unconfigured, an adjusted service MTU is used (**service-mtu** command).
Range	0 to 9782
Introduced	21.5.R1
Platforms	All

app-profile *reference*

Synopsis	Application profile name for this SDP

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Context	**configure** service epipe *string* spoke-sdp *string* app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bandwidth *(number | keyword)*

Synopsis	Bandwidth that is reserved for this SDP binding
Context	**configure** service epipe *string* spoke-sdp *string* bandwidth *(number | keyword)*
Tree	bandwidth
Range	0 to 100000000
Units	kilobps
Options	max
Default	0
Introduced	16.0.R1
Platforms	All

bfd

Synopsis	Enter the **bfd** context
Context	**configure** service epipe *string* spoke-sdp *string* bfd
Tree	bfd
Introduced	21.2.R1
Platforms	All

bfd-liveness

Synopsis	Enable the **bfd-liveness** context
Context	**configure** service epipe *string* spoke-sdp *string* bfd bfd-liveness
Tree	bfd-liveness
Introduced	21.2.R1
Platforms	All

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encap *keyword*

Synopsis	BFD encapsulation used on the SDP binding
Context	**configure** service epipe *string* spoke-sdp *string* bfd bfd-liveness encap *keyword*
Tree	encap
Options	ipv4
Default	ipv4
Introduced	21.2.R1
Platforms	All

bfd-template *reference*

Synopsis	BFD template associated with the SDP binding
Context	**configure** service epipe *string* spoke-sdp *string* bfd bfd-template *reference*
Tree	bfd-template
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the **configure router bfd** context.
Reference	**configure** bfd bfd-template *string*
Introduced	21.2.R1
Platforms	All

failure-action *keyword*

Synopsis	VCCV BFD action taken on the SDP binding
Context	**configure** service epipe *string* spoke-sdp *string* bfd failure-action *keyword*
Tree	failure-action
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the **configure router bfd** context.
Options	none, down
Default	none
Introduced	21.2.R1
Platforms	All

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wait-for-up-timer *number*

Synopsis	Time waited for BFD up status
Context	**configure** service epipe *string* spoke-sdp *string* bfd wait-for-up-timer *number*
Tree	wait-for-up-timer
Description	This command configures the time interval that is used to wait for a BFD session to come up. This command is triggered when a spoke-SDP is first administratively enabled and a VCCV BFD session transitions from up to down. The command is required to allow time for BFD sessions to come up, and for BFD to settle before selecting the active spoke-SDP for use in a redundant set. In the case where a VCCV BFD session is bouncing, the timer prevents excessive flapping of the operational state of a spoke-SDP.
Range	1 to 60
Units	seconds
Introduced	21.2.R1
Platforms	All

collect-stats *boolean*

Synopsis	Allow agent to collect accounting statistics
Context	**configure** service epipe *string* spoke-sdp *string* collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

control-word *boolean*

Synopsis	Use the control word as preferred
Context	**configure** service epipe *string* spoke-sdp *string* control-word *boolean*
Tree	control-word
Default	false
Introduced	16.0.R1
Platforms	All

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cpu-protection

Synopsis	Enter the **cpu-protection** context
Context	**configure** service epipe *string* spoke-sdp *string* cpu-protection
Tree	cpu-protection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

eth-cfm-monitoring

Synopsis	Enable the **eth-cfm-monitoring** context
Context	**configure** service epipe *string* spoke-sdp *string* cpu-protection eth-cfm-monitoring
Tree	eth-cfm-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

aggregate

Synopsis	Apply rate limit to the sum of the per peer packet rates
Context	**configure** service epipe *string* spoke-sdp *string* cpu-protection eth-cfm-monitoring aggregate
Tree	aggregate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

car

Synopsis	Ignore Ethernet CFM packets when enforcing overall rate
Context	**configure** service epipe *string* spoke-sdp *string* cpu-protection eth-cfm-monitoring car
Tree	car
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

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mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	**configure** service epipe *string* spoke-sdp *string* cpu-protection mac-monitoring
Tree	mac-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

policy-id *reference*

Synopsis	CPM protection policy
Context	**configure** service epipe *string* spoke-sdp *string* cpu-protection policy-id *reference*
Tree	policy-id
Reference	**configure** system security cpu-protection policy *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** service epipe *string* spoke-sdp *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** service epipe *string* spoke-sdp *string* egress
Tree	egress
Introduced	16.0.R1
Platforms	All

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filter

Synopsis	Enter the **filter** context
Context	**configure** service epipe *string* spoke-sdp *string* egress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service epipe *string* spoke-sdp *string* egress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service epipe *string* spoke-sdp *string* egress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	All

mac *reference*

Synopsis	MAC filter policy name
Context	**configure** service epipe *string* spoke-sdp *string* egress filter mac *reference*
Tree	mac
Reference	**configure** filter mac-filter *string*
Introduced	16.0.R1
Platforms	All

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l2tpv3

Synopsis	Enter the **l2tpv3** context
Context	**configure** service epipe *string* spoke-sdp *string* egress l2tpv3
Tree	l2tpv3
Introduced	16.0.R1
Platforms	All

cookie *string*

Synopsis	Cookie parameters
Context	**configure** service epipe *string* spoke-sdp *string* egress l2tpv3 cookie *string*
Tree	cookie
String Length	18 to 23
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** service epipe *string* spoke-sdp *string* egress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

network

Synopsis	Enter the **network** context
Context	**configure** service epipe *string* spoke-sdp *string* egress qos network
Tree	network
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Network policy ID

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Context	**configure** service epipe *string* spoke-sdp *string* egress qos network policy-name *reference*
Tree	policy-name
Reference	**configure** qos network *string*
Introduced	16.0.R1
Platforms	All

port-redirect-group

Synopsis	Enter the **port-redirect-group** context
Context	**configure** service epipe *string* spoke-sdp *string* egress qos network port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Name of the egress port queue group
Context	**configure** service epipe *string* spoke-sdp *string* egress qos network port-redirect-group group-name *reference*
Tree	group-name
Reference	**configure** qos queue-group-templates egress queue-group *string*
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Queue-group instance ID
Context	**configure** service epipe *string* spoke-sdp *string* egress qos network port-redirect-group instance *number*
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

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vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	**configure** service epipe *string* spoke-sdp *string* egress vc-label *number*
Tree	vc-label
Range	16 to 1048575
Introduced	16.0.R1
Platforms	All

endpoint

Synopsis	Enter the **endpoint** context
Context	**configure** service epipe *string* spoke-sdp *string* endpoint
Tree	endpoint
Introduced	16.0.R1
Platforms	All

icb *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Bind SDP as type Inter-Chassis Backup (ICB)
Context	**configure** service epipe *string* spoke-sdp *string* endpoint icb *boolean*
Tree	icb
Default	false
Introduced	16.0.R1
Platforms	All

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name *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Service endpoint name
Context	**configure** service epipe *string* spoke-sdp *string* endpoint name *reference*
Tree	name
Reference	**configure** service epipe *string* endpoint *string*
Introduced	16.0.R1
Platforms	All

precedence *(number | keyword)*

Synopsis	Precedence when multiple SDP binds are on one endpoint
Context	**configure** service epipe *string* spoke-sdp *string* endpoint precedence *(number | keyword)*
Tree	precedence
Range	1 to 4
Options	primary
Default	4
Introduced	16.0.R1
Platforms	All

entropy-label

Synopsis	Enable the use of entropy labels for spoke SDPs
Context	**configure** service epipe *string* spoke-sdp *string* entropy-label
Tree	entropy-label
Notes	The following elements are part of a choice: **entropy-label** or **hash-label**.
Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the **eth-cfm** context

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Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm
Tree	eth-cfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-fc-stats

Synopsis	Enter the **collect-lmm-fc-stats** context
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm collect-lmm-fc-stats
Tree	collect-lmm-fc-stats
Description	Commands in this context configure per forwarding class (FC) LMM information collection. The commands **fc-in-profile** and **fc** in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively. This command and the **collect-lmm-stats** command are mutually exclusive when there is entity resource contention.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc *keyword*

Synopsis	Forwarding class name for profile-unaware counter
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm collect-lmm-fc-stats fc *keyword*
Tree	fc
Description	This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter. An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the **fc-in-profile** command under the **collect-lmm-fc-stats** context. When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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fc-in-profile *keyword*

Synopsis	Forwarding class name for profile-aware counter
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm collect-lmm-fc-stats fc-in-profile *keyword*
Tree	fc-in-profile
Description	This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter. An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the **fc** command under the **collect-lmm-fc-stats** context. When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm collect-lmm-stats *boolean*
Tree	collect-lmm-stats
Description	When configured to **true**, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings. The **show eth-cfm collect-lmm-stats** command displays entities that have been enabled to collect transit and receive counters. When configured to **false**, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*

Synopsis	Enter the **mep** list instance

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Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string* association *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais

Synopsis	Enable the **ais** context
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais
Tree	ais
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

client-meg-level *number*

Synopsis	Client MEG level for AIS message generation
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais client-meg-level *number*
Tree	client-meg-level
Range	1 to 7
Max. Instances	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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interface-support *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais interface-support *boolean*
Tree	interface-support
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number*

Synopsis	Transmission interval for AIS messages
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais interval *number*
Tree	interval
Range	1 | 60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais low-priority-defect *keyword*
Tree	low-priority-defect
Options	all-def, mac-rem-err-xcon
Default	all-def
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Priority of the AIS messages generated by the node

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Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais priority *number*
Tree	priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the **alarm-notification** context
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification
Tree	alarm-notification
Description	Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm. Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-alarm-time *number*
Tree	fng-alarm-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset

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Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-reset-time *number*
Tree	fng-reset-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis	Generate CCM messages
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm *boolean*
Tree	ccm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-ltm-priority *number*
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-padding-size *number*
Tree	ccm-padding-size
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.

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This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through **configure eth-cfm domain association ccm-interval)** is less than 1 second.

Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cfm-vlan-tag *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* cfm-vlan-tag *string*
Tree	cfm-vlan-tag
String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

csf

Synopsis	Enable the **csf** context
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* csf
Tree	csf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* csf multiplier *decimal-number*
Tree	multiplier
Range	0.0 | 2.0 to 30.0
Default	3.5
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

direction *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Direction the MEP faces
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* direction *keyword*
Tree	direction
Options	down, up
Default	down
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the **eth-test** context
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the **oam eth-cfm eth-test** command.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test bit-error-threshold *number*
Tree	bit-error-threshold
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis	Enter the **test-pattern** context
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern crc-tlv *boolean*
Tree	crc-tlv
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern pattern *keyword*
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fault-propagation *keyword*

Synopsis	Fault propagation for the MEP
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* fault-propagation *keyword*
Tree	fault-propagation
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the **grace** context
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the **eth-ed** context

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Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed max-rx-defect-window *number*
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed priority *number*
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed rx-eth-ed *boolean*
Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.

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Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed tx-eth-ed *boolean*
Tree	tx-eth-ed
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis	Enter the **eth-vsm-grace** context
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace rx-eth-vsm-grace *boolean*
Tree	rx-eth-vsm-grace
Description	When configured to **true**, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to **false**, the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1

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Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis Transmit ETH-ED PDUs from the MEP

Context **configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace tx-eth-vsm-grace *boolean*

Tree tx-eth-vsm-grace

Description When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.

The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lbm-svc-act-responder *boolean*

Synopsis Process service activation streams in ETH-CFM LBM

Context **configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* lbm-svc-act-responder *boolean*

Tree lbm-svc-act-responder

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis Lowest priority defect allowed to generate fault alarm

Context **configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* low-priority-defect *keyword*

Tree low-priority-defect

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Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MEP
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* mac-address *string*
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* one-way-delay-threshold *number*
Tree	one-way-delay-threshold
Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

primary-vlan *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MEP provisioned using MA primary VLAN ID

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Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* primary-vlan *boolean*
Tree	primary-vlan
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mip primary-vlan *(number | keyword)*

Synopsis	Enter the **mip** list instance
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mip primary-vlan *(number | keyword)*
Tree	mip
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

primary-vlan *(number | keyword)*

Synopsis	VLAN ID to which the MIP is attached
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mip primary-vlan *(number | keyword)*
Tree	mip
Description	This command provides an option for linking a MIP with a Primary VLAN number or none. When the **none** option is provided, the MIP does not include the primary vlan.
Range	1 to 4094
Options	none
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cfm-vlan-tag *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mip primary-vlan *(number | keyword)* cfm-vlan-tag *string*
Tree	cfm-vlan-tag

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Description	This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration.
String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MIP
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm mip primary-vlan *(number | keyword)* mac-address *string*
Tree	mac-address
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch-ingress-ctag-levels *number*

Synopsis	Squelch levels using additional VLAN C-Tag space
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm squelch-ingress-ctag-levels *number*
Tree	squelch-ingress-ctag-levels
Description	This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding plus an additional VLAN, up to a maximum tag length of two tags. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option. The list of levels must be a complete contiguous list from 0 up to the highest level to be dropped.
Range	0 to 7
Max. Instances	8
Introduced	21.2.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch-ingress-levels *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded
Context	**configure** service epipe *string* spoke-sdp *string* eth-cfm squelch-ingress-levels *number*
Tree	squelch-ingress-levels
Description	This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option. The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.
Range	0 to 7
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

force-vc-forwarding *keyword*

Synopsis	VC forwarding action
Context	**configure** service epipe *string* spoke-sdp *string* force-vc-forwarding *keyword*
Tree	force-vc-forwarding
Options	vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag
Introduced	16.0.R1
Platforms	All

hash-label

Synopsis	Enable the **hash-label** context
Context	**configure** service epipe *string* spoke-sdp *string* hash-label
Tree	hash-label
Description	Commands in this context configure the use of hash labels for egress datapaths.

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For information about hash-label handling, see the "Hash labels" section of the *7450 ESS, 7750 SR, 7950 XRS, and VSR MPLS Guide*.

Notes The following elements are part of a choice: **entropy-label** or **hash-label**.

Introduced 16.0.R1

Platforms All

signal-capability

Synopsis Signal hash label capability to the remote PE

Context **configure** service epipe *string* spoke-sdp *string* hash-label signal-capability

Tree signal-capability

Description When configured, this command enables the signaling and negotiating of the hash label between the local and remote PE nodes.

The signaling process outcome determines whether the local PE inserts the hash label on the user packets. This outcome can override the local PE configuration.

Introduced 16.0.R1

Platforms All

ingress

Synopsis Enter the **ingress** context

Context **configure** service epipe *string* spoke-sdp *string* ingress

Tree ingress

Introduced 16.0.R1

Platforms All

filter

Synopsis Enter the **filter** context

Context **configure** service epipe *string* spoke-sdp *string* ingress filter

Tree filter

Introduced 16.0.R1

Platforms All

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ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service epipe *string* spoke-sdp *string* ingress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service epipe *string* spoke-sdp *string* ingress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	All

mac *reference*

Synopsis	MAC filter policy name
Context	**configure** service epipe *string* spoke-sdp *string* ingress filter mac *reference*
Tree	mac
Reference	**configure** filter mac-filter *string*
Introduced	16.0.R1
Platforms	All

l2tpv3

Synopsis	Enter the **l2tpv3** context
Context	**configure** service epipe *string* spoke-sdp *string* ingress l2tpv3
Tree	l2tpv3
Introduced	16.0.R1
Platforms	All

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cookie

Synopsis	Enter the **cookie** context
Context	**configure** service epipe *string* spoke-sdp *string* ingress l2tpv3 cookie
Tree	cookie
Introduced	16.0.R1
Platforms	All

cookie1 *string*

Synopsis	Value of cookie-1 for the tunnel
Context	**configure** service epipe *string* spoke-sdp *string* ingress l2tpv3 cookie cookie1 *string*
Tree	cookie1
String Length	18 to 23
Introduced	16.0.R1
Platforms	All

cookie2 *string*

Synopsis	Value of cookie-1 for the tunnel
Context	**configure** service epipe *string* spoke-sdp *string* ingress l2tpv3 cookie cookie2 *string*
Tree	cookie2
String Length	18 to 23
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** service epipe *string* spoke-sdp *string* ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

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network

Synopsis	Enter the **network** context
Context	**configure** service epipe *string* spoke-sdp *string* ingress qos network
Tree	network
Introduced	16.0.R1
Platforms	All

fp-redirect-group

Synopsis	Enter the **fp-redirect-group** context
Context	**configure** service epipe *string* spoke-sdp *string* ingress qos network fp-redirect-group
Tree	fp-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Name of the forwarding plane queue group template
Context	**configure** service epipe *string* spoke-sdp *string* ingress qos network fp-redirect-group group-name *reference*
Tree	group-name
Reference	**configure** qos queue-group-templates ingress queue-group *string*
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Instance of FP ingress queue group for the SDP binding
Context	**configure** service epipe *string* spoke-sdp *string* ingress qos network fp-redirect-group instance *number*
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

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policy-name *reference*

Synopsis	Network policy ID
Context	**configure** service epipe *string* spoke-sdp *string* ingress qos network policy-name *reference*
Tree	policy-name
Reference	**configure** qos network *string*
Introduced	16.0.R1
Platforms	All

vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
Context	**configure** service epipe *string* spoke-sdp *string* ingress vc-label *number*
Tree	vc-label
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference*

Synopsis	Operational group that affects state of the SDP bind
Context	**configure** service epipe *string* spoke-sdp *string* monitor-oper-group *reference*
Tree	monitor-oper-group
Reference	**configure** service oper-group *string*
Notes	The following elements are part of a choice: **monitor-oper-group** or **oper-group**.
Introduced	16.0.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group identifier
Context	**configure** service epipe *string* spoke-sdp *string* oper-group *reference*

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Tree	oper-group
Reference	**configure** service oper-group *string*
Notes	The following elements are part of a choice: **monitor-oper-group** or **oper-group**.
Introduced	16.0.R1
Platforms	All

pw-status

Synopsis	Enter the **pw-status** context
Context	**configure** service epipe *string* spoke-sdp *string* pw-status
Tree	pw-status
Introduced	16.0.R1
Platforms	All

block-on-peer-fault *boolean*

Synopsis	Block transmit direction of PW based on status code
Context	**configure** service epipe *string* spoke-sdp *string* pw-status block-on-peer-fault *boolean*
Tree	block-on-peer-fault
Default	false
Notes	The following elements are part of a choice: **block-on-peer-fault** or **standby-signaling-slave**.
Introduced	16.0.R1
Platforms	All

signaling *boolean*

Synopsis	Allow SDP binding to support pseudowire status signaling
Context	**configure** service epipe *string* spoke-sdp *string* pw-status signaling *boolean*
Tree	signaling
Default	true
Introduced	16.0.R1
Platforms	All

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standby-signaling-slave *boolean*

Synopsis	Block spoke transmission based on PW standby status
Context	**configure** service epipe *string* spoke-sdp *string* pw-status standby-signaling-slave *boolean*
Tree	standby-signaling-slave
Default	false
Notes	The following elements are part of a choice: **block-on-peer-fault** or **standby-signaling-slave**.
Introduced	16.0.R1
Platforms	All

source-bmac

Synopsis	Enter the **source-bmac** context
Context	**configure** service epipe *string* spoke-sdp *string* source-bmac
Tree	source-bmac
Introduced	16.0.R1
Platforms	All

use-sdp-bmac-lsb *boolean*

Synopsis	Allow the spoke SDP to be part of a redundant pseudo-wire within PBB Epipe service
Context	**configure** service epipe *string* spoke-sdp *string* source-bmac use-sdp-bmac-lsb *boolean*
Tree	use-sdp-bmac-lsb
Default	false
Introduced	16.0.R1
Platforms	All

transit-policy

Synopsis	Enable the **transit-policy** context
Context	**configure** service epipe *string* spoke-sdp *string* transit-policy
Tree	transit-policy
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ip *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP transit policy ID
Context	**configure** service epipe *string* spoke-sdp *string* transit-policy ip *reference*
Tree	ip
Reference	**configure** application-assurance group *number* partition *number* transit-ip-policy *number*
Notes	The following elements are part of a mandatory choice: **ip** or **prefix**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	**configure** service epipe *string* spoke-sdp *string* transit-policy prefix *reference*
Tree	prefix
Reference	**configure** application-assurance group *number* partition *number* transit-prefix-policy *number*
Notes	The following elements are part of a mandatory choice: **ip** or **prefix**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vc-type *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Virtual circuit type associated with the SDP binding
Context	**configure** service epipe *string* spoke-sdp *string* vc-type *keyword*

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Tree	vc-type
Options	ether, vlan
Default	ether
Introduced	16.0.R1
Platforms	All

vlan-vc-tag *number*

Synopsis	SDP bind VC tag
Context	**configure** service epipe *string* spoke-sdp *string* vlan-vc-tag *number*
Tree	vlan-vc-tag
Range	0 to 4094
Introduced	16.0.R1
Platforms	All

test *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate as a test service
Context	**configure** service epipe *string* test *boolean*
Tree	test
Default	false
Introduced	16.0.R1
Platforms	All

vc-switching *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Use PW switching signaling for spoke SDPs in service
Context	**configure** service epipe *string* vc-switching *boolean*
Tree	vc-switching

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Default	false
Introduced	16.0.R1
Platforms	All

vpn-id *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPN identifier for the service
Context	**configure** service epipe *string* vpn-id *number*
Tree	vpn-id
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

vxlan

Synopsis	Enter the **vxlan** context
Context	**configure** service epipe *string* vxlan
Tree	vxlan
Introduced	16.0.R1
Platforms	All

instance [vxlan-instance] *number*

Synopsis	Enter the **instance** list instance
Context	**configure** service epipe *string* vxlan instance *number*
Tree	instance
Max. Instances	1
Introduced	16.0.R1
Platforms	All

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[**vxlan-instance**] *number*

Synopsis	VXLAN instance
Context	**configure** service epipe *string* vxlan instance *number*
Tree	instance
Range	1
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

egress-vtep

Synopsis	Enter the **egress-vtep** context
Context	**configure** service epipe *string* vxlan instance *number* egress-vtep
Tree	egress-vtep
Introduced	16.0.R1
Platforms	All

ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	VTEP IP address used when originating VXLAN packets
Context	**configure** service epipe *string* vxlan instance *number* egress-vtep ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-address
Introduced	16.0.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group associated with egress VTEP address
Context	**configure** service epipe *string* vxlan instance *number* egress-vtep oper-group *reference*
Tree	oper-group
Reference	**configure** service oper-group *string*
Introduced	16.0.R1
Platforms	All

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vni *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VNI of the VXLAN
Context	**configure** service epipe *string* vxlan instance *number* vni *number*
Tree	vni
Range	1 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

source-vtep *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Vxlan source virtual tunnel endpoint information
Context	**configure** service epipe *string* vxlan source-vtep *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-vtep
Introduced	16.0.R1
Platforms	All

ies [service-name] *string*

Synopsis	Enter the **ies** list instance
Context	**configure** service ies *string*
Tree	ies
Introduced	16.0.R1
Platforms	All

[**service-name**] *string*

Synopsis	Administrative service name
Context	**configure** service ies *string*
Tree	ies

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String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

aa-interface [interface-name] *string*

Synopsis	Enter the **aa-interface** list instance
Context	**configure** service ies *string* aa-interface *string*
Tree	aa-interface
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**interface-name**] *string*

Synopsis	Interface name
Context	**configure** service ies *string* aa-interface *string*
Tree	aa-interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	**configure** service ies *string* aa-interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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description *string*

Synopsis	Text description
Context	**configure** service ies *string* aa-interface *string* description *string*
Tree	description
String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis	IP MTU applied to outgoing packets
Context	**configure** service ies *string* aa-interface *string* ip-mtu *number*
Tree	ip-mtu
Range	512 to 9786
Units	bytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service ies *string* aa-interface *string* ipv4
Tree	ipv4
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

primary

Synopsis	Enable the **primary** context
Context	**configure** service ies *string* aa-interface *string* ipv4 primary
Tree	primary
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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address *string*

Synopsis	Primary IPv4 address assigned to the interface
Context	**configure** service ies *string* aa-interface *string* ipv4 primary address *string*
Tree	address
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	**configure** service ies *string* aa-interface *string* ipv4 primary prefix-length *number*
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap [sap-id] *string*

Synopsis	Enter the **sap** list instance
Context	**configure** service ies *string* aa-interface *string* sap *string*
Tree	sap
Max. Instances	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**sap-id**] *string*

Synopsis	SAP ID
Context	**configure** service ies *string* aa-interface *string* sap *string*
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the SAP
Context	**configure** service ies *string* aa-interface *string* sap *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service ies *string* aa-interface *string* sap *string* description *string*
Tree	description
String Length	1 to 160
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the **egress** context
Context	**configure** service ies *string* aa-interface *string* sap *string* egress
Tree	egress
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis	Enter the **filter** context
Context	**configure** service ies *string* aa-interface *string* sap *string* egress filter
Tree	filter

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service ies *string* aa-interface *string* sap *string* egress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the **qos** context
Context	**configure** service ies *string* aa-interface *string* sap *string* egress qos
Tree	qos
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap-egress

Synopsis	Enter the **sap-egress** context
Context	**configure** service ies *string* aa-interface *string* sap *string* egress qos sap-egress
Tree	sap-egress
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	**configure** service ies *string* aa-interface *string* sap *string* egress qos sap-egress policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-egress *string*

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fwd-wholesale

Synopsis	Enter the **fwd-wholesale** context
Context	**configure** service ies *string* aa-interface *string* sap *string* fwd-wholesale
Tree	fwd-wholesale
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pppoe-service *reference*

Synopsis	PPPoE service name
Context	**configure** service ies *string* aa-interface *string* sap *string* fwd-wholesale pppoe-service *reference*
Tree	pppoe-service
Reference	**configure** service epipe *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service ies *string* aa-interface *string* sap *string* ingress
Tree	ingress
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the **qos** context
Context	**configure** service ies *string* aa-interface *string* sap *string* ingress qos
Tree	qos
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap-ingress

Synopsis	Enter the **sap-ingress** context
Context	**configure** service ies *string* aa-interface *string* sap *string* ingress qos sap-ingress
Tree	sap-ingress
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

overrides

Synopsis	Enter the **overrides** context
Context	**configure** service ies *string* aa-interface *string* sap *string* ingress qos sap-ingress overrides
Tree	overrides
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Policy ID
Context	**configure** service ies *string* aa-interface *string* sap *string* ingress qos sap-ingress policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-ingress *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lag

Synopsis	Enter the **lag** context
Context	**configure** service ies *string* aa-interface *string* sap *string* lag
Tree	lag
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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aarp-interface [interface-name] *string*

Synopsis	Enter the **aarp-interface** list instance
Context	**configure** service ies *string* aarp-interface *string*
Tree	aarp-interface
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**interface-name**] *string*

Synopsis	Interface name
Context	**configure** service ies *string* aarp-interface *string*
Tree	aarp-interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	**configure** service ies *string* aarp-interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service ies *string* aarp-interface *string* description *string*
Tree	description
String Length	1 to 255
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis	IP MTU applied to outgoing packets
Context	**configure** service ies *string* aarp-interface *string* ip-mtu *number*
Tree	ip-mtu
Range	512 to 9786
Units	bytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

spoke-sdp [sdp-bind-id] *string*

Synopsis	Enter the **spoke-sdp** list instance
Context	**configure** service ies *string* aarp-interface *string* spoke-sdp *string*
Tree	spoke-sdp
Max. Instances	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**sdp-bind-id**] *string*

Synopsis	SDP binding ID
Context	**configure** service ies *string* aarp-interface *string* spoke-sdp *string*
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aarp

Synopsis	Enable the **aarp** context

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Context	**configure** service ies *string* aarp-interface *string* spoke-sdp *string* aarp
Tree	aarp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	AARP instance ID
Context	**configure** service ies *string* aarp-interface *string* spoke-sdp *string* aarp id *reference*
Tree	id
Reference	**configure** application-assurance aarp *number*
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Role of the spoke SDP referenced by the AARP
Context	**configure** service ies *string* aarp-interface *string* spoke-sdp *string* aarp type *keyword*
Tree	type
Options	subscriber-side-shunt, network-side-shunt
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of this service SDP binding

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Context	**configure** service ies *string* aarp-interface *string* spoke-sdp *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service ies *string* aarp-interface *string* spoke-sdp *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the **egress** context
Context	**configure** service ies *string* aarp-interface *string* spoke-sdp *string* egress
Tree	egress
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis	Enter the **filter** context
Context	**configure** service ies *string* aarp-interface *string* spoke-sdp *string* egress filter
Tree	filter
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip *reference*

Synopsis	IP filter ID

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Context	**configure** service ies *string* aarp-interface *string* spoke-sdp *string* egress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VC egress value that indicates a specific connection
Context	**configure** service ies *string* aarp-interface *string* spoke-sdp *string* egress vc-label *number*
Tree	vc-label
Range	16 to 1048575
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service ies *string* aarp-interface *string* spoke-sdp *string* ingress
Tree	ingress
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis	Enter the **filter** context
Context	**configure** service ies *string* aarp-interface *string* spoke-sdp *string* ingress filter
Tree	filter
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ip *reference*

Synopsis	IP filter name
Context	**configure** service ies *string* aarp-interface *string* spoke-sdp *string* ingress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VC ingress value that indicates a specific connection
Context	**configure** service ies *string* aarp-interface *string* spoke-sdp *string* ingress vc-label *number*
Tree	vc-label
Range	1 to 1048575
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the service
Context	**configure** service ies *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

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customer *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service customer ID
Context	**configure** service ies *string* customer *reference*
Tree	customer
Reference	**configure** service customer *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service ies *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the **eth-cfm** context
Context	**configure** service ies *string* eth-cfm
Tree	eth-cfm
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

igmp-host-tracking

Synopsis	Enter the **igmp-host-tracking** context
Context	**configure** service ies *string* igmp-host-tracking
Tree	igmp-host-tracking

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of IGMP host tracking
Context	**configure** service ies *string* igmp-host-tracking admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

expiry-time *number*

Synopsis	Time that the system continues to track inactive hosts
Context	**configure** service ies *string* igmp-host-tracking expiry-time *number*
Tree	expiry-time
Range	1 to 65535
Units	seconds
Default	260
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface [interface-name] *string*

Synopsis	Enter the **interface** list instance
Context	**configure** service ies *string* interface *string*
Tree	interface
Description	Commands in this context create a logical IP routing interface. When created, attributes such as an IP address and SAP ID can be associated with the IP interface.
Introduced	16.0.R1
Platforms	All

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[**interface-name**] *string*

Synopsis	Interface name
Context	**configure** service ies *string* interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	**configure** service ies *string* interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

cflowd-parameters

Synopsis	Enter the **cflowd-parameters** context
Context	**configure** service ies *string* interface *string* cflowd-parameters
Tree	cflowd-parameters
Introduced	16.0.R1
Platforms	All

sampling [sampling-type] *keyword*

Synopsis	Enter the **sampling** list instance
Context	**configure** service ies *string* interface *string* cflowd-parameters sampling *keyword*
Tree	sampling
Introduced	16.0.R1
Platforms	All

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[**sampling-type**] *keyword*

Synopsis	Traffic sampling type
Context	**configure** service ies *string* interface *string* cflowd-parameters sampling *keyword*
Tree	sampling
Description	This command configures the type of traffic to be sampled on the associated IP interface.
Options	unicast, multicast, both
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

direction *keyword*

Synopsis	Direction of traffic for cflowd sampling
Context	**configure** service ies *string* interface *string* cflowd-parameters sampling *keyword* direction *keyword*
Tree	direction
Description	This command configures the direction in which sampling occurs on the associated IP interfaces.
Options	ingress-only, egress-only, both
Default	ingress-only
Introduced	16.0.R1
Platforms	All

sample-profile *(keyword | number)*

Synopsis	Sample profile ID
Context	**configure** service ies *string* interface *string* cflowd-parameters sampling *keyword* sample-profile *(keyword | number)*
Tree	sample-profile
Description	This command defines the sampling rate profile associated with this interface.
Max. Range	0 to 4294967295
Options	1
Introduced	19.5.R1

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Platforms	All

type *keyword*

Synopsis	Type of cflowd analysis
Context	**configure** service ies *string* interface *string* cflowd-parameters sampling *keyword* type *keyword*
Tree	type
Description	This command configures the cflowd sampling type on the associated IP interface.
Options	acl, interface
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

cpu-protection *reference*

Synopsis	CPU protection policy
Context	**configure** service ies *string* interface *string* cpu-protection *reference*
Tree	cpu-protection
Reference	**configure** system security cpu-protection policy *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** service ies *string* interface *string* description *string*
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

dynamic-tunnel-redundant-nexthop *string*

Synopsis	Redundant next-hop address for the dynamic IPsec tunnel

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Context	**configure** service ies *string* interface *string* dynamic-tunnel-redundant-nexthop *string*
Tree	dynamic-tunnel-redundant-nexthop
Description	This command specifies the redundant next-hop address on a public or private IPsec interface (with public or private tunnel SAP) for a dynamic IPsec tunnel. The next-hop address is used by a standby node to shunt traffic to a master if it receives the address. The next-hop address is resolved in the routing table of a corresponding service.
Notes	The following elements are part of a choice: **multi-chassis-shunting-profile** or (**dynamic-tunnel-redundant-nexthop** and **static-tunnel-redundant-nexthop**).
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-time

Synopsis	Enter the **hold-time** context
Context	**configure** service ies *string* interface *string* hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service ies *string* interface *string* hold-time ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

down

Synopsis	Enter the **down** context
Context	**configure** service ies *string* interface *string* hold-time ipv4 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the **init-only** command.
Introduced	16.0.R1

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Platforms	All

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	**configure** service ies *string* interface *string* hold-time ipv4 down init-only *boolean*
Tree	init-only
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Down hold time for the IP interface
Context	**configure** service ies *string* interface *string* hold-time ipv4 down seconds *number*
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

up

Synopsis	Enter the **up** context
Context	**configure** service ies *string* interface *string* hold-time ipv4 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	All

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seconds *number*

Synopsis	Up hold time for the IP interface
Context	**configure** service ies *string* interface *string* hold-time ipv4 up seconds *number*
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** service ies *string* interface *string* hold-time ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

down

Synopsis	Enter the **down** context
Context	**configure** service ies *string* interface *string* hold-time ipv6 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the **init-only** command.
Introduced	16.0.R1
Platforms	All

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	**configure** service ies *string* interface *string* hold-time ipv6 down init-only *boolean*
Tree	init-only
Description	When configured to **true**, the system applies a delay only when the IP interface is first configured or after a system reboot.

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Default	false
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Down hold time for the IP interface
Context	**configure** service ies *string* interface *string* hold-time ipv6 down seconds *number*
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

up

Synopsis	Enter the **up** context
Context	**configure** service ies *string* interface *string* hold-time ipv6 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Up hold time for the IP interface
Context	**configure** service ies *string* interface *string* hold-time ipv6 up seconds *number*
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

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if-attribute

Synopsis	Enter the **if-attribute** context
Context	**configure** service ies *string* interface *string* if-attribute
Tree	if-attribute
Introduced	16.0.R1
Platforms	All

admin-group *reference*

Synopsis	Administrative group name for the interface
Context	**configure** service ies *string* interface *string* if-attribute admin-group *reference*
Tree	admin-group
Reference	**configure** routing-options if-attribute admin-group *string*
Max. Instances	32
Introduced	16.0.R1
Platforms	All

srlg-group [name] *reference*

Synopsis	Add a list entry for **srlg-group**
Context	**configure** service ies *string* interface *string* if-attribute srlg-group *reference*
Tree	srlg-group
Introduced	16.0.R1
Platforms	All

[**name**] *reference*

Synopsis	SRLG name
Context	**configure** service ies *string* interface *string* if-attribute srlg-group *reference*
Tree	srlg-group
Reference	**configure** routing-options if-attribute srlg-group *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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ingress

Synopsis	Enter the **ingress** context
Context	**configure** service ies *string* interface *string* ingress
Tree	ingress
Introduced	19.7.R1
Platforms	All

destination-class-lookup *boolean*

Synopsis	Enable BGP destination class lookup
Context	**configure** service ies *string* interface *string* ingress destination-class-lookup *boolean*
Tree	destination-class-lookup
Description	When configured to **true**, the router performs a destination class lookup. This command is supported on FP3-based cards and later and is used in combination with the **destination-class** match criterion for an IP filter policy to filter egress traffic based on BGP destination classes. When configured to **false**, destination class lookup is not enabled.
Default	false
Introduced	20.7.R1
Platforms	All

policy-accounting *reference*

Synopsis	Ingress policy accounting template name
Context	**configure** service ies *string* interface *string* ingress policy-accounting *reference*
Tree	policy-accounting
Reference	**configure** routing-options policy-accounting policy-acct-template *string*
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

ingress-stats *boolean*

Synopsis	Collect ingress statistics
Context	**configure** service ies *string* interface *string* ingress-stats *boolean*
Tree	ingress-stats

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Default	false
Introduced	16.0.R1
Platforms	All

ip-mtu *number*

Synopsis	IP MTU applied to outgoing packets
Context	**configure** service ies *string* interface *string* ip-mtu *number*
Tree	ip-mtu
Range	512 to 9786
Units	bytes
Introduced	16.0.R1
Platforms	All

ipsec

Synopsis	Enable the **ipsec** context
Context	**configure** service ies *string* interface *string* ipsec
Tree	ipsec
Description	Commands in this context configure an IPsec secured interface.
Introduced	22.7.R1
Platforms	VSR

admin-state *keyword*

Synopsis	Administrative state of IPsec secured interface
Context	**configure** service ies *string* interface *string* ipsec admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	22.7.R1
Platforms	VSR

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ip-exception *reference*

Synopsis	IP exception filter
Context	**configure** service ies *string* interface *string* ipsec ip-exception *reference*
Tree	ip-exception
Description	This command configures the IP exception filter for the secured interface. All ingress traffic matching the specified filter bypasses IPsec processing.
Reference	**configure** filter ip-exception *string*
Introduced	22.7.R1
Platforms	VSR

ipsec-tunnel [name] *string*

Synopsis	Enter the **ipsec-tunnel** list instance
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string*
Tree	ipsec-tunnel
Description	Commands in this context configure IPsec tunnels used to secure traffic forwarded over the interface.
Introduced	22.7.R1
Platforms	VSR

[**name**] *string*

Synopsis	IPsec tunnel name
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string*
Tree	ipsec-tunnel
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

admin-state *keyword*

Synopsis	Administrative state of the IPsec tunnel
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	disable
Introduced	22.7.R1
Platforms	VSR

bfd

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **bfd** context
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* bfd
Tree	bfd
Introduced	22.7.R1
Platforms	VSR

bfd-designate *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Designate IPsec tunnel to carry BFD traffic
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* bfd bfd-designate *boolean*
Tree	bfd-designate
Default	false
Introduced	22.7.R1
Platforms	VSR

bfd-liveness

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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Synopsis	Enable the **bfd-liveness** context
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* bfd bfd-liveness
Tree	bfd-liveness
Description	Commands in this context configure a BFD session to provide a heart-beat mechanism for a specified IPsec tunnel. There can be only one BFD session assigned to any given IPsec tunnel, but there can be multiple IPsec tunnels using the same BFD session. BFD controls the state of the association tunnel. If the BFD session goes down, the system brings down the associated non-designated IPsec tunnel.
Introduced	22.7.R1
Platforms	VSR

dest-ip *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination address used for the BFD session
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* bfd bfd-liveness dest-ip *string*
Tree	dest-ip
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

interface *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the interface used by the BFD session
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* bfd bfd-liveness interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is mandatory.
Introduced	22.7.R1

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Platforms	VSR

service-name *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* bfd bfd-liveness service-name *string*
Tree	service-name
Description	This command configures the name of the service where BFD traffic is forwarded to.
String Length	1 to 64
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

clear-df-bit *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reset the DF bit to 0 in all payload IP packets
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* clear-df-bit *boolean*
Tree	clear-df-bit
Description	When configured to **true**, the DF bit is set to 0 in all payload IP packets associated with the IPsec tunnel, before any potential fragmentation occurs.
Default	false
Introduced	22.7.R1
Platforms	VSR

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copy-traffic-class-upon-decapsulation *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable traffic class copy upon decapsulation
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* copy-traffic-class-upon-decapsulation *boolean*
Tree	copy-traffic-class-upon-decapsulation
Description	When configured to **true**, the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private).
Default	false
Introduced	22.7.R1
Platforms	VSR

description *string*

Synopsis	Text description
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* description *string*
Tree	description
String Length	1 to 80
Introduced	22.7.R1
Platforms	VSR

encapsulated-ip-mtu *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum size of the encapsulated tunnel packet
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* encapsulated-ip-mtu *number*
Tree	encapsulated-ip-mtu
Description	This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If

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	the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

icmp-generation

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **icmp-generation** context
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* icmp-generation
Tree	icmp-generation
Description	Commands in this context configure settings for ICMPv4 message generation.
Introduced	22.7.R1
Platforms	VSR

frag-required

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **frag-required** context
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* icmp-generation frag-required
Tree	frag-required
Description	Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Introduced	22.7.R1
Platforms	VSR

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admin-state *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending ICMP messages
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* icmp-generation frag-required admin-state *keyword*
Tree	admin-state
Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Options	enable, disable
Default	enable
Introduced	22.7.R1
Platforms	VSR

interval *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending ICMP messages
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* icmp-generation frag-required interval *number*
Tree	interval
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Units	seconds
Default	10
Introduced	22.7.R1
Platforms	VSR

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message-count *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMP messages that can be sent
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* icmp-generation frag-required message-count *number*
Tree	message-count
Description	This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	22.7.R1
Platforms	VSR

icmp6-generation

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **icmp6-generation** context
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* icmp6-generation
Tree	icmp6-generation
Description	Commands in this context configure settings for ICMPv6 message generation.
Introduced	22.7.R1
Platforms	VSR

packet-too-big

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **packet-too-big** context

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Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* icmp6-generation packet-too-big
Tree	packet-too-big
Description	Commands in this context configure the parameters to send ICMPv6 PTB (Packet Too Big) messages on the private side. The system sends PTB messages if a received IPv6 packet on the private side is greater than 1280 bytes and it exceeds the private MTU of the tunnel. The private MTU for the tunnel is configured via the **configure router interface ipsec ipsec-tunnel ip-mtu** command for the interface.
Introduced	22.7.R1
Platforms	VSR

admin-state *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of Packet Too Big message sends
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* icmp6-generation packet-too-big admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	22.7.R1
Platforms	VSR

interval *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending Packet Too Big messages
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* icmp6-generation packet-too-big interval *number*
Tree	interval
Range	1 to 60

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Units	seconds
Default	10
Introduced	22.7.R1
Platforms	VSR

message-count *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMPv6 PTB messages that can be sent
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* icmp6-generation packet-too-big message-count *number*
Tree	message-count
Description	This command configures the maximum number of PTB messages that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	22.7.R1
Platforms	VSR

ip-mtu *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private MTU of the IPsec tunnel
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* ip-mtu *number*
Tree	ip-mtu
Description	This command specifies the private MTU of the IPsec tunnel. The private MTU is used to determine the need for fragmentation before encapsulation of the payload packet.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

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key-exchange

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **key-exchange** context
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* key-exchange
Tree	key-exchange
Introduced	22.7.R1
Platforms	VSR

dynamic

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **dynamic** context
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic
Tree	dynamic
Notes	The following elements are part of a choice: **dynamic** or **manual**.
Introduced	22.7.R1
Platforms	VSR

auto-establish *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Attempt to establish a phase 1 exchange automatically
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic auto-establish *boolean*
Tree	auto-establish
Default	false
Introduced	22.7.R1

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Platforms	VSR

cert

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **cert** context
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic cert
Tree	cert
Description	Commands in this context configure the attributes of the dynamic keying certificate.
Introduced	22.7.R1
Platforms	VSR

cert-profile *reference*

Synopsis	Certificate profile name
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic cert cert-profile *reference*
Tree	cert-profile
Reference	**configure** ipsec cert-profile *string*
Introduced	22.7.R1
Platforms	VSR

status-verify

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **status-verify** context
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic cert status-verify
Tree	status-verify
Description	Commands in this context configure attributes of Certificate Status Verification (CSV).

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Introduced	22.7.R1
Platforms	VSR

default-result *keyword*

Synopsis	Default result for Certificate Status Verification
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic cert status-verify default-result *keyword*
Tree	default-result
Description	This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.
Options	revoked, good
Default	revoked
Introduced	22.7.R1
Platforms	VSR

primary *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic cert status-verify primary *keyword*
Tree	primary
Description	This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.
Options	crl, ocsp
Default	crl
Introduced	22.7.R1
Platforms	VSR

secondary *keyword*

Synopsis	Secondary method used to verify certificate revocation
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic cert status-verify secondary *keyword*
Tree	secondary
Description	This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.

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Options	none, crl, ocsp
Default	none
Introduced	22.7.R1
Platforms	VSR

trust-anchor-profile *reference*

Synopsis	Trust anchor profile name
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic cert trust-anchor-profile *reference*
Tree	trust-anchor-profile
Reference	**configure** ipsec trust-anchor-profile *string*
Introduced	22.7.R1
Platforms	VSR

id

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **id** context
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic id
Tree	id
Description	Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation. The default behavior depends on the local authentication method as follows: • Psk: local tunnel IP address • Cert-auth: subject of the local certificate
Introduced	22.7.R1
Platforms	VSR

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fqdn *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN used as the local ID IKE type
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic id fqdn *string*
Tree	fqdn
String Length	1 to 255
Notes	The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.
Introduced	22.7.R1
Platforms	VSR

ipv4 *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 as the local ID type
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic id ipv4 *string*
Tree	ipv4
Notes	The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.
Introduced	22.7.R1
Platforms	VSR

ipv6 *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 used as the local IKE ID type
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic id ipv6 *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ipv6

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Notes	The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.
Introduced	22.7.R1
Platforms	VSR

ike-policy *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IKE policy ID
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic ike-policy *reference*
Tree	ike-policy
Description	This command specifies the ID of the IKE policy used for IKE negotiation. The **ipsec-transport-mode-profile** configuration only supports IKEv2.
Reference	**configure** ipsec ike-policy *number*
Introduced	22.7.R1
Platforms	VSR

ipsec-transform *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec transform IDs used by the dynamic key
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic ipsec-transform *reference*
Tree	ipsec-transform
Description	This command specifies IPsec transform IDs used for CHILD_SA negotiation.
Reference	**configure** ipsec ipsec-transform *number*
Max. Instances	4
Introduced	22.7.R1
Platforms	VSR

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pre-shared-key *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pre-shared key for authentication
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic pre-shared-key *string*
Tree	pre-shared-key
String Length	1 to 115
Introduced	22.7.R1
Platforms	VSR

manual

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **manual** context
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* key-exchange manual
Tree	manual
Description	Commands in this context configure settings for manually configured security associations for the IPsec tunnel.
Notes	The following elements are part of a choice: **dynamic** or **manual**.
Introduced	22.7.R1
Platforms	VSR

keys [security-association] *number* direction *keyword*

Synopsis	Enter the **keys** list instance
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword*
Tree	keys
Description	Commands in this context configure the security association list for the tunnel.

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Introduced	22.7.R1
Platforms	VSR

[**security-association**] *number*

Synopsis	SA entry ID
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword*
Tree	keys
Range	1 to 16
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

direction *keyword*

Synopsis	Direction of the IPsec tunnel
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword*
Tree	keys
Options	inbound, outbound
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

authentication-key *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the authentication algorithm
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword* authentication-key *string*
Tree	authentication-key
String Length	1 to 130
Introduced	22.7.R1

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Platforms	VSR

encryption-key *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the encryption algorithm
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword* encryption-key *string*
Tree	encryption-key
String Length	1 to 66
Introduced	22.7.R1
Platforms	VSR

ipsec-transform *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Transform entry used by manual SAs
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword* ipsec-transform *reference*
Tree	ipsec-transform
Reference	**configure** ipsec ipsec-transform *number*
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

spi *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SPI of inbound and outbound packets

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Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword* spi *number*
Tree	spi
Description	This command specifies the Security Parameter Index (SPI) used to look up the instruction to verify and decrypt the incoming IPsec packets when the direction is inbound. When the direction is outbound, the SPI is used in the encoding of the outgoing packets. The remote node can use the SPI to look up the instruction to verify and decrypt the packet.
Range	256 to 16383
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

local-gateway-address-override *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPsec tunnel endpoint address
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* local-gateway-address-override *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	local-gateway-address-override
Description	This command configures the local IPsec tunnel endpoint address. This overrides the default endpoint address, which is the interface address.
Introduced	22.7.R1
Platforms	VSR

max-history-key-records

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **max-history-key-records** context
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* max-history-key-records
Tree	max-history-key-records

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Description	Commands in this context configure the settings for recording historical IPsec keys.
Introduced	22.7.R1
Platforms	VSR

esp *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of recent records
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* max-history-key-records esp *number*
Tree	esp
Range	1 to 48
Introduced	22.7.R1
Platforms	VSR

ike *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of historical IKE key records
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* max-history-key-records ike *number*
Tree	ike
Range	1 to 3
Introduced	22.7.R1
Platforms	VSR

pmtu-discovery-aging *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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Synopsis	Aging out time of the learned path MTU
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* pmtu-discovery-aging *number*
Tree	pmtu-discovery-aging
Description	This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation.
Range	900 to 3600
Units	seconds
Default	900
Introduced	22.7.R1
Platforms	VSR

private-sap *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Private SAP ID
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* private-sap *number*
Tree	private-sap
Range	0 to 4094
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

private-service *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Private service name
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* private-service *string*
Tree	private-service
Description	This command configures the private service name. If unconfigured, the private service is the service where the secured interface resides.
String Length	1 to 64
Introduced	22.7.R1
Platforms	VSR

private-tcp-mss-adjust *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) adjustment
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* private-tcp-mss-adjust *number*
Tree	private-tcp-mss-adjust
Description	This command specifies the TCP MSS to adjust for the tunnel on the private side. When configured, the system may use the value to update the MSS option in the received TCP SYN packet on the private side.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

propagate-pmtu-v4 *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* propagate-pmtu-v4 *boolean*
Tree	propagate-pmtu-v4
Description	When configured to **true**, the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).
Default	true
Introduced	22.7.R1
Platforms	VSR

propagate-pmtu-v6 *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv6 hosts
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* propagate-pmtu-v6 *boolean*
Tree	propagate-pmtu-v6
Description	When configured to **true**, the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).
Default	true
Introduced	22.7.R1
Platforms	VSR

public-tcp-mss-adjust *(number | keyword)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) on the public network
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* public-tcp-mss-adjust *(number | keyword)*
Tree	public-tcp-mss-adjust

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Description	This command configures the MSS for the TCP traffic in an IPsec tunnel that is sent from the public network to the private network. The system may use this value to adjust or insert the MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Options	auto
Introduced	22.7.R1
Platforms	VSR

remote-gateway-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote IPsec tunnel endpoint address
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* remote-gateway-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	remote-gateway-address
Introduced	22.7.R1
Platforms	VSR

replay-window *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Anti-replay window size
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* replay-window *number*
Tree	replay-window
Description	This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.
Range	32 | 64 | 128 | 256 | 512
Units	packets
Introduced	22.7.R1
Platforms	VSR

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security-policy

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **security-policy** context
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* security-policy
Tree	security-policy
Description	Commands in this context specify a security policy used by the tunnel.
Introduced	22.7.R1
Platforms	VSR

id *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Security policy ID for use by the tunnel
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* security-policy id *number*
Tree	id
Max. Range	0 to 4294967295
Introduced	22.7.R1
Platforms	VSR

strict-match *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable strict match of the security policy entry
Context	**configure** service ies *string* interface *string* ipsec ipsec-tunnel *string* security-policy strict-match *boolean*
Tree	strict-match
Description	When configured to **true**, this command enables strict match of the security policy entry.

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When a CREATE_CHILD exchange request is received for a static IPsec tunnel, and this request is not a rekey request, ISA matches the received TSi and TSr with the configured security policy. This can be a match only when a received TS (in TSi or TSr) address range matches exactly with the subnet in a security policy entry.

If there is no match, the setup fails, and TS_UNACCEPTABLE is sent.

If there is a match, but there is an existing CHILD_SA for the matched security policy, the setup fails, and NO_PROPOSAL_CHOSEN is sent.

If there is a match, and there is not a CHILD_SA for the matched entry, the subnet is sent in the matched security policy entry as TSi and TSr, and the CHILD_SA is created.

Default	false
Introduced	22.7.R1
Platforms	VSR

ipv6-exception *reference*

Synopsis	IPv6 filter exception used to bypass encryption
Context	**configure** service ies *string* interface *string* ipsec ipv6-exception *reference*
Tree	ipv6-exception
Description	This command specifies the IPv6 filter exception for an IPsec-secured IPv6 interface. When an IPv6 filter exception is added, clear text packets that match the exception criteria in the IPv6 filter exception can ingress the interface, even when IPsec is enabled on the interface.
Reference	**configure** filter ipv6-exception *string*
Introduced	22.7.R1
Platforms	VSR

public-sap *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Public SAP ID
Context	**configure** service ies *string* interface *string* ipsec public-sap *number*
Tree	public-sap
Range	0 to 4094
Notes	This element is mandatory.
Introduced	22.7.R1

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Platforms	VSR

tunnel-group *reference*

WARNING:
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Synopsis	Tunnel group ID
Context	**configure** service ies *string* interface *string* ipsec tunnel-group *reference*
Tree	tunnel-group
Reference	**configure** isa tunnel-group *number*
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service ies *string* interface *string* ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

addresses

Synopsis	Enter the **addresses** context
Context	**configure** service ies *string* interface *string* ipv4 addresses
Tree	addresses
Introduced	16.0.R1
Platforms	All

address [ipv4-address] *string*

Synopsis	Enter the **address** list instance
Context	**configure** service ies *string* interface *string* ipv4 addresses address *string*

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Tree	address
Introduced	16.0.R1
Platforms	All

[**ipv4-address**] *string*

Synopsis	IPv4 address for the interface
Context	**configure** service ies *string* interface *string* ipv4 addresses address *string*
Tree	address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	**configure** service ies *string* interface *string* ipv4 addresses address *string* prefix-length *number*
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

allow-directed-broadcasts *boolean*

Synopsis	Forward directed broadcasts
Context	**configure** service ies *string* interface *string* ipv4 allow-directed-broadcasts *boolean*
Tree	allow-directed-broadcasts
Default	false
Introduced	16.0.R1
Platforms	All

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bfd

Synopsis	Enter the **bfd** context
Context	**configure** service ies *string* interface *string* ipv4 bfd
Tree	bfd
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	**configure** service ies *string* interface *string* ipv4 bfd admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	**configure** service ies *string* interface *string* ipv4 bfd echo-receive *number*
Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	**configure** service ies *string* interface *string* ipv4 bfd multiplier *number*
Tree	multiplier
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.

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Range	1 to 20
Default	3
Introduced	16.0.R1
Platforms	All

receive *number*

Synopsis	BFD receive interval over this interface
Context	**configure** service ies *string* interface *string* ipv4 bfd receive *number*
Tree	receive
Description	This command specifies the receive interval for the BFD session. On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

transmit-interval *number*

Synopsis	BFD transmit interval over this interface
Context	**configure** service ies *string* interface *string* ipv4 bfd transmit-interval *number*
Tree	transmit-interval
Description	This command configures the transmit intervals. On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

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type *keyword*

Synopsis	Local termination point for the BFD session
Context	**configure** service ies *string* interface *string* ipv4 bfd type *keyword*
Tree	type
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: • **auto** (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the **cpm-np**. • **cpm-np** – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems. • **fp** – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.
Options	cpm-np, auto, fp
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dhcp

Synopsis	Enter the **dhcp** context
Context	**configure** service ies *string* interface *string* ipv4 dhcp
Tree	dhcp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of DHCP
Context	**configure** service ies *string* interface *string* ipv4 dhcp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** service ies *string* interface *string* ipv4 dhcp description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

gi-address *string*

Synopsis	GI address for the DHCP relay
Context	**configure** service ies *string* interface *string* ipv4 dhcp gi-address *string*
Tree	gi-address
Description	This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay. By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.
Introduced	16.0.R1
Platforms	All

lease-populate

Synopsis	Enter the **lease-populate** context
Context	**configure** service ies *string* interface *string* ipv4 dhcp lease-populate
Tree	lease-populate
Introduced	16.0.R1
Platforms	All

max-leases *number*

Synopsis	Maximum number of DHCPv4 leases allowed
Context	**configure** service ies *string* interface *string* ipv4 dhcp lease-populate max-leases *number*

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Tree	max-leases
Range	0 to 511999
Introduced	16.0.R1
Platforms	All

option-82

Synopsis	Enter the **option-82** context
Context	**configure** service ies *string* interface *string* ipv4 dhcp option-82
Tree	option-82
Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	16.0.R1
Platforms	All

action *keyword*

Synopsis	Action to take with received DHCP Option 82
Context	**configure** service ies *string* interface *string* ipv4 dhcp option-82 action *keyword*
Tree	action
Options	replace, drop, keep
Default	keep
Introduced	16.0.R1
Platforms	All

circuit-id

Synopsis	Enter the **circuit-id** context
Context	**configure** service ies *string* interface *string* ipv4 dhcp option-82 circuit-id
Tree	circuit-id
Introduced	16.0.R1
Platforms	All

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ascii-tuple

Synopsis	Use the ASCII-encoded tuple for the circuit ID
Context	**configure** service ies *string* interface *string* ipv4 dhcp option-82 circuit-id ascii-tuple
Tree	ascii-tuple
Notes	The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	All

ifindex

Synopsis	Use the interface index for the circuit ID
Context	**configure** service ies *string* interface *string* ipv4 dhcp option-82 circuit-id ifindex
Tree	ifindex
Notes	The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	All

none

Synopsis	Do not include the circuit ID
Context	**configure** service ies *string* interface *string* ipv4 dhcp option-82 circuit-id none
Tree	none
Notes	The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	All

sap-id

Synopsis	Use the SAP ID
Context	**configure** service ies *string* interface *string* ipv4 dhcp option-82 circuit-id sap-id
Tree	sap-id
Notes	The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.

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Introduced	16.0.R1
Platforms	All

vlan-ascii-tuple

Synopsis	Include the VLAN ID and dot1p bits in the ASCII tuple
Context	**configure** service ies *string* interface *string* ipv4 dhcp option-82 circuit-id vlan-ascii-tuple
Tree	vlan-ascii-tuple
Description	When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet. When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty.
Notes	The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	All

remote-id

Synopsis	Enter the **remote-id** context
Context	**configure** service ies *string* interface *string* ipv4 dhcp option-82 remote-id
Tree	remote-id
Description	Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).
Introduced	16.0.R1
Platforms	All

ascii-string *string*

Synopsis	User-defined ASCII string for the remote ID
Context	**configure** service ies *string* interface *string* ipv4 dhcp option-82 remote-id ascii-string *string*
Tree	ascii-string
String Length	1 to 32
Notes	The following elements are part of a choice: **ascii-string**, **mac**, or **none**.
Introduced	16.0.R1

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Platforms	All

mac

Synopsis	Use the MAC address for the remote ID
Context	**configure** service ies *string* interface *string* ipv4 dhcp option-82 remote-id mac
Tree	mac
Notes	The following elements are part of a choice: **ascii-string**, **mac**, or **none**.
Introduced	16.0.R1
Platforms	All

none

Synopsis	Do not include the remote ID
Context	**configure** service ies *string* interface *string* ipv4 dhcp option-82 remote-id none
Tree	none
Notes	The following elements are part of a choice: **ascii-string**, **mac**, or **none**.
Introduced	16.0.R1
Platforms	All

vendor-specific-option

Synopsis	Enter the **vendor-specific-option** context
Context	**configure** service ies *string* interface *string* ipv4 dhcp option-82 vendor-specific-option
Tree	vendor-specific-option
Description	Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.
Introduced	16.0.R1
Platforms	All

client-mac-address *boolean*

Synopsis	Send the MAC address in the VSO
Context	**configure** service ies *string* interface *string* ipv4 dhcp option-82 vendor-specific-option client-mac-address *boolean*
Tree	client-mac-address

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Default	false
Introduced	16.0.R1
Platforms	All

pool-name *boolean*

Synopsis	Send the pool name in the VSO
Context	**configure** service ies *string* interface *string* ipv4 dhcp option-82 vendor-specific-option pool-name *boolean*
Tree	pool-name
Default	false
Introduced	16.0.R1
Platforms	All

sap-id *boolean*

Synopsis	Send SAP ID in the sub-option of the DHCP relay packet
Context	**configure** service ies *string* interface *string* ipv4 dhcp option-82 vendor-specific-option sap-id *boolean*
Tree	sap-id
Default	false
Introduced	16.0.R1
Platforms	All

service-id *boolean*

Synopsis	Send the service ID in the Vendor Specific Option
Context	**configure** service ies *string* interface *string* ipv4 dhcp option-82 vendor-specific-option service-id *boolean*
Tree	service-id
Default	false
Introduced	16.0.R1
Platforms	All

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string *string*

Synopsis	User-defined ASCII string for the VSO
Context	**configure** service ies *string* interface *string* ipv4 dhcp option-82 vendor-specific-option string *string*
Tree	string
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

system-id *boolean*

Synopsis	Send the system ID in the VSO
Context	**configure** service ies *string* interface *string* ipv4 dhcp option-82 vendor-specific-option system-id *boolean*
Tree	system-id
Default	false
Introduced	16.0.R1
Platforms	All

proxy-server

Synopsis	Enter the **proxy-server** context
Context	**configure** service ies *string* interface *string* ipv4 dhcp proxy-server
Tree	proxy-server
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the DHCP proxy server
Context	**configure** service ies *string* interface *string* ipv4 dhcp proxy-server admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1

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Platforms	All

emulated-server *string*

Synopsis	IP address used as the DHCP server address for the SAP
Context	**configure** service ies *string* interface *string* ipv4 dhcp proxy-server emulated-server *string*
Tree	emulated-server
Description	This command configures the IP address which will be used as the DHCP server address in the context of the SAP. Typically, the configured address should be in the context of the subnet represented by the service.
Introduced	16.0.R1
Platforms	All

lease-time

Synopsis	Enter the **lease-time** context
Context	**configure** service ies *string* interface *string* ipv4 dhcp proxy-server lease-time
Tree	lease-time
Introduced	16.0.R1
Platforms	All

radius-override *boolean*

Synopsis	Use lease time information provided by RADIUS server
Context	**configure** service ies *string* interface *string* ipv4 dhcp proxy-server lease-time radius-override *boolean*
Tree	radius-override
Default	false
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	DHCP lease time
Context	**configure** service ies *string* interface *string* ipv4 dhcp proxy-server lease-time value *number*

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Tree	value
Range	300 to 315446399
Units	seconds
Introduced	16.0.R1
Platforms	All

python-policy *reference*

Synopsis	Python policy
Context	**configure** service ies *string* interface *string* ipv4 dhcp python-policy *reference*
Tree	python-policy
Reference	**configure** python python-policy *string*
Introduced	16.0.R1
Platforms	All

relay-plain-bootp *boolean*

Synopsis	Enable relaying of plain BOOTP packets
Context	**configure** service ies *string* interface *string* ipv4 dhcp relay-plain-bootp *boolean*
Tree	relay-plain-bootp
Default	false
Introduced	16.0.R1
Platforms	All

relay-proxy

Synopsis	Enable the **relay-proxy** context
Context	**configure** service ies *string* interface *string* ipv4 dhcp relay-proxy
Tree	relay-proxy
Introduced	16.0.R1
Platforms	All

release-update-src-ip *boolean*

Synopsis	Update the source IP address of a DHCP RELEASE message

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Context	**configure** service ies *string* interface *string* ipv4 dhcp relay-proxy release-update-src-ip *boolean*
Tree	release-update-src-ip
Default	false
Introduced	16.0.R1
Platforms	All

siaddr-override *string*

Synopsis	DHCP server IP address for address hiding function
Context	**configure** service ies *string* interface *string* ipv4 dhcp relay-proxy siaddr-override *string*
Tree	siaddr-override
Introduced	16.0.R1
Platforms	All

release-include-gi-address *boolean*

Synopsis	Include gateway IP address in DHCP Release messages
Context	**configure** service ies *string* interface *string* ipv4 dhcp release-include-gi-address *boolean*
Tree	release-include-gi-address
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *string*

Synopsis	IP addresses for DHCP server requests
Context	**configure** service ies *string* interface *string* ipv4 dhcp server *string*
Tree	server
Description	This command configures a list of servers that this interface forwards requests to. The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list.
Max. Instances	8

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Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

src-ip-addr *keyword*

Synopsis	Type of source address to use for DHCP relay
Context	**configure** service ies *string* interface *string* ipv4 dhcp src-ip-addr *keyword*
Tree	src-ip-addr
Options	auto, gi-address
Default	auto
Introduced	16.0.R1
Platforms	All

trusted *boolean*

Synopsis	Relay untrusted packets
Context	**configure** service ies *string* interface *string* ipv4 dhcp trusted *boolean*
Tree	trusted
Description	When configured to **true**, the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request. A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit. This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.
Default	false
Introduced	16.0.R1
Platforms	All

use-arp *boolean*

Synopsis	Use ARP to determine the destination hardware address
Context	**configure** service ies *string* interface *string* ipv4 dhcp use-arp *boolean*
Tree	use-arp

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Default	false
Introduced	16.0.R1
Platforms	All

icmp

Synopsis	Enter the **icmp** context
Context	**configure** service ies *string* interface *string* ipv4 icmp
Tree	icmp
Introduced	16.0.R1
Platforms	All

mask-reply *boolean*

Synopsis	Allow responses to ICMP mask requests on the interface
Context	**configure** service ies *string* interface *string* ipv4 icmp mask-reply *boolean*
Tree	mask-reply
Default	true
Introduced	16.0.R1
Platforms	All

param-problem

Synopsis	Enter the **param-problem** context
Context	**configure** service ies *string* interface *string* ipv4 icmp param-problem
Tree	param-problem
Description	Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sent Parameter Problem messages
Context	**configure** service ies *string* interface *string* ipv4 icmp param-problem admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum number of Parameter Problem messages to send
Context	**configure** service ies *string* interface *string* ipv4 icmp param-problem number *number*
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit number of Parameter Problem messages
Context	**configure** service ies *string* interface *string* ipv4 icmp param-problem seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

redirects

Synopsis	Enter the **redirects** context
Context	**configure** service ies *string* interface *string* ipv4 icmp redirects
Tree	redirects
Description	Commands in this context configure the settings for ICMP redirect messages generated by the interface. The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.

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Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sending ICMP redirect messages
Context	**configure** service ies *string* interface *string* ipv4 icmp redirects admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum number of ICMP redirect messages to send
Context	**configure** service ies *string* interface *string* ipv4 icmp redirects number *number*
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit the number of ICMP redirect messages
Context	**configure** service ies *string* interface *string* ipv4 icmp redirects seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

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ttl-expired

Synopsis	Enter the **ttl-expired** context
Context	**configure** service ies *string* interface *string* ipv4 icmp ttl-expired
Tree	ttl-expired
Description	Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sending TTL expired messages
Context	**configure** service ies *string* interface *string* ipv4 icmp ttl-expired admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum number of TTL expired messages to send
Context	**configure** service ies *string* interface *string* ipv4 icmp ttl-expired number *number*
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit the number of TTL expired messages
Context	**configure** service ies *string* interface *string* ipv4 icmp ttl-expired seconds *number*
Tree	seconds
Range	1 to 60

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Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

unreachables

Synopsis	Enter the **unreachables** context
Context	**configure** service ies *string* interface *string* ipv4 icmp unreachables
Tree	unreachables
Description	Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sending unreachable messages
Context	**configure** service ies *string* interface *string* ipv4 icmp unreachables admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum number of unreachable messages to send
Context	**configure** service ies *string* interface *string* ipv4 icmp unreachables number *number*
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

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seconds *number*

Synopsis	Time to limit the number of ICMP unreachable messages
Context	**configure** service ies *string* interface *string* ipv4 icmp unreachables seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

ip-helper-address *string*

Synopsis	Gateway address
Context	**configure** service ies *string* interface *string* ipv4 ip-helper-address *string*
Tree	ip-helper-address
Introduced	16.0.R1
Platforms	All

local-dhcp-server *reference*

Synopsis	DHCP server for the interface
Context	**configure** service ies *string* interface *string* ipv4 local-dhcp-server *reference*
Tree	local-dhcp-server
Reference	**configure** router *string* dhcp-server dhcpv4 *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-discovery

Synopsis	Enter the **neighbor-discovery** context
Context	**configure** service ies *string* interface *string* ipv4 neighbor-discovery
Tree	neighbor-discovery
Introduced	16.0.R1
Platforms	All

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host-route

Synopsis	Enter the **host-route** context
Context	**configure** service ies *string* interface *string* ipv4 neighbor-discovery host-route
Tree	host-route
Introduced	19.10.R1
Platforms	All

populate [route-type] *keyword*

Synopsis	Enter the **populate** list instance
Context	**configure** service ies *string* interface *string* ipv4 neighbor-discovery host-route populate *keyword*
Tree	populate
Introduced	19.10.R1
Platforms	All

[**route-type**] *keyword*

Synopsis	Type of ARP or ND entries that generate host routes
Context	**configure** service ies *string* interface *string* ipv4 neighbor-discovery host-route populate *keyword*
Tree	populate
Options	static, dynamic, evpn
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

route-tag *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	**configure** service ies *string* interface *string* ipv4 neighbor-discovery host-route populate *keyword* route-tag *number*

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Tree	route-tag
Description	This command specifies the route tag that is added in the route table for ARP or ND host routes. This tag can be matched on BGP VRF export and BGP peer export policies.
Range	1 to 255
Introduced	19.10.R1
Platforms	All

learn-unsolicited *boolean*

Synopsis	Learn new entries from any received NA message
Context	**configure** service ies *string* interface *string* ipv4 neighbor-discovery learn-unsolicited *boolean*
Tree	learn-unsolicited
Description	When configured to **true**, the router can learn neighbor entries from received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited (S) flag set. The command can be enabled for global addresses, link-local addresses, or for both. When configured to **false**, the router follows standard behavior for learning neighbor entries. • If an unsolicited NA (regardless of the S flag) is received from a neighbor that is not yet in the Neighbor Discovery (ND) cache, the NA is ignored. • If an NS, RS, RA, or Redirect message with a Link Layer Address (MAC) is received from a neighbor that is not yet in the ND cache, a new neighbor entry is created in the cache to store the received Link Layer MAC. The neighbor is put in the STALE state.
Default	false
Introduced	16.0.R1
Platforms	All

limit

Synopsis	Enter the **limit** context
Context	**configure** service ies *string* interface *string* ipv4 neighbor-discovery limit
Tree	limit
Introduced	16.0.R1
Platforms	All

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log-only *boolean*

Synopsis	Generate log entries only if limit is reached
Context	**configure** service ies *string* interface *string* ipv4 neighbor-discovery limit log-only *boolean*
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

max-entries *number*

Synopsis	Maximum number of entries learned on an IP interface
Context	**configure** service ies *string* interface *string* ipv4 neighbor-discovery limit max-entries *number*
Tree	max-entries
Range	0 to 524288
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Threshold value that triggers a warning message
Context	**configure** service ies *string* interface *string* ipv4 neighbor-discovery limit threshold *number*
Tree	threshold
Range	1 to 100
Units	percent
Default	90
Introduced	16.0.R1
Platforms	All

local-proxy-arp *boolean*

Synopsis	Enable local proxy ARP on interface
Context	**configure** service ies *string* interface *string* ipv4 neighbor-discovery local-proxy-arp *boolean*

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Tree	local-proxy-arp
Description	When configured to **true**, the router enables local proxy ARP on the interface. When configured to **false**, the router does not respond to ARP requests for addresses on the same subnet.
Introduced	16.0.R1
Platforms	All

populate *boolean*

Synopsis	Allow static and dynamic hosts to be populated in system ARP cache
Context	**configure** service ies *string* interface *string* ipv4 neighbor-discovery populate *boolean*
Tree	populate
Default	false
Introduced	16.0.R1
Platforms	All

proactive-refresh *boolean*

Synopsis	Send a single refresh message before entry timeout
Context	**configure** service ies *string* interface *string* ipv4 neighbor-discovery proactive-refresh *boolean*
Tree	proactive-refresh
Description	When configured to **true**, the router always sends a refresh message 30 seconds before the timeout of the entry (a single refresh message with no retries). When configured to **false**, the router marks an entry as stale 30 seconds before age-out, and the router only sends an ARP request to refresh the entry if the IOM receives traffic that uses it. Then, the IOM asks the ARP application to send a refresh message. With ARP proactive refresh enabled, the ARP module sends a refresh message regardless of the IOM receiving traffic.
Default	false
Introduced	16.0.R1
Platforms	All

proxy-arp-policy *reference*

Synopsis	Proxy ARP policy name

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Context	**configure** service ies *string* interface *string* ipv4 neighbor-discovery proxy-arp-policy *reference*
Tree	proxy-arp-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

remote-proxy-arp *boolean*

Synopsis	Enable remote proxy ARP on the interface
Context	**configure** service ies *string* interface *string* ipv4 neighbor-discovery remote-proxy-arp *boolean*
Tree	remote-proxy-arp
Default	false
Introduced	16.0.R1
Platforms	All

retry-timer *number*

Synopsis	ARP retry interval
Context	**configure** service ies *string* interface *string* ipv4 neighbor-discovery retry-timer *number*
Tree	retry-timer
Range	1 to 300
Units	deciseconds
Default	50
Introduced	16.0.R1
Platforms	All

static-neighbor [ipv4-address] *string*

Synopsis	Enter the **static-neighbor** list instance
Context	**configure** service ies *string* interface *string* ipv4 neighbor-discovery static-neighbor *string*

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Tree	static-neighbor
Introduced	16.0.R1
Platforms	All

[**ipv4-address**] *string*

Synopsis	IPv4 address that corresponds to the physical address
Context	**configure** service ies *string* interface *string* ipv4 neighbor-discovery static-neighbor *string*
Tree	static-neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

mac-address *string*

Synopsis	MAC address for the static neighbor
Context	**configure** service ies *string* interface *string* ipv4 neighbor-discovery static-neighbor *string* mac-address *string*
Tree	mac-address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

static-neighbor-unnumbered

Synopsis	Enable the **static-neighbor-unnumbered** context
Context	**configure** service ies *string* interface *string* ipv4 neighbor-discovery static-neighbor-unnumbered
Tree	static-neighbor-unnumbered
Introduced	16.0.R1
Platforms	All

mac-address *string*

Synopsis	MAC address for the static neighbor

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Context	**configure** service ies *string* interface *string* ipv4 neighbor-discovery static-neighbor-unnumbered mac-address *string*
Tree	mac-address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout for an ARP entry learned on the interface
Context	**configure** service ies *string* interface *string* ipv4 neighbor-discovery timeout *number*
Tree	timeout
Description	This command configures the minimum time an ARP entry learned on the IP interface is stored in the ARP table. ARP entries are automatically refreshed when an ARP request or gratuitous ARP is seen by an IP host. Otherwise, the ARP entry is aged from the ARP table.
Range	0 to 65535
Units	seconds
Default	14400
Introduced	16.0.R1
Platforms	All

primary

Synopsis	Enable the **primary** context
Context	**configure** service ies *string* interface *string* ipv4 primary
Tree	primary
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Primary IPv4 address assigned to the interface
Context	**configure** service ies *string* interface *string* ipv4 primary address *string*
Tree	address
Notes	This element is mandatory.

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Introduced	16.0.R1
Platforms	All

broadcast *keyword*

Synopsis	Broadcast address format
Context	**configure** service ies *string* interface *string* ipv4 primary broadcast *keyword*
Tree	broadcast
Options	all-ones, host-ones
Default	host-ones
Introduced	16.0.R1
Platforms	All

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	**configure** service ies *string* interface *string* ipv4 primary prefix-length *number*
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

track-srrp *number*

Synopsis	SRRP instance whose state is tracked on the IP address
Context	**configure** service ies *string* interface *string* ipv4 primary track-srrp *number*
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

qos-route-lookup *keyword*

Synopsis	QoS Route lookup

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Context	**configure** service ies *string* interface *string* ipv4 qos-route-lookup *keyword*
Tree	qos-route-lookup
Options	destination, source
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

secondary [address] *string*

Synopsis	Enter the **secondary** list instance
Context	**configure** service ies *string* interface *string* ipv4 secondary *string*
Tree	secondary
Introduced	16.0.R1
Platforms	All

[**address**] *string*

Synopsis	Secondary IPv4 address assigned to the interface
Context	**configure** service ies *string* interface *string* ipv4 secondary *string*
Tree	secondary
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

broadcast *keyword*

Synopsis	Broadcast address format
Context	**configure** service ies *string* interface *string* ipv4 secondary *string* broadcast *keyword*
Tree	broadcast
Options	all-ones, host-ones
Default	host-ones
Introduced	16.0.R1
Platforms	All

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igp-inhibit *boolean*

Synopsis	Disable the running IGP from recognizing secondary IP
Context	**configure** service ies *string* interface *string* ipv4 secondary *string* igp-inhibit *boolean*
Tree	igp-inhibit
Description	When configured to **true**, the running IGP does not recognize the secondary IP address as a local interface.
Default	false
Introduced	16.0.R1
Platforms	All

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	**configure** service ies *string* interface *string* ipv4 secondary *string* prefix-length *number*
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

track-srrp *number*

Synopsis	SRRP instance whose state is tracked on the IP address
Context	**configure** service ies *string* interface *string* ipv4 secondary *string* track-srrp *number*
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

tcp-mss *number*

Synopsis	TCP maximum segment size for the interface
Context	**configure** service ies *string* interface *string* ipv4 tcp-mss *number*
Tree	tcp-mss
Range	384 to 9746

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Introduced	16.0.R1
Platforms	All

unnumbered

Synopsis	Enter the **unnumbered** context
Context	**configure** service ies *string* interface *string* ipv4 unnumbered
Tree	unnumbered
Introduced	16.0.R1
Platforms	All

ip-address *string*

Synopsis	IP address of the unnumbered interface
Context	**configure** service ies *string* interface *string* ipv4 unnumbered ip-address *string*
Tree	ip-address
Notes	The following elements are part of a choice: **ip-address**, **ip-int-name**, or **system**.
Introduced	16.0.R1
Platforms	All

ip-int-name *string*

Synopsis	IP interface name
Context	**configure** service ies *string* interface *string* ipv4 unnumbered ip-int-name *string*
Tree	ip-int-name
String Length	1 to 32
Notes	The following elements are part of a choice: **ip-address**, **ip-int-name**, or **system**.
Introduced	16.0.R1
Platforms	All

system

Synopsis	IP interface as an unnumbered interface
Context	**configure** service ies *string* interface *string* ipv4 unnumbered system
Tree	system

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Notes	The following elements are part of a choice: **ip-address**, **ip-int-name**, or **system**.
Introduced	16.0.R1
Platforms	All

urpf-check

Synopsis	Enable the **urpf-check** context
Context	**configure** service ies *string* interface *string* ipv4 urpf-check
Tree	urpf-check
Introduced	16.0.R1
Platforms	All

ignore-default *boolean*

Synopsis	Ignore default route when performing a uRPF check
Context	**configure** service ies *string* interface *string* ipv4 urpf-check ignore-default *boolean*
Tree	ignore-default
Default	false
Introduced	16.0.R1
Platforms	All

mode *keyword*

Synopsis	Unicast RPF check mode
Context	**configure** service ies *string* interface *string* ipv4 urpf-check mode *keyword*
Tree	mode
Options	strict, loose, strict-no-ecmp
Default	strict
Introduced	16.0.R1
Platforms	All

vrrp [virtual-router-id] *number*

Synopsis	Enter the **vrrp** list instance
Context	**configure** service ies *string* interface *string* ipv4 vrrp *number*

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Tree	vrrp
Introduced	16.0.R1
Platforms	All

[**virtual-router-id**] *number*

Synopsis	Virtual Router Identifier (VRID) for the IP interface
Context	**configure** service ies *string* interface *string* ipv4 vrrp *number*
Tree	vrrp
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of VRRP
Context	**configure** service ies *string* interface *string* ipv4 vrrp *number* admin-state *keyword*
Tree	admin-state
Description	The command determines the administrative state of non-owner virtual router instances. Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes. When **disabled**, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing. Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated. An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the **admin-state** command within the parent IP interface node which administratively disables the IP interface.
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

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authentication-key *string*

Synopsis	Password for simple text authentication
Context	**configure** service ies *string* interface *string* ipv4 vrrp *number* authentication-key *string*
Tree	authentication-key
Description	This command optionally assigns a simple text password authentication key to generate master VRRP advertisement messages and validate received VRRP advertisement messages. If this command is re-executed with a different password key defined, the new key immediately replaces the old key. This command may be executed at any time.
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

backup *string*

Synopsis	Virtual router IP addresses for the interface
Context	**configure** service ies *string* interface *string* ipv4 vrrp *number* backup *string*
Tree	backup
Description	This command associates virtual router IP addresses with those of the parental IP interface. This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance. Non-owner virtual router instances create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance. For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is advertising to backup virtual routers receiving the messages. The specified *unicast-ipv4-address* must be equal to one of the existing IP addresses in the parental IP interface (primary or secondary) or this command fails. See "Owner and non-owner VRRP" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide* for more information about owner and non-owner virtual router instances.
Max. Instances	16
Introduced	16.0.R1
Platforms	All

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bfd-liveness

Synopsis	Enable the **bfd-liveness** context
Context	**configure** service ies *string* interface *string* ipv4 vrrp *number* bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

dest-ip *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination IP address to use for BFD session
Context	**configure** service ies *string* interface *string* ipv4 vrrp *number* bfd-liveness dest-ip *string*
Tree	dest-ip
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

interface-name *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
Context	**configure** service ies *string* interface *string* ipv4 vrrp *number* bfd-liveness interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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service-name *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	**configure** service ies *string* interface *string* ipv4 vrrp *number* bfd-liveness service-name *string*
Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

init-delay *number*

Synopsis	VRRP initialization delay timer
Context	**configure** service ies *string* interface *string* ipv4 vrrp *number* init-delay *number*
Tree	init-delay
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

mac *string*

Synopsis	Virtual MAC address to use in ARP responses
Context	**configure** service ies *string* interface *string* ipv4 vrrp *number* mac *string*
Tree	mac
Description	This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID. Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address. Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with *unicast-mac-address* as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts

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results. All VRRP advertisement messages are transmitted with *unicast-mac-address* as the source MAC.

An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.

Introduced 16.0.R1

Platforms All

master-int-inherit *boolean*

Synopsis Allow master instance to dictate the master down timer

Context **configure** service ies *string* interface *string* ipv4 vrrp *number* master-int-inherit *boolean*

Tree master-int-inherit

Description When configured to **true**, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.

When configured to **false**, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.

Introduced 16.0.R1

Platforms All

message-interval *number*

Synopsis Interval for sending VRRP advertisement messages

Context **configure** service ies *string* interface *string* ipv4 vrrp *number* message-interval *number*

Tree message-interval

Description This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.

The usage of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the **master-int-inherit** command:

- When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The **master-int-inherit** command has no effect when operating as master.
- When a non-owner is in the backup state with **master-int-inherit** disabled, the system uses the configured value of this command to match the incoming

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advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.

- When a non-owner is in the backup state with **master-int-inherit** enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.

Range	1 to 2559
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VRRP instance to follow a specified operational group
Context	**configure** service ies *string* interface *string* ipv4 vrrp *number* monitor-oper-group *reference*
Tree	monitor-oper-group
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.
Reference	**configure** service oper-group *string*
Introduced	22.2.R1
Platforms	All

ntp-reply *boolean*

Synopsis	Allow processing of NTP requests
Context	**configure** service ies *string* interface *string* ipv4 vrrp *number* ntp-reply *boolean*
Tree	ntp-reply
Description	When configured to **true**, the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router.

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When configured to **false**, the router does not process NTP requests.

Default	false
Introduced	20.2.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group name associated with the VRRP
Context	**configure** service ies *string* interface *string* ipv4 vrrp *number* oper-group *reference*
Tree	oper-group
Description	This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states.
Reference	**configure** service oper-group *string*
Introduced	16.0.R1
Platforms	All

owner *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate the virtual router instance as owner
Context	**configure** service ies *string* interface *string* ipv4 vrrp *number* owner *boolean*
Tree	owner
Description	When configured to **true**, the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router. When configured to **false**, this virtual router instance is designated as a non-owner.
Default	false
Introduced	16.0.R1
Platforms	All

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passive *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Suppress the processing of VRRP advertisement messages
Context	**configure** service ies *string* interface *string* ipv4 vrrp *number* passive *boolean*
Tree	passive
Description	When configured to **true**, the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down). When configured to **false**, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.
Default	false
Introduced	16.0.R1
Platforms	All

ping-reply *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	**configure** service ies *string* interface *string* ipv4 vrrp *number* ping-reply *boolean*
Tree	ping-reply
Description	When configured to **true**, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address). When configured to **false**, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded. Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.
Default	false
Introduced	16.0.R1
Platforms	All

policy *reference*

Synopsis	VRRP priority control policy

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Context	**configure** service ies *string* interface *string* ipv4 vrrp *number* policy *reference*
Tree	policy
Description	This command configures a VRRP priority control policy to associate with the virtual router instance. VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis. An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the **priority** command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value. For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.
Reference	**configure** vrrp policy *number*
Introduced	16.0.R1
Platforms	All

preempt *boolean*

Synopsis	Allow the VRRP to override an existing non-owner master
Context	**configure** service ies *string* interface *string* ipv4 vrrp *number* preempt *boolean*
Tree	preempt
Description	When configured to **true**, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router. When configured to **false**, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.
Default	true
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Base priority for the VRRP
Context	**configure** service ies *string* interface *string* ipv4 vrrp *number* priority *number*
Tree	priority
Description	This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process.

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The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.

Range	1 to 255
Introduced	16.0.R1
Platforms	All

ssh-reply *boolean*

Synopsis	Allow the non-owner master to reply to SSH requests
Context	**configure** service ies *string* interface *string* ipv4 vrrp *number* ssh-reply *boolean*
Tree	ssh-reply
Description	When configured to **true**, the router allows the non-owner master to reply to SSH requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the SSH request. SSH cannot be disabled at the management security level (either on the parental IP interface or on the SSH source host address). When configure to **false**, SSH requests to non-owner master virtual IP addresses are silently discarded.
Default	false
Introduced	16.0.R1
Platforms	All

standby-forwarding *boolean*

Synopsis	Allow standby router to forward traffic
Context	**configure** service ies *string* interface *string* ipv4 vrrp *number* standby-forwarding *boolean*
Tree	standby-forwarding
Description	When configured to **true**, the standby router forwards all traffic. When configured to **false**, the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.
Default	false
Introduced	16.0.R1
Platforms	All

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telnet-reply *boolean*

Synopsis	Allow non-owner master to reply to Telnet requests
Context	**configure** service ies *string* interface *string* ipv4 vrrp *number* telnet-reply *boolean*
Tree	telnet-reply
Description	When configured to **true**, the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address). When configured to **false**, the router silently discards Telnet requests sent to non-owner master virtual IP addresses.
Default	false
Introduced	16.0.R1
Platforms	All

traceroute-reply *boolean*

Synopsis	Allow non-owner master to reply to traceroute requests
Context	**configure** service ies *string* interface *string* ipv4 vrrp *number* traceroute-reply *boolean*
Tree	traceroute-reply
Description	When configured to **true**, the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance. When configured to **false**, the router silently discards traceroute requests sent to non-owner master virtual IP addresses. Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).
Default	false
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enable the **ipv6** context
Context	**configure** service ies *string* interface *string* ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

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address [ipv6-address] *string*

Synopsis	Enter the **address** list instance
Context	**configure** service ies *string* interface *string* ipv6 address *string*
Tree	address
Introduced	16.0.R1
Platforms	All

[**ipv6-address**] *string*

Synopsis	IPv6 address assigned to the interface
Context	**configure** service ies *string* interface *string* ipv6 address *string*
Tree	address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

duplicate-address-detection *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable Duplicate Address Detection
Context	**configure** service ies *string* interface *string* ipv6 address *string* duplicate-address-detection *boolean*
Tree	duplicate-address-detection
Description	When configured to **true**, the router enables Duplicate Address Detection (DAD). When configured to **false**, the router disables DAD and sets the address to preferred, even if there is a duplicated address.
Default	true
Introduced	16.0.R1
Platforms	All

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eui-64 *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Form IPv6 address from prefix and 64-bit interface ID
Context	**configure** service ies *string* interface *string* ipv6 address *string* eui-64 *boolean*
Tree	eui-64
Description	When configured to **true**, the router forms a complete IPv6 address from the supplied prefix and 64-bit interface identifier. The 64-bit interface identifier is derived from the MAC address on Ethernet interfaces. For interfaces without a MAC address, for example POS interfaces, use the base MAC address of the chassis.
Default	false
Introduced	16.0.R1
Platforms	All

prefix-length *number*

Synopsis	IPv6 address prefix length
Context	**configure** service ies *string* interface *string* ipv6 address *string* prefix-length *number*
Tree	prefix-length
Range	4 to 128
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

primary-preference *number*

Synopsis	Index assigned to the IPv6 address of the interface
Context	**configure** service ies *string* interface *string* ipv6 address *string* primary-preference *number*
Tree	primary-preference
Description	This command assigns a primary preference index to an IPv6 address of the interface to enforce the order in which the address is used by control plane protocols and applications that require a fixed address of the interface, such as LDP and Segment Routing. In cases where a fixed address is required when originating packets from the interface, the IPv6 address with the lowest primary preference index is selected. If the selected address is removed, the next IPv6 address with the next lowest primary preference index is selected.

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If this index is not specified for the IPv6 address, the system assigns the next available index value to the address. The address index space is unique across all addresses of a given interface.

Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

track-srrp *number*

Synopsis	SRRP ID whose state is tracked on this IP address
Context	**configure** service ies *string* interface *string* ipv6 address *string* track-srrp *number*
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

bfd

Synopsis	Enter the **bfd** context
Context	**configure** service ies *string* interface *string* ipv6 bfd
Tree	bfd
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	**configure** service ies *string* interface *string* ipv6 bfd admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

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echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	**configure** service ies *string* interface *string* ipv6 bfd echo-receive *number*
Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	**configure** service ies *string* interface *string* ipv6 bfd multiplier *number*
Tree	multiplier
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	16.0.R1
Platforms	All

receive *number*

Synopsis	BFD receive interval over this interface
Context	**configure** service ies *string* interface *string* ipv6 bfd receive *number*
Tree	receive
Description	This command specifies the receive interval for the BFD session. On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

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transmit-interval *number*

Synopsis	BFD transmit interval over this interface
Context	**configure** service ies *string* interface *string* ipv6 bfd transmit-interval *number*
Tree	transmit-interval
Description	This command configures the transmit intervals. On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Local termination point for the BFD session
Context	**configure** service ies *string* interface *string* ipv6 bfd type *keyword*
Tree	type
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: • **auto** (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the **cpm-np**. • **cpm-np** – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems. • **fp** – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.
Options	cpm-np, auto, fp
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dhcp6

Synopsis	Enter the **dhcp6** context

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Context	**configure** service ies *string* interface *string* ipv6 dhcp6
Tree	dhcp6
Introduced	16.0.R1
Platforms	All

relay

Synopsis	Enter the **relay** context
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 relay
Tree	relay
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of DHCPv6 Relay
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 relay admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 relay description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

lease-populate

Synopsis	Enter the **lease-populate** context

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Context	**configure** service ies *string* interface *string* ipv6 dhcp6 relay lease-populate
Tree	lease-populate
Introduced	16.0.R1
Platforms	All

max-nbr-of-leases *number*

Synopsis	Maximum lease state entries allowed for the interface
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 relay lease-populate max-nbr-of-leases *number*
Tree	max-nbr-of-leases
Range	0 to 32767
Default	0
Introduced	16.0.R1
Platforms	All

route-populate

Synopsis	Enter the **route-populate** context
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 relay lease-populate route-populate
Tree	route-populate
Introduced	16.0.R1
Platforms	All

na *boolean*

Synopsis	Create route based on IA_NA prefix option in relay-reply message
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 relay lease-populate route-populate na *boolean*
Tree	na
Default	false
Introduced	16.0.R1
Platforms	All

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pd

Synopsis	Enable the **pd** context
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 relay lease-populate route-populate pd
Tree	pd
Introduced	16.0.R1
Platforms	All

exclude *boolean*

Synopsis	Create back hole route based on prefix exclude option in relay-reply message
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 relay lease-populate route-populate pd exclude *boolean*
Tree	exclude
Default	false
Introduced	16.0.R1
Platforms	All

ta *boolean*

Synopsis	Create route based on IA_TA prefix option in relay-reply message
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 relay lease-populate route-populate ta *boolean*
Tree	ta
Default	false
Introduced	16.0.R1
Platforms	All

link-address *string*

Synopsis	Link address of the DHCPv6 relay messages
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 relay link-address *string*
Tree	link-address
Introduced	16.0.R1
Platforms	All

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neighbor-resolution *boolean*

Synopsis	Enable neighbor resolution via DHCPv6 relay
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 relay neighbor-resolution *boolean*
Tree	neighbor-resolution
Default	false
Introduced	16.0.R1
Platforms	All

option

Synopsis	Enter the **option** context
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 relay option
Tree	option
Introduced	16.0.R1
Platforms	All

interface-id

Synopsis	Enter the **interface-id** context
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 relay option interface-id
Tree	interface-id
Introduced	16.0.R1
Platforms	All

ascii-tuple

Synopsis	Use ASCII-encoded concatenated tuple
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 relay option interface-id ascii-tuple
Tree	ascii-tuple
Notes	The following elements are part of a choice: **ascii-tuple**, **if-index**, **sap-id**, or **string**.
Introduced	16.0.R1
Platforms	All

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if-index

Synopsis	Use interface index in the DHCPv6 relay packet
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 relay option interface-id if-index
Tree	if-index
Notes	The following elements are part of a choice: **ascii-tuple**, **if-index**, **sap-id**, or **string**.
Introduced	16.0.R1
Platforms	All

sap-id

Synopsis	Use SAP ID in interface ID option in relay packet
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 relay option interface-id sap-id
Tree	sap-id
Notes	The following elements are part of a choice: **ascii-tuple**, **if-index**, **sap-id**, or **string**.
Introduced	16.0.R1
Platforms	All

string *string*

Synopsis	String for interface ID option in DHCPv6 relay packet
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 relay option interface-id string *string*
Tree	string
String Length	1 to 80
Notes	The following elements are part of a choice: **ascii-tuple**, **if-index**, **sap-id**, or **string**.
Introduced	16.0.R1
Platforms	All

remote-id *boolean*

Synopsis	Send remote ID option in the DHCPv6 relay packet
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 relay option remote-id *boolean*
Tree	remote-id
Default	false

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Introduced	16.0.R1
Platforms	All

python-policy *reference*

Synopsis	Python policy name
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 relay python-policy *reference*
Tree	python-policy
Reference	**configure** python python-policy *string*
Introduced	16.0.R1
Platforms	All

server *string*

Synopsis	DHCPv6 server to which the DHCPv6 requests are forwarded
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 relay server *string*
Tree	server
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

source-address *string*

Synopsis	Source IPv6 address of the DHCPv6 relay messages
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 relay source-address *string*
Tree	source-address
Introduced	16.0.R1
Platforms	All

user-db *reference*

Synopsis	Local user database for authentication
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 relay user-db *reference*

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Tree	user-db
Reference	**configure** subscriber-mgmt local-user-db *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server

Synopsis	Enter the **server** context
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 server
Tree	server
Introduced	16.0.R1
Platforms	All

max-nbr-of-leases *number*

Synopsis	DHCPv6 leases allowed
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 server max-nbr-of-leases *number*
Tree	max-nbr-of-leases
Range	0 to 8000
Default	8000
Introduced	16.0.R1
Platforms	All

prefix-delegation

Synopsis	Enter the **prefix-delegation** context
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 server prefix-delegation
Tree	prefix-delegation
Description	Commands in this context configure the options for delegating a long-lived prefix from a delegating router to a requesting router, where the delegating router does not require knowledge about the link topology in the network to which the prefixes are assigned.
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the prefix delegation
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 server prefix-delegation admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

prefix [ipv6-prefix] *string*

Synopsis	Enter the **prefix** list instance
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 server prefix-delegation prefix *string*
Tree	prefix
Description	Commands in this context configure the IPv6 prefix that is delegated by the system.
Introduced	16.0.R1
Platforms	All

[**ipv6-prefix**] *string*

Synopsis	IPv6 address and prefix
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 server prefix-delegation prefix *string*
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

client-id

Synopsis	Enter the **client-id** context
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 server prefix-delegation prefix *string* client-id
Tree	client-id

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Introduced	16.0.R1
Platforms	All

duid *string*

Synopsis	Requesting router ID
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 server prefix-delegation prefix *string* client-id duid *string*
Tree	duid
String Length	1 to 130
Introduced	16.0.R1
Platforms	All

iaid *number*

Synopsis	IAID from the requesting router to match
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 server prefix-delegation prefix *string* client-id iaid *number*
Tree	iaid
Description	This command configures the Identity Association ID (IAID) associated with a prefix delegation entry and must match the IAID sent by the requesting router for the prefix delegation to succeed.
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

preferred-lifetime *(number | keyword)*

Synopsis	Preferred lifetime of the prefix
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 server prefix-delegation prefix *string* preferred-lifetime *(number | keyword)*
Tree	preferred-lifetime
Description	This command configures the preferred lifetime of the prefix. The value cannot be greater than the valid lifetime value.
Range	1 to 4294967294
Units	seconds
Options	infinite

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Default	604800
Introduced	16.0.R1
Platforms	All

valid-lifetime *(number | keyword)*

Synopsis	Valid lifetime of the prefix
Context	**configure** service ies *string* interface *string* ipv6 dhcp6 server prefix-delegation prefix *string* valid-lifetime *(number | keyword)*
Tree	valid-lifetime
Range	1 to 4294967294
Units	seconds
Options	infinite
Default	2592000
Introduced	16.0.R1
Platforms	All

duplicate-address-detection *boolean*

Synopsis	Enable Duplicate Address Detection per interface
Context	**configure** service ies *string* interface *string* ipv6 duplicate-address-detection *boolean*
Tree	duplicate-address-detection
Default	true
Introduced	16.0.R1
Platforms	All

forward-ipv4-packets *boolean*

Synopsis	Forward unencapsulated IPv4 packets
Context	**configure** service ies *string* interface *string* ipv6 forward-ipv4-packets *boolean*
Tree	forward-ipv4-packets
Default	false
Introduced	19.5.R1
Platforms	All

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icmp6

Synopsis	Enter the **icmp6** context
Context	**configure** service ies *string* interface *string* ipv6 icmp6
Tree	icmp6
Introduced	16.0.R1
Platforms	All

packet-too-big

Synopsis	Enter the **packet-too-big** context
Context	**configure** service ies *string* interface *string* ipv6 icmp6 packet-too-big
Tree	packet-too-big
Description	Commands in this context configure limiting the number of ICMPv6 Packet Too Big messages.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Packet Too Big message sends
Context	**configure** service ies *string* interface *string* ipv6 icmp6 packet-too-big admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number of Packet Too big Messages issued per time frame
Context	**configure** service ies *string* interface *string* ipv6 icmp6 packet-too-big number *number*
Tree	number
Range	10 to 1000
Default	100

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Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit Packet Too Big messages
Context	**configure** service ies *string* interface *string* ipv6 icmp6 packet-too-big seconds *number*
Tree	seconds
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

param-problem

Synopsis	Enter the **param-problem** context
Context	**configure** service ies *string* interface *string* ipv6 icmp6 param-problem
Tree	param-problem
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Parameter Problem message sends
Context	**configure** service ies *string* interface *string* ipv6 icmp6 param-problem admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number used to limit ICMPv6 Parameter Problem messages
Context	**configure** service ies *string* interface *string* ipv6 icmp6 param-problem number *number*

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Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit ICMPv6 Parameter Problem messages
Context	**configure** service ies *string* interface *string* ipv6 icmp6 param-problem seconds *number*
Tree	seconds
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

redirects

Synopsis	Enter the **redirects** context
Context	**configure** service ies *string* interface *string* ipv6 icmp6 redirects
Tree	redirects
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Redirect message sends
Context	**configure** service ies *string* interface *string* ipv6 icmp6 redirects admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

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number *number*

Synopsis	Number to limit ICMPv6 Redirect messages per time frame
Context	**configure** service ies *string* interface *string* ipv6 icmp6 redirects number *number*
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit ICMPv6 Redirect messages
Context	**configure** service ies *string* interface *string* ipv6 icmp6 redirects seconds *number*
Tree	seconds
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

time-exceeded

Synopsis	Enter the **time-exceeded** context
Context	**configure** service ies *string* interface *string* ipv6 icmp6 time-exceeded
Tree	time-exceeded
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Time Exceeded message sends
Context	**configure** service ies *string* interface *string* ipv6 icmp6 time-exceeded admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable

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Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number to limit Time Exceeded messages per time frame
Context	**configure** service ies *string* interface *string* ipv6 icmp6 time-exceeded number *number*
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit ICMPv6 Time Exceeded messages
Context	**configure** service ies *string* interface *string* ipv6 icmp6 time-exceeded seconds *number*
Tree	seconds
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

unreachables

Synopsis	Enter the **unreachables** context
Context	**configure** service ies *string* interface *string* ipv6 icmp6 unreachables
Tree	unreachables
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Unreachable message sends
Context	**configure** service ies *string* interface *string* ipv6 icmp6 unreachables admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number to limit Unreachable messages per time frame
Context	**configure** service ies *string* interface *string* ipv6 icmp6 unreachables number *number*
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit ICMPv6 Unreachable messages
Context	**configure** service ies *string* interface *string* ipv6 icmp6 unreachables seconds *number*
Tree	seconds
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

link-local-address

Synopsis	Enter the **link-local-address** context
Context	**configure** service ies *string* interface *string* ipv6 link-local-address
Tree	link-local-address
Introduced	16.0.R1
Platforms	All

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address *string*

Synopsis	IPv6 link-local address
Context	**configure** service ies *string* interface *string* ipv6 link-local-address address *string*
Tree	address
Introduced	16.0.R1
Platforms	All

duplicate-address-detection *boolean*

Synopsis	Enable Duplicate Address Detection
Context	**configure** service ies *string* interface *string* ipv6 link-local-address duplicate-address-detection *boolean*
Tree	duplicate-address-detection
Description	When configured to **true**, the router enables Duplicate Address Detection (DAD) on the interface. When configured to **false**, the router disables DAD and sets the address to preferred, even if there is a duplicated address.
Default	true
Introduced	16.0.R1
Platforms	All

local-dhcp-server *reference*

Synopsis	DHCP server for the interface
Context	**configure** service ies *string* interface *string* ipv6 local-dhcp-server *reference*
Tree	local-dhcp-server
Reference	**configure** router *string* dhcp-server dhcpv6 *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-discovery

Synopsis	Enter the **neighbor-discovery** context
Context	**configure** service ies *string* interface *string* ipv6 neighbor-discovery
Tree	neighbor-discovery
Introduced	16.0.R1

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Platforms	All

host-route

Synopsis	Enter the **host-route** context
Context	**configure** service ies *string* interface *string* ipv6 neighbor-discovery host-route
Tree	host-route
Introduced	20.2.R1
Platforms	All

populate [route-type] *keyword*

Synopsis	Enter the **populate** list instance
Context	**configure** service ies *string* interface *string* ipv6 neighbor-discovery host-route populate *keyword*
Tree	populate
Introduced	20.2.R1
Platforms	All

[**route-type**] *keyword*

Synopsis	Type of ARP or ND entries that generate host routes
Context	**configure** service ies *string* interface *string* ipv6 neighbor-discovery host-route populate *keyword*
Tree	populate
Options	static, dynamic, evpn
Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	All

route-tag *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry

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Context	**configure** service ies *string* interface *string* ipv6 neighbor-discovery host-route populate *keyword* route-tag *number*
Tree	route-tag
Description	This command specifies the route tag that is added in the route table for ARP or ND host routes. This tag can be matched on BGP VRF export and BGP peer export policies.
Range	1 to 255
Introduced	20.2.R1
Platforms	All

learn-unsolicited *keyword*

Synopsis	Type of entries learned from unsolicited NA messages
Context	**configure** service ies *string* interface *string* ipv6 neighbor-discovery learn-unsolicited *keyword*
Tree	learn-unsolicited
Description	This command enables the ability to learn neighbor entries out of received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited flag set. When unconfigured, the router follows standard RFC 4861 behavior for learning of neighbor entries. The neighbor is put in the stale state. This is the standard RFC behavior.
Options	global, link-local, both
Introduced	16.0.R1
Platforms	All

limit

Synopsis	Enter the **limit** context
Context	**configure** service ies *string* interface *string* ipv6 neighbor-discovery limit
Tree	limit
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Generate log entries when limit is reached
Context	**configure** service ies *string* interface *string* ipv6 neighbor-discovery limit log-only *boolean*

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Tree	log-only
Description	When configured to **true**, the router sends the warning message at the specified threshold percentage or upon exceeding the specified limit. Entries that exceed the limit are learned. When configured to **false**, the router does not send the warning message.
Default	false
Introduced	16.0.R1
Platforms	All

max-entries *number*

Synopsis	Maximum number of entries learned on an IP interface
Context	**configure** service ies *string* interface *string* ipv6 neighbor-discovery limit max-entries *number*
Tree	max-entries
Description	This command configures the maximum number of entries that can be learned on an IP interface. When unconfigured, no maximum limit is imposed.
Range	0 to 102400
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Threshold percentage that triggers a warning message
Context	**configure** service ies *string* interface *string* ipv6 neighbor-discovery limit threshold *number*
Tree	threshold
Range	1 to 100
Units	percent
Default	90
Introduced	16.0.R1
Platforms	All

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local-proxy-nd *boolean*

Synopsis	Enable local proxy neighbor discovery on the interface
Context	**configure** service ies *string* interface *string* ipv6 neighbor-discovery local-proxy-nd *boolean*
Tree	local-proxy-nd
Description	When configured to **true**, the router enables local proxy neighbor discovery on the interface and replies to neighbor solicitation requests when both the hosts are on the same subnet. In this case, ICMP redirects are disabled. When configured to **false**, the router disables local proxy neighbor discovery on the interface and does not reply to neighbor solicitation requests if both the hosts are on the same subnet.
Default	false
Introduced	16.0.R1
Platforms	All

proactive-refresh *keyword*

Synopsis	Proactive refresh of neighbor entries
Context	**configure** service ies *string* interface *string* ipv6 neighbor-discovery proactive-refresh *keyword*
Tree	proactive-refresh
Description	This command enables a proactive refresh of the neighbor entries. After the stale timer expires, the router sends an NUD message to the host (regardless of the existence of traffic to the IP address on the IOM), so the entry can be refreshed or removed.
Options	global, link-local, both
Introduced	16.0.R1
Platforms	All

proxy-nd-policy *reference*

Synopsis	Proxy Neighbor Discovery policy name for the interface
Context	**configure** service ies *string* interface *string* ipv6 neighbor-discovery proxy-nd-policy *reference*
Tree	proxy-nd-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5

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Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

reachable-time *number*

Synopsis	Neighbor reachability detection timer
Context	**configure** service ies *string* interface *string* ipv6 neighbor-discovery reachable-time *number*
Tree	reachable-time
Range	30 to 3600
Introduced	16.0.R1
Platforms	All

secure-nd

Synopsis	Enter the **secure-nd** context
Context	**configure** service ies *string* interface *string* ipv6 neighbor-discovery secure-nd
Tree	secure-nd
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Secure Neighbor Discovery
Context	**configure** service ies *string* interface *string* ipv6 neighbor-discovery secure-nd admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

allow-unsecured-msgs *boolean*

Synopsis	Accept unsecured messages

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Context	**configure** service ies *string* interface *string* ipv6 neighbor-discovery secure-nd allow-unsecured-msgs *boolean*
Tree	allow-unsecured-msgs
Description	When configured to **true**, the router accepts unsecured messages. When Secure Neighbor Discovery (SeND) is enabled, only secure messages are accepted. When configured to **false**, the router disables the acceptance of unsecured messages.
Default	true
Introduced	16.0.R1
Platforms	All

public-key-min-bits *number*

Synopsis	Minimum acceptable key length for public keys in CGA
Context	**configure** service ies *string* interface *string* ipv6 neighbor-discovery secure-nd public-key-min-bits *number*
Tree	public-key-min-bits
Range	512 to 1024
Default	1024
Introduced	16.0.R1
Platforms	All

security-parameter *number*

Synopsis	Security parameter used in the generation of a CGA
Context	**configure** service ies *string* interface *string* ipv6 neighbor-discovery secure-nd security-parameter *number*
Tree	security-parameter
Range	0 to 1
Default	1
Introduced	16.0.R1
Platforms	All

stale-time *number*

Synopsis	Time a Neighbor Discovery cache entry remains stale
Context	**configure** service ies *string* interface *string* ipv6 neighbor-discovery stale-time *number*

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Tree	stale-time
Range	60 to 65535
Introduced	16.0.R1
Platforms	All

static-neighbor [ipv6-address] *string*

Synopsis	Enter the **static-neighbor** list instance
Context	**configure** service ies *string* interface *string* ipv6 neighbor-discovery static-neighbor *string*
Tree	static-neighbor
Introduced	16.0.R1
Platforms	All

[**ipv6-address**] *string*

Synopsis	IPv6 address corresponding to the physical address
Context	**configure** service ies *string* interface *string* ipv6 neighbor-discovery static-neighbor *string*
Tree	static-neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

mac-address *string*

Synopsis	MAC address for the static neighbor
Context	**configure** service ies *string* interface *string* ipv6 neighbor-discovery static-neighbor *string* mac-address *string*
Tree	mac-address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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qos-route-lookup *keyword*

Synopsis	QoS Route lookup
Context	**configure** service ies *string* interface *string* ipv6 qos-route-lookup *keyword*
Tree	qos-route-lookup
Options	destination, source
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tcp-mss *number*

Synopsis	TCP maximum segment size for the interface
Context	**configure** service ies *string* interface *string* ipv6 tcp-mss *number*
Tree	tcp-mss
Range	1220 to 9726
Introduced	16.0.R1
Platforms	All

urpf-check

Synopsis	Enable the **urpf-check** context
Context	**configure** service ies *string* interface *string* ipv6 urpf-check
Tree	urpf-check
Introduced	16.0.R1
Platforms	All

ignore-default *boolean*

Synopsis	Ignore default route when performing a uRPF check
Context	**configure** service ies *string* interface *string* ipv6 urpf-check ignore-default *boolean*
Tree	ignore-default
Default	false
Introduced	16.0.R1
Platforms	All

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mode *keyword*

Synopsis	Unicast RPF check mode
Context	**configure** service ies *string* interface *string* ipv6 urpf-check mode *keyword*
Tree	mode
Options	strict, loose, strict-no-ecmp
Default	strict
Introduced	16.0.R1
Platforms	All

vrrp [virtual-router-id] *number*

Synopsis	Enter the **vrrp** list instance
Context	**configure** service ies *string* interface *string* ipv6 vrrp *number*
Tree	vrrp
Max. Instances	4
Introduced	16.0.R1
Platforms	All

[**virtual-router-id**] *number*

Synopsis	Virtual Router Identifier (VRID) for the IP interface
Context	**configure** service ies *string* interface *string* ipv6 vrrp *number*
Tree	vrrp
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of VRRP
Context	**configure** service ies *string* interface *string* ipv6 vrrp *number* admin-state *keyword*
Tree	admin-state
Description	The command determines the administrative state of non-owner virtual router instances.

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Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.

When **disabled**, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.

Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.

An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the **admin-state** command within the parent IP interface node which administratively disables the IP interface.

Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

backup *string*

Synopsis	Virtual router IP addresses for the interface
Context	**configure** service ies *string* interface *string* ipv6 vrrp *number* backup *string*
Tree	backup
Description	This command associates router IPv6 virtual router IP addresses with those of the parental IP interface. This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance. Non-owner virtual router instance create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance. For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is representing to backup virtual routers receiving the messages. The specified IPv6 address must be equal to one of the existing parental IP addresses in the parental IP interface (primary or secondary) or this command fails. See "Owner and non-owner VRRP" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide* for more information about owner and non-owner virtual router instances.
Max. Instances	4
Introduced	16.0.R1

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Platforms	All

bfd-liveness

Synopsis	Enable the **bfd-liveness** context
Context	**configure** service ies *string* interface *string* ipv6 vrrp *number* bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

dest-ip *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination address for the BFD session
Context	**configure** service ies *string* interface *string* ipv6 vrrp *number* bfd-liveness dest-ip *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	dest-ip
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

interface-name *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
Context	**configure** service ies *string* interface *string* ipv6 vrrp *number* bfd-liveness interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1

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Platforms	All

service-name *string*

WARNING:
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Synopsis	Administrative service name
Context	**configure** service ies *string* interface *string* ipv6 vrrp *number* bfd-liveness service-name *string*
Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

init-delay *number*

Synopsis	VRRP initialization delay timer
Context	**configure** service ies *string* interface *string* ipv6 vrrp *number* init-delay *number*
Tree	init-delay
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

mac *string*

Synopsis	Virtual MAC address to use in ARP responses
Context	**configure** service ies *string* interface *string* ipv6 vrrp *number* mac *string*
Tree	mac
Description	This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID. Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.

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Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with *unicast-mac-address* as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with *unicast-mac-address* as the source MAC.

An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.

Introduced 16.0.R1

Platforms All

master-int-inherit *boolean*

Synopsis Allow master instance to dictate the master down timer

Context **configure** service ies *string* interface *string* ipv6 vrrp *number* master-int-inherit *boolean*

Tree master-int-inherit

Description When configured to **true**, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.

When configured to **false**, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.

Introduced 16.0.R1

Platforms All

message-interval *number*

Synopsis Interval for sending VRRP advertisement messages

Context **configure** service ies *string* interface *string* ipv6 vrrp *number* message-interval *number*

Tree message-interval

Description This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.

The use of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the **master-int-inherit** command:

- When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar

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to an owner virtual router instance. The **master-int-inherit** command has no effect when operating as the master.

- When a non-owner is in the backup state with **master-int-inherit** disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.
- When a non-owner is in the backup state with **master-int-inherit** enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.

Range	10 to 4095
Units	centiseconds
Default	100
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VRRP instance to follow a specified operational group
Context	**configure** service ies *string* interface *string* ipv6 vrrp *number* monitor-oper-group *reference*
Tree	monitor-oper-group
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.
Reference	**configure** service oper-group *string*
Introduced	22.2.R1
Platforms	All

ntp-reply *boolean*

Synopsis	Allow processing of NTP requests
Context	**configure** service ies *string* interface *string* ipv6 vrrp *number* ntp-reply *boolean*

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Tree	ntp-reply
Description	When configured to **true**, the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router. When configured to **false**, the router does not process NTP requests.
Default	false
Introduced	20.2.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group name associated with the VRRP
Context	**configure** service ies *string* interface *string* ipv6 vrrp *number* oper-group *reference*
Tree	oper-group
Description	This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states.
Reference	**configure** service oper-group *string*
Introduced	16.0.R1
Platforms	All

owner *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate the virtual router instance as owner
Context	**configure** service ies *string* interface *string* ipv6 vrrp *number* owner *boolean*
Tree	owner
Description	When configured to **true**, the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router. When configured to **false**, this virtual router instance is designated as a non-owner.
Default	false
Introduced	16.0.R1

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Platforms	All

passive *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Suppress the processing of VRRP advertisement messages
Context	**configure** service ies *string* interface *string* ipv6 vrrp *number* passive *boolean*
Tree	passive
Description	When configured to **true**, the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down). When configured to **false**, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.
Default	false
Introduced	16.0.R1
Platforms	All

ping-reply *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	**configure** service ies *string* interface *string* ipv6 vrrp *number* ping-reply *boolean*
Tree	ping-reply
Description	When configured to **true**, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address). When configured to **false**, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded. Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.
Default	false
Introduced	16.0.R1
Platforms	All

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policy *reference*

Synopsis	VRRP priority control policy
Context	**configure** service ies *string* interface *string* ipv6 vrrp *number* policy *reference*
Tree	policy
Description	This command configures a VRRP priority control policy to associate with the virtual router instance. VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis. An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the **priority** command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value. For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.
Reference	**configure** vrrp policy *number*
Introduced	16.0.R1
Platforms	All

preempt *boolean*

Synopsis	Allow the VRRP to override an existing non-owner master
Context	**configure** service ies *string* interface *string* ipv6 vrrp *number* preempt *boolean*
Tree	preempt
Description	When configured to **true**, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router. When configured to **false**, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.
Default	true
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Base priority for the VRRP
Context	**configure** service ies *string* interface *string* ipv6 vrrp *number* priority *number*

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Tree	priority
Description	This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process. The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

standby-forwarding *boolean*

Synopsis	Allow standby router to forward traffic
Context	**configure** service ies *string* interface *string* ipv6 vrrp *number* standby-forwarding *boolean*
Tree	standby-forwarding
Description	When configured to **true**, the standby router forwards all traffic. When configured to **false**, the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.
Default	false
Introduced	16.0.R1
Platforms	All

telnet-reply *boolean*

Synopsis	Allow non-owner master to reply to Telnet requests
Context	**configure** service ies *string* interface *string* ipv6 vrrp *number* telnet-reply *boolean*
Tree	telnet-reply
Description	When configured to **true**, the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address). When configured to **false**, the router silently discards Telnet requests sent to non-owner master virtual IP addresses.
Default	false
Introduced	16.0.R1

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Platforms	All

traceroute-reply *boolean*

Synopsis	Allow non-owner master to reply to traceroute requests
Context	**configure** service ies *string* interface *string* ipv6 vrrp *number* traceroute-reply *boolean*
Tree	traceroute-reply
Description	When configured to **true**, the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance. When configured to **false**, the router silently discards traceroute requests sent to non-owner master virtual IP addresses. Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).
Default	false
Introduced	16.0.R1
Platforms	All

load-balancing

Synopsis	Enter the **load-balancing** context
Context	**configure** service ies *string* interface *string* load-balancing
Tree	load-balancing
Introduced	16.0.R1
Platforms	All

flow-label-load-balancing *boolean*

Synopsis	Enable flow label load balancing
Context	**configure** service ies *string* interface *string* load-balancing flow-label-load-balancing *boolean*
Tree	flow-label-load-balancing
Description	When configured to **true**, the router enables load balancing in ECMP and LAG based on the output of a hash performed on the triplet (SA, DA, flow label) in the header of an IPv6 packet received on an IES, VPRN, R-VPLS, CSC, or network interface. When configured to **false**, the router disables load balancing in ECMP and LAG.
Default	false
Introduced	21.5.R1

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Platforms	All

ip-load-balancing *keyword*

Synopsis	IP load-balancing algorithm
Context	**configure** service ies *string* interface *string* load-balancing ip-load-balancing *keyword*
Tree	ip-load-balancing
Description	This command specifies whether to include the source address, destination address, or both in LAG or ECMP hash on IP interfaces. Additionally, when the **l4-load-balancing** command is enabled, this command also includes the source or destination port in the hash inputs.
Options	both, destination, source, inner-ip
Default	both
Introduced	16.0.R3
Platforms	All

spi-load-balancing *boolean*

Synopsis	Enable SPI use in hashing
Context	**configure** service ies *string* interface *string* load-balancing spi-load-balancing *boolean*
Tree	spi-load-balancing
Description	When configured to **true**, the router uses the Security Parameter Index (SPI) in hashing for ESP and AH encrypted IPv4 and IPv6 traffic. This is a per-interface setting.
Default	false
Introduced	16.0.R1
Platforms	All

teid-load-balancing *boolean*

Synopsis	Enable use of TEID in hashing
Context	**configure** service ies *string* interface *string* load-balancing teid-load-balancing *boolean*
Tree	teid-load-balancing
Default	false
Introduced	16.0.R1
Platforms	All

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loopback *boolean*

Synopsis	Use interface as a loopback interface
Context	**configure** service ies *string* interface *string* loopback *boolean*
Tree	loopback
Default	false
Introduced	16.0.R1
Platforms	All

mac *string*

Synopsis	MAC address for the interface
Context	**configure** service ies *string* interface *string* mac *string*
Tree	mac
Introduced	16.0.R1
Platforms	All

mac-accounting *boolean*

Synopsis	Enable MAC accounting functionality
Context	**configure** service ies *string* interface *string* mac-accounting *boolean*
Tree	mac-accounting
Default	false
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference*

Synopsis	Operational group to monitor
Context	**configure** service ies *string* interface *string* monitor-oper-group *reference*
Tree	monitor-oper-group
Reference	**configure** service oper-group *string*
Introduced	16.0.R1
Platforms	All

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multi-chassis-shunting-profile *reference*

Synopsis	Multi-chassis shunting profile name
Context	**configure** service ies *string* interface *string* multi-chassis-shunting-profile *reference*
Tree	multi-chassis-shunting-profile
Description	This command configures the name of a multi-chassis shunting profile to use on public or private tunnel interfaces.
Reference	**configure** router *string* ipsec multi-chassis-shunting-profile *string*
Notes	The following elements are part of a choice: **multi-chassis-shunting-profile** or (**dynamic-tunnel-redundant-nexthop** and **static-tunnel-redundant-nexthop**).
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multicast-network-domain *reference*

Synopsis	Network domain name
Context	**configure** service ies *string* interface *string* multicast-network-domain *reference*
Tree	multicast-network-domain
Reference	**configure** router *string* network-domains network-domain *string*
Introduced	16.0.R1
Platforms	All

ping-template

Synopsis	Enable the **ping-template** context
Context	**configure** service ies *string* interface *string* ping-template
Tree	ping-template
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the ping template
Context	**configure** service ies *string* interface *string* ping-template admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

destination-address *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ping template destination address
Context	**configure** service ies *string* interface *string* ping-template destination-address *string*
Tree	destination-address
Description	This command configures the address to where the ICMP echo requests are directed to test connectivity. The source of the ICMP echo request is the primary IPv4 address of the interface under which the ping-template is configured. The destination address must be on the same subnet as the source IP address. Unnumbered interfaces and loopback addresses are not supported.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

name *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Ping template name
Context	**configure** service ies *string* interface *string* ping-template name *reference*
Tree	name
Description	This command configures the name of the ping template to be assigned to the IP interface.
Reference	**configure** test-oam icmp ping-template *string*
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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ptp-hw-assist

Synopsis	Enter the **ptp-hw-assist** context
Context	**configure** service ies *string* interface *string* ptp-hw-assist
Tree	ptp-hw-assist
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the PTP time stamping assist
Context	**configure** service ies *string* interface *string* ptp-hw-assist admin-state *keyword*
Tree	admin-state
Description	This command controls the administrative state of port-based time stamping assist of PTP packets at the physical interface.This capability is supported on specific hardware. The command may be blocked if not all hardware has the required level of support. Only one interface per physical port can have ptp-hw-assist enabled. This feature cannot be enabled if the physical port supporting the interface is configured as a PTP port.
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

radius-auth-policy *reference*

Synopsis	Authentication policy
Context	**configure** service ies *string* interface *string* radius-auth-policy *reference*
Tree	radius-auth-policy
Reference	**configure** subscriber-mgmt radius-authentication-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap [sap-id] *string*

Synopsis	Enter the **sap** list instance

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Context	**configure** service ies *string* interface *string* sap *string*
Tree	sap
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[**sap-id**] *string*

Synopsis	SAP ID
Context	**configure** service ies *string* interface *string* sap *string*
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

aarp

Synopsis	Enable the **aarp** context
Context	**configure** service ies *string* interface *string* sap *string* aarp
Tree	aarp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id *reference*

Synopsis	AARP instance ID
Context	**configure** service ies *string* interface *string* sap *string* aarp id *reference*
Tree	id
Reference	**configure** application-assurance aarp *number*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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type *keyword*

Synopsis	Role referenced by the AARP
Context	**configure** service ies *string* interface *string* sap *string* aarp type *keyword*
Tree	type
Options	dual-homed, dual-homed-secondary
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	Accounting policy
Context	**configure** service ies *string* interface *string* sap *string* accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the SAP
Context	**configure** service ies *string* interface *string* sap *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

anti-spoof *keyword*

Synopsis	Anti-spoof filtering
Context	**configure** service ies *string* interface *string* sap *string* anti-spoof *keyword*
Tree	anti-spoof
Options	source-ip-addr, source-mac-addr, source-ip-and-mac-addr, next-hop-ip-and-mac-addr
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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app-profile *reference*

Synopsis	Application profile name
Context	**configure** service ies *string* interface *string* sap *string* app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bandwidth *number*

Synopsis	SAP bandwidth
Context	**configure** service ies *string* interface *string* sap *string* bandwidth *number*
Tree	bandwidth
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

calling-station-id *string*

Synopsis	Calling station ID
Context	**configure** service ies *string* interface *string* sap *string* calling-station-id *string*
Tree	calling-station-id
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Collect accounting statistics
Context	**configure** service ies *string* interface *string* sap *string* collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	16.0.R1

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Platforms	All

cpu-protection

Synopsis	Enter the **cpu-protection** context
Context	**configure** service ies *string* interface *string* sap *string* cpu-protection
Tree	cpu-protection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

eth-cfm-monitoring

Synopsis	Enable the **eth-cfm-monitoring** context
Context	**configure** service ies *string* interface *string* sap *string* cpu-protection eth-cfm-monitoring
Tree	eth-cfm-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

aggregate

Synopsis	Apply rate limit to the sum of the per peer packet rates
Context	**configure** service ies *string* interface *string* sap *string* cpu-protection eth-cfm-monitoring aggregate
Tree	aggregate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

car

Synopsis	Ignore Ethernet CFM packets when enforcing overall rate
Context	**configure** service ies *string* interface *string* sap *string* cpu-protection eth-cfm-monitoring car
Tree	car
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

ip-src-monitoring

Synopsis	Enable IP source monitoring for CPU protection
Context	**configure** service ies *string* interface *string* sap *string* cpu-protection ip-src-monitoring
Tree	ip-src-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	**configure** service ies *string* interface *string* sap *string* cpu-protection mac-monitoring
Tree	mac-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

policy-id *reference*

Synopsis	CPM protection policy
Context	**configure** service ies *string* interface *string* sap *string* cpu-protection policy-id *reference*
Tree	policy-id
Reference	**configure** system security cpu-protection policy *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** service ies *string* interface *string* sap *string* description *string*
Tree	description

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String Length	1 to 160
Introduced	16.0.R1
Platforms	All

dist-cpu-protection *reference*

Synopsis	Distributed CPU protection policy for SAP
Context	**configure** service ies *string* interface *string* sap *string* dist-cpu-protection *reference*
Tree	dist-cpu-protection
Reference	**configure** system security dist-cpu-protection policy *string*
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** service ies *string* interface *string* sap *string* egress
Tree	egress
Introduced	16.0.R1
Platforms	All

agg-rate

Synopsis	Enter the **agg-rate** context
Context	**configure** service ies *string* interface *string* sap *string* egress agg-rate
Tree	agg-rate
Notes	The following elements are part of a choice: **agg-rate** or **percent-agg-rate**.
Introduced	16.0.R1
Platforms	All

adaptation-rule *keyword*

Synopsis	Adaptation rule to compute the operational PIR value when an aggregate shaper is used
Context	**configure** service ies *string* interface *string* sap *string* egress agg-rate adaptation-rule *keyword*

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Tree	adaptation-rule
Options	max, min, closest
Default	closest
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

burst-limit *(number | keyword)*

Synopsis	Shaping burst size when an aggregate shaper is used
Context	**configure** service ies *string* interface *string* sap *string* egress agg-rate burst-limit *(number | keyword)*
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

limit-unused-bandwidth *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	**configure** service ies *string* interface *string* sap *string* egress agg-rate limit-unused-bandwidth *boolean*
Tree	limit-unused-bandwidth
Default	false
Introduced	16.0.R1
Platforms	All

queue-frame-based-accounting *boolean*

Synopsis	Enable frame based accounting on policers and queues
Context	**configure** service ies *string* interface *string* sap *string* egress agg-rate queue-frame-based-accounting *boolean*
Tree	queue-frame-based-accounting
Default	false

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Introduced	16.0.R1
Platforms	All

rate *number*

Synopsis	Enforced aggregate rate for all queues
Context	**configure** service ies *string* interface *string* sap *string* egress agg-rate rate *number*
Tree	rate
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the **filter** context
Context	**configure** service ies *string* interface *string* sap *string* egress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service ies *string* interface *string* sap *string* egress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service ies *string* interface *string* sap *string* egress filter ipv6 *reference*
Tree	ipv6

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Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** service ies *string* interface *string* sap *string* egress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

policer-control-policy

Synopsis	Enter the **policer-control-policy** context
Context	**configure** service ies *string* interface *string* sap *string* egress qos policer-control-policy
Tree	policer-control-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis	Enable the **overrides** context
Context	**configure** service ies *string* interface *string* sap *string* egress qos policer-control-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

root

Synopsis	Enter the **root** context
Context	**configure** service ies *string* interface *string* sap *string* egress qos policer-control-policy overrides root
Tree	root
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate *(number | keyword)*

Synopsis	Maximum frame-based bandwidth limit
Context	**configure** service ies *string* interface *string* sap *string* egress qos policer-control-policy overrides root max-rate *(number | keyword)*
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis	Enter the **priority-mbs-thresholds** context
Context	**configure** service ies *string* interface *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-thresh-separation *(number | keyword)*

Synopsis	Minimum amount of separation buffer space
Context	**configure** service ies *string* interface *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation *(number | keyword)*
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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priority [priority-level] *number*

Synopsis	Enter the **priority** list instance
Context	**configure** service ies *string* interface *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*
Tree	priority
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**priority-level**] *number*

Synopsis	Priority level
Context	**configure** service ies *string* interface *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution *(number | keyword)*

Synopsis	Minimum amount of cumulative buffer space allowed
Context	**configure** service ies *string* interface *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds priority *number* mbs-contribution *(number | keyword)*
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

Synopsis	Policer control policy name

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Context	**configure** service ies *string* interface *string* sap *string* egress qos policer-control-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos policer-control-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

qinq-mark-top-only *boolean*

Synopsis	Mark top Q-tags
Context	**configure** service ies *string* interface *string* sap *string* egress qos qinq-mark-top-only *boolean*
Tree	qinq-mark-top-only
Default	false
Introduced	16.0.R1
Platforms	All

sap-egress

Synopsis	Enter the **sap-egress** context
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress
Tree	sap-egress
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the **overrides** context
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

hs-secondary-shaper *string*

Synopsis	HS Secondary Shaper

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Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides hs-secondary-shaper *string*
Tree	hs-secondary-shaper
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-group [group-id] *reference*

Synopsis	Enter the **hs-wrr-group** list instance
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides hs-wrr-group *reference*
Tree	hs-wrr-group
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[**group-id**] *reference*

Synopsis	HS WRR group identifier
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides hs-wrr-group *reference*
Tree	hs-wrr-group
Reference	**configure** qos sap-egress *string* hs-wrr-group *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-class-weight *number*

Synopsis	Class weight override of the WRR group
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides hs-wrr-group *reference* hs-class-weight *number*
Tree	hs-class-weight
Range	1 | 2 | 4 | 8
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

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percent-rate *decimal-number*

Synopsis	Percent rate override applied to the HS WRR group
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides hs-wrr-group *reference* percent-rate *decimal-number*
Tree	percent-rate
Range	0.01 to 100.00
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

rate *(number | keyword)*

Synopsis	Scheduling rate override applied to the HS WRR group
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides hs-wrr-group *reference* rate *(number | keyword)*
Tree	rate
Range	1 to 2000000000
Units	kilobps
Options	max
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policer [policer-id] *reference*

Synopsis	Enter the **policer** list instance
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides policer *reference*
Tree	policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**policer-id**] *reference*

Synopsis	Policer unique ID

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Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides policer *reference*
Tree	policer
Reference	**configure** qos sap-egress *string* policer *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs *(number | keyword)*

Synopsis	CBS
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides policer *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides policer *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information

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Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides policer *reference* packet-byte-offset *number*
Tree	packet-byte-offset
Range	-64 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides policer *reference* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *decimal-number*

Synopsis	CIR percent rate
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides policer *reference* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *decimal-number*

Synopsis	PIR percent rate
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides policer *reference* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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rate

Synopsis	Enter the **rate** context
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides policer *reference* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *(number | keyword)*

Synopsis	CIR rate
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides policer *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *(number | keyword)*

Synopsis	PIR rate
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides policer *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides policer *reference* stat-mode *keyword*
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue [queue-id] *reference*

Synopsis	Enter the **queue** list instance
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference*
Tree	queue
Introduced	16.0.R1
Platforms	All

[**queue-id**] *reference*

Synopsis	Policer unique ID
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference*
Tree	queue
Reference	**configure** qos sap-egress *string* queue *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* adaptation-rule
Tree	adaptation-rule

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Introduced	16.0.R1
Platforms	All

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* adaptation-rule cir *keyword*
Tree	cir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

avg-frame-overhead *decimal-number*

Synopsis	Average packet-to-frame encapsulation overhead
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* avg-frame-overhead *decimal-number*
Tree	avg-frame-overhead
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

burst-limit *(number | keyword)*

Synopsis	Explicit shaping burst size for the queue

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Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* burst-limit *(number* | *keyword)*
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

cbs *(number* | *keyword)*

Synopsis	CBS
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* cbs *(number* | *keyword)*
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the **drop-tail** context
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the **low** context
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* drop-tail low
Tree	low

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Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs *(number | keyword)*

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* drop-tail low percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

hs-class-weight *number*

Synopsis	Class weight override for the queue
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* hs-class-weight *number*
Tree	hs-class-weight
Range	1 | 2 | 4 | 8
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wred-queue

Synopsis	Enter the **hs-wred-queue** context
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* hs-wred-queue
Tree	hs-wred-queue
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policy *reference*

Synopsis	Slope policy applied to the HSQ queue group queue

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Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* hs-wred-queue policy *reference*
Tree	policy
Reference	**configure** qos slope-policy *string*
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-weight *number*

Synopsis	WRR weight to parent with the queue into the scheduler
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* hs-wrr-weight *number*
Tree	hs-wrr-weight
Range	1 to 127
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the **monitor-queue-depth** context
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* monitor-queue-depth
Tree	monitor-queue-depth

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Introduced	20.10.R1
Platforms	All

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* monitor-queue-depth fast-polling *boolean*
Tree	fast-polling
Description	When configured to **true**, this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth.
Default	false
Introduced	20.10.R1
Platforms	All

violation-threshold *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* monitor-queue-depth violation-threshold *decimal-number*
Tree	violation-threshold
Description	This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

parent

Synopsis	Enter the **parent** context
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* parent
Tree	parent
Introduced	16.0.R1
Platforms	All

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cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	PIR parameter that overrides parent for queue group
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* parent weight *number*
Tree	weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

cir *decimal-number*

Synopsis	CIR percent rate
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00

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Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	PIR percent rate
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	CIR rate
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

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pir *(number | keyword)*

Synopsis	PIR rate
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-egress *string*
Introduced	16.0.R1
Platforms	All

port-redirect-group

Synopsis	Enter the **port-redirect-group** context
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Name of the queue group redirect list policy
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress port-redirect-group group-name *reference*
Tree	group-name

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Reference	**configure** qos queue-group-templates egress queue-group *string*
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Instance of port queue group
Context	**configure** service ies *string* interface *string* sap *string* egress qos sap-egress port-redirect-group instance *number*
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

scheduler-policy

Synopsis	Enter the **scheduler-policy** context
Context	**configure** service ies *string* interface *string* sap *string* egress qos scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the **overrides** context
Context	**configure** service ies *string* interface *string* sap *string* egress qos scheduler-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

scheduler [scheduler-name] *string*

Synopsis	Enter the **scheduler** list instance
Context	**configure** service ies *string* interface *string* sap *string* egress qos scheduler-policy overrides scheduler *string*

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Tree	scheduler
Introduced	16.0.R1
Platforms	All

[**scheduler-name**] *string*

Synopsis	Scheduler name
Context	**configure** service ies *string* interface *string* sap *string* egress qos scheduler-policy overrides scheduler *string*
Tree	scheduler
Description	This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands. If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name. If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

parent

Synopsis	Enter the **parent** context
Context	**configure** service ies *string* interface *string* sap *string* egress qos scheduler-policy overrides scheduler *string* parent
Tree	parent
Introduced	16.0.R1
Platforms	All

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cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	**configure** service ies *string* interface *string* sap *string* egress qos scheduler-policy overrides scheduler *string* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	**configure** service ies *string* interface *string* sap *string* egress qos scheduler-policy overrides scheduler *string* parent weight *number*
Tree	weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** service ies *string* interface *string* sap *string* egress qos scheduler-policy overrides scheduler *string* rate
Tree	rate
Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	CIR at which the queue it to operate
Context	**configure** service ies *string* interface *string* sap *string* egress qos scheduler-policy overrides scheduler *string* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps

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Options	sum, max
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	PIR at which the queue is to operate
Context	**configure** service ies *string* interface *string* sap *string* egress qos scheduler-policy overrides scheduler *string* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy name
Context	**configure** service ies *string* interface *string* sap *string* egress qos scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos scheduler-policy *string*
Introduced	16.0.R1
Platforms	All

queue-group-redirect-list *reference*

Synopsis	Assign queue-group redirect list
Context	**configure** service ies *string* interface *string* sap *string* egress queue-group-redirect-list *reference*
Tree	queue-group-redirect-list
Reference	**configure** qos queue-group-redirect-list *string*
Introduced	16.0.R1
Platforms	All

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eth-cfm

Synopsis	Enter the **eth-cfm** context
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm
Tree	eth-cfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-fc-stats

Synopsis	Enter the **collect-lmm-fc-stats** context
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm collect-lmm-fc-stats
Tree	collect-lmm-fc-stats
Description	Commands in this context configure per forwarding class (FC) LMM information collection. The commands **fc-in-profile** and **fc** in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively. This command and the **collect-lmm-stats** command are mutually exclusive when there is entity resource contention.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc *keyword*

Synopsis	Forwarding class name for profile-unaware counter
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm collect-lmm-fc-stats fc *keyword*
Tree	fc
Description	This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter. An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the **fc-in-profile** command under the **collect-lmm-fc-stats** context. When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.
Options	be, l2, af, l1, h2, ef, h1, nc

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Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc-in-profile *keyword*

Synopsis	Forwarding class name for profile-aware counter
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm collect-lmm-fc-stats fc-in-profile *keyword*
Tree	fc-in-profile
Description	This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter. An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the **fc** command under the **collect-lmm-fc-stats** context. When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm collect-lmm-stats *boolean*
Tree	collect-lmm-stats
Description	When configured to **true**, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings. The **show eth-cfm collect-lmm-stats** command displays entities that have been enabled to collect transit and receive counters. When configured to **false**, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*

Synopsis	Enter the **mep** list instance
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string* association *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID

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Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais *boolean*

Synopsis	Enable the generation and the reception of AIS messages
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais *boolean*
Tree	ais
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the **alarm-notification** context
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification
Tree	alarm-notification
Description	Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.

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Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-alarm-time *number*
Tree	fng-alarm-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-reset-time *number*
Tree	fng-reset-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis	Generate CCM messages
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm *boolean*
Tree	ccm
Default	false

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-ltm-priority *number*
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-padding-size *number*
Tree	ccm-padding-size
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU. This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through **configure eth-cfm domain association ccm-interval)** is less than 1 second.
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

csf

Synopsis	Enable the **csf** context
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* csf
Tree	csf
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* csf multiplier *decimal-number*
Tree	multiplier
Range	0.0 | 2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the **eth-test** context
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the **oam eth-cfm eth-test** command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test bit-error-threshold *number*
Tree	bit-error-threshold
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis	Enter the **test-pattern** context
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern crc-tlv *boolean*
Tree	crc-tlv
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames

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Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern pattern *keyword*
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fault-propagation *keyword*

Synopsis	Fault propagation for the MEP
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* fault-propagation *keyword*
Tree	fault-propagation
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the **grace** context
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the **eth-ed** context
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed

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Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed max-rx-defect-window *number*
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed priority *number*
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed rx-eth-ed *boolean*
Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed tx-eth-ed *boolean*
Tree	tx-eth-ed
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis	Enter the **eth-vsm-grace** context
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace rx-eth-vsm-grace *boolean*
Tree	rx-eth-vsm-grace
Description	When configured to **true**, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to **false**, the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace tx-eth-vsm-grace *boolean*
Tree	tx-eth-vsm-grace
Description	When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards. The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED). When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* low-priority-defect *keyword*
Tree	low-priority-defect
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* one-way-delay-threshold *number*
Tree	one-way-delay-threshold

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Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch-ingress-levels *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded
Context	**configure** service ies *string* interface *string* sap *string* eth-cfm squelch-ingress-levels *number*
Tree	squelch-ingress-levels
Description	This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option. The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.
Range	0 to 7
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fwd-wholesale

Synopsis	Enter the **fwd-wholesale** context
Context	**configure** service ies *string* interface *string* sap *string* fwd-wholesale
Tree	fwd-wholesale
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe-service *reference*

Synopsis	PPPoE service name

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Context	**configure** service ies *string* interface *string* sap *string* fwd-wholesale pppoe-service *reference*
Tree	pppoe-service
Reference	**configure** service epipe *string*
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-admin-state *keyword*

Synopsis	Administrative state of host creation on the SAP
Context	**configure** service ies *string* interface *string* sap *string* host-admin-state *keyword*
Tree	host-admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-lockout-policy *reference*

Synopsis	Host lockout policy
Context	**configure** service ies *string* interface *string* sap *string* host-lockout-policy *reference*
Tree	host-lockout-policy
Reference	**configure** subscriber-mgmt host-lockout-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service ies *string* interface *string* sap *string* ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

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filter

Synopsis	Enter the **filter** context
Context	**configure** service ies *string* interface *string* sap *string* ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service ies *string* interface *string* sap *string* ingress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service ies *string* interface *string* sap *string* ingress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** service ies *string* interface *string* sap *string* ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

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match-qinq-dot1p *keyword*

Synopsis	Ingress match QinQ Dot1p
Context	**configure** service ies *string* interface *string* sap *string* ingress qos match-qinq-dot1p *keyword*
Tree	match-qinq-dot1p
Options	top, bottom
Introduced	16.0.R1
Platforms	All

policer-control-policy

Synopsis	Enter the **policer-control-policy** context
Context	**configure** service ies *string* interface *string* sap *string* ingress qos policer-control-policy
Tree	policer-control-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis	Enable the **overrides** context
Context	**configure** service ies *string* interface *string* sap *string* ingress qos policer-control-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

root

Synopsis	Enter the **root** context
Context	**configure** service ies *string* interface *string* sap *string* ingress qos policer-control-policy overrides root
Tree	root
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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max-rate *(number | keyword)*

Synopsis	Maximum frame-based bandwidth limit
Context	**configure** service ies *string* interface *string* sap *string* ingress qos policer-control-policy overrides root max-rate *(number | keyword)*
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis	Enter the **priority-mbs-thresholds** context
Context	**configure** service ies *string* interface *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-thresh-separation *(number | keyword)*

Synopsis	Minimum amount of separation buffer space
Context	**configure** service ies *string* interface *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation *(number | keyword)*
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [priority-level] *number*

Synopsis	Enter the **priority** list instance
Context	**configure** service ies *string* interface *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*

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Tree	priority
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**priority-level**] *number*

Synopsis	Priority level
Context	**configure** service ies *string* interface *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution *(number | keyword)*

Synopsis	Minimum amount of cumulative buffer space allowed
Context	**configure** service ies *string* interface *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds priority *number* mbs-contribution *(number | keyword)*
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	**configure** service ies *string* interface *string* sap *string* ingress qos policer-control-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos policer-control-policy *string*
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

sap-ingress

Synopsis	Enter the **sap-ingress** context
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress
Tree	sap-ingress
Introduced	16.0.R1
Platforms	All

fp-redirect-group

Synopsis	Enter the **fp-redirect-group** context
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress fp-redirect-group
Tree	fp-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Queue group template name created on forwarding plane
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress fp-redirect-group group-name *reference*
Tree	group-name
Reference	**configure** qos queue-group-templates ingress queue-group *string*
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Queue group instance
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress fp-redirect-group instance *number*
Tree	instance
Range	1 to 65535

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Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the **overrides** context
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

ip-criteria

Synopsis	Enter the **ip-criteria** context
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides ip-criteria
Tree	ip-criteria
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

activate-entry-tag *number*

Synopsis	Tag ID activated for IPv4 criteria
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides ip-criteria activate-entry-tag *number*
Tree	activate-entry-tag
Range	1 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6-criteria

Synopsis	Enter the **ipv6-criteria** context
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides ipv6-criteria
Tree	ipv6-criteria

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Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

activate-entry-tag *number*

Synopsis	Tag ID activated for IPv6 criteria
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides ipv6-criteria activate-entry-tag *number*
Tree	activate-entry-tag
Range	1 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policer [policer-id] *reference*

Synopsis	Enter the **policer** list instance
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides policer *reference*
Tree	policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**policer-id**] *reference*

Synopsis	Policer unique ID
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides policer *reference*
Tree	policer
Reference	**configure** qos sap-ingress *string* policer *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs *(number | keyword)*

Synopsis	CBS

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Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides policer *reference* cbs *(number* | *keyword)*
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs *(number* | *keyword)*

Synopsis	MBS
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides policer *reference* mbs *(number* | *keyword)*
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides policer *reference* packet-byte-offset *number*
Tree	packet-byte-offset
Range	-32 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides policer *reference* percent-rate

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Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *decimal-number*

Synopsis	CIR percent rate
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides policer *reference* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *decimal-number*

Synopsis	PIR percent rate
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides policer *reference* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis	Enter the **rate** context
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides policer *reference* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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cir *(number | keyword)*

Synopsis	CIR rate
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides policer *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *(number | keyword)*

Synopsis	PIR rate
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides policer *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides policer *reference* stat-mode *keyword*
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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queue [queue-id] *reference*

Synopsis	Enter the **queue** list instance
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference*
Tree	queue
Introduced	16.0.R1
Platforms	All

[**queue-id**] *reference*

Synopsis	Policer unique ID
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference*
Tree	queue
Reference	**configure** qos sap-ingress *string* queue *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* adaptation-rule cir *keyword*
Tree	cir
Options	max, min, closest
Introduced	16.0.R1

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Platforms	All

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

cbs *(number | keyword)*

Synopsis	CBS
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the **drop-tail** context
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the **low** context

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Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs *(number | keyword)*

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* drop-tail low percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the **monitor-queue-depth** context
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* monitor-queue-depth
Tree	monitor-queue-depth
Introduced	21.7.R1

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Platforms	All

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* monitor-queue-depth fast-polling *boolean*
Tree	fast-polling
Default	false
Introduced	21.7.R1
Platforms	All

parent

Synopsis	Enter the **parent** context
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* parent
Tree	parent
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	PIR parameter that overrides parent for queue group
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* parent weight *number*
Tree	weight

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Range	0 to 100
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

cir *decimal-number*

Synopsis	CIR percent rate
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	PIR percent rate
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

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rate

Synopsis	Enter the **rate** context
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	CIR rate
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	PIR rate
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Policy ID

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Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-ingress *string*
Introduced	16.0.R1
Platforms	All

queuing-type *keyword*

Synopsis	Queuing type
Context	**configure** service ies *string* interface *string* sap *string* ingress qos sap-ingress queuing-type *keyword*
Tree	queuing-type
Options	shared, multipoint-shared
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR

scheduler-policy

Synopsis	Enter the **scheduler-policy** context
Context	**configure** service ies *string* interface *string* sap *string* ingress qos scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the **overrides** context
Context	**configure** service ies *string* interface *string* sap *string* ingress qos scheduler-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

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scheduler [scheduler-name] *string*

Synopsis	Enter the **scheduler** list instance
Context	**configure** service ies *string* interface *string* sap *string* ingress qos scheduler-policy overrides scheduler *string*
Tree	scheduler
Introduced	16.0.R1
Platforms	All

[**scheduler-name**] *string*

Synopsis	Scheduler name
Context	**configure** service ies *string* interface *string* sap *string* ingress qos scheduler-policy overrides scheduler *string*
Tree	scheduler
Description	This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands. If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name. If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

parent

Synopsis	Enter the **parent** context
Context	**configure** service ies *string* interface *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* parent
Tree	parent
Introduced	16.0.R1

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Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	**configure** service ies *string* interface *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	**configure** service ies *string* interface *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* parent weight *number*
Tree	weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** service ies *string* interface *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* rate
Tree	rate
Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	CIR at which the queue it to operate
Context	**configure** service ies *string* interface *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* rate cir *(number | keyword)*
Tree	cir

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Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	PIR at which the queue is to operate
Context	**configure** service ies *string* interface *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy name
Context	**configure** service ies *string* interface *string* sap *string* ingress qos scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos scheduler-policy *string*
Introduced	16.0.R1
Platforms	All

queue-group-redirect-list *reference*

Synopsis	Queue group redirect list
Context	**configure** service ies *string* interface *string* sap *string* ingress queue-group-redirect-list *reference*
Tree	queue-group-redirect-list
Reference	**configure** qos queue-group-redirect-list *string*
Introduced	16.0.R1

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Platforms	All

ip-tunnel [tunnel-name] *string*

Synopsis	Enter the **ip-tunnel** list instance
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string*
Tree	ip-tunnel
Description	Commands in this context configure an IP-GRE or IP-IP tunnel and associate it with a private tunnel SAP within an IES service.
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[**tunnel-name**] *string*

Synopsis	IP tunnel name
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string*
Tree	ip-tunnel
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the IP tunnel
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

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backup-remote-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Backup remote IP address that is applied to this tunnel
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* backup-remote-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	backup-remote-ip-address
Introduced	16.0.R1
Platforms	All

clear-df-bit *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear the Do-not-Fragment bit
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* clear-df-bit *boolean*
Tree	clear-df-bit
Description	When configured to **true**, the DF bit is cleared (set to 0) in all payload IP packets associated with the GRE or IPsec tunnel, before any potential fragmentation resulting from the ip-mtu command. This requires a modification of the header checksum. When configured to **false**, clearing of the DF bit is disabled.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

delivery-service *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Service to originate and terminate GRE packets
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* delivery-service *string*

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Tree	delivery-service
Description	This command specifies the service used to originate and terminate the GRE encapsulated packets belonging to the GRE tunnel. The delivery service may be the same service that owns the private tunnel SAP associated with the GRE tunnel. The GRE tunnel does not come up until a valid delivery service is configured.
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

description *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Text description
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dest-ip [dest-ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Add a list entry for **dest-ip**
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* dest-ip *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	dest-ip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**dest-ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the remote IP tunnel endpoint
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* dest-ip *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	dest-ip

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Description	This command configures the IP address of the remote IP tunnel endpoint. If the remote IP address is not within the subnet of the IP interface associated with the tunnel, the tunnel fails to come up.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dscp *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Differentiated Services Code Point (DSCP) name
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encapsulated-ip-mtu *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum size of the encapsulated tunnel packet
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* encapsulated-ip-mtu *number*
Tree	encapsulated-ip-mtu
Description	This command specifies the maximum size of the encapsulated tunnel packet for the IP tunnel. If the packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	bytes
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gre-header

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **gre-header** context
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* gre-header
Tree	gre-header
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of the GRE header in the tunnel
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* gre-header admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

key

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **key** context
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* gre-header key
Tree	key
Introduced	16.0.R1

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Platforms	All

admin-state *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of the keys in the GRE header
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* gre-header key admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

receive *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Receive key of the GRE header
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* gre-header key receive *number*
Tree	receive
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R1
Platforms	All

send *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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Synopsis	Send key of the GRE header
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* gre-header key send *number*
Tree	send
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R1
Platforms	All

icmp-generation

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **icmp-generation** context
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* icmp-generation
Tree	icmp-generation
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

frag-required

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **frag-required** context
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* icmp-generation frag-required
Tree	frag-required
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send fragmentation required messages
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* icmp-generation frag-required admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum interval that the ICMP messages can be sent
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* icmp-generation frag-required interval *number*
Tree	interval
Range	1 to 60
Units	seconds
Default	10
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

message-count *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMP messages sent
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* icmp-generation frag-required message-count *number*

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Tree	message-count
Description	This command configures the maximum number of ICMP messages that can be sent during the period specified by the **interval** command.
Range	10 to 1000
Default	100
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp6-generation

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **icmp6-generation** context
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* icmp6-generation
Tree	icmp6-generation
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packet-too-big

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **packet-too-big** context
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* icmp6-generation packet-too-big
Tree	packet-too-big
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending Packet Too Big messages
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* icmp6-generation packet-too-big admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

number *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of PTB ICMPv6 messages that can be sent
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* icmp6-generation packet-too-big number *number*
Tree	number
Description	This command configures the maximum number of ICMPv6 messages that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum interval when PTB messages can be sent

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Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* icmp6-generation packet-too-big seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP MTU for the interface
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* ip-mtu *number*
Tree	ip-mtu
Description	This command specifies the IP MTU for the interface. If the DF bit is not set in the packet, IP packet fragmentation is performed, if necessary, based on this configured value. When unconfigured, all IP packets, regardless of the packet size or DF bit setting, are allowed into the tunnel without fragmentation.
Range	512 to 9000
Units	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-transport-mode-profile *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec transport mode profile name
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* ipsec-transport-mode-profile *reference*
Tree	ipsec-transport-mode-profile

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Reference	**configure** ipsec ipsec-transport-mode-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IP address of this tunnel
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* local-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	local-ip-address
Description	This command specifies the local IP address to use for the IP tunnel. This configuration applies to the outer IP header of the encapsulated packets. The address must belong to one of the IP subnets associated with the public SAP interface of the tunnel group. The source IP address, the remote IP address, and the backup remote IP address of a tunnel must all belong to the same address family (IPv4 or IPv6). When this command specifies an IPv6 address, it must be a global unicast address.
Introduced	16.0.R1
Platforms	All

pmtu-discovery-aging *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time to age out the learned path MTU
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* pmtu-discovery-aging *number*
Tree	pmtu-discovery-aging
Description	This command configures the temporary public MTU expiration time. The temporary public MTU is used for MTU propagation.
Range	900 to 3600
Units	seconds
Default	900

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Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

private-tcp-mss-adjust *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP Maximum Segment Size (MSS) on the private side
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* private-tcp-mss-adjust *number*
Tree	private-tcp-mss-adjust
Description	This command specifies the TCP MSS to adjust for tunnels on the private side. The value is used to adjust the TCP MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

propagate-pmtu-v4 *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* propagate-pmtu-v4 *boolean*
Tree	propagate-pmtu-v4
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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propagate-pmtu-v6 *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of path MTU to IPv6 hosts
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* propagate-pmtu-v6 *boolean*
Tree	propagate-pmtu-v6
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

public-tcp-mss-adjust *(number | keyword)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP Maximum Segment Size (MSS) on the public side
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* public-tcp-mss-adjust *(number | keyword)*
Tree	public-tcp-mss-adjust
Description	This command specifies the TCP MSS for TCP traffic sent from the public network to the private network. The value is used to adjust the TCP MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reassembly *(number | keyword)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum reassembly wait time

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Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* reassembly *(number | keyword)*
Tree	reassembly
Description	This command configures the maximum time to wait to receive all fragments of a particular IPsec or GRE packet for reassembly.
Range	1 to 5000
Units	milliseconds
Options	use-tunnel-group-setting, none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote IP address of the tunnel
Context	**configure** service ies *string* interface *string* sap *string* ip-tunnel *string* remote-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	remote-ip-address
Introduced	16.0.R1
Platforms	All

ipsec-gateway [name] *string*

Synopsis	Enter the **ipsec-gateway** list instance
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string*
Tree	ipsec-gateway
Max. Instances	1
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	IPsec gateway name

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Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string*
Tree	ipsec-gateway
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the IPsec gateway
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cert

Synopsis	Enter the **cert** context
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* cert
Tree	cert
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cert-profile *reference*

Synopsis	Certificate profile name
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* cert cert-profile *reference*
Tree	cert-profile
Reference	**configure** ipsec cert-profile *string*
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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status-verify

Synopsis	Enter the **status-verify** context
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* cert status-verify
Tree	status-verify
Description	Commands in this context configure certificate revocation status verification.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-result *keyword*

Synopsis	Default result of Certificate Status Verification (CSV)
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* cert status-verify default-result *keyword*
Tree	default-result
Description	This command specifies the default result when both the primary and secondary methods fail to provide an answer.
Options	revoked, good
Default	revoked
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

primary *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* cert status-verify primary *keyword*
Tree	primary
Options	crl, ocsp
Default	crl
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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secondary *keyword*

Synopsis	Secondary method of CSV to verify the revocation status
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* cert status-verify secondary *keyword*
Tree	secondary
Options	none, crl, ocsp
Default	none
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

trust-anchor-profile *reference*

Synopsis	Trust anchor profile name
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* cert trust-anchor-profile *reference*
Tree	trust-anchor-profile
Reference	**configure** ipsec trust-anchor-profile *string*
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

client-db

Synopsis	Enable the **client-db** context
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* client-db
Tree	client-db
Description	Commands in this context configure the IPsec client database. The client database is used to authenticate the IKEv2 dynamic LAN-to-LAN tunnel.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fallback *boolean*

Synopsis	Fall back to the default authentication policy
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* client-db fallback *boolean*
Tree	fallback

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Description	When configured to **true**, this command specifies whether the IPsec gateway can fall back to the default authentication policy when the IPsec tunnel authentication request fails to match any clients in the IPsec database. When configured to **false** and the client database lookup fails to return a matched result, the system fails the tunnel setup.
Default	true
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *reference*

Synopsis	Client database name
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* client-db name *reference*
Tree	name
Reference	**configure** ipsec client-db *string*
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-secure-service

Synopsis	Enable the **default-secure-service** context
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* default-secure-service
Tree	default-secure-service
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private IPsec tunnel interface name
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* default-secure-service interface *string*

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Tree	interface
String Length	1 to 32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

service-name *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default security service name
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* default-secure-service service-name *string*
Tree	service-name
String Length	1 to 64
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-tunnel-template *reference*

Synopsis	Default tunnel policy template for the gateway
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* default-tunnel-template *reference*
Tree	default-tunnel-template
Reference	**configure** ipsec tunnel-template *number*
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp-address-assignment

Synopsis	Enter the **dhcp-address-assignment** context
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment
Tree	dhcp-address-assignment
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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dhcpv4

Synopsis	Enable the **dhcpv4** context
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv4
Tree	dhcpv4
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the IPsec DHCPv4 server
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv4 admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gi-address *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Gateway IP address of DHCPv4 packets sent by the system
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv4 gi-address *string*
Tree	gi-address
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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send-release *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send DHCPv4 release message when IPsec tunnel removed
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv4 send-release *boolean*
Tree	send-release
Default	true
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **server** context
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv4 server
Tree	server
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DHCPv4 server addresses
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv4 server address *string*
Tree	address
Description	This command specifies DHCPv4 server addresses for the DHCPv4-based address assignment. If multiple server addresses are specified, the first advertised DHCPv4 address received is chosen.

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Max. Instances	8
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance used to reach the DHCPv4 server
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv4 server router-instance *string*
Tree	router-instance
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcpv6

Synopsis	Enable the **dhcpv6** context
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv6
Tree	dhcpv6
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 server
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv6 admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.7.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Link address of the relayed DHCPv6 packets
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv6 link-address *string*
Tree	link-address
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

send-release *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send DHCPv6 release message when IPsec tunnel removed
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv6 send-release *boolean*
Tree	send-release
Default	true
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **server** context
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv6 server
Tree	server

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Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DHCPv6 server addresses
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv6 server address *string*
Tree	address
Description	This command specifies DHCPv6 server addresses for the DHCPv6-based address assignment. If multiple server addresses are specified, the first advertised DHCPv6 address received is chosen.
Max. Instances	8
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance to reach the DHCPv6 server
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv6 server router-instance *string*
Tree	router-instance
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-policy *reference*

Synopsis	IKE policy ID

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Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* ike-policy *reference*
Tree	ike-policy
Reference	**configure** ipsec ike-policy *number*
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local

Synopsis	Enter the **local** context
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* local
Tree	local
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address-assignment

Synopsis	Enable the **address-assignment** context
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* local address-assignment
Tree	address-assignment
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of local address assignments
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* local address-assignment admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ipv4

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **ipv4** context
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* local address-assignment ipv4
Tree	ipv4
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp-server *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local DHCPv4 server name
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* local address-assignment ipv4 dhcp-server *string*
Tree	dhcp-server
String Length	1 to 32
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the pool defined in the specified DHCPv4 server
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* local address-assignment ipv4 pool *string*
Tree	pool
String Length	1 to 32

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Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance ID for the local DHCPv4 server
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* local address-assignment ipv4 router-instance *string*
Tree	router-instance
String Length	1 to 64
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

secondary-pool *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the secondary pool defined in the DHCPv4 server
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* local address-assignment ipv4 secondary-pool *string*
Tree	secondary-pool
String Length	1 to 32
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ipv6

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **ipv6** context
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* local address-assignment ipv6
Tree	ipv6
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp-server *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local DHCPv6 server name
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* local address-assignment ipv6 dhcp-server *string*
Tree	dhcp-server
String Length	1 to 32
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Secondary pool name defined in the DHCPv6 server
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* local address-assignment ipv6 pool *string*
Tree	pool
String Length	1 to 32

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Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance ID hosting the DHCPv6 connection
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* local address-assignment ipv6 router-instance *string*
Tree	router-instance
String Length	1 to 64
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gateway-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local gateway address of the IPsec gateway
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* local gateway-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	gateway-address
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id

Synopsis	Enter the **id** context
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* local id
Tree	id

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Description	Commands in this context specify the local ID used for the Identification Indicator (IDi) or Identification Responder (IDr) in the IKEv2 tunnel.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

auto

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Select ID based on authentication method in IKE policy
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* local id auto
Tree	auto
Notes	The following elements are part of a choice: **auto**, **fqdn**, **ipv4**, or **ipv6**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fqdn *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN as the local ID type
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* local id fqdn *string*
Tree	fqdn
String Length	1 to 255
Notes	The following elements are part of a choice: **auto**, **fqdn**, **ipv4**, or **ipv6**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ipv4 *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 address as the local ID type
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* local id ipv4 *string*
Tree	ipv4
Notes	The following elements are part of a choice: **auto**, **fqdn**, **ipv4**, or **ipv6**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6 *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 address as the local ID type
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* local id ipv6 *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ipv6
Notes	The following elements are part of a choice: **auto**, **fqdn**, **ipv4**, or **ipv6**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-history-key-records

Synopsis	Enter the **max-history-key-records** context
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* max-history-key-records
Tree	max-history-key-records
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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esp *number*

Synopsis	Maximum number of recent records
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* max-history-key-records esp *number*
Tree	esp
Range	1 to 48
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike *number*

Synopsis	Maximum number of historical IKE keys recorded
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* max-history-key-records ike *number*
Tree	ike
Range	1 to 3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pre-shared-key *string*

Synopsis	Pre-shared key for the IPsec gateway
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* pre-shared-key *string*
Tree	pre-shared-key
String Length	1 to 115
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius

Synopsis	Enter the **radius** context
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* radius
Tree	radius
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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accounting-policy *reference*

Synopsis	RADIUS accounting policy
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* radius accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** ipsec radius accounting-policy *string*
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication-policy *reference*

Synopsis	RADIUS authentication policy
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* radius authentication-policy *reference*
Tree	authentication-policy
Reference	**configure** ipsec radius authentication-policy *string*
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ts-list *reference*

Synopsis	TS list used for IKEv2 TS negotiation
Context	**configure** service ies *string* interface *string* sap *string* ipsec-gateway *string* ts-list *reference*
Tree	ts-list
Reference	**configure** ipsec ts-list *string*
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lag

Synopsis	Enter the **lag** context
Context	**configure** service ies *string* interface *string* sap *string* lag
Tree	lag
Introduced	16.0.R1

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Platforms	All

link-map-profile *number*

Synopsis	LAG link map profile for a SAP or network interface
Context	**configure** service ies *string* interface *string* sap *string* lag link-map-profile *number*
Tree	link-map-profile
Description	This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration. If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.
Range	1 to 64
Introduced	16.0.R1
Platforms	All

per-link-hash

Synopsis	Enter the **per-link-hash** context
Context	**configure** service ies *string* interface *string* sap *string* lag per-link-hash
Tree	per-link-hash
Introduced	16.0.R1
Platforms	All

class *number*

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	**configure** service ies *string* interface *string* sap *string* lag per-link-hash class *number*
Tree	class
Range	1 to 3
Default	1
Introduced	16.0.R1
Platforms	All

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weight *number*

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	**configure** service ies *string* interface *string* sap *string* lag per-link-hash weight *number*
Tree	weight
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	All

multi-service-site *reference*

Synopsis	Multi service site name
Context	**configure** service ies *string* interface *string* sap *string* multi-service-site *reference*
Tree	multi-service-site
Reference	**configure** service customer *string* multi-service-site *string*
Introduced	16.0.R1
Platforms	All

static-host

Synopsis	Enter the **static-host** context
Context	**configure** service ies *string* interface *string* sap *string* static-host
Tree	static-host
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4 [ip] *string* mac *string*

Synopsis	Enter the **ipv4** list instance
Context	**configure** service ies *string* interface *string* sap *string* static-host ipv4 *string* mac *string*
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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[**ip**] *string*

Synopsis	IP address
Context	**configure** service ies *string* interface *string* sap *string* static-host ipv4 *string* mac *string*
Tree	ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *string*

Synopsis	MAC address
Context	**configure** service ies *string* interface *string* sap *string* static-host ipv4 *string* mac *string*
Tree	ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the static host
Context	**configure** service ies *string* interface *string* sap *string* static-host ipv4 *string* mac *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-string *string*

Synopsis	ANCP string
Context	**configure** service ies *string* interface *string* sap *string* static-host ipv4 *string* mac *string* ancp-string *string*
Tree	ancp-string
String Length	1 to 63

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile

Synopsis	Enter the **app-profile** context
Context	**configure** service ies *string* interface *string* sap *string* static-host ipv4 *string* mac *string* app-profile
Tree	app-profile
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

profile *reference*

Synopsis	Application profile used by the static host
Context	**configure** service ies *string* interface *string* sap *string* static-host ipv4 *string* mac *string* app-profile profile *reference*
Tree	profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

int-dest-id *string*

Synopsis	Intermediate destination ID
Context	**configure** service ies *string* interface *string* sap *string* static-host ipv4 *string* mac *string* int-dest-id *string*
Tree	int-dest-id
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	SLA profile name

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Context	**configure** service ies *string* interface *string* sap *string* static-host ipv4 *string* mac *string* sla-profile *reference*
Tree	sla-profile
Reference	**configure** subscriber-mgmt sla-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Sub-profile name
Context	**configure** service ies *string* interface *string* sap *string* static-host ipv4 *string* mac *string* sub-profile *reference*
Tree	sub-profile
Reference	**configure** subscriber-mgmt sub-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id

Synopsis	Enter the **subscriber-id** context
Context	**configure** service ies *string* interface *string* sap *string* static-host ipv4 *string* mac *string* subscriber-id
Tree	subscriber-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Subscriber identification
Context	**configure** service ies *string* interface *string* sap *string* static-host ipv4 *string* mac *string* subscriber-id string *string*
Tree	string
String Length	1 to 64
Notes	The following elements are part of a choice: **string** or **use-sap-id**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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use-sap-id

Synopsis	Use the SAP id as subscriber ID
Context	**configure** service ies *string* interface *string* sap *string* static-host ipv4 *string* mac *string* subscriber-id use-sap-id
Tree	use-sap-id
Notes	The following elements are part of a choice: **string** or **use-sap-id**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

transit-policy

Synopsis	Enable the **transit-policy** context
Context	**configure** service ies *string* interface *string* sap *string* transit-policy
Tree	transit-policy
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP transit policy ID
Context	**configure** service ies *string* interface *string* sap *string* transit-policy ip *reference*
Tree	ip
Reference	**configure** application-assurance group *number* partition *number* transit-ip-policy *number*
Notes	The following elements are part of a mandatory choice: **ip** or **prefix**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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prefix *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	**configure** service ies *string* interface *string* sap *string* transit-policy prefix *reference*
Tree	prefix
Reference	**configure** application-assurance group *number* partition *number* transit-prefix-policy *number*
Notes	The following elements are part of a mandatory choice: **ip** or **prefix**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

shcv-policy-ipv4 *reference*

Synopsis	Host connectivity IPv4 policy
Context	**configure** service ies *string* interface *string* shcv-policy-ipv4 *reference*
Tree	shcv-policy-ipv4
Reference	**configure** subscriber-mgmt shcv-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

spoke-sdp [sdp-bind-id] *string*

Synopsis	Enter the **spoke-sdp** list instance
Context	**configure** service ies *string* interface *string* spoke-sdp *string*
Tree	spoke-sdp
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[**sdp-bind-id**] *string*

Synopsis	SDP binding ID

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Context	**configure** service ies *string* interface *string* spoke-sdp *string*
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

aarp

Synopsis	Enable the **aarp** context
Context	**configure** service ies *string* interface *string* spoke-sdp *string* aarp
Tree	aarp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id *reference*

Synopsis	AARP instance ID
Context	**configure** service ies *string* interface *string* spoke-sdp *string* aarp id *reference*
Tree	id
Reference	**configure** application-assurance aarp *number*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Role referenced by the AARP
Context	**configure** service ies *string* interface *string* spoke-sdp *string* aarp type *keyword*
Tree	type
Options	dual-homed, dual-homed-secondary
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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accounting-policy *reference*

Synopsis	Policy to collect accounting statistics
Context	**configure** service ies *string* interface *string* spoke-sdp *string* accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the SDP binding to the service
Context	**configure** service ies *string* interface *string* spoke-sdp *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

app-profile *reference*

Synopsis	Application profile name for this SDP
Context	**configure** service ies *string* interface *string* spoke-sdp *string* app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bfd

Synopsis	Enter the **bfd** context
Context	**configure** service ies *string* interface *string* spoke-sdp *string* bfd
Tree	bfd
Introduced	21.2.R1
Platforms	All

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bfd-liveness

Synopsis	Enable the **bfd-liveness** context
Context	**configure** service ies *string* interface *string* spoke-sdp *string* bfd bfd-liveness
Tree	bfd-liveness
Introduced	21.2.R1
Platforms	All

encap *keyword*

Synopsis	BFD encapsulation used on the SDP binding
Context	**configure** service ies *string* interface *string* spoke-sdp *string* bfd bfd-liveness encap *keyword*
Tree	encap
Options	ipv4
Default	ipv4
Introduced	21.2.R1
Platforms	All

bfd-template *reference*

Synopsis	BFD template associated with the SDP binding
Context	**configure** service ies *string* interface *string* spoke-sdp *string* bfd bfd-template *reference*
Tree	bfd-template
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the **configure router bfd** context.
Reference	**configure** bfd bfd-template *string*
Introduced	21.2.R1
Platforms	All

failure-action *keyword*

Synopsis	VCCV BFD action taken on the SDP binding
Context	**configure** service ies *string* interface *string* spoke-sdp *string* bfd failure-action *keyword*

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Tree	failure-action
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the **configure router bfd** context.
Options	none, down
Default	none
Introduced	21.2.R1
Platforms	All

wait-for-up-timer *number*

Synopsis	Time waited for BFD up status
Context	**configure** service ies *string* interface *string* spoke-sdp *string* bfd wait-for-up-timer *number*
Tree	wait-for-up-timer
Description	This command configures the time interval that is used to wait for a BFD session to come up. This command is triggered when a spoke-SDP is first administratively enabled and a VCCV BFD session transitions from up to down. The command is required to allow time for BFD sessions to come up, and for BFD to settle before selecting the active spoke-SDP for use in a redundant set. In the case where a VCCV BFD session is bouncing, the timer prevents excessive flapping of the operational state of a spoke-SDP.
Range	1 to 60
Units	seconds
Introduced	21.2.R1
Platforms	All

collect-stats *boolean*

Synopsis	Allow agent to collect accounting statistics
Context	**configure** service ies *string* interface *string* spoke-sdp *string* collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

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control-word *boolean*

Synopsis	Use the control word as preferred
Context	**configure** service ies *string* interface *string* spoke-sdp *string* control-word *boolean*
Tree	control-word
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cpu-protection

Synopsis	Enter the **cpu-protection** context
Context	**configure** service ies *string* interface *string* spoke-sdp *string* cpu-protection
Tree	cpu-protection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

eth-cfm-monitoring

Synopsis	Enable the **eth-cfm-monitoring** context
Context	**configure** service ies *string* interface *string* spoke-sdp *string* cpu-protection eth-cfm-monitoring
Tree	eth-cfm-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

aggregate

Synopsis	Apply rate limit to the sum of the per peer packet rates
Context	**configure** service ies *string* interface *string* spoke-sdp *string* cpu-protection eth-cfm-monitoring aggregate
Tree	aggregate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

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car

Synopsis	Ignore Ethernet CFM packets when enforcing overall rate
Context	**configure** service ies *string* interface *string* spoke-sdp *string* cpu-protection eth-cfm-monitoring car
Tree	car
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

ip-src-monitoring

Synopsis	Enable IP source monitoring for CPU protection
Context	**configure** service ies *string* interface *string* spoke-sdp *string* cpu-protection ip-src-monitoring
Tree	ip-src-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	**configure** service ies *string* interface *string* spoke-sdp *string* cpu-protection mac-monitoring
Tree	mac-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

policy-id *reference*

Synopsis	CPM protection policy
Context	**configure** service ies *string* interface *string* spoke-sdp *string* cpu-protection policy-id *reference*
Tree	policy-id

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Reference	**configure** system security cpu-protection policy *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** service ies *string* interface *string* spoke-sdp *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** service ies *string* interface *string* spoke-sdp *string* egress
Tree	egress
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the **filter** context
Context	**configure** service ies *string* interface *string* spoke-sdp *string* egress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service ies *string* interface *string* spoke-sdp *string* egress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*

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Introduced	16.0.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service ies *string* interface *string* spoke-sdp *string* egress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** service ies *string* interface *string* spoke-sdp *string* egress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

network

Synopsis	Enter the **network** context
Context	**configure** service ies *string* interface *string* spoke-sdp *string* egress qos network
Tree	network
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Network policy ID
Context	**configure** service ies *string* interface *string* spoke-sdp *string* egress qos network policy-name *reference*
Tree	policy-name
Reference	**configure** qos network *string*

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Introduced	16.0.R1
Platforms	All

port-redirect-group

Synopsis	Enter the **port-redirect-group** context
Context	**configure** service ies *string* interface *string* spoke-sdp *string* egress qos network port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Name of the egress port queue group
Context	**configure** service ies *string* interface *string* spoke-sdp *string* egress qos network port-redirect-group group-name *reference*
Tree	group-name
Reference	**configure** qos queue-group-templates egress queue-group *string*
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Queue-group instance ID
Context	**configure** service ies *string* interface *string* spoke-sdp *string* egress qos network port-redirect-group instance *number*
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

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vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	**configure** service ies *string* interface *string* spoke-sdp *string* egress vc-label *number*
Tree	vc-label
Range	16 to 1048575
Introduced	16.0.R1
Platforms	All

entropy-label

Synopsis	Enable the use of entropy labels for spoke SDPs
Context	**configure** service ies *string* interface *string* spoke-sdp *string* entropy-label
Tree	entropy-label
Notes	The following elements are part of a choice: **entropy-label** or **hash-label**.
Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the **eth-cfm** context
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm
Tree	eth-cfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-fc-stats

Synopsis	Enter the **collect-lmm-fc-stats** context
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm collect-lmm-fc-stats
Tree	collect-lmm-fc-stats

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Description	Commands in this context configure per forwarding class (FC) LMM information collection. The commands **fc-in-profile** and **fc** in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively. This command and the **collect-lmm-stats** command are mutually exclusive when there is entity resource contention.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc *keyword*

Synopsis	Forwarding class name for profile-unaware counter
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm collect-lmm-fc-stats fc *keyword*
Tree	fc
Description	This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter. An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the **fc-in-profile** command under the **collect-lmm-fc-stats** context. When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc-in-profile *keyword*

Synopsis	Forwarding class name for profile-aware counter
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm collect-lmm-fc-stats fc-in-profile *keyword*
Tree	fc-in-profile
Description	This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.

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An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the **fc** command under the **collect-lmm-fc-stats** context.

When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm collect-lmm-stats *boolean*
Tree	collect-lmm-stats
Description	When configured to **true**, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings. The **show eth-cfm collect-lmm-stats** command displays entities that have been enabled to collect transit and receive counters. When configured to **false**, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*

Synopsis	Enter the **mep** list instance
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string* association *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MEP

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Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais *boolean*

Synopsis	Enable the generation and the reception of AIS messages
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais *boolean*
Tree	ais
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the **alarm-notification** context
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification
Tree	alarm-notification
Description	Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm. Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-alarm-time *number*

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Tree	fng-alarm-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-reset-time *number*
Tree	fng-reset-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis	Generate CCM messages
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm *boolean*
Tree	ccm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-ltm-priority *number*
Tree	ccm-ltm-priority
Range	0 to 7
Default	7

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-padding-size *number*
Tree	ccm-padding-size
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU. This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through **configure eth-cfm domain association ccm-interval)** is less than 1 second.
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

csf

Synopsis	Enable the **csf** context
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* csf
Tree	csf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* csf multiplier *decimal-number*
Tree	multiplier
Range	0.0 | 2.0 to 30.0
Default	3.5

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the **eth-test** context
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the **oam eth-cfm eth-test** command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test bit-error-threshold *number*
Tree	bit-error-threshold
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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test-pattern

Synopsis	Enter the **test-pattern** context
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern crc-tlv *boolean*
Tree	crc-tlv
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern pattern *keyword*
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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fault-propagation *keyword*

Synopsis	Fault propagation for the MEP
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* fault-propagation *keyword*
Tree	fault-propagation
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the **grace** context
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the **eth-ed** context
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed max-rx-defect-window *number*
Tree	max-rx-defect-window

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Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed priority *number*
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed rx-eth-ed *boolean*
Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed tx-eth-ed *boolean*
Tree	tx-eth-ed
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis	Enter the **eth-vsm-grace** context
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace rx-eth-vsm-grace *boolean*
Tree	rx-eth-vsm-grace
Description	When configured to **true**, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to **false**, the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace tx-eth-vsm-grace *boolean*
Tree	tx-eth-vsm-grace
Description	When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards. The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

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The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* low-priority-defect *keyword*
Tree	low-priority-defect
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* one-way-delay-threshold *number*
Tree	one-way-delay-threshold
Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch-ingress-levels *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded

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Context	**configure** service ies *string* interface *string* spoke-sdp *string* eth-cfm squelch-ingress-levels *number*
Tree	squelch-ingress-levels
Description	This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option. The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.
Range	0 to 7
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

hash-label

Synopsis	Enable the **hash-label** context
Context	**configure** service ies *string* interface *string* spoke-sdp *string* hash-label
Tree	hash-label
Description	Commands in this context configure the use of hash labels for egress datapaths. For information about hash-label handling, see the "Hash labels" section of the *7450 ESS, 7750 SR, 7950 XRS, and VSR MPLS Guide*.
Notes	The following elements are part of a choice: **entropy-label** or **hash-label**.
Introduced	16.0.R1
Platforms	All

signal-capability

Synopsis	Signal hash label capability to the remote PE
Context	**configure** service ies *string* interface *string* spoke-sdp *string* hash-label signal-capability
Tree	signal-capability
Description	When configured, this command enables the signaling and negotiating of the hash label between the local and remote PE nodes. The signaling process outcome determines whether the local PE inserts the hash label on the user packets. This outcome can override the local PE configuration.

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Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service ies *string* interface *string* spoke-sdp *string* ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the **filter** context
Context	**configure** service ies *string* interface *string* spoke-sdp *string* ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service ies *string* interface *string* spoke-sdp *string* ingress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service ies *string* interface *string* spoke-sdp *string* ingress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1

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Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** service ies *string* interface *string* spoke-sdp *string* ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

network

Synopsis	Enter the **network** context
Context	**configure** service ies *string* interface *string* spoke-sdp *string* ingress qos network
Tree	network
Introduced	16.0.R1
Platforms	All

fp-redirect-group

Synopsis	Enter the **fp-redirect-group** context
Context	**configure** service ies *string* interface *string* spoke-sdp *string* ingress qos network fp-redirect-group
Tree	fp-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Name of the forwarding plane queue group template
Context	**configure** service ies *string* interface *string* spoke-sdp *string* ingress qos network fp-redirect-group group-name *reference*
Tree	group-name
Reference	**configure** qos queue-group-templates ingress queue-group *string*
Introduced	16.0.R1
Platforms	All

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instance *number*

Synopsis	Instance of FP ingress queue group for the SDP binding
Context	**configure** service ies *string* interface *string* spoke-sdp *string* ingress qos network fp-redirect-group instance *number*
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Network policy ID
Context	**configure** service ies *string* interface *string* spoke-sdp *string* ingress qos network policy-name *reference*
Tree	policy-name
Reference	**configure** qos network *string*
Introduced	16.0.R1
Platforms	All

vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
Context	**configure** service ies *string* interface *string* spoke-sdp *string* ingress vc-label *number*
Tree	vc-label
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

transit-policy

Synopsis	Enable the **transit-policy** context

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Context	**configure** service ies *string* interface *string* spoke-sdp *string* transit-policy
Tree	transit-policy
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP transit policy ID
Context	**configure** service ies *string* interface *string* spoke-sdp *string* transit-policy ip *reference*
Tree	ip
Reference	**configure** application-assurance group *number* partition *number* transit-ip-policy *number*
Notes	The following elements are part of a mandatory choice: **ip** or **prefix**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	**configure** service ies *string* interface *string* spoke-sdp *string* transit-policy prefix *reference*
Tree	prefix
Reference	**configure** application-assurance group *number* partition *number* transit-prefix-policy *number*
Notes	The following elements are part of a mandatory choice: **ip** or **prefix**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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vc-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Virtual circuit type associated with the SDP binding
Context	**configure** service ies *string* interface *string* spoke-sdp *string* vc-type *keyword*
Tree	vc-type
Options	ether, ipipe
Default	ether
Introduced	16.0.R1
Platforms	All

static-tunnel-redundant-nexthop *string*

Synopsis	Address for the static ISA tunnel redundant next-hop
Context	**configure** service ies *string* interface *string* static-tunnel-redundant-nexthop *string*
Tree	static-tunnel-redundant-nexthop
Description	This command specifies the redundant next-hop address on public or private IPsec interfaces (with a public or private tunnel SAP) for the static IPsec tunnel. The next-hop address is resolved in the routing table of the corresponding service.
Notes	The following elements are part of a choice: **multi-chassis-shunting-profile** or (**dynamic-tunnel-redundant-nexthop** and **static-tunnel-redundant-nexthop**).
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tos-marking-state *keyword*

Synopsis	TOS marking state
Context	**configure** service ies *string* interface *string* tos-marking-state *keyword*
Tree	tos-marking-state
Options	trusted, untrusted
Default	untrusted
Introduced	16.0.R1
Platforms	All

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tunnel *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable/disable tunnel interface
Context	**configure** service ies *string* interface *string* tunnel *boolean*
Tree	tunnel
Default	false
Introduced	16.0.R1
Platforms	All

vas-if-type *keyword*

Synopsis	VAS interface type
Context	**configure** service ies *string* interface *string* vas-if-type *keyword*
Tree	vas-if-type
Options	to-from-access, to-from-network, to-from-both
Introduced	16.0.R1
Platforms	All

vpls [vpls-name] *string*

Synopsis	Enter the **vpls** list instance
Context	**configure** service ies *string* interface *string* vpls *string*
Tree	vpls
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[**vpls-name**] *string*

Synopsis	VPLS service
Context	**configure** service ies *string* interface *string* vpls *string*

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Tree	vpls
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** service ies *string* interface *string* vpls *string* egress
Tree	egress
Introduced	16.0.R1
Platforms	All

reclassify-using-qos *reference*

Synopsis	Egress QoS policy
Context	**configure** service ies *string* interface *string* vpls *string* egress reclassify-using-qos *reference*
Tree	reclassify-using-qos
Reference	**configure** qos sap-egress *string*
Introduced	16.0.R1
Platforms	All

routed-override-filter

Synopsis	Enter the **routed-override-filter** context
Context	**configure** service ies *string* interface *string* vpls *string* egress routed-override-filter
Tree	routed-override-filter
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name

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Context	**configure** service ies *string* interface *string* vpls *string* egress routed-override-filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service ies *string* interface *string* vpls *string* egress routed-override-filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	All

evpn

Synopsis	Enter the **evpn** context
Context	**configure** service ies *string* interface *string* vpls *string* evpn
Tree	evpn
Introduced	19.10.R1
Platforms	All

arp

Synopsis	Enter the **arp** context
Context	**configure** service ies *string* interface *string* vpls *string* evpn arp
Tree	arp
Introduced	19.10.R1
Platforms	All

advertise [route-type] *keyword*

Synopsis	Enter the **advertise** list instance

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Context	**configure** service ies *string* interface *string* vpls *string* evpn arp advertise *keyword*
Tree	advertise
Description	Commands in this context specify the configuration to allow ARP or ND entries that are installed in the ARP or ND cache to be advertised in EVPN MAC/IP routes. The **learn-dynamic** command must be set to **false** when using this functionality.
Introduced	19.10.R1
Platforms	All

[**route-type**] *keyword*

Synopsis	Type of ARP or ND entries that generate host routes
Context	**configure** service ies *string* interface *string* vpls *string* evpn arp advertise *keyword*
Tree	advertise
Description	This command specifies the type of ARP or ND entries that are installed in the ARP or ND cache into EVPN MAC/IP routes.
Options	static, dynamic
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

route-tag *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	**configure** service ies *string* interface *string* vpls *string* evpn arp advertise *keyword* route-tag *number*
Tree	route-tag
Description	This command specifies the route tag that is added separately to dynamic or static ARP or ND entries that are advertised in EVPN MAC/IP routes. This tag can be matched on BGP vsi-export (in the R-VPLS) and BGP peer export policies.
Range	0 to 255
Introduced	19.10.R1
Platforms	All

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flood-garp-and-unknown-req *boolean*

Synopsis	Allow CPM originated ARP frames to flood R-VPLS service
Context	**configure** service ies *string* interface *string* vpls *string* evpn arp flood-garp-and-unknown-req *boolean*
Tree	flood-garp-and-unknown-req
Description	When configured to **true**, the system allows CPM-originated ARP frames to be flooded in the R-VPLS service. Any frames that are data path flooded such as the ARP messages received on a SAP, are flooded irrespective of this command. When configured to **false**, CPM-originated ARP flooding is suppressed.
Default	true
Introduced	19.10.R1
Platforms	All

learn-dynamic *boolean*

Synopsis	Process ARP or ND messages on EVPN tunnels
Context	**configure** service ies *string* interface *string* vpls *string* evpn arp learn-dynamic *boolean*
Tree	learn-dynamic
Description	When configured to **true**, the system processes ARP or ND messages that arrive on EVPN tunnels. When configured to **false**, learning is disabled and table entries are not created for these messages.
Default	true
Introduced	19.10.R1
Platforms	All

nd

Synopsis	Enter the **nd** context
Context	**configure** service ies *string* interface *string* vpls *string* evpn nd
Tree	nd
Introduced	20.5.R1
Platforms	All

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advertise [route-type] *keyword*

Synopsis	Enter the **advertise** list instance
Context	**configure** service ies *string* interface *string* vpls *string* evpn nd advertise *keyword*
Tree	advertise
Description	Commands in this context specify the configuration to allow ARP or ND entries that are installed in the ARP or ND cache to be advertised in EVPN MAC/IP routes. The **learn-dynamic** command must be set to **false** when using this functionality.
Introduced	20.5.R1
Platforms	All

[**route-type**] *keyword*

Synopsis	Type of ARP or ND entries that generate host routes
Context	**configure** service ies *string* interface *string* vpls *string* evpn nd advertise *keyword*
Tree	advertise
Description	This command specifies the type of ARP or ND entries that are installed in the ARP or ND cache into EVPN MAC/IP routes.
Options	static, dynamic
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

route-tag *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	**configure** service ies *string* interface *string* vpls *string* evpn nd advertise *keyword* route-tag *number*
Tree	route-tag
Description	This command specifies the route tag that is added separately to dynamic or static ARP or ND entries that are advertised in EVPN MAC/IP routes. This tag can be matched on BGP vsi-export (in the R-VPLS) and BGP peer export policies.
Range	0 to 255
Introduced	20.5.R1

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Platforms	All

learn-dynamic *boolean*

Synopsis	Process ARP or ND messages on EVPN tunnels
Context	**configure** service ies *string* interface *string* vpls *string* evpn nd learn-dynamic *boolean*
Tree	learn-dynamic
Description	When configured to **true**, the system processes ARP or ND messages that arrive on EVPN tunnels. When configured to **false**, learning is disabled and table entries are not created for these messages.
Default	true
Introduced	20.5.R1
Platforms	All

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service ies *string* interface *string* vpls *string* ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

routed-override-filter

Synopsis	Enter the **routed-override-filter** context
Context	**configure** service ies *string* interface *string* vpls *string* ingress routed-override-filter
Tree	routed-override-filter
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service ies *string* interface *string* vpls *string* ingress routed-override-filter ip *reference*

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Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service ies *string* interface *string* vpls *string* ingress routed-override-filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	All

redundant-interface [interface-name] *string*

Synopsis	Enter the **redundant-interface** list instance
Context	**configure** service ies *string* redundant-interface *string*
Tree	redundant-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**interface-name**] *string*

Synopsis	Interface name
Context	**configure** service ies *string* redundant-interface *string*
Tree	redundant-interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of the interface
Context	**configure** service ies *string* redundant-interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service ies *string* redundant-interface *string* description *string*
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-time

Synopsis	Enter the **hold-time** context
Context	**configure** service ies *string* redundant-interface *string* hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service ies *string* redundant-interface *string* hold-time ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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down

Synopsis	Enter the **down** context
Context	**configure** service ies *string* redundant-interface *string* hold-time ipv4 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the **init-only** command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	**configure** service ies *string* redundant-interface *string* hold-time ipv4 down init-only *boolean*
Tree	init-only
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Down hold time for the IP interface
Context	**configure** service ies *string* redundant-interface *string* hold-time ipv4 down seconds *number*
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

up

Synopsis	Enter the **up** context

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Context	**configure** service ies *string* redundant-interface *string* hold-time ipv4 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Up hold time for the IP interface
Context	**configure** service ies *string* redundant-interface *string* hold-time ipv4 up seconds *number*
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis	IP MTU applied to outgoing packets
Context	**configure** service ies *string* redundant-interface *string* ip-mtu *number*
Tree	ip-mtu
Range	512 to 9786
Units	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service ies *string* redundant-interface *string* ipv4
Tree	ipv4
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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primary

Synopsis	Enable the **primary** context
Context	**configure** service ies *string* redundant-interface *string* ipv4 primary
Tree	primary
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis	IPv4 address to be assigned to the interface
Context	**configure** service ies *string* redundant-interface *string* ipv4 primary address *string*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	**configure** service ies *string* redundant-interface *string* ipv4 primary prefix-length *number*
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-ip *string*

Synopsis	Remote IP address for the interface
Context	**configure** service ies *string* redundant-interface *string* ipv4 primary remote-ip *string*
Tree	remote-ip
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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spoke-sdp [sdp-bind-id] *string*

Synopsis	Enter the **spoke-sdp** list instance
Context	**configure** service ies *string* redundant-interface *string* spoke-sdp *string*
Tree	spoke-sdp
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**sdp-bind-id**] *string*

Synopsis	SDP binding ID
Context	**configure** service ies *string* redundant-interface *string* spoke-sdp *string*
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the SDP binding to the service
Context	**configure** service ies *string* redundant-interface *string* spoke-sdp *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

control-word *boolean*

Synopsis	Use the control word as preferred
Context	**configure** service ies *string* redundant-interface *string* spoke-sdp *string* control-word *boolean*

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Tree	control-word
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service ies *string* redundant-interface *string* spoke-sdp *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the **egress** context
Context	**configure** service ies *string* redundant-interface *string* spoke-sdp *string* egress
Tree	egress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis	Enter the **filter** context
Context	**configure** service ies *string* redundant-interface *string* spoke-sdp *string* egress filter
Tree	filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service ies *string* redundant-interface *string* spoke-sdp *string* egress filter ip *reference*

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Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	**configure** service ies *string* redundant-interface *string* spoke-sdp *string* egress vc-label *number*
Tree	vc-label
Range	16 to 1048575
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service ies *string* redundant-interface *string* spoke-sdp *string* ingress
Tree	ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis	Enter the **filter** context
Context	**configure** service ies *string* redundant-interface *string* spoke-sdp *string* ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service ies *string* redundant-interface *string* spoke-sdp *string* ingress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
Context	**configure** service ies *string* redundant-interface *string* spoke-sdp *string* ingress vc-label *number*
Tree	vc-label
Range	1 to 1048575
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-id *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	**configure** service ies *string* service-id *number*
Tree	service-id
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

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subscriber-interface [interface-name] *string*

Synopsis	Enter the **subscriber-interface** list instance
Context	**configure** service ies *string* subscriber-interface *string*
Tree	subscriber-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**interface-name**] *string*

Synopsis	Subscriber interface name
Context	**configure** service ies *string* subscriber-interface *string*
Tree	subscriber-interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the subscriber interface
Context	**configure** service ies *string* subscriber-interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service ies *string* subscriber-interface *string* description *string*
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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fwd-service *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Forwarding service name
Context	**configure** service ies *string* subscriber-interface *string* fwd-service *reference*
Tree	fwd-service
Reference	**configure** service vprn *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fwd-subscriber-interface *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Forwarding subscriber interface name
Context	**configure** service ies *string* subscriber-interface *string* fwd-subscriber-interface *reference*
Tree	fwd-subscriber-interface
Reference	**configure** service vprn *string* subscriber-interface *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface [group-interface-name] *string*

Synopsis	Enter the **group-interface** list instance
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string*
Tree	group-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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[**group-interface-name**] *string*

Synopsis	Group interface name
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string*
Tree	group-interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bonding-parameters

Synopsis	Enter the **bonding-parameters** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* bonding-parameters
Tree	bonding-parameters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of ESM connection bonding
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* bonding-parameters admin-state *keyword*
Tree	admin-state
Options	enable, disable

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Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

connection [connection-index] *number*

Synopsis	Enter the **connection** list instance
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* bonding-parameters connection *number*
Tree	connection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**connection-index**] *number*

Synopsis	Bonding connection index
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* bonding-parameters connection *number*
Tree	connection
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

service *string*

Synopsis	Connection service
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* bonding-parameters connection *number* service *string*
Tree	service
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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fpe *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FPE that provisions bonding functionality
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* bonding-parameters fpe *reference*
Tree	fpe
Reference	**configure** fwd-path-ext fpe *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multicast

Synopsis	Enter the **multicast** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* bonding-parameters multicast
Tree	multicast
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

connection *(number | keyword)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Multicast connection
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* bonding-parameters multicast connection *(number | keyword)*
Tree	connection
Range	1 to 2
Options	use-incoming
Default	use-incoming
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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brg

Synopsis	Enter the **brg** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* brg
Tree	brg
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of BRG
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* brg admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authenticated-brg-only *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow BRGs that have been pre-authenticated
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* brg authenticated-brg-only *boolean*
Tree	authenticated-brg-only
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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default-brg-profile *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default BRG profile for new BRGs
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* brg default-brg-profile *reference*
Tree	default-brg-profile
Reference	**configure** subscriber-mgmt vrgw brg-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cflowd-parameters

Synopsis	Enter the **cflowd-parameters** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* cflowd-parameters
Tree	cflowd-parameters
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sampling [sampling-type] *keyword*

Synopsis	Enter the **sampling** list instance
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* cflowd-parameters sampling *keyword*
Tree	sampling
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**sampling-type**] *keyword*

Synopsis	Traffic sampling type
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* cflowd-parameters sampling *keyword*
Tree	sampling

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Description	This command configures the type of traffic to be sampled on the associated IP interface.
Options	unicast, multicast, both
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of traffic for cflowd sampling
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* cflowd-parameters sampling *keyword* direction *keyword*
Tree	direction
Description	This command configures the direction in which sampling occurs on the associated IP interfaces.
Options	ingress-only, egress-only, both
Default	ingress-only
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sample-profile *(keyword | number)*

Synopsis	Sample profile ID
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* cflowd-parameters sampling *keyword* sample-profile *(keyword | number)*
Tree	sample-profile
Description	This command defines the sampling rate profile associated with this interface.
Max. Range	0 to 4294967295
Options	1
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Type of cflowd analysis

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* cflowd-parameters sampling *keyword* type *keyword*
Tree	type
Description	This command configures the cflowd sampling type on the associated IP interface.
Options	acl, interface
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

data-trigger

Synopsis	Enter the **data-trigger** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* data-trigger
Tree	data-trigger
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of data-triggered host creation
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* data-trigger admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* description *string*
Tree	description
String Length	1 to 255

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dynamic-routes-track-srrp

Synopsis	Enable the **dynamic-routes-track-srrp** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* dynamic-routes-track-srrp
Tree	dynamic-routes-track-srrp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-time *number*

Synopsis	Time before route state updated after SRRP transition
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* dynamic-routes-track-srrp hold-time *number*
Tree	hold-time
Range	1 to 50
Units	deciseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gtp-parameters

Synopsis	Enter the **gtp-parameters** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* gtp-parameters
Tree	gtp-parameters
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of GTP access
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* gtp-parameters admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

fpe *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PE that provisions the GTP user interface
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* gtp-parameters fpe *reference*
Tree	fpe
Reference	**configure** fwd-path-ext fpe *number*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

gx-policy *reference*

Synopsis	Diameter application policy
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* gx-policy *reference*
Tree	gx-policy
Reference	**configure** subscriber-mgmt diameter-gx-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ingress
Tree	ingress
Introduced	19.7.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-accounting *reference*

Synopsis	Ingress policy accounting template name
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ingress policy-accounting *reference*
Tree	policy-accounting
Reference	**configure** routing-options policy-accounting policy-acct-template *string*
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s

ingress-stats *boolean*

Synopsis	Collect ingress interface statistics
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ingress-stats *boolean*
Tree	ingress-stats
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis	Interface IP MTU
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ip-mtu *number*
Tree	ip-mtu
Range	512 to 9786
Units	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-linking

Synopsis	Enter the **ipoe-linking** context

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipoe-linking
Tree	ipoe-linking
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of IPoE host linking
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipoe-linking admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gratuitous-router-advertisement *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send unsolicited router advertisement after DHCP setup
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipoe-linking gratuitous-router-advertisement *boolean*
Tree	gratuitous-router-advertisement
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shared-circuit-id *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable circuit ID in DHCPv4 Option82 to validate DHCPv6

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipoe-linking shared-circuit-id *boolean*
Tree	shared-circuit-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-session

Synopsis	Enter the **ipoe-session** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipoe-session
Tree	ipoe-session
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of IPoE session management
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipoe-session admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipoe-session description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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force-auth

Synopsis	Enter the **force-auth** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipoe-session force-auth
Tree	force-auth
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cid-change *boolean*

Synopsis	Ignore min-auth-interval when circuit ID changed
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipoe-session force-auth cid-change *boolean*
Tree	cid-change
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rid-change *boolean*

Synopsis	Ignore min-auth-interval when remote ID changed
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipoe-session force-auth rid-change *boolean*
Tree	rid-change
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-session-policy *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPoE Session policy to be used for new sessions
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipoe-session ipoe-session-policy *reference*
Tree	ipoe-session-policy
Reference	**configure** subscriber-mgmt ipoe-session-policy *string*

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-auth-interval *(keyword | number)*

Synopsis	Minimum time between two authentication attempts
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipoe-session min-auth-interval *(keyword | number)*
Tree	min-auth-interval
Range	1 to 32000000
Units	seconds
Options	infinite, always-reauthenticate
Default	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-session-timeout *keyword*

Synopsis	Session timeout attribute to be interpreted
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipoe-session radius-session-timeout *keyword*
Tree	radius-session-timeout
Options	absolute, ignore, backwards-compatible
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-session-limit *number*

Synopsis	Maximum number of sessions per SAP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipoe-session sap-session-limit *number*
Tree	sap-session-limit
Range	1 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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session-limit *number*

Synopsis	Maximum number of sessions on this group interface
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipoe-session session-limit *number*
Tree	session-limit
Range	1 to 500000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stateless-redundancy *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remove IPoE sessions when the system becomes stand-by in a stateless multi-chassis redundancy setup
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipoe-session stateless-redundancy *boolean*
Tree	stateless-redundancy
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local user database for IPoE session authentication
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipoe-session user-db *reference*
Tree	user-db
Reference	**configure** subscriber-mgmt local-user-db *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arp-host

Synopsis	Enter the **arp-host** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 arp-host
Tree	arp-host
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of ARP hosts
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 arp-host admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-limit *number*

Synopsis	Maximum number of ARP hosts
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 arp-host host-limit *number*
Tree	host-limit
Range	1 to 524287
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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min-auth-interval *number*

Synopsis	Minimum authentication interval
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 arp-host min-auth-interval *number*
Tree	min-auth-interval
Range	1 to 6000
Units	minutes
Default	15
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-host-limit *number*

Synopsis	Maximum number of ARP hosts per SAP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 arp-host sap-host-limit *number*
Tree	sap-host-limit
Range	1 to 131071
Default	1
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp

Synopsis	Enter the **dhcp** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp
Tree	dhcp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of DHCP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the **client-applications** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp *boolean*

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp client-applications dhcp *boolean*
Tree	dhcp
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp *boolean*

Synopsis	Enable PPPoE clients to use DHCP relay or proxy server
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp client-applications ppp *boolean*
Tree	ppp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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description *string*

Synopsis	Text description
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter *reference*

Synopsis	DHCP filter ID for the group interface
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp filter *reference*
Tree	filter
Reference	**configure** filter dhcp-filter *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gi-address *string*

Synopsis	GI address for the DHCP relay
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp gi-address *string*
Tree	gi-address
Description	This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay. By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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lease-populate

Synopsis	Enter the **lease-populate** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp lease-populate
Tree	lease-populate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2-header

Synopsis	Enable the **l2-header** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp lease-populate l2-header
Tree	l2-header
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *string*

Synopsis	IEEE address used in anti-spoofing entries for the SAP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp lease-populate l2-header mac *string*
Tree	mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-leases *number*

Synopsis	Maximum number of DHCPv4 leases
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp lease-populate max-leases *number*
Tree	max-leases
Range	1 to 511999
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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match-circuit-id *boolean*

Synopsis	Enable Option 82 circuit ID on relayed DHCP packets
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp match-circuit-id *boolean*
Tree	match-circuit-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

offer-selection

Synopsis	Enter the **offer-selection** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp offer-selection
Tree	offer-selection
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-mac

Synopsis	Enter the **client-mac** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp offer-selection client-mac
Tree	client-mac
Notes	The following elements are part of a choice: **client-mac** or **server**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

discover-delay *number*

Synopsis	Delay before sending DHCP Discover messages
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp offer-selection client-mac discover-delay *number*
Tree	discover-delay
Description	This command configures the time to delay sending DHCP Discover messages from the specified MAC addresses.

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Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-address *keyword*

Synopsis	Designated client MAC addresses for Offer selection
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp offer-selection client-mac mac-address *keyword*
Tree	mac-address
Description	This command specifies the client MAC addresses for which the Discover delay applies.
Options	odd, even
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

discover-delay *number*

Synopsis	Delay before sending DHCP Discover messages
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp offer-selection discover-delay *number*
Tree	discover-delay
Description	This command configures the time to delay sending DHCP Discover messages. The delay is applied to all DHCP Discover messages for which no per DHCP server or per client MAC delay is configured.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server [ipv4-address] *string*

Synopsis	Enter the **server** list instance
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp offer-selection server *string*
Tree	server

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Max. Instances	8
Notes	The following elements are part of a choice: **client-mac** or **server**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**ipv4-address**] *string*

Synopsis	IP address of the DHCP server
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp offer-selection server *string*
Tree	server
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

discover-delay *number*

Synopsis	Delay before sending DHCP Discover messages
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp offer-selection server *string* discover-delay *number*
Tree	discover-delay
Description	This command configures the time to delay DHCP Discover messages sent to the server.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option-82

Synopsis	Enter the **option-82** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82
Tree	option-82

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Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	Action to take with received DHCP Option 82
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 action *keyword*
Tree	action
Options	replace, drop, keep
Default	keep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id

Synopsis	Enter the **circuit-id** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 circuit-id
Tree	circuit-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-tuple

Synopsis	Use the ASCII-encoded tuple for the circuit ID
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 circuit-id ascii-tuple
Tree	ascii-tuple
Notes	The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ifindex

Synopsis	Use the interface index for the circuit ID
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 circuit-id ifindex
Tree	ifindex
Notes	The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

none

Synopsis	Do not include the circuit ID
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 circuit-id none
Tree	none
Notes	The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id

Synopsis	Use the SAP ID
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 circuit-id sap-id
Tree	sap-id
Notes	The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vlan-ascii-tuple

Synopsis	Include the VLAN ID and dot1p bits in the ASCII tuple
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 circuit-id vlan-ascii-tuple

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Tree	vlan-ascii-tuple
Description	When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet. When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty.
Notes	The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id

Synopsis	Enter the **remote-id** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 remote-id
Tree	remote-id
Description	Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	User-defined ASCII string for the remote ID
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 remote-id ascii-string *string*
Tree	ascii-string
String Length	1 to 32
Notes	The following elements are part of a choice: **ascii-string**, **mac**, or **none**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac

Synopsis	Use the MAC address for the remote ID

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 remote-id mac
Tree	mac
Notes	The following elements are part of a choice: **ascii-string**, **mac**, or **none**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

none

Synopsis	Do not include the remote ID
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 remote-id none
Tree	none
Notes	The following elements are part of a choice: **ascii-string**, **mac**, or **none**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor-specific-option

Synopsis	Enter the **vendor-specific-option** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 vendor-specific-option
Tree	vendor-specific-option
Description	Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-mac-address *boolean*

Synopsis	Send the MAC address in the VSO
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 vendor-specific-option client-mac-address *boolean*
Tree	client-mac-address
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool-name *boolean*

Synopsis	Send the pool name in the VSO
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 vendor-specific-option pool-name *boolean*
Tree	pool-name
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id *boolean*

Synopsis	Send SAP ID in the sub-option of the DHCP relay packet
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 vendor-specific-option sap-id *boolean*
Tree	sap-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-id *boolean*

Synopsis	Send the service ID in the Vendor Specific Option
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 vendor-specific-option service-id *boolean*
Tree	service-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	User-defined ASCII string for the VSO
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 vendor-specific-option string *string*

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Tree	string
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

system-id *boolean*

Synopsis	Send the system ID in the VSO
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 vendor-specific-option system-id *boolean*
Tree	system-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy-server

Synopsis	Enter the **proxy-server** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp proxy-server
Tree	proxy-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCP proxy server
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp proxy-server admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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emulated-server *string*

Synopsis	IP address used as DHCP server address in SAP context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp proxy-server emulated-server *string*
Tree	emulated-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-time

Synopsis	Enter the **lease-time** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp proxy-server lease-time
Tree	lease-time
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-override *boolean*

Synopsis	Use lease time information provided by RADIUS server
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp proxy-server lease-time radius-override *boolean*
Tree	radius-override
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	DHCP lease time
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp proxy-server lease-time value *number*
Tree	value
Range	300 to 315446399
Units	seconds
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy name
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp python-policy *reference*
Tree	python-policy
Description	This command associates a Python policy name with the interface.
Reference	**configure** python python-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

relay-proxy

Synopsis	Enable the **relay-proxy** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp relay-proxy
Tree	relay-proxy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

release-update-src-ip *boolean*

Synopsis	Update the source IP address of a DHCP RELEASE message
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp relay-proxy release-update-src-ip *boolean*
Tree	release-update-src-ip
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

siaddr-override *string*

Synopsis	DHCP server IP address for address hiding function

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp relay-proxy siaddr-override *string*
Tree	siaddr-override
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

release-include-gi-address *boolean*

Synopsis	Include gateway IP address in DHCP Release messages
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp release-include-gi-address *boolean*
Tree	release-include-gi-address
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *string*

Synopsis	IP addresses for DHCP server requests
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp server *string*
Tree	server
Description	This command configures a list of servers that this interface forwards requests to. The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list.
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

src-ip-addr *keyword*

Synopsis	Type of source address to use for DHCP relay
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp src-ip-addr *keyword*

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Tree	src-ip-addr
Options	auto, gi-address
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

trusted *boolean*

Synopsis	Relay untrusted packets
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp trusted *boolean*
Tree	trusted
Description	When configured to **true**, the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request. A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit. This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local user database for authentication
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 dhcp user-db *reference*
Tree	user-db
Reference	**configure** subscriber-mgmt local-user-db *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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icmp

Synopsis	Enter the **icmp** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 icmp
Tree	icmp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mask-reply *boolean*

Synopsis	Allow responses to ICMP mask requests on the interface
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 icmp mask-reply *boolean*
Tree	mask-reply
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

param-problem

Synopsis	Enter the **param-problem** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 icmp param-problem
Tree	param-problem
Description	Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of sent Parameter Problem messages
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 icmp param-problem admin-state *keyword*
Tree	admin-state
Options	enable, disable

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Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

number *number*

Synopsis	Maximum number of Parameter Problem messages to send
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 icmp param-problem number *number*
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Time used to limit number of Parameter Problem messages
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 icmp param-problem seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

redirects

Synopsis	Enter the **redirects** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 icmp redirects
Tree	redirects
Description	Commands in this context configure the settings for ICMP redirect messages generated by the interface. The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of sending ICMP redirect messages
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 icmp redirects admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

number *number*

Synopsis	Maximum number of ICMP redirect messages to send
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 icmp redirects number *number*
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Time used to limit the number of ICMP redirect messages
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 icmp redirects seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ttl-expired

Synopsis	Enter the **ttl-expired** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 icmp ttl-expired
Tree	ttl-expired
Description	Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of sending TTL expired messages
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 icmp ttl-expired admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

number *number*

Synopsis	Maximum number of TTL expired messages to send
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 icmp ttl-expired number *number*
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Time used to limit the number of TTL expired messages

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 icmp ttl-expired seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-matching-address *boolean*

Synopsis	Use the subscriber interface address as source address
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 icmp ttl-expired use-matching-address *boolean*
Tree	use-matching-address
Description	When configured to **true**, the system uses a matching subscriber interface address as the source address of the ICMP TTL expired message. For matching to occur, the source address of the offending packet must be in the same subnet of the subscriber interface address. When configured to **false**, the system uses the first configured address.
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

unreachables

Synopsis	Enter the **unreachables** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 icmp unreachables
Tree	unreachables
Description	Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of sending unreachable messages
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 icmp unreachables admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

number *number*

Synopsis	Maximum number of unreachable messages to send
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 icmp unreachables number *number*
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Time to limit the number of ICMP unreachable messages
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 icmp unreachables seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-df-bit *boolean*

Synopsis	Ignore DF bit in the IPv4 header when fragmenting

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 ignore-df-bit *boolean*
Tree	ignore-df-bit
Description	When configured to **true**, fragmentation is applied according to the applicable egress MTU instead of the DF bit for frames egressing the WLAN-GW group. The DF bit is reset for frames that are fragmented. When configured to **false**, the router fragments a packet larger than the MTU if the DF bit is set to 0 and drops the packet if the DF bit is set to 1.
Default	false
Introduced	20.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

neighbor-discovery

Synopsis	Enter the **neighbor-discovery** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 neighbor-discovery
Tree	neighbor-discovery
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-proxy-arp *boolean*

Synopsis	Enable local proxy ARP on interface
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 neighbor-discovery local-proxy-arp *boolean*
Tree	local-proxy-arp
Description	When configured to **true**, the router enables local proxy ARP on the interface. When configured to **false**, the router does not respond to ARP requests for addresses on the same subnet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

populate *boolean*

Synopsis	Allow population of static and dynamic hosts

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 neighbor-discovery populate *boolean*
Tree	populate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy-arp-policy *reference*

Synopsis	Proxy ARP policy name
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 neighbor-discovery proxy-arp-policy *reference*
Tree	proxy-arp-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-proxy-arp *boolean*

Synopsis	Enable remote proxy ARP on the interface
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 neighbor-discovery remote-proxy-arp *boolean*
Tree	remote-proxy-arp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Timeout for an ARP entry learned on the interface
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 neighbor-discovery timeout *number*
Tree	timeout
Range	0 to 65535

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Units	seconds
Default	14400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos-route-lookup *keyword*

Synopsis	QoS route lookup
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 qos-route-lookup *keyword*
Tree	qos-route-lookup
Options	destination
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

urpf-check

Synopsis	Enable the **urpf-check** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 urpf-check
Tree	urpf-check
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mode *keyword*

Synopsis	Unicast RPF check mode
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv4 urpf-check mode *keyword*
Tree	mode
Options	strict, loose, strict-no-ecmp
Default	strict
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ipv6

Synopsis	Enable the **ipv6** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-multiple-wan-addresses *boolean*

Synopsis	Allow multiple WAN addresses
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 allow-multiple-wan-addresses *boolean*
Tree	allow-multiple-wan-addresses
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-reply

Synopsis	Enter the **auto-reply** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 auto-reply
Tree	auto-reply
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-solicitation *boolean*

Synopsis	Enable auto-reply for NS
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 auto-reply neighbor-solicitation *boolean*
Tree	neighbor-solicitation
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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router-solicitation *boolean*

Synopsis	Enable auto-reply for RS
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 auto-reply router-solicitation *boolean*
Tree	router-solicitation
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp6

Synopsis	Enter the **dhcp6** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6
Tree	dhcp6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter *reference*

Synopsis	DHCPv6 filter
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 filter *reference*
Tree	filter
Reference	**configure** filter dhcp6-filter *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option

Synopsis	Enter the **option** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 option
Tree	option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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interface-id

Synopsis	Enter the **interface-id** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 option interface-id
Tree	interface-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-tuple

Synopsis	Use ASCII-encoded concatenated tuple
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 option interface-id ascii-tuple
Tree	ascii-tuple
Notes	The following elements are part of a choice: **ascii-tuple**, **if-index**, **sap-id**, or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

if-index

Synopsis	Use interface index in the DHCPv6 relay packet
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 option interface-id if-index
Tree	if-index
Notes	The following elements are part of a choice: **ascii-tuple**, **if-index**, **sap-id**, or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id

Synopsis	Use SAP ID in interface ID option in relay packet
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 option interface-id sap-id
Tree	sap-id
Notes	The following elements are part of a choice: **ascii-tuple**, **if-index**, **sap-id**, or **string**.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	String for interface ID option in DHCPv6 relay packet
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 option interface-id string *string*
Tree	string
String Length	1 to 80
Notes	The following elements are part of a choice: **ascii-tuple**, **if-index**, **sap-id**, or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id *boolean*

Synopsis	Send remote ID option in the DHCPv6 relay packet
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 option remote-id *boolean*
Tree	remote-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

override-slaac *boolean*

Synopsis	Allow WAN address offered by DHCP to overwrite the WAN address acquired from SLAAC
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 override-slaac *boolean*
Tree	override-slaac
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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pd-managed-route

Synopsis	Enable the **pd-managed-route** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 pd-managed-route
Tree	pd-managed-route
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

next-hop *keyword*

Synopsis	Next hop type
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 pd-managed-route next-hop *keyword*
Tree	next-hop
Options	ipv4, ipv6
Default	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy-server

Synopsis	Enter the **proxy-server** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 proxy-server
Tree	proxy-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 proxy server
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 proxy-server admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the **client-applications** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 proxy-server client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp *boolean*

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 proxy-server client-applications dhcp *boolean*
Tree	dhcp
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp *boolean*

Synopsis	Allow PPPoE clients to use DHCP relay functionality
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 proxy-server client-applications ppp *boolean*
Tree	ppp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime *(number | keyword)*

Synopsis	Time for prefix to remain preferred on this interface
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 proxy-server preferred-lifetime *(number | keyword)*

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Tree	preferred-lifetime
Range	300 to 4294967294
Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rebind-timer *number*

Synopsis	Rebind timer (T2) for this interface
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 proxy-server rebind-timer *number*
Tree	rebind-timer
Range	0 to 1209600
Units	seconds
Default	2880
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

renew-timer *number*

Synopsis	Renew timer (T1)
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 proxy-server renew-timer *number*
Tree	renew-timer
Range	0 to 604800
Units	seconds
Default	1800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server-id

Synopsis	Enter the **server-id** context

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 proxy-server server-id
Tree	server-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-en-ascii *string*

Synopsis	Vendor-assigned ID based on Enterprise Number (DUID-EN)
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 proxy-server server-id duid-en-ascii *string*
Tree	duid-en-ascii
String Length	1 to 58
Notes	The following elements are part of a choice: **duid-en-ascii**, **duid-en-hex**, or **duid-ll**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-en-hex *string*

Synopsis	DUID system ID in hexadecimal format
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 proxy-server server-id duid-en-hex *string*
Tree	duid-en-hex
String Length	1 to 118
Notes	The following elements are part of a choice: **duid-en-ascii**, **duid-en-hex**, or **duid-ll**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-ll

Synopsis	Use link-layer address (DUID-LL) as DUID
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 proxy-server server-id duid-ll
Tree	duid-ll
Notes	The following elements are part of a choice: **duid-en-ascii**, **duid-en-hex**, or **duid-ll**.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *(number | keyword)*

Synopsis	Time for prefix to remain valid on this interface
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 proxy-server valid-lifetime *(number | keyword)*
Tree	valid-lifetime
Range	300 to 4294967294
Units	seconds
Options	infinite
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 python-policy *reference*
Tree	python-policy
Reference	**configure** python python-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

relay

Synopsis	Enter the **relay** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay
Tree	relay
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of DHCPv6 Relay
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

advertise-selection

Synopsis	Enter the **advertise-selection** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection
Tree	advertise-selection
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-mac

Synopsis	Enter the **client-mac** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection client-mac
Tree	client-mac
Notes	The following elements are part of a choice: **client-mac** or **server**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-address *keyword*

Synopsis	Designated client MAC addresses for Advertise selection
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection client-mac mac-address *keyword*
Tree	mac-address
Options	odd, even

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Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference-option

Synopsis	Enter the **preference-option** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection client-mac preference-option
Tree	preference-option
Description	Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Preference option value for DHCPv6 Advertise messages
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection client-mac preference-option value *number*
Tree	value
Range	0 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

solicit-delay *number*

Synopsis	Delay before sending DHCPv6 Solicit messages
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection client-mac solicit-delay *number*
Tree	solicit-delay
Description	This command configures the time to delay DHCPv6 Solicit messages sent from the designated client MAC addresses.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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preference-option

Synopsis	Enter the **preference-option** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection preference-option
Tree	preference-option
Description	Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Preference option value for DHCPv6 Advertise messages
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection preference-option value *number*
Tree	value
Range	0 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server [ipv6-address] *string*

Synopsis	Enter the **server** list instance
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection server *string*
Tree	server
Max. Instances	8
Notes	The following elements are part of a choice: **client-mac** or **server**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ipv6-address] *string*

Synopsis	IP address of the DHCPv6 server

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection server *string*
Tree	server
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference-option

Synopsis	Enter the **preference-option** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection server *string* preference-option
Tree	preference-option
Description	Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Preference option value for DHCPv6 Advertise messages
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection server *string* preference-option value *number*
Tree	value
Range	0 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

solicit-delay *number*

Synopsis	Delay before sending DHCPv6 Solicit messages
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection server *string* solicit-delay *number*
Tree	solicit-delay
Description	This command configures the time to delay DHCPv6 Solicit messages sent to the server.
Range	1 to 100

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Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

solicit-delay *number*

Synopsis	Delay before sending DHCPv6 Solicit messages
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection solicit-delay *number*
Tree	solicit-delay
Description	This command configures the time to delay DHCPv6 Solicit messages. The delay is applied to DHCPv6 Solicit messages for which no overriding value is configured in the **server** instance or the **client-mac** context.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the **client-applications** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp *boolean*

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay client-applications dhcp *boolean*
Tree	dhcp
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ppp *boolean*

Synopsis	Allow PPPoE clients to use DHCP relay functionality
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay client-applications ppp *boolean*
Tree	ppp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-split

Synopsis	Enter the **lease-split** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay lease-split
Tree	lease-split
Description	Commands in this context configure DHCPv6 lease split. DHCPv6 lease split is active when administratively enabled and for all IA_NA and IA_PD options in the transaction, the configured lease split valid lifetime (short lease time) is less than or equal to one of the following: • the renew time T1 committed by the server (long renew time) • half of the preferred lifetime committed by the server when T1 committed by the server equals zero
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of DHCPv6 lease split
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay lease-split admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *number*

Synopsis	DHCPv6 lease split valid lifetime (short lease time)
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay lease-split valid-lifetime *number*
Tree	valid-lifetime
Range	300 to 315446399
Units	seconds
Default	3600
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

Synopsis	Link address for the DHCPv6 relay messages
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay link-address *string*
Tree	link-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *string*

Synopsis	DHCP6 server(s) to which the DHCP6 requests are forwarded
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay server *string*

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Tree	server
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-address *string*

Synopsis	Source IPv6 address for the DHCPv6 relay messages
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay source-address *string*
Tree	source-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

snooping

Synopsis	Enter the **snooping** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 snooping
Tree	snooping
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of DHCPv6 snooping
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 snooping admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

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user-db *reference*

Synopsis	Local user database for authentication
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 user-db *reference*
Tree	user-db
Reference	**configure** subscriber-mgmt local-user-db *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-ident *keyword*

Synopsis	DHCP6 user identification for this interface
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 user-ident *keyword*
Tree	user-ident
Options	mac, mac-interface-id
Default	mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-bridged-mode *boolean*

Synopsis	Enable IPv6 IPoE bridged mode
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 ipoe-bridged-mode *boolean*
Tree	ipoe-bridged-mode
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-discovery

Synopsis	Enter the **neighbor-discovery** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 neighbor-discovery
Tree	neighbor-discovery

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dad-snooping *boolean*

Synopsis	Populate table via duplicate address detection packets
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 neighbor-discovery dad-snooping *boolean*
Tree	dad-snooping
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-limit *number*

Synopsis	Maximum neighbor entries learned per SLAAC host
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 neighbor-discovery neighbor-limit *number*
Tree	neighbor-limit
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos-route-lookup *keyword*

Synopsis	QoS route lookup
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 qos-route-lookup *keyword*
Tree	qos-route-lookup
Options	destination
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

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router-advertisements

Synopsis	Enter the **router-advertisements** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements
Tree	router-advertisements
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of router advertisements
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

force-mcast *keyword*

Synopsis	Protocol with forced multicast
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements force-mcast *keyword*
Tree	force-mcast
Options	ip, ip-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-advertisement-interval *number*

Synopsis	Maximum advertisement interval
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements max-advertisement-interval *number*
Tree	max-advertisement-interval
Range	900 to 1800

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Units	seconds
Default	1800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-advertisement-interval *number*

Synopsis	Minimum advertisement interval
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements min-advertisement-interval *number*
Tree	min-advertisement-interval
Range	900 to 1350
Units	seconds
Default	900
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the **options** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements options
Tree	options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

current-hop-limit *number*

Synopsis	Hop limit to be advertised
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements options current-hop-limit *number*
Tree	current-hop-limit
Range	0 to 255
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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dns

Synopsis	Enter the **dns** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements options dns
Tree	dns
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

include-rdnss *boolean*

Synopsis	Include the RDNSS server option 25
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements options dns include-rdnss *boolean*
Tree	include-rdnss
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rdnss-lifetime *(number | keyword)*

Synopsis	Maximum time for the RDNSS address to remain valid
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements options dns rdnss-lifetime *(number | keyword)*
Tree	rdnss-lifetime
Range	900 to 3600
Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

managed-configuration *boolean*

Synopsis	Managed address configuration flag

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements options managed-configuration *boolean*
Tree	managed-configuration
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mtu *(number | keyword)*

Synopsis	Advertised MTU value
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements options mtu *(number | keyword)*
Tree	mtu
Range	1280 to 9212
Units	bytes
Options	not-included
Default	not-included
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

other-stateful-configuration *boolean*

Synopsis	Other stateful configuration flag
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements options other-stateful-configuration *boolean*
Tree	other-stateful-configuration
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reachable-time *number*

Synopsis	Reachable time for advertisements
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements options reachable-time *number*
Tree	reachable-time

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Range	0 to 3600000
Units	milliseconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retransmit-timer *number*

Synopsis	Retransmit time in router advertisements from interface
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements options retransmit-timer *number*
Tree	retransmit-timer
Range	0 to 1800000
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-lifetime *(number | keyword)*

Synopsis	Router lifetime
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements options router-lifetime *(number | keyword)*
Tree	router-lifetime
Range	2700 to 9000
Units	seconds
Options	no-default-router
Default	4500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-options

Synopsis	Enter the **prefix-options** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements prefix-options

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Tree	prefix-options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

autonomous *boolean*

Synopsis	Value of the autonomous flag
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements prefix-options autonomous *boolean*
Tree	autonomous
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-link *boolean*

Synopsis	Assign the prefix to an interface on the specified link
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements prefix-options on-link *boolean*
Tree	on-link
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime *(number | keyword)*

Synopsis	Time for a prefix to remain preferred
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements prefix-options preferred-lifetime *(number | keyword)*
Tree	preferred-lifetime
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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valid-lifetime *(number | keyword)*

Synopsis	Time for a prefix to remain valid
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements prefix-options valid-lifetime *(number | keyword)*
Tree	valid-lifetime
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-solicit

Synopsis	Enter the **router-solicit** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 router-solicit
Tree	router-solicit
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of router-solicit authentication
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 router-solicit admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

inactivity-timer *(number | keyword)*

Synopsis	Time before an inactive host is removed

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 router-solicit inactivity-timer *(number | keyword)*
Tree	inactivity-timer
Range	1 to 31536000
Units	seconds
Options	infinite
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-auth-interval *number*

Synopsis	Minimum time between successive authentication attempts
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 router-solicit min-auth-interval *number*
Tree	min-auth-interval
Range	1 to 360000
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

Synopsis	Local user database used for authentication
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 router-solicit user-db *reference*
Tree	user-db
Reference	**configure** subscriber-mgmt local-user-db *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

urpf-check

Synopsis	Enable the **urpf-check** context

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 urpf-check
Tree	urpf-check
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mode *keyword*

Synopsis	Unicast RPF check mode
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* ipv6 urpf-check mode *keyword*
Tree	mode
Options	strict, loose, strict-no-ecmp
Default	strict
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-address-assignment

Synopsis	Enter the **local-address-assignment** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* local-address-assignment
Tree	local-address-assignment
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of Local Address Assignment
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* local-address-assignment admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* local-address-assignment ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the **client-applications** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* local-address-assignment ipv4 client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe *boolean*

Synopsis	Request local addresses for non-DHCP/managed IPoE hosts
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* local-address-assignment ipv4 client-applications ipoe *boolean*
Tree	ipoe
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp *boolean*

Synopsis	Request local addresses for PPP IPCP hosts
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* local-address-assignment ipv4 client-applications ppp *boolean*
Tree	ppp
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-pool *string*

Synopsis	Default pools
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* local-address-assignment ipv4 default-pool *string*
Tree	default-pool
String Length	1 to 32
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *reference*

Synopsis	Local DHCPv4 server for local pools management
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* local-address-assignment ipv4 server *reference*
Tree	server
Reference	**configure** router *string* dhcp-server dhcpv4 *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* local-address-assignment ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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client-applications

Synopsis	Enter the **client-applications** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* local-address-assignment ipv6 client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-slaac *boolean*

Synopsis	Request local addresses for IPoE SLAAC hosts
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* local-address-assignment ipv6 client-applications ipoe-slaac *boolean*
Tree	ipoe-slaac
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-wan *boolean*

Synopsis	Request local addresses for IPoE IA NA hosts
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* local-address-assignment ipv6 client-applications ipoe-wan *boolean*
Tree	ipoe-wan
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-slaac *boolean*

Synopsis	Request local addresses for PPP SLAAC hosts
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* local-address-assignment ipv6 client-applications ppp-slaac *boolean*
Tree	ppp-slaac
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *reference*

Synopsis	Local DHCPv6 server for local pools management
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* local-address-assignment ipv6 server *reference*
Tree	server
Reference	**configure** router *string* dhcp-server dhcpv6 *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *string*

Synopsis	MAC address for the interface
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* mac *string*
Tree	mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nasreq-auth-policy *reference*

Synopsis	Diameter NASREQ application policy to use for authentication
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* nasreq-auth-policy *reference*
Tree	nasreq-auth-policy
Reference	**configure** subscriber-mgmt diameter-nasreq-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

oper-up-while-empty *boolean*

Synopsis	Enable this group interface without any active SAPs
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* oper-up-while-empty *boolean*
Tree	oper-up-while-empty

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Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe

Synopsis	Enter the **pppoe** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* pppoe
Tree	pppoe
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of PPPoE
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* pppoe admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

anti-spoof *keyword*

Synopsis	PPPoE anti-spoof filtering
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* pppoe anti-spoof *keyword*
Tree	anti-spoof
Options	mac-sid, mac-sid-ip
Default	mac-sid
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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description *string*

Synopsis	Text description
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* pppoe description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp-client

Synopsis	Enter the **dhcp-client** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* pppoe dhcp-client
Tree	dhcp-client
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-id *keyword*

Synopsis	Type of information that DHCP option 61 contains
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* pppoe dhcp-client client-id *keyword*
Tree	client-id
Options	mac-pppoe-session-id
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	PPPoE policy
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* pppoe policy *reference*
Tree	policy
Reference	**configure** subscriber-mgmt ppp-policy *string*
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy used to modify PPPoE packets
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* pppoe python-policy *reference*
Tree	python-policy
Reference	**configure** python python-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-session-limit *number*

Synopsis	Maximum PPPoE sessions per SAP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* pppoe sap-session-limit *number*
Tree	sap-session-limit
Range	1 to 131071
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *number*

Synopsis	Maximum PPPoE sessions
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* pppoe session-limit *number*
Tree	session-limit
Range	1 to 333823
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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user-db *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local user database for authentication
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* pppoe user-db *reference*
Tree	user-db
Reference	**configure** subscriber-mgmt local-user-db *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-auth-policy *reference*

Synopsis	RADIUS authentication policy
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* radius-auth-policy *reference*
Tree	radius-auth-policy
Reference	**configure** subscriber-mgmt radius-authentication-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

redundant-interface *reference*

Synopsis	Redundant interface
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* redundant-interface *reference*
Tree	redundant-interface
Reference	**configure** service ies *string* redundant-interface *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap [sap-id] *string*

Synopsis	Enter the **sap** list instance

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string*
Tree	sap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**sap-id**] *string*

Synopsis	SAP ID
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string*
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	Accounting policy
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the SAP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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anti-spoof *keyword*

Synopsis	Type of anti-spoof filtering
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* anti-spoof *keyword*
Tree	anti-spoof
Options	source-ip-addr, source-ip-and-mac-addr, next-hop-ip-and-mac-addr
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Application profile name
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

calling-station-id *string*

Synopsis	Calling station ID
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* calling-station-id *string*
Tree	calling-station-id
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Collect accounting statistics
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* collect-stats *boolean*
Tree	collect-stats

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Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cpu-protection

Synopsis	Enter the **cpu-protection** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* cpu-protection
Tree	cpu-protection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

eth-cfm-monitoring

Synopsis	Enable the **eth-cfm-monitoring** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* cpu-protection eth-cfm-monitoring
Tree	eth-cfm-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

aggregate

Synopsis	Apply rate limit to the sum of the per peer packet rates
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* cpu-protection eth-cfm-monitoring aggregate
Tree	aggregate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

car

Synopsis	Ignore Ethernet CFM packets when enforcing overall rate

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* cpu-protection eth-cfm-monitoring car
Tree	car
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

ip-src-monitoring

Synopsis	Enable IP source monitoring for CPU protection
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* cpu-protection ip-src-monitoring
Tree	ip-src-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* cpu-protection mac-monitoring
Tree	mac-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

policy-id *reference*

Synopsis	CPM protection policy
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* cpu-protection policy-id *reference*
Tree	policy-id
Reference	**configure** system security cpu-protection policy *number*
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

default-host

Synopsis	Enter the **default-host** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* default-host
Tree	default-host
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ipv4 [address] *reference* prefix-length *number*

Synopsis	Enter the **ipv4** list instance
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* default-host ipv4 *reference* prefix-length *number*
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

[**address**] *reference*

Synopsis	IPv4 default host address
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* default-host ipv4 *reference* prefix-length *number*
Tree	ipv4
Reference	**configure** service ies *string* subscriber-interface *string* ipv4 address *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* default-host ipv4 *reference* prefix-length *number*

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Tree	ipv4
Range	0 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

next-hop *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Next hop IP address
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* default-host ipv4 *reference* prefix-length *number* next-hop *string*
Tree	next-hop
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ipv6 [address] *string* prefix-length *number*

Synopsis	Enter the **ipv6** list instance
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* default-host ipv6 *string* prefix-length *number*
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

[**address**] *string*

Synopsis	IPv6 default host address
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* default-host ipv6 *string* prefix-length *number*
Tree	ipv6
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

prefix-length *number*

Synopsis	IPv6 address prefix length
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* default-host ipv6 *string* prefix-length *number*
Tree	ipv6
Range	0 to 128
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

next-hop *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Next hop IP address
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* default-host ipv6 *string* prefix-length *number* next-hop *string*
Tree	next-hop
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

description *string*

Synopsis	Text description
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* description *string*
Tree	description
String Length	1 to 160
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dist-cpu-protection *reference*

Synopsis	Distributed CPU protection policy for SAP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* dist-cpu-protection *reference*
Tree	dist-cpu-protection
Reference	**configure** system security dist-cpu-protection policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the **egress** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* egress
Tree	egress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

agg-rate

Synopsis	Enter the **agg-rate** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* egress agg-rate
Tree	agg-rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

adaptation-rule *keyword*

Synopsis	Adaptation rule to compute the operational PIR value when an aggregate shaper is used
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* egress agg-rate adaptation-rule *keyword*
Tree	adaptation-rule

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Options	max, min, closest
Default	closest
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

burst-limit *(number | keyword)*

Synopsis	Shaping burst size when an aggregate shaper is used
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* egress agg-rate burst-limit *(number | keyword)*
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

limit-unused-bandwidth *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* egress agg-rate limit-unused-bandwidth *boolean*
Tree	limit-unused-bandwidth
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

queue-frame-based-accounting *boolean*

Synopsis	Enable frame based accounting on policers and queues
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* egress agg-rate queue-frame-based-accounting *boolean*
Tree	queue-frame-based-accounting
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate *number*

Synopsis	Enforced aggregate rate for all queues
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* egress agg-rate rate *number*
Tree	rate
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis	Enter the **filter** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* egress filter
Tree	filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* egress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6 *reference*

Synopsis	IPv6 filter policy name

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* egress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the **qos** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* egress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer-control-policy

Synopsis	Enter the **policer-control-policy** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* egress qos policer-control-policy
Tree	policer-control-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* egress qos policer-control-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos policer-control-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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qinq-mark-top-only *boolean*

Synopsis	Mark top Q-tags
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* egress qos qinq-mark-top-only *boolean*
Tree	qinq-mark-top-only
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-egress

Synopsis	Enter the **sap-egress** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* egress qos sap-egress
Tree	sap-egress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* egress qos sap-egress policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-egress *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler-policy

Synopsis	Enter the **scheduler-policy** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* egress qos scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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policy-name *reference*

Synopsis	Scheduler policy name
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* egress qos scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos scheduler-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

eth-cfm

Synopsis	Enter the **eth-cfm** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm
Tree	eth-cfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

collect-lmm-fc-stats

Synopsis	Enter the **collect-lmm-fc-stats** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm collect-lmm-fc-stats
Tree	collect-lmm-fc-stats
Description	Commands in this context configure per forwarding class (FC) LMM information collection. The commands **fc-in-profile** and **fc** in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively. This command and the **collect-lmm-stats** command are mutually exclusive when there is entity resource contention.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

fc *keyword*

Synopsis	Forwarding class name for profile-unaware counter

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm collect-lmm-fc-stats fc *keyword*
Tree	fc
Description	This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter. An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the **fc-in-profile** command under the **collect-lmm-fc-stats** context. When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

fc-in-profile *keyword*

Synopsis	Forwarding class name for profile-aware counter
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm collect-lmm-fc-stats fc-in-profile *keyword*
Tree	fc-in-profile
Description	This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter. An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the **fc** command under the **collect-lmm-fc-stats** context. When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

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collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm collect-lmm-stats *boolean*
Tree	collect-lmm-stats
Description	When configured to **true**, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings. The **show eth-cfm collect-lmm-stats** command displays entities that have been enabled to collect transit and receive counters. When configured to **false**, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*

Synopsis	Enter the **mep** list instance
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

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ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string* association *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ais *boolean*

Synopsis	Enable the generation and the reception of AIS messages

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais *boolean*
Tree	ais
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

alarm-notification

Synopsis	Enter the **alarm-notification** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification
Tree	alarm-notification
Description	Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm. Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-alarm-time *number*
Tree	fng-alarm-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-reset-time *number*
Tree	fng-reset-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ccm *boolean*

Synopsis	Generate CCM messages
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm *boolean*
Tree	ccm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-ltm-priority *number*
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-padding-size *number*

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Tree	ccm-padding-size
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU. This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through **configure eth-cfm domain association ccm-interval)** is less than 1 second.
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

csf

Synopsis	Enable the **csf** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* csf
Tree	csf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* csf multiplier *decimal-number*
Tree	multiplier
Range	0.0 | 2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

description *string*

Synopsis	Text description

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

eth-test

Synopsis	Enable the **eth-test** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the **oam eth-cfm eth-test** command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test bit-error-threshold *number*
Tree	bit-error-threshold
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

test-pattern

Synopsis	Enter the **test-pattern** context

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern crc-tlv *boolean*
Tree	crc-tlv
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern pattern *keyword*
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

fault-propagation *keyword*

Synopsis	Fault propagation for the MEP

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* fault-propagation *keyword*
Tree	fault-propagation
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

grace

Synopsis	Enter the **grace** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

eth-ed

Synopsis	Enter the **eth-ed** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed max-rx-defect-window *number*
Tree	max-rx-defect-window

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Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed priority *number*
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed rx-eth-ed *boolean*
Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed tx-eth-ed *boolean*
Tree	tx-eth-ed
Default	false

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

eth-vsm-grace

Synopsis	Enter the **eth-vsm-grace** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace rx-eth-vsm-grace *boolean*
Tree	rx-eth-vsm-grace
Description	When configured to **true**, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to **false**, the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace tx-eth-vsm-grace *boolean*
Tree	tx-eth-vsm-grace
Description	When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.

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The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* low-priority-defect *keyword*
Tree	low-priority-defect
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* one-way-delay-threshold *number*
Tree	one-way-delay-threshold
Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

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squelch-ingress-levels *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm squelch-ingress-levels *number*
Tree	squelch-ingress-levels
Description	This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option. The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.
Range	0 to 7
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

fwd-wholesale

Synopsis	Enter the **fwd-wholesale** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* fwd-wholesale
Tree	fwd-wholesale
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe-service *reference*

Synopsis	PPPoE service name
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* fwd-wholesale pppoe-service *reference*
Tree	pppoe-service
Reference	**configure** service epipe *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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host-admin-state *keyword*

Synopsis	Administrative state of the hosts
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* host-admin-state *keyword*
Tree	host-admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-lockout-policy *reference*

Synopsis	Host lockout policy
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* host-lockout-policy *reference*
Tree	host-lockout-policy
Reference	**configure** subscriber-mgmt host-lockout-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

igmp-host-tracking

Synopsis	Enter the **igmp-host-tracking** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* igmp-host-tracking
Tree	igmp-host-tracking
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

expiry-time *number*

Synopsis	Time that the system continues to track inactive hosts
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* igmp-host-tracking expiry-time *number*
Tree	expiry-time

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Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* igmp-host-tracking import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis	Maximum number of multicast groups to track per group
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* igmp-host-tracking maximum-number-group-sources *number*
Tree	maximum-number-group-sources
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of multicast groups to be tracked
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* igmp-host-tracking maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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maximum-number-sources *number*

Synopsis	Maximum number of multicast sources to be tracked
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* igmp-host-tracking maximum-number-sources *number*
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis	Enable IGMP router alert check option
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* igmp-host-tracking router-alert-check *boolean*
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* ingress
Tree	ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis	Enter the **filter** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* ingress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* ingress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the **qos** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match-qinq-dot1p *keyword*

Synopsis	Ingress match QinQ Dot1p
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* ingress qos match-qinq-dot1p *keyword*
Tree	match-qinq-dot1p
Options	top, bottom

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer-control-policy

Synopsis	Enter the **policer-control-policy** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* ingress qos policer-control-policy
Tree	policer-control-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* ingress qos policer-control-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos policer-control-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap-ingress

Synopsis	Enter the **sap-ingress** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* ingress qos sap-ingress
Tree	sap-ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Policy ID
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* ingress qos sap-ingress policy-name *reference*

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Tree	policy-name
Reference	**configure** qos sap-ingress *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

queuing-type *keyword*

Synopsis	Queuing type
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* ingress qos sap-ingress queuing-type *keyword*
Tree	queuing-type
Options	shared, multipoint-shared
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR

scheduler-policy

Synopsis	Enter the **scheduler-policy** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* ingress qos scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Scheduler policy name
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* ingress qos scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos scheduler-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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lag

Synopsis	Enter the **lag** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* lag
Tree	lag
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

link-map-profile *number*

Synopsis	LAG link map profile for a SAP or network interface
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* lag link-map-profile *number*
Tree	link-map-profile
Description	This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration. If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.
Range	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

per-link-hash

Synopsis	Enter the **per-link-hash** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* lag per-link-hash
Tree	per-link-hash
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

class *number*

Synopsis	Class used on LAG egress using weighted per-link-hash

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* lag per-link-hash class *number*
Tree	class
Range	1 to 3
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

weight *number*

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* lag per-link-hash weight *number*
Tree	weight
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

monitor-oper-group *reference*

Synopsis	Monitor operational group
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* monitor-oper-group *reference*
Tree	monitor-oper-group
Reference	**configure** service oper-group *string*
Notes	The following elements are part of a choice: **monitor-oper-group** or **oper-group**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

multi-service-site *reference*

Synopsis	Multi service site name
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* multi-service-site *reference*
Tree	multi-service-site

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Reference	**configure** service customer *string* multi-service-site *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

oper-group *reference*

Synopsis	Operational group
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* oper-group *reference*
Tree	oper-group
Reference	**configure** service oper-group *string*
Notes	The following elements are part of a choice: **monitor-oper-group** or **oper-group**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

static-host

Synopsis	Enter the **static-host** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host
Tree	static-host
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4 [ip] *string* mac *string*

Synopsis	Enter the **ipv4** list instance
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string*
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**ip**] *string*

Synopsis	IPv4 address used by the static host

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string*
Tree	ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *string*

Synopsis	MAC address used by the static host
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string*
Tree	ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the static host
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-string *string*

Synopsis	ANCP string
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* ancp-string *string*
Tree	ancp-string
String Length	1 to 63
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile

Synopsis	Enter the **app-profile** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* app-profile
Tree	app-profile
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

profile *reference*

Synopsis	Application profile used by the static host
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* app-profile profile *reference*
Tree	profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

scope *keyword*

Synopsis	Scope of the static host application profile
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* app-profile scope *keyword*
Tree	scope
Options	subscriber, mac
Default	subscriber
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

int-dest-id *string*

Synopsis	Intermediate destination ID

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* int-dest-id *string*
Tree	int-dest-id
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

managed-route [prefix] *string*

Synopsis	Enter the **managed-route** list instance
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string*
Tree	managed-route
Description	Commands in this context configure managed route parameters.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**prefix**] *string*

Synopsis	Managed route prefix associated with IPv4 static host
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string*
Tree	managed-route
Description	This command configures the managed route prefix. The prefix length must be in the range of 1 to 32.
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cpe-check

Synopsis	Enable the **cpe-check** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* cpe-check
Tree	cpe-check
Introduced	22.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destination-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the target CPE device
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* cpe-check destination-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	destination-ip-address
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* cpe-check drop-count *number*
Tree	drop-count
Range	1 to 255
Default	3
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failed-action

Synopsis	Enter the **failed-action** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* cpe-check failed-action
Tree	failed-action
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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metric *number*

Synopsis	Metric associated with the provisioned managed route
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* cpe-check failed-action metric *number*
Tree	metric
Max. Range	0 to 4294967295
Default	0
Notes	The following elements are part of a choice: (**metric**, **preference**, and **tag**) or **withdraw**.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference *number*

Synopsis	Preference associated to the provisioned managed route
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* cpe-check failed-action preference *number*
Tree	preference
Range	0 to 255
Notes	The following elements are part of a choice: (**metric**, **preference**, and **tag**) or **withdraw**.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tag *number*

Synopsis	Route tag used if CPE check fails
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* cpe-check failed-action tag *number*
Tree	tag
Max. Range	0 to 4294967295
Default	0
Notes	The following elements are part of a choice: (**metric**, **preference**, and **tag**) or **withdraw**.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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withdraw *boolean*

Synopsis	Withdraw the route when the CPE check fails
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* cpe-check failed-action withdraw *boolean*
Tree	withdraw
Default	false
Notes	The following elements are part of a choice: (**metric**, **preference**, and **tag**) or **withdraw**.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Interval between ICMP pings to target CPE IP address
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* cpe-check interval *number*
Tree	interval
Range	1 to 255
Units	seconds
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* cpe-check log *boolean*
Tree	log
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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padding-size *number*

Synopsis	Padding size for CPE connectivity checks
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* cpe-check padding-size *number*
Tree	padding-size
Range	0 to 16384
Units	bytes
Default	56
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source IP address used in the ICMP messages
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* cpe-check source-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-ip-address
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Time interval determining that a ping is missed
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* cpe-check timeout *number*
Tree	timeout
Range	1 to 10
Units	seconds
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

metric *number*

Synopsis	Metric associated with the managed route

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* metric *number*
Tree	metric
Max. Range	0 to 4294967295
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference *number*

Synopsis	Preference associated with the managed route
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* preference *number*
Tree	preference
Range	0 to 255
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tag *number*

Synopsis	Route tag associated with the managed route
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* tag *number*
Tree	tag
Max. Range	0 to 4294967295
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rip-policy *reference*

Synopsis	RIP policy name
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* rip-policy *reference*
Tree	rip-policy

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Reference	**configure** subscriber-mgmt rip-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv

Synopsis	Enter the **shcv** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* shcv
Tree	shcv
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	SLA profile name
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* sla-profile *reference*
Tree	sla-profile
Reference	**configure** subscriber-mgmt sla-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Sub-profile name
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* sub-profile *reference*
Tree	sub-profile
Reference	**configure** subscriber-mgmt sub-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id

Synopsis	Enter the **subscriber-id** context

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* subscriber-id
Tree	subscriber-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Subscriber identification
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* subscriber-id string *string*
Tree	string
String Length	1 to 64
Notes	The following elements are part of a choice: **string** or **use-sap-id**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-sap-id

Synopsis	Use the SAP id as subscriber ID
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* subscriber-id use-sap-id
Tree	use-sap-id
Notes	The following elements are part of a choice: **string** or **use-sap-id**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6 [prefix] *string* mac *string*

Synopsis	Enter the **ipv6** list instance
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string*
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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[**prefix**] *string*

Synopsis	IPv6 prefix
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string*
Tree	ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *string*

Synopsis	MAC address
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string*
Tree	ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the static host
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-string *string*

Synopsis	ANCP string
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* ancp-string *string*

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Tree	ancp-string
String Length	1 to 63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile

Synopsis	Enter the **app-profile** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* app-profile
Tree	app-profile
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

profile *reference*

Synopsis	Application profile used by the static host
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* app-profile profile *reference*
Tree	profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

scope *keyword*

Synopsis	Scope of the static host application profile
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* app-profile scope *keyword*
Tree	scope
Options	subscriber, mac
Default	subscriber
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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int-dest-id *string*

Synopsis	Intermediate destination ID
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* int-dest-id *string*
Tree	int-dest-id
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-linking *string*

Synopsis	IPv6 host linked with IPv4 host via learned MAC address
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* mac-linking *string*
Tree	mac-linking
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

managed-route [ipv6-prefix] *string*

Synopsis	Enter the **managed-route** list instance
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string*
Tree	managed-route
Description	Commands in this context configure managed route parameters.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**ipv6-prefix**] *string*

Synopsis	Managed route prefix associated with IPv6 static host
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string*
Tree	managed-route
Description	This command configures the managed route prefix. The prefix length must be in the range of 1 to 128.

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Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cpe-check

Synopsis	Enable the **cpe-check** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* cpe-check
Tree	cpe-check
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destination-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the target CPE device
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* cpe-check destination-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	destination-ip-address
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* cpe-check drop-count *number*
Tree	drop-count
Range	1 to 255
Default	3
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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failed-action

Synopsis	Enter the **failed-action** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* cpe-check failed-action
Tree	failed-action
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

metric *number*

Synopsis	Metric associated with the provisioned managed route
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* cpe-check failed-action metric *number*
Tree	metric
Max. Range	0 to 4294967295
Default	0
Notes	The following elements are part of a choice: (**metric**, **preference**, and **tag**) or **withdraw**.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference *number*

Synopsis	Preference associated to the provisioned managed route
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* cpe-check failed-action preference *number*
Tree	preference
Range	0 to 255
Notes	The following elements are part of a choice: (**metric**, **preference**, and **tag**) or **withdraw**.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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tag *number*

Synopsis	Route tag used if CPE check fails
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* cpe-check failed-action tag *number*
Tree	tag
Max. Range	0 to 4294967295
Default	0
Notes	The following elements are part of a choice: (**metric**, **preference**, and **tag**) or **withdraw**.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

withdraw *boolean*

Synopsis	Withdraw the route when the CPE check fails
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* cpe-check failed-action withdraw *boolean*
Tree	withdraw
Default	false
Notes	The following elements are part of a choice: (**metric**, **preference**, and **tag**) or **withdraw**.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Interval between ICMP pings to target CPE IP address
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* cpe-check interval *number*
Tree	interval
Range	1 to 255
Units	seconds
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* cpe-check log *boolean*
Tree	log
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

padding-size *number*

Synopsis	Padding size for CPE connectivity checks
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* cpe-check padding-size *number*
Tree	padding-size
Range	0 to 16384
Units	bytes
Default	56
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source IP address used in the ICMP messages
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* cpe-check source-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-ip-address
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Time interval determining that a ping is missed
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* cpe-check timeout *number*

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Tree	timeout
Range	1 to 10
Units	seconds
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

metric *number*

Synopsis	Metric associated with the managed route
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* metric *number*
Tree	metric
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference *number*

Synopsis	Preference associated with the managed route
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* preference *number*
Tree	preference
Range	0 to 255
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tag *number*

Synopsis	Route tag associated with the managed route
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* tag *number*
Tree	tag
Max. Range	0 to 4294967295

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Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retail-svc-id *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Retail service ID
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* retail-svc-id *number*
Tree	retail-svc-id
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv

Synopsis	Enter the **shcv** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* shcv
Tree	shcv
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	SLA profile name
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* sla-profile *reference*
Tree	sla-profile
Reference	**configure** subscriber-mgmt sla-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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sub-profile *reference*

Synopsis	Sub-profile name
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* sub-profile *reference*
Tree	sub-profile
Reference	**configure** subscriber-mgmt sub-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id

Synopsis	Enter the **subscriber-id** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* subscriber-id
Tree	subscriber-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Subscriber identification
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* subscriber-id string *string*
Tree	string
String Length	1 to 64
Notes	The following elements are part of a choice: **string** or **use-sap-id**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-sap-id

Synopsis	Use the SAP id as subscriber ID
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* subscriber-id use-sap-id
Tree	use-sap-id

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Notes	The following elements are part of a choice: **string** or **use-sap-id**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-learning

Synopsis	Enter the **mac-learning** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host mac-learning
Tree	mac-learning
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

data-triggered *boolean*

Synopsis	Enable learning of MAC addresses from data packets
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host mac-learning data-triggered *boolean*
Tree	data-triggered
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

single-mac *boolean*

Synopsis	Enforce single MAC address and subscriber for the SAP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* static-host mac-learning single-mac *boolean*
Tree	single-mac
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-sla-mgmt

Synopsis	Enter the **sub-sla-mgmt** context

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt
Tree	sub-sla-mgmt
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of SAP subscriber management
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

defaults

Synopsis	Enter the **defaults** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt defaults
Tree	defaults
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Default application profile name for this SAP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt defaults app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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int-dest-id

Synopsis	Enter the **int-dest-id** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt defaults int-dest-id
Tree	int-dest-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Use the configured string
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt defaults int-dest-id string *string*
Tree	string
String Length	1 to 32
Notes	The following elements are part of a choice: **string** or **top-q-tag**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

top-q-tag

Synopsis	Use the top Q-tag of this SAP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt defaults int-dest-id top-q-tag
Tree	top-q-tag
Notes	The following elements are part of a choice: **string** or **top-q-tag**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	Default SLA profile for hosts on this SAP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt defaults sla-profile *reference*
Tree	sla-profile
Reference	**configure** subscriber-mgmt sla-profile *string*

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Default subscriber profile for the SAP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt defaults sub-profile *reference*
Tree	sub-profile
Reference	**configure** subscriber-mgmt sub-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id

Synopsis	Enter the **subscriber-id** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt defaults subscriber-id
Tree	subscriber-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-id

Synopsis	Use auto-generated subscriber identification string
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt defaults subscriber-id auto-id
Tree	auto-id
Notes	The following elements are part of a choice: **auto-id**, **sap-id**, or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id

Synopsis	Use SAP ID as default subscriber identification string

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt defaults subscriber-id sap-id
Tree	sap-id
Notes	The following elements are part of a choice: **auto-id**, **sap-id**, or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Default subscriber identification string for the SAP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt defaults subscriber-id string *string*
Tree	string
String Length	1 to 64
Notes	The following elements are part of a choice: **auto-id**, **sap-id**, or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

single-sub-parameters

Synopsis	Enter the **single-sub-parameters** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt single-sub-parameters
Tree	single-sub-parameters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

non-sub-traffic

Synopsis	Enable the **non-sub-traffic** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt single-sub-parameters non-sub-traffic
Tree	non-sub-traffic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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app-profile *reference*

Synopsis	Application profile name for all non-subscriber traffic
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt single-sub-parameters non-sub-traffic app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	SLA profile applicable for all non-subscriber traffic
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt single-sub-parameters non-sub-traffic sla-profile *reference*
Tree	sla-profile
Reference	**configure** subscriber-mgmt sla-profile *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Subscriber profile all non-subscriber traffic
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt single-sub-parameters non-sub-traffic sub-profile *reference*
Tree	sub-profile
Reference	**configure** subscriber-mgmt sub-profile *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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subscriber-id *string*

WARNING:
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Synopsis	Subscriber ID applied for all non-subscriber traffic
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt single-sub-parameters non-sub-traffic subscriber-id *string*
Tree	subscriber-id
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

profiled-traffic-only *boolean*

Synopsis	Include all traffic in subscriber profile
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt single-sub-parameters profiled-traffic-only *boolean*
Tree	profiled-traffic-only
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-ident-policy *reference*

Synopsis	Subscriber identification policy used on this SAP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt sub-ident-policy *reference*
Tree	sub-ident-policy
Reference	**configure** subscriber-mgmt sub-ident-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-limit *(keyword | number)*

Synopsis	Maximum number of subscribers on this SAP

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt subscriber-limit *(keyword | number)*
Tree	subscriber-limit
Range	1 to 131071
Options	no-limit
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-parameters

Synopsis	Enter the **sap-parameters** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap-parameters
Tree	sap-parameters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

anti-spoof *keyword*

Synopsis	Anti-spoof type of the SAP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap-parameters anti-spoof *keyword*
Tree	anti-spoof
Options	ip-mac, nh-mac
Default	ip-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap-parameters description *string*
Tree	description
String Length	1 to 80

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-sla-mgmt

Synopsis	Enter the **sub-sla-mgmt** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap-parameters sub-sla-mgmt
Tree	sub-sla-mgmt
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

defaults

Synopsis	Enter the **defaults** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap-parameters sub-sla-mgmt defaults
Tree	defaults
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Default application profile name
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap-parameters sub-sla-mgmt defaults app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	Default SLA profile
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap-parameters sub-sla-mgmt defaults sla-profile *reference*

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Tree	sla-profile
Reference	**configure** subscriber-mgmt sla-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Default subscriber profile
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap-parameters sub-sla-mgmt defaults sub-profile *reference*
Tree	sub-profile
Reference	**configure** subscriber-mgmt sub-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id

Synopsis	Enter the **subscriber-id** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap-parameters sub-sla-mgmt defaults subscriber-id
Tree	subscriber-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-id

Synopsis	Subscriber ID that is autogenerated
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap-parameters sub-sla-mgmt defaults subscriber-id auto-id
Tree	auto-id
Notes	The following elements are part of a choice: **auto-id** or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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string *string*

Synopsis	String to be used as default subscriber ID
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap-parameters sub-sla-mgmt defaults subscriber-id string *string*
Tree	string
String Length	1 to 64
Notes	The following elements are part of a choice: **auto-id** or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-ident-policy *reference*

Synopsis	Subscriber identification policy
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap-parameters sub-sla-mgmt sub-ident-policy *reference*
Tree	sub-ident-policy
Reference	**configure** subscriber-mgmt sub-ident-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv-policy *reference*

Synopsis	SHCV policy for IPv4 and IPv6 subscriber hosts
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* shcv-policy *reference*
Tree	shcv-policy
Reference	**configure** subscriber-mgmt shcv-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv-policy-ipv4 *reference*

Synopsis	SHCV for IPv4 subscriber hosts
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* shcv-policy-ipv4 *reference*
Tree	shcv-policy-ipv4

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Reference	**configure** subscriber-mgmt shcv-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv-policy-ipv6 *reference*

Synopsis	SHCV for IPv6 subscriber hosts
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* shcv-policy-ipv6 *reference*
Tree	shcv-policy-ipv6
Reference	**configure** subscriber-mgmt shcv-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

srrp [srrp-id] *number*

Synopsis	Enter the **srrp** list instance
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* srrp *number*
Tree	srrp
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**srrp-id**] *number*

Synopsis	SRRP instance ID
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* srrp *number*
Tree	srrp
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of SRRP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* srrp *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bfd-liveness

Synopsis	Enable the **bfd-liveness** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* srrp *number* bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dest-ip *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination IPv4 prefix
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* srrp *number* bfd-liveness dest-ip *string*
Tree	dest-ip
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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interface-name *string*

WARNING:
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Synopsis	Name of the interface running BFD
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* srrp *number* bfd-liveness interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-name *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* srrp *number* bfd-liveness service-name *string*
Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* srrp *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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gw-mac *string*

Synopsis	Gateway MAC address
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* srrp *number* gw-mac *string*
Tree	gw-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

keep-alive-interval *number*

Synopsis	Interval between SRRP advertisements
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* srrp *number* keep-alive-interval *number*
Tree	keep-alive-interval
Range	1 to 100
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

message-path *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SAP to use as the SRRP message path
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* srrp *number* message-path *reference*
Tree	message-path
Reference	**configure** service ies *string* subscriber-interface *string* group-interface *string* sap *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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monitor-oper-group

Synopsis	Enter the **monitor-oper-group** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* srrp *number* monitor-oper-group
Tree	monitor-oper-group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-name *reference*

Synopsis	Operational group name
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* srrp *number* monitor-oper-group group-name *reference*
Tree	group-name
Reference	**configure** service oper-group *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

priority-step *number*

Synopsis	Step value to change priority of SRRP instance
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* srrp *number* monitor-oper-group priority-step *number*
Tree	priority-step
Range	1 to 10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

one-garp-per-sap *boolean*

Synopsis	Send one gratuitous ARP to each SAP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* srrp *number* one-garp-per-sap *boolean*
Tree	one-garp-per-sap
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	VRRP priority control policy associated with the SRRP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* srrp *number* policy *reference*
Tree	policy
Reference	**configure** vrrp policy *number*
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preempt *boolean*

Synopsis	Allow the SRRP instance to override an existing master
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* srrp *number* preempt *boolean*
Tree	preempt
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

priority *number*

Synopsis	Priority for this interface at this level
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* srrp *number* priority *number*
Tree	priority
Range	1 to 254
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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send-fib-population-packets *keyword*

Synopsis	Mode used to send FIB population packets on switchover
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* srrp *number* send-fib-population-packets *keyword*
Tree	send-fib-population-packets
Options	all, outer-tag-only
Default	all
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suppress-aa-sub *boolean*

Synopsis	Enable application assurance suppression for ESM subscribers
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* suppress-aa-sub *boolean*
Tree	suppress-aa-sub
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tos-marking-state *keyword*

Synopsis	TOS marking state
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* tos-marking-state *keyword*
Tree	tos-marking-state
Options	trusted, untrusted
Default	untrusted
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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type *keyword*

WARNING:
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Synopsis	Group interface type
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* type *keyword*
Tree	type
Options	plain, lns, wlan-gw, gtp, bonding
Default	plain
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wlan-gw

Synopsis	Enter the **wlan-gw** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw
Tree	wlan-gw
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of WLAN Gateway
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

gateway-address [address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **gateway-address** list instance

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw gateway-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	gateway-address
Max. Instances	10
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Gateway endpoint address of the WLAN Gateway tunnel
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw gateway-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	gateway-address
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

purpose

Synopsis	Enter the **purpose** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw gateway-address *(ipv4-address-no-zone | ipv6-address-no-zone)* purpose
Tree	purpose
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect *boolean*

Synopsis	Use tunnel IP address for crosse-connect traffic
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw gateway-address *(ipv4-address-no-zone | ipv6-address-no-zone)* purpose xconnect *boolean*
Tree	xconnect
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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gateway-router *string*

WARNING:
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Synopsis	Routing instance the WLAN-GW endpoint resides in
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw gateway-router *string*
Tree	gateway-router
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

group-encryption

Synopsis	Enter the **group-encryption** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw group-encryption
Tree	group-encryption
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

encryption-keygroup-inbound *reference*

Synopsis	Encryption keygroup for inbound traffic
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw group-encryption encryption-keygroup-inbound *reference*
Tree	encryption-keygroup-inbound
Reference	**configure** group-encryption encryption-keygroup *number*
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

encryption-keygroup-outbound *reference*

Synopsis	Encryption keygroup for inbound traffic
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw group-encryption encryption-keygroup-outbound *reference*

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Tree	encryption-keygroup-outbound
Reference	**configure** group-encryption encryption-keygroup *number*
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2-ap

Synopsis	Enter the **l2-ap** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw l2-ap
Tree	l2-ap
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

access-point [sap-id] *string*

Synopsis	Enter the **access-point** list instance
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw l2-ap access-point *string*
Tree	access-point
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**sap-id**] *string*

Synopsis	SAP ID for the Layer 2 access point
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw l2-ap access-point *string*
Tree	access-point
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of the L2 access points
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw l2-ap access-point *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

encap-type *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Service encapsulation type of this access point
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw l2-ap access-point *string* encap-type *keyword*
Tree	encap-type
Options	null, dot1q, qinq
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

epipe-sap-template *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Parameters template for the L2 access point SAP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw l2-ap access-point *string* epipe-sap-template *reference*
Tree	epipe-sap-template
Reference	**configure** service template epipe-sap-template *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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auto-sub-id-fmt *keyword*

Synopsis	Format of the auto-generated subscriber ID
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw l2-ap auto-sub-id-fmt *keyword*
Tree	auto-sub-id-fmt
Options	include-ap-tags, sap-only
Default	include-ap-tags
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-encap-type *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default encapsulation type for Layer 2 access points
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw l2-ap default-encap-type *keyword*
Tree	default-encap-type
Options	null, dot1q, qinq
Default	null
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lanext

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **lanext** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw lanext
Tree	lanext
Introduced	16.0.R1

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Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-bd *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of bridge domains
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw lanext max-bd *number*
Tree	max-bd
Range	1 to 131071
Default	131071
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

learn-ap-mac

Synopsis	Enable the **learn-ap-mac** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw learn-ap-mac
Tree	learn-ap-mac
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

delay-auth *boolean*

Synopsis	Delay AP-MAC until after ARP/ND authentication response
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw learn-ap-mac delay-auth *boolean*
Tree	delay-auth
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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mobility

Synopsis	Enter the **mobility** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw mobility
Tree	mobility
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-time *number*

Synopsis	Minimum time between two mobility events for single UE
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw mobility hold-time *number*
Tree	hold-time
Range	0 to 255
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

inter-tunnel-type *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable mobility between terminating tunnel types
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw mobility inter-tunnel-type *boolean*
Tree	inter-tunnel-type
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

inter-vlan *boolean*

Synopsis	Allow mobility within different VLANs of the same range

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw mobility inter-vlan *boolean*
Tree	inter-vlan
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

trigger

Synopsis	Enter the **trigger** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw mobility trigger
Tree	trigger
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

control *boolean*

Synopsis	Use control traffic as a mobility trigger
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw mobility trigger control *boolean*
Tree	control
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

data *boolean*

Synopsis	Use data traffic as mobility trigger
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw mobility trigger data *boolean*
Tree	data
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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iapp *boolean*

Synopsis	Use IAPP messages as a mobility trigger
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw mobility trigger iapp *boolean*
Tree	iapp
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

oper-down-on-group-degrade *boolean*

Synopsis	Bring interface down when the ISA WLAN Gateway degraded
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw oper-down-on-group-degrade *boolean*
Tree	oper-down-on-group-degrade
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-mss-adjust *number*

Synopsis	TCP Maximum Segment Size (MSS) adjustment for gateway
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw tcp-mss-adjust *number*
Tree	tcp-mss-adjust
Range	160 to 10240
Units	bytes
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-egress-qos

Synopsis	Enter the **tunnel-egress-qos** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw tunnel-egress-qos
Tree	tunnel-egress-qos

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Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of egress QoS for WLAN-GW tunnels
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw tunnel-egress-qos admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

agg-rate-limit *(number | keyword)*

Synopsis	HQoS aggregate rate limit
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw tunnel-egress-qos agg-rate-limit *(number | keyword)*
Tree	agg-rate-limit
Range	1 to 100000000
Options	max
Default	max
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

granularity *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Granularity of the egress shaping for WLAN Gateway

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw tunnel-egress-qos granularity *keyword*
Tree	granularity
Options	per-tunnel – Applied to each tunnel per-retailer – Applied to each retailer Mobile Network Operator's fraction of the tunnel payload
Default	per-tunnel
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-time *(number | keyword)*

Synopsis	Minimum time to hold egress shaping resources
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw tunnel-egress-qos hold-time *(number | keyword)*
Tree	hold-time
Range	1 to 86400
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-client-only *boolean*

Synopsis	Allow shaping for tunnel traffic for multiple UEs
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw tunnel-egress-qos multi-client-only *boolean*
Tree	multi-client-only
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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qos *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress QoS policy linked with each interface tunnel
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw tunnel-egress-qos qos *reference*
Tree	qos
Reference	**configure** qos sap-egress *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

scheduler-policy *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress scheduler policy linked with each tunnel
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw tunnel-egress-qos scheduler-policy *reference*
Tree	scheduler-policy
Reference	**configure** qos scheduler-policy *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-encaps

Synopsis	Enter the **tunnel-encaps** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw tunnel-encaps
Tree	tunnel-encaps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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learn-l2tp-cookie *(keyword | hex-string)*

Synopsis	System that learns the cookie from L2TP tunnels terminating on this interface
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw tunnel-encaps learn-l2tp-cookie *(keyword | hex-string)*
Tree	learn-l2tp-cookie
String Length	6
Options	never – Never interpret the cookie always – Interpret cookie regardless of first two octets value
Default	never
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

vlan-range [range] *string*

Synopsis	Enter the **vlan-range** list instance
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string*
Tree	vlan-range
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**range**] *string*

Synopsis	IEEE 802.1q VLAN tag range
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string*
Tree	vlan-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication

Synopsis	Enter the **authentication** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* authentication

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Tree	authentication
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-time *number*

Synopsis	Minimum time UE held down after failed authentication
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* authentication hold-time *number*
Tree	hold-time
Range	0 to 3600
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

local

Synopsis	Enable the **local** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* authentication local
Tree	local
Introduced	22.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

coa-policy *reference*

Synopsis	RADIUS ISA policy applied to CoA or disconnect messages
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* authentication local coa-policy *reference*
Tree	coa-policy
Reference	**configure** aaa radius isa-policy *string*
Introduced	22.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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default-ue-state *keyword*

Synopsis	UE state accepted for immediate authentication
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* authentication local default-ue-state *keyword*
Tree	default-ue-state
Options	portal – Portal redirect UE using the http-redirect-policy dsm – DSM UE using DSM parameters
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

on-control-plane *boolean*

Synopsis	Allow authentication on first control plane packet
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* authentication on-control-plane *boolean*
Tree	on-control-plane
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	RADIUS policy for authentication
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* authentication policy *reference*
Tree	policy
Reference	**configure** aaa radius isa-policy *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

vlan-mismatch-timeout *number*

Synopsis	Timeout if packet received with a non-matching VLAN tag
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* authentication vlan-mismatch-timeout *number*

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Tree	vlan-mismatch-timeout
Range	5 to 60
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

data-triggered-ue-creation

Synopsis	Enter the **data-triggered-ue-creation** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* data-triggered-ue-creation
Tree	data-triggered-ue-creation
Description	Commands in this context configure data-triggered subscriber creation for Wi-Fi subscribers. Data-triggered UE creation only works upon receipt of TCP and UDP packets.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of data-triggered UE creation
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* data-triggered-ue-creation admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

arp *boolean*

Synopsis	Authenticate ARP packets received from an unknown UE
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* data-triggered-ue-creation arp *boolean*
Tree	arp
Default	false

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Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

create-proxy-cache-entry

Synopsis	Enter the **create-proxy-cache-entry** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* data-triggered-ue-creation create-proxy-cache-entry
Tree	create-proxy-cache-entry
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-format *string*

Synopsis	MAC address format
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* data-triggered-ue-creation create-proxy-cache-entry mac-format *string*
Tree	mac-format
String Length	2 to 7
Default	aa:
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

proxy-server

Synopsis	Enable the **proxy-server** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* data-triggered-ue-creation create-proxy-cache-entry proxy-server
Tree	proxy-server
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	RADIUS Proxy server name

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* data-triggered-ue-creation create-proxy-cache-entry proxy-server name *string*
Tree	name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Router instance of the RADIUS proxy server
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* data-triggered-ue-creation create-proxy-cache-entry proxy-server router-instance *string*
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ospf *boolean*

Synopsis	Authenticate OSPF packets received from an unknown UE
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* data-triggered-ue-creation ospf *boolean*
Tree	ospf
Description	When configured to **true**, the system triggers UE authentication based on OSPFv2 or OSPFv3 packets. These packets are used with the dynamic VPLS service.
Default	false
Introduced	23.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp4

Synopsis	Enter the **dhcp4** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp4

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Tree	dhcp4
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of DHCPv4
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp4 admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns *string*

Synopsis	DNS servers signaled in DHCP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp4 dns *string*
Tree	dns
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2-aware-ip-address *(ipv4-unicast-address | keyword)*

Synopsis	L2-Aware NAT inside IP address
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp4 l2-aware-ip-address *(ipv4-unicast-address | keyword)*
Tree	l2-aware-ip-address
Options	from-pool – IP address allocated from a pool
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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lease-time

Synopsis	Enter the **lease-time** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp4 lease-time
Tree	lease-time
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

active *number*

Synopsis	Lease time an authenticated user
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp4 lease-time active *number*
Tree	active
Range	300 to 3600
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial *number*

Synopsis	Lease time for migrant user (unauthenticated)
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp4 lease-time initial *number*
Tree	initial
Range	300 to 3600
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

nbns *string*

Synopsis	NetBIOS servers signaled in DHCP

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp4 nbns *string*
Tree	nbns
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp6

Synopsis	Enter the **dhcp6** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp6
Tree	dhcp6
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the protocol
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp6 admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime

Synopsis	Enter the **preferred-lifetime** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp6 preferred-lifetime
Tree	preferred-lifetime
Introduced	16.0.R1

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Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

active *number*

Synopsis	Preferred signaled lifetime after full authentication
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp6 preferred-lifetime active *number*
Tree	active
Range	300 to 3600
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial *number*

Synopsis	Signaled preferred lifetime after full authentication
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp6 preferred-lifetime initial *number*
Tree	initial
Range	300 to 3600
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime

Synopsis	Enter the **valid-lifetime** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp6 valid-lifetime
Tree	valid-lifetime
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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active *number*

Synopsis	Signaled valid lifetime after full authentication
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp6 valid-lifetime active *number*
Tree	active
Range	300 to 3600
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial *number*

Synopsis	Valid signaled lifetime UE is not fully authenticated
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp6 valid-lifetime initial *number*
Tree	initial
Range	300 to 3600
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dsm

Synopsis	Enter the **dsm** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm
Tree	dsm
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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accounting-policy *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA Radius Policy for accounting
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** aaa radius isa-policy *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-update

Synopsis	Enable the **accounting-update** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm accounting-update
Tree	accounting-update
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Interim accounting update messages interval
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm accounting-update interval *number*
Tree	interval
Range	5 to 259200
Units	minutes
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of DSM
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

application-assurance

Synopsis	Enter the **application-assurance** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm application-assurance
Tree	application-assurance
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-statistics *boolean*

Synopsis	Collect AA statistics
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm application-assurance accounting-statistics *boolean*
Tree	accounting-statistics
Default	false
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

profile *reference*

Synopsis	AA application profile used for portal authentication
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm application-assurance profile *reference*
Tree	profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*

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Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

url-parameter *string*

Synopsis	AA URL parameter included for HTTP portal redirect
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm application-assurance url-parameter *string*
Tree	url-parameter
String Length	1 to 247
Introduced	22.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the **egress** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm egress
Tree	egress
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer *reference*

Synopsis	Policer for egress traffic
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm egress policer *reference*
Tree	policer
Reference	**configure** subscriber-mgmt isa-policer *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the **ingress** context

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm ingress
Tree	ingress
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-filter *reference*

Synopsis	Filter for ingress traffic
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm ingress ip-filter *reference*
Tree	ip-filter
Reference	**configure** subscriber-mgmt isa-filter *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer *reference*

Synopsis	Policer for ingress traffic
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm ingress policer *reference*
Tree	policer
Reference	**configure** subscriber-mgmt isa-policer *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

soft-quota-exhausted-filter *reference*

Synopsis	Filter applied when soft volume quota is reached
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm ingress soft-quota-exhausted-filter *reference*
Tree	soft-quota-exhausted-filter
Description	This command applies a filter when a soft volume quota is reached. The filter replaces the currently applied filter (which can be preconfigured using the **ip-filter** command in the **configure service vprn subscriber-interface group-interface wlan-gw vlan-range dsm ingress ip-filter** context or be set using a RADIUS CoA message) for the UE upon quota exhaustion. If the quota is extended using a RADIUS CoA message, the

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filter is automatically reverted. Configuration changes apply only to new DSM UEs and not to existing UEs.

Reference	**configure** subscriber-mgmt isa-filter *string*
Introduced	21.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

one-time-redirect

Synopsis	Enter the **one-time-redirect** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm one-time-redirect
Tree	one-time-redirect
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

port *number*

Synopsis	Destination port of packets for HTTP redirect
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm one-time-redirect port *number*
Tree	port
Range	1 to 65535
Default	80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

url *string*

Synopsis	URL for redirected HTTP protocol packets
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm one-time-redirect url *string*
Tree	url
String Length	1 to 255
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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volume-quota-direction *keyword*

Synopsis	Volume quota direction for WLAN GW
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm volume-quota-direction *keyword*
Tree	volume-quota-direction
Description	This command specifies the direction that volume quotas are applied. Configuration changes apply only to new DSM UEs and not to existing UEs.
Options	both – Both directions ingress – Ingress direction (upstream) egress – Egress direction (downstream)
Default	both
Introduced	21.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic-service *boolean*

Synopsis	Dynamically assign WLAN-GW subscriber to a VPLS service
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dynamic-service *boolean*
Tree	dynamic-service
Description	When configured to **true**, the WLAN-GW subscriber is dynamically assigned to a VPLS service, based on RADIUS authentication reply attributes. This feature is used in conjunction with the **configure service vpls wlan-gw wlan-gw-group** command. See "Dynamic VPLS service" in the *7450 ESS, 7750 SR, and VSR Triple Play Service Delivery Architecture Guide* for more information about the dynamic VPLS service feature.
Default	false
Introduced	23.3.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

extension [extension-range] *string*

Synopsis	Add a list entry for **extension**
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* extension *string*
Tree	extension
Introduced	21.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**extension-range**] *string*

Synopsis	VLAN tag range used for matching
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* extension *string*
Tree	extension
Description	This command configures the additional VLAN range that is used for matching. Any traffic within the extension range is considered part of the same VLAN range for purposes of intra-SSID mobility.
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect-policy *reference*

Synopsis	Default HTTP redirect policy for portal authentication
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* http-redirect-policy *reference*
Tree	http-redirect-policy
Reference	**configure** subscriber-mgmt http-redirect-policy *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

idle-timeout-action *keyword*

Synopsis	Action to perform when the idle timeout expires
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* idle-timeout-action *keyword*
Tree	idle-timeout-action
Options	remove, shcv
Default	remove
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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l2-service

Synopsis	Enable the **l2-service** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* l2-service
Tree	l2-service
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of Layer 2 service for VLAN range
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* l2-service admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* l2-service description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

service *reference*

Synopsis	Layer 2 service associated with the range
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* l2-service service *reference*
Tree	service
Reference	**configure** service vpls *string*

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*

Synopsis	NAT policy for DSM and ISA portal authentication
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* nat-policy *reference*
Tree	nat-policy
Reference	**configure** service nat nat-policy *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

retail-service *string*

Synopsis	Default retail service for new UEs in this range
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* retail-service *string*
Tree	retail-service
String Length	1 to 64
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

slaac

Synopsis	Enter the **slaac** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* slaac
Tree	slaac
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the protocol

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* slaac admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime

Synopsis	Enter the **preferred-lifetime** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* slaac preferred-lifetime
Tree	preferred-lifetime
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

active *number*

Synopsis	Preferred signaled lifetime after full authentication
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* slaac preferred-lifetime active *number*
Tree	active
Range	300 to 3600
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial *number*

Synopsis	Signaled preferred lifetime after full authentication
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* slaac preferred-lifetime initial *number*
Tree	initial
Range	300 to 3600

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Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime

Synopsis	Enter the **valid-lifetime** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* slaac valid-lifetime
Tree	valid-lifetime
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

active *number*

Synopsis	Signaled valid lifetime after full authentication
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* slaac valid-lifetime active *number*
Tree	active
Range	300 to 3600
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial *number*

Synopsis	Valid signaled lifetime UE is not fully authenticated
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* slaac valid-lifetime initial *number*
Tree	initial
Range	300 to 3600
Units	seconds
Default	300
Introduced	16.0.R1

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Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

vrgw

Synopsis	Enter the **vrgw** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw
Tree	vrgw
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of vRGW
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

brg

Synopsis	Enter the **brg** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw brg
Tree	brg
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

authenticated-brg-only *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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Synopsis	Only allow hosts from BRGs pre-authenticated using the radius-proxy
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw brg authenticated-brg-only *boolean*
Tree	authenticated-brg-only
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-brg-profile *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default BRG profile to use if the AAA server does not specify one
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw brg default-brg-profile *reference*
Tree	default-brg-profile
Reference	**configure** subscriber-mgmt vrgw brg-profile *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lanext

Synopsis	Enter the **lanext** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw lanext
Tree	lanext
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

access

WARNING:
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Synopsis	Enter the **access** context

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw lanext access
Tree	access
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-mac *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of allowed MAC entries on access side
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw lanext access max-mac *number*
Tree	max-mac
Range	1 to 256
Default	20
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-access *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow multiple access points
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw lanext access multi-access *boolean*
Tree	multi-access
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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policer *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Policer for ingress home traffic
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw lanext access policer *reference*
Tree	policer
Reference	**configure** subscriber-mgmt isa-policer *string*
Introduced	19.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of HLE
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw lanext admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

assistive-address-resolution *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA assists in address resolution
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw lanext assistive-address-resolution *boolean*
Tree	assistive-address-resolution
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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bd-mac-prefix *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Prefix of the HLE BD MAC address
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw lanext bd-mac-prefix *string*
Tree	bd-mac-prefix
String Length	8
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-translation *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow MAC address translation for HLE services
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw lanext mac-translation *boolean*
Tree	mac-translation
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

network

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **network** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw lanext network
Tree	network

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Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of the HLE network
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw lanext network admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-mac *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of allowed MAC entries on network side
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw lanext network max-mac *number*
Tree	max-mac
Range	1 to 64
Default	20
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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policer *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Policer for ingress data center traffic
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw lanext network policer *reference*
Tree	policer
Reference	**configure** subscriber-mgmt isa-policer *string*
Introduced	19.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect

Synopsis	Enter the **xconnect** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* xconnect
Tree	xconnect
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting

Synopsis	Enter the **accounting** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* xconnect accounting
Tree	accounting
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mobility-updates *boolean*

Synopsis	Accounting updates triggered by mobility
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* xconnect accounting mobility-updates *boolean*
Tree	mobility-updates

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Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA RADIUS accounting policy for cross-connected UEs
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* xconnect accounting policy *reference*
Tree	policy
Reference	**configure** aaa radius isa-policy *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

update-interval *number*

Synopsis	Time between successive interim accounting updates
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* xconnect accounting update-interval *number*
Tree	update-interval
Range	5 to 259200
Units	minutes
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the cross-connect
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* xconnect admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable

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Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ID of WLAN Gateway ISA group that gateway binds to
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wlan-gw wlan-gw-group *reference*
Tree	wlan-gw-group
Reference	**configure** isa wlan-gw-group *number*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wpp

Synopsis	Enable the **wpp** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wpp
Tree	wpp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of WPP
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wpp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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initial

Synopsis	Enter the **initial** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wpp initial
Tree	initial
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Initial application profile name
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wpp initial app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	Initial SLA profile
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wpp initial sla-profile *reference*
Tree	sla-profile
Reference	**configure** subscriber-mgmt sla-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Initial subscriber profile
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wpp initial sub-profile *reference*
Tree	sub-profile
Reference	**configure** subscriber-mgmt sub-profile *string*
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-time *number*

Synopsis	Lease time
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wpp lease-time *number*
Tree	lease-time
Range	10 to 315446399
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

portal

Synopsis	Enter the **portal** context
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wpp portal
Tree	portal
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	Web portal server name
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wpp portal name *string*
Tree	name
String Length	1 to 32
Notes	The following elements are part of a choice: **portal-group** or (**name** and **router-instance**).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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portal-group *reference*

Synopsis	WPP portal group for this interface
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wpp portal portal-group *reference*
Tree	portal-group
Reference	**configure** aaa wpp portal-group *string*
Notes	The following elements are part of a choice: **portal-group** or (**name** and **router-instance**).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Virtual router instance of WPP portal for interface
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wpp portal router-instance *string*
Tree	router-instance
Notes	The following elements are part of a choice: **portal-group** or (**name** and **router-instance**).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

restore-to-initial-on-disconnect *boolean*

Synopsis	Restore initial profiles after a host has disconnected
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wpp restore-to-initial-on-disconnect *boolean*
Tree	restore-to-initial-on-disconnect
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

triggered-hosts *boolean*

Synopsis	Enable/disable triggered hosts

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Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wpp triggered-hosts *boolean*
Tree	triggered-hosts
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

Synopsis	User database
Context	**configure** service ies *string* subscriber-interface *string* group-interface *string* wpp user-db *reference*
Tree	user-db
Reference	**configure** subscriber-mgmt local-user-db *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-time

Synopsis	Enter the **hold-time** context
Context	**configure** service ies *string* subscriber-interface *string* hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service ies *string* subscriber-interface *string* hold-time ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

down

Synopsis	Enter the **down** context

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Context	**configure** service ies *string* subscriber-interface *string* hold-time ipv4 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the **init-only** command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	**configure** service ies *string* subscriber-interface *string* hold-time ipv4 down init-only *boolean*
Tree	init-only
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Down hold time for the IP interface
Context	**configure** service ies *string* subscriber-interface *string* hold-time ipv4 down seconds *number*
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

up

Synopsis	Enter the **up** context
Context	**configure** service ies *string* subscriber-interface *string* hold-time ipv4 up
Tree	up

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Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Up hold time for the IP interface
Context	**configure** service ies *string* subscriber-interface *string* hold-time ipv4 up seconds *number*
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** service ies *string* subscriber-interface *string* hold-time ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

down

Synopsis	Enter the **down** context
Context	**configure** service ies *string* subscriber-interface *string* hold-time ipv6 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the **init-only** command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	**configure** service ies *string* subscriber-interface *string* hold-time ipv6 down init-only *boolean*
Tree	init-only
Description	When configured to **true**, the system applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Down hold time for the IP interface
Context	**configure** service ies *string* subscriber-interface *string* hold-time ipv6 down seconds *number*
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

up

Synopsis	Enter the **up** context
Context	**configure** service ies *string* subscriber-interface *string* hold-time ipv6 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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seconds *number*

Synopsis	Up hold time for the IP interface
Context	**configure** service ies *string* subscriber-interface *string* hold-time ipv6 up seconds *number*
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-linking

Synopsis	Enter the **ipoe-linking** context
Context	**configure** service ies *string* subscriber-interface *string* ipoe-linking
Tree	ipoe-linking
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gratuitous-router-advertisement *boolean*

Synopsis	Send unsolicited router advertisement after DHCP setup
Context	**configure** service ies *string* subscriber-interface *string* ipoe-linking gratuitous-router-advertisement *boolean*
Tree	gratuitous-router-advertisement
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-session

Synopsis	Enter the **ipoe-session** context
Context	**configure** service ies *string* subscriber-interface *string* ipoe-session
Tree	ipoe-session
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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session-limit *number*

Synopsis	Maximum number of sessions on this group interface
Context	**configure** service ies *string* subscriber-interface *string* ipoe-session session-limit *number*
Tree	session-limit
Range	1 to 500000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service ies *string* subscriber-interface *string* ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address [ipv4-address] *string*

Synopsis	Enter the **address** list instance
Context	**configure** service ies *string* subscriber-interface *string* ipv4 address *string*
Tree	address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**ipv4-address**] *string*

Synopsis	IP address associated with the subscriber subnet
Context	**configure** service ies *string* subscriber-interface *string* ipv4 address *string*
Tree	address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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gateway *string*

Synopsis	Gateway IP address within the subnet for SRRP routing
Context	**configure** service ies *string* subscriber-interface *string* ipv4 address *string* gateway *string*
Tree	gateway
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

holdup-time *number*

Synopsis	Wait time before accepting new state attribute
Context	**configure** service ies *string* subscriber-interface *string* ipv4 address *string* holdup-time *number*
Tree	holdup-time
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

populate-host-routes *boolean*

Synopsis	Populate subscriber host routes in local FIB
Context	**configure** service ies *string* subscriber-interface *string* ipv4 address *string* populate-host-routes *boolean*
Tree	populate-host-routes
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	**configure** service ies *string* subscriber-interface *string* ipv4 address *string* prefix-length *number*
Tree	prefix-length
Range	0 to 32

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-srrp *number*

Synopsis	SRRP instance whose state is tracked on this IP address
Context	**configure** service ies *string* subscriber-interface *string* ipv4 address *string* track-srrp *number*
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-unmatching-subnets *boolean*

Synopsis	Allow subscriber hosts without a matching subnet
Context	**configure** service ies *string* subscriber-interface *string* ipv4 allow-unmatching-subnets *boolean*
Tree	allow-unmatching-subnets
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-dns *string*

Synopsis	Default DNS server addresses
Context	**configure** service ies *string* subscriber-interface *string* ipv4 default-dns *string*
Tree	default-dns
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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dhcp

Synopsis	Enter the **dhcp** context
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp
Tree	dhcp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of DHCP
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the **client-applications** context
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp *boolean*

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp client-applications dhcp *boolean*
Tree	dhcp
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ppp *boolean*

Synopsis	Enable PPPoE clients to use DHCP relay or proxy server
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp client-applications ppp *boolean*
Tree	ppp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gi-address *string*

Synopsis	GI address for the DHCP relay
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp gi-address *string*
Tree	gi-address
Description	This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay. By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-populate

Synopsis	Enter the **lease-populate** context

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Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp lease-populate
Tree	lease-populate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-leases *number*

Synopsis	Maximum number of DHCPv4 leases
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp lease-populate max-leases *number*
Tree	max-leases
Range	0 to 511999
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option-82

Synopsis	Enter the **option-82** context
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp option-82
Tree	option-82
Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor-specific-option

Synopsis	Enter the **vendor-specific-option** context
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp option-82 vendor-specific-option
Tree	vendor-specific-option
Description	Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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client-mac-address *boolean*

Synopsis	Send the MAC address in the VSO
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp option-82 vendor-specific-option client-mac-address *boolean*
Tree	client-mac-address
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id *boolean*

Synopsis	Send SAP ID in the sub-option of the DHCP relay packet
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp option-82 vendor-specific-option sap-id *boolean*
Tree	sap-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-id *boolean*

Synopsis	Send the service ID in the Vendor Specific Option
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp option-82 vendor-specific-option service-id *boolean*
Tree	service-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	User-defined ASCII string for the VSO
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp option-82 vendor-specific-option string *string*
Tree	string

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String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

system-id *boolean*

Synopsis	Send the system ID in the VSO
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp option-82 vendor-specific-option system-id *boolean*
Tree	system-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy-server

Synopsis	Enter the **proxy-server** context
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp proxy-server
Tree	proxy-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCP proxy server
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp proxy-server admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

emulated-server *string*

Synopsis	IP address used as DHCP server address in SAP context

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Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp proxy-server emulated-server *string*
Tree	emulated-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-time

Synopsis	Enter the **lease-time** context
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp proxy-server lease-time
Tree	lease-time
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-override *boolean*

Synopsis	Use lease time information provided by RADIUS server
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp proxy-server lease-time radius-override *boolean*
Tree	radius-override
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	DHCP lease time
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp proxy-server lease-time value *number*
Tree	value
Range	300 to 315446399
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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python-policy *reference*

Synopsis	Python policy
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp python-policy *reference*
Tree	python-policy
Reference	**configure** python python-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

relay-proxy

Synopsis	Enable the **relay-proxy** context
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp relay-proxy
Tree	relay-proxy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

release-update-src-ip *boolean*

Synopsis	Update the source IP address of a DHCP RELEASE message
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp relay-proxy release-update-src-ip *boolean*
Tree	release-update-src-ip
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

siaddr-override *string*

Synopsis	DHCP server IP address for address hiding function
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp relay-proxy siaddr-override *string*
Tree	siaddr-override
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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release-include-gi-address *boolean*

Synopsis	Include the GI address in DHCP relay messages
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp release-include-gi-address *boolean*
Tree	release-include-gi-address
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *string*

Synopsis	DHCP server IP addresses
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp server *string*
Tree	server
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

src-ip-addr *keyword*

Synopsis	Type of source address to use for DHCP relay
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp src-ip-addr *keyword*
Tree	src-ip-addr
Options	auto, gi-address
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

virtual-subnet *boolean*

Synopsis	Enable a virtual subnet for DHCPv4 hosts
Context	**configure** service ies *string* subscriber-interface *string* ipv4 dhcp virtual-subnet *boolean*
Tree	virtual-subnet

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Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

export-host-routes *boolean*

Synopsis	Allow export of subscriber management host routes
Context	**configure** service ies *string* subscriber-interface *string* ipv4 export-host-routes *boolean*
Tree	export-host-routes
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

unnumbered

Synopsis	Enter the **unnumbered** context
Context	**configure** service ies *string* subscriber-interface *string* ipv4 unnumbered
Tree	unnumbered
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis	IP address for the subscriber interface
Context	**configure** service ies *string* subscriber-interface *string* ipv4 unnumbered ip-address *string*
Tree	ip-address
Notes	The following elements are part of a choice: **ip-address** or **ip-int-name**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-int-name *string*

Synopsis	Interface name from which an IPv4 addressed is borrowed
Context	**configure** service ies *string* subscriber-interface *string* ipv4 unnumbered ip-int-name *string*

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Tree	ip-int-name
String Length	1 to 32
Notes	The following elements are part of a choice: **ip-address** or **ip-int-name**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enable the **ipv6** context
Context	**configure** service ies *string* subscriber-interface *string* ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address [ipv6-address] *string*

Synopsis	Enter the **address** list instance
Context	**configure** service ies *string* subscriber-interface *string* ipv6 address *string*
Tree	address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**ipv6-address**] *string*

Synopsis	IPv6 address for the subscriber interface
Context	**configure** service ies *string* subscriber-interface *string* ipv6 address *string*
Tree	address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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host-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Host type for subscriber interface prefixes
Context	**configure** service ies *string* subscriber-interface *string* ipv6 address *string* host-type *keyword*
Tree	host-type
Options	pd – IPv6 ESM hosts for DHCPv6 prefix-delegation wan – ESM hosts for DHCPv6 addresses or by WAN interface pd-wan – Both prefix-delegation and ESM hosts
Default	pd
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length *number*

Synopsis	IPv6 address prefix length
Context	**configure** service ies *string* subscriber-interface *string* ipv6 address *string* prefix-length *number*
Tree	prefix-length
Range	0 to 128
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-multiple-wan-addresses *boolean*

Synopsis	Allow multiple WAN addresses
Context	**configure** service ies *string* subscriber-interface *string* ipv6 allow-multiple-wan-addresses *boolean*
Tree	allow-multiple-wan-addresses
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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allow-unmatching-prefixes *boolean*

Synopsis	Allow subscriber hosts without a matching prefix
Context	**configure** service ies *string* subscriber-interface *string* ipv6 allow-unmatching-prefixes *boolean*
Tree	allow-unmatching-prefixes
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-dns *string*

Synopsis	Default DNS server addresses
Context	**configure** service ies *string* subscriber-interface *string* ipv6 default-dns *string*
Tree	default-dns
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delegated-prefix-length *(number | keyword)*

Synopsis	IPv6 delegated prefix length
Context	**configure** service ies *string* subscriber-interface *string* ipv6 delegated-prefix-length *(number | keyword)*
Tree	delegated-prefix-length
Range	48 to 64
Options	variable
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp6

Synopsis	Enter the **dhcp6** context

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Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6
Tree	dhcp6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

override-slaac *boolean*

Synopsis	Allow WAN address offered by DHCP to overwrite the WAN address acquired from SLAAC
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 override-slaac *boolean*
Tree	override-slaac
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pd-managed-route

Synopsis	Enable the **pd-managed-route** context
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 pd-managed-route
Tree	pd-managed-route
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

next-hop *keyword*

Synopsis	Next hop type
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 pd-managed-route next-hop *keyword*
Tree	next-hop
Options	ipv4, ipv6
Default	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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proxy-server

Synopsis	Enter the **proxy-server** context
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 proxy-server
Tree	proxy-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 proxy server
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 proxy-server admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the **client-applications** context
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 proxy-server client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp *boolean*

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 proxy-server client-applications dhcp *boolean*
Tree	dhcp
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ppp *boolean*

Synopsis	Allow PPPoE clients to use DHCP relay functionality
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 proxy-server client-applications ppp *boolean*
Tree	ppp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime *(number | keyword)*

Synopsis	Time for prefix to remain preferred on this interface
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 proxy-server preferred-lifetime *(number | keyword)*
Tree	preferred-lifetime
Range	300 to 4294967294
Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rebind-timer *number*

Synopsis	Rebind timer (T2) for this interface
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 proxy-server rebind-timer *number*
Tree	rebind-timer
Range	0 to 1209600
Units	seconds
Default	2880
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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renew-timer *number*

Synopsis	Renew timer (T1)
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 proxy-server renew-timer *number*
Tree	renew-timer
Range	0 to 604800
Units	seconds
Default	1800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server-id

Synopsis	Enter the **server-id** context
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 proxy-server server-id
Tree	server-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-en-ascii *string*

Synopsis	Vendor-assigned ID based on Enterprise Number (DUID-EN)
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 proxy-server server-id duid-en-ascii *string*
Tree	duid-en-ascii
String Length	1 to 58
Notes	The following elements are part of a choice: **duid-en-ascii**, **duid-en-hex**, or **duid-ll**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-en-hex *string*

Synopsis	DUID system ID in hexadecimal format
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 proxy-server server-id duid-en-hex *string*

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Tree	duid-en-hex
String Length	1 to 118
Notes	The following elements are part of a choice: **duid-en-ascii**, **duid-en-hex**, or **duid-ll**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-ll

Synopsis	Use link-layer address (DUID-LL) as DUID
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 proxy-server server-id duid-ll
Tree	duid-ll
Notes	The following elements are part of a choice: **duid-en-ascii**, **duid-en-hex**, or **duid-ll**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *(number | keyword)*

Synopsis	Time for prefix to remain valid on this interface
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 proxy-server valid-lifetime *(number | keyword)*
Tree	valid-lifetime
Range	300 to 4294967294
Units	seconds
Options	infinite
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 python-policy *reference*
Tree	python-policy
Reference	**configure** python python-policy *string*

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

relay

Synopsis	Enter the **relay** context
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 relay
Tree	relay
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of DHCPv6 Relay
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 relay admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the **client-applications** context
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 relay client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp *boolean*

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 relay client-applications dhcp *boolean*

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Tree	dhcp
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp *boolean*

Synopsis	Allow PPPoE clients to use DHCP relay functionality
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 relay client-applications ppp *boolean*
Tree	ppp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 relay description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-split

Synopsis	Enter the **lease-split** context
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 relay lease-split
Tree	lease-split
Description	Commands in this context configure DHCPv6 lease split. DHCPv6 lease split is active when administratively enabled and for all IA_NA and IA_PD options in the transaction, the configured lease split valid lifetime (short lease time) is less than or equal to one of the following: • the renew time T1 committed by the server (long renew time) • half of the preferred lifetime committed by the server when T1 committed by the server equals zero

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Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of DHCPv6 lease split
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 relay lease-split admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *number*

Synopsis	DHCPv6 lease split valid lifetime (short lease time)
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 relay lease-split valid-lifetime *number*
Tree	valid-lifetime
Range	300 to 315446399
Units	seconds
Default	3600
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

Synopsis	Link address for the DHCPv6 relay messages
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 relay link-address *string*
Tree	link-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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server *string*

Synopsis	DHCP6 server(s) to which the DHCP6 requests are forwarded
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 relay server *string*
Tree	server
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-address *string*

Synopsis	Source IPv6 address for the DHCPv6 relay messages
Context	**configure** service ies *string* subscriber-interface *string* ipv6 dhcp6 relay source-address *string*
Tree	source-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-bridged-mode *boolean*

Synopsis	Enable IPv6 IPoE bridged mode
Context	**configure** service ies *string* subscriber-interface *string* ipv6 ipoe-bridged-mode *boolean*
Tree	ipoe-bridged-mode
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

link-local-address

Synopsis	Enter the **link-local-address** context
Context	**configure** service ies *string* subscriber-interface *string* ipv6 link-local-address
Tree	link-local-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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address *string*

Synopsis	IPv6 link local address
Context	**configure** service ies *string* subscriber-interface *string* ipv6 link-local-address address *string*
Tree	address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix [ipv6-prefix] *string*

Synopsis	Enter the **prefix** list instance
Context	**configure** service ies *string* subscriber-interface *string* ipv6 prefix *string*
Tree	prefix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**ipv6-prefix**] *string*

Synopsis	IPv6 address for a router interface
Context	**configure** service ies *string* subscriber-interface *string* ipv6 prefix *string*
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

holdup-time *number*

Synopsis	Time to wait before route accepts new state attribute
Context	**configure** service ies *string* subscriber-interface *string* ipv6 prefix *string* holdup-time *number*
Tree	holdup-time
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Host type for subscriber interface prefixes
Context	**configure** service ies *string* subscriber-interface *string* ipv6 prefix *string* host-type *keyword*
Tree	host-type
Options	pd – IPv6 ESM hosts for DHCPv6 prefix-delegation wan – ESM hosts for DHCPv6 addresses or by WAN interface pd-wan – Both prefix-delegation and ESM hosts
Default	pd
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-srrp *number*

Synopsis	SRRP instance whose state is tracked on this IP address
Context	**configure** service ies *string* subscriber-interface *string* ipv6 prefix *string* track-srrp *number*
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-advertisements

Synopsis	Enter the **router-advertisements** context
Context	**configure** service ies *string* subscriber-interface *string* ipv6 router-advertisements
Tree	router-advertisements
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of router advertisements
Context	**configure** service ies *string* subscriber-interface *string* ipv6 router-advertisements admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

force-mcast *keyword*

Synopsis	Protocol with forced multicast
Context	**configure** service ies *string* subscriber-interface *string* ipv6 router-advertisements force-mcast *keyword*
Tree	force-mcast
Options	ip, ip-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-advertisement-interval *number*

Synopsis	Maximum advertisement interval
Context	**configure** service ies *string* subscriber-interface *string* ipv6 router-advertisements max-advertisement-interval *number*
Tree	max-advertisement-interval
Range	900 to 1800
Units	seconds
Default	1800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-advertisement-interval *number*

Synopsis	Minimum advertisement interval

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Context	**configure** service ies *string* subscriber-interface *string* ipv6 router-advertisements min-advertisement-interval *number*
Tree	min-advertisement-interval
Range	900 to 1350
Units	seconds
Default	900
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the **options** context
Context	**configure** service ies *string* subscriber-interface *string* ipv6 router-advertisements options
Tree	options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

current-hop-limit *number*

Synopsis	Hop limit to be advertised
Context	**configure** service ies *string* subscriber-interface *string* ipv6 router-advertisements options current-hop-limit *number*
Tree	current-hop-limit
Range	0 to 255
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dns

Synopsis	Enter the **dns** context
Context	**configure** service ies *string* subscriber-interface *string* ipv6 router-advertisements options dns
Tree	dns
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

include-rdnss *boolean*

Synopsis	Include the RDNSS server option 25
Context	**configure** service ies *string* subscriber-interface *string* ipv6 router-advertisements options dns include-rdnss *boolean*
Tree	include-rdnss
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rdnss-lifetime *(number | keyword)*

Synopsis	Maximum time for the RDNSS address to remain valid
Context	**configure** service ies *string* subscriber-interface *string* ipv6 router-advertisements options dns rdnss-lifetime *(number | keyword)*
Tree	rdnss-lifetime
Range	900 to 3600
Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

managed-configuration *boolean*

Synopsis	Managed address configuration flag
Context	**configure** service ies *string* subscriber-interface *string* ipv6 router-advertisements options managed-configuration *boolean*
Tree	managed-configuration
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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mtu *(number | keyword)*

Synopsis	Advertised MTU value
Context	**configure** service ies *string* subscriber-interface *string* ipv6 router-advertisements options mtu *(number | keyword)*
Tree	mtu
Range	1280 to 9212
Units	bytes
Options	not-included
Default	not-included
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

other-stateful-configuration *boolean*

Synopsis	Other stateful configuration flag
Context	**configure** service ies *string* subscriber-interface *string* ipv6 router-advertisements options other-stateful-configuration *boolean*
Tree	other-stateful-configuration
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reachable-time *number*

Synopsis	Reachable time for advertisements
Context	**configure** service ies *string* subscriber-interface *string* ipv6 router-advertisements options reachable-time *number*
Tree	reachable-time
Range	0 to 3600000
Units	milliseconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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retransmit-timer *number*

Synopsis	Retransmit time in router advertisements from interface
Context	**configure** service ies *string* subscriber-interface *string* ipv6 router-advertisements options retransmit-timer *number*
Tree	retransmit-timer
Range	0 to 1800000
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-lifetime *(number | keyword)*

Synopsis	Router lifetime
Context	**configure** service ies *string* subscriber-interface *string* ipv6 router-advertisements options router-lifetime *(number | keyword)*
Tree	router-lifetime
Range	2700 to 9000
Units	seconds
Options	no-default-router
Default	4500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-options

Synopsis	Enter the **prefix-options** context
Context	**configure** service ies *string* subscriber-interface *string* ipv6 router-advertisements prefix-options
Tree	prefix-options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

autonomous *boolean*

Synopsis	Value of the autonomous flag

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Context	**configure** service ies *string* subscriber-interface *string* ipv6 router-advertisements prefix-options autonomous *boolean*
Tree	autonomous
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-link *boolean*

Synopsis	Assign the prefix to an interface on the specified link
Context	**configure** service ies *string* subscriber-interface *string* ipv6 router-advertisements prefix-options on-link *boolean*
Tree	on-link
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime *(number | keyword)*

Synopsis	Time for a prefix to remain preferred
Context	**configure** service ies *string* subscriber-interface *string* ipv6 router-advertisements prefix-options preferred-lifetime *(number | keyword)*
Tree	preferred-lifetime
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *(number | keyword)*

Synopsis	Time for a prefix to remain valid
Context	**configure** service ies *string* subscriber-interface *string* ipv6 router-advertisements prefix-options valid-lifetime *(number | keyword)*
Tree	valid-lifetime

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Range	0 to 4294967294
Units	seconds
Options	infinite
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-solicit

Synopsis	Enter the **router-solicit** context
Context	**configure** service ies *string* subscriber-interface *string* ipv6 router-solicit
Tree	router-solicit
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

inactivity-timer *(number | keyword)*

Synopsis	Time before an inactive host is removed
Context	**configure** service ies *string* subscriber-interface *string* ipv6 router-solicit inactivity-timer *(number | keyword)*
Tree	inactivity-timer
Range	1 to 31536000
Units	seconds
Options	infinite
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-address-assignment

Synopsis	Enter the **local-address-assignment** context
Context	**configure** service ies *string* subscriber-interface *string* local-address-assignment
Tree	local-address-assignment
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of Local Address Assignment
Context	**configure** service ies *string* subscriber-interface *string* local-address-assignment admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service ies *string* subscriber-interface *string* local-address-assignment ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the **client-applications** context
Context	**configure** service ies *string* subscriber-interface *string* local-address-assignment ipv4 client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp *boolean*

Synopsis	Request local addresses for PPP IPCP hosts
Context	**configure** service ies *string* subscriber-interface *string* local-address-assignment ipv4 client-applications ppp *boolean*
Tree	ppp
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-pool *string*

Synopsis	Default pools
Context	**configure** service ies *string* subscriber-interface *string* local-address-assignment ipv4 default-pool *string*
Tree	default-pool
String Length	1 to 32
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *reference*

Synopsis	Local DHCPv4 server for local pools management
Context	**configure** service ies *string* subscriber-interface *string* local-address-assignment ipv4 server *reference*
Tree	server
Reference	**configure** router *string* dhcp-server dhcpv4 *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** service ies *string* subscriber-interface *string* local-address-assignment ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the **client-applications** context

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Context	**configure** service ies *string* subscriber-interface *string* local-address-assignment ipv6 client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-slaac *boolean*

Synopsis	Request local addresses for IPoE SLAAC hosts
Context	**configure** service ies *string* subscriber-interface *string* local-address-assignment ipv6 client-applications ipoe-slaac *boolean*
Tree	ipoe-slaac
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-wan *boolean*

Synopsis	Request local addresses for IPoE IA NA hosts
Context	**configure** service ies *string* subscriber-interface *string* local-address-assignment ipv6 client-applications ipoe-wan *boolean*
Tree	ipoe-wan
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-slaac *boolean*

Synopsis	Request local addresses for PPP SLAAC hosts
Context	**configure** service ies *string* subscriber-interface *string* local-address-assignment ipv6 client-applications ppp-slaac *boolean*
Tree	ppp-slaac
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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server *reference*

Synopsis	Local DHCPv6 server for local pools management
Context	**configure** service ies *string* subscriber-interface *string* local-address-assignment ipv6 server *reference*
Tree	server
Reference	**configure** router *string* dhcp-server dhcpv6 *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe

Synopsis	Enter the **pppoe** context
Context	**configure** service ies *string* subscriber-interface *string* pppoe
Tree	pppoe
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service ies *string* subscriber-interface *string* pppoe description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *number*

Synopsis	Maximum PPPoE sessions
Context	**configure** service ies *string* subscriber-interface *string* pppoe session-limit *number*
Tree	session-limit
Range	1 to 333823
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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wan-mode *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Mode of operation for hosts with /128 WAN IPv6 address
Context	**configure** service ies *string* subscriber-interface *string* wan-mode *keyword*
Tree	wan-mode
Options	mode64, mode128
Default	mode64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wlan-gw

Synopsis	Enable the **wlan-gw** context
Context	**configure** service ies *string* subscriber-interface *string* wlan-gw
Tree	wlan-gw
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool-manager

Synopsis	Enter the **pool-manager** context
Context	**configure** service ies *string* subscriber-interface *string* wlan-gw pool-manager
Tree	pool-manager
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp6-client

Synopsis	Enter the **dhcp6-client** context
Context	**configure** service ies *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client
Tree	dhcp6-client

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Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcpv4-nat

Synopsis	Enter the **dhcpv4-nat** context
Context	**configure** service ies *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client dhcpv4-nat
Tree	dhcpv4-nat
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 client entity
Context	**configure** service ies *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client dhcpv4-nat admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

Synopsis	IPv6 address in the link address field of relay header
Context	**configure** service ies *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client dhcpv4-nat link-address *string*
Tree	link-address
Default	::
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool-name *string*

Synopsis	Pool name to be sent in the DHCPv6 messages

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Context	**configure** service ies *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client dhcpv4-nat pool-name *string*
Tree	pool-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ia-na

Synopsis	Enter the **ia-na** context
Context	**configure** service ies *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client ia-na
Tree	ia-na
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 client entity
Context	**configure** service ies *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client ia-na admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

Synopsis	IPv6 address in the link address field of relay header
Context	**configure** service ies *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client ia-na link-address *string*
Tree	link-address
Default	::
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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pool-name *string*

Synopsis	Pool name to be sent in the DHCPv6 messages
Context	**configure** service ies *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client ia-na pool-name *string*
Tree	pool-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lease-query

Synopsis	Enable the **lease-query** context
Context	**configure** service ies *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client lease-query
Tree	lease-query
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-retries *number*

Synopsis	Retries before lease query assumes no allocated subnets
Context	**configure** service ies *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client lease-query max-retries *number*
Tree	max-retries
Range	0 to 10
Default	2
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

servers *string*

Synopsis	DHCPv6 servers that are used for requesting addresses
Context	**configure** service ies *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client servers *string*
Tree	servers

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Max. Instances	8
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

slaac

Synopsis	Enter the **slaac** context
Context	**configure** service ies *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client slaac
Tree	slaac
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 client entity
Context	**configure** service ies *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client slaac admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

Synopsis	IPv6 address in the link address field of relay header
Context	**configure** service ies *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client slaac link-address *string*
Tree	link-address
Default	::
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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pool-name *string*

Synopsis	Pool name to be sent in the DHCPv6 messages
Context	**configure** service ies *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client slaac pool-name *string*
Tree	pool-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

source-ip *(keyword | ipv6-address)*

Synopsis	Source IP address that is used by the DHCPv6 client
Context	**configure** service ies *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client source-ip *(keyword | ipv6-address)*
Tree	source-ip
Options	use-interface-ip
Default	use-interface-ip
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enter the **watermarks** context
Context	**configure** service ies *string* subscriber-interface *string* wlan-gw pool-manager watermarks
Tree	watermarks
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis	High watermark when new prefix is allocated
Context	**configure** service ies *string* subscriber-interface *string* wlan-gw pool-manager watermarks high *number*
Tree	high
Range	51 to 99

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Default	95
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

low *number*

Synopsis	Low watermark when unused prefix is released
Context	**configure** service ies *string* subscriber-interface *string* wlan-gw pool-manager watermarks low *number*
Tree	low
Range	50 to 98
Default	90
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*

Synopsis	ID of WLAN gateway group where prefixes are installed
Context	**configure** service ies *string* subscriber-interface *string* wlan-gw pool-manager wlan-gw-group *reference*
Tree	wlan-gw-group
Reference	**configure** isa wlan-gw-group *number*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

redundancy

Synopsis	Enter the **redundancy** context
Context	**configure** service ies *string* subscriber-interface *string* wlan-gw redundancy
Tree	redundancy
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of WLAN-GW redundancy

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Context	**configure** service ies *string* subscriber-interface *string* wlan-gw redundancy admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

export *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Route to export to peer
Context	**configure** service ies *string* subscriber-interface *string* wlan-gw redundancy export *string*
Tree	export
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

monitor *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Peer route to monitor
Context	**configure** service ies *string* subscriber-interface *string* wlan-gw redundancy monitor *string*
Tree	monitor
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-mgmt

Synopsis	Enter the **subscriber-mgmt** context
Context	**configure** service ies *string* subscriber-mgmt

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Tree	subscriber-mgmt
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

multi-chassis-shunt-id *number*

Synopsis	Shunt ID for a pair of resilient nodes
Context	**configure** service ies *string* subscriber-mgmt multi-chassis-shunt-id *number*
Tree	multi-chassis-shunt-id
Description	This command configures the shunt ID that is used to shunt downstream traffic from a standby node to an active node. Because this ID identifies the traffic service on the standby node, the same ID must be configured per service on each node. This configuration is required for BNG CUPS inter-UPF resiliency shunting, but not for non-BNG CUPS shunting. However, when configured, it is also used for shunting non-BNG CUPS sessions in the same service.
Range	1 to 8191
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

up-resiliency

Synopsis	Enter the **up-resiliency** context
Context	**configure** service ies *string* subscriber-mgmt up-resiliency
Tree	up-resiliency
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

monitor-oper-group [oper-group] *reference*

Synopsis	Enter the **monitor-oper-group** list instance
Context	**configure** service ies *string* subscriber-mgmt up-resiliency monitor-oper-group *reference*
Tree	monitor-oper-group
Description	Commands in this context define parameters to derive the service health based on monitored operational groups. The BNG UPF sends the health value to the BNG CPF. The BNG CPF uses the value to determine the need for a BNG UPF status change (active or standby). **Note:**

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	The following is only applicable for the **configure service vpls capture-sap** context.If the configured groups are not the same for all capture SAPs sharing the same underlying port or LAG, the configuration of a Layer 2 access ID alias is required, or else the system chooses arbitrarily one set of configured groups.
Max. Instances	2
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**oper-group**] *reference*

Synopsis	Operational group name
Context	**configure** service ies *string* subscriber-mgmt up-resiliency monitor-oper-group *reference*
Tree	monitor-oper-group
Reference	**configure** service oper-group *string*
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

health-drop *number*

Synopsis	Number subtracted from the health value per failure
Context	**configure** service ies *string* subscriber-mgmt up-resiliency monitor-oper-group *reference* health-drop *number*
Tree	health-drop
Description	This command configures the drop in the health value for every operational group member failure. Every failure of an operational group member decreases the base health value to a possible minimum of 0.
Range	1 to 255
Default	1
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

video-interface [interface-name] *string*

Synopsis	Enter the **video-interface** list instance

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Context	**configure** service ies *string* video-interface *string*
Tree	video-interface
Max. Instances	9
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[**interface-name**] *string*

Synopsis	Video interface name
Context	**configure** service ies *string* video-interface *string*
Tree	video-interface
String Length	1 to 29
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

accounting-policy *reference*

Synopsis	Accounting Policy
Context	**configure** service ies *string* video-interface *string* accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

address [ip-address] *string*

Synopsis	Add a list entry for **address**
Context	**configure** service ies *string* video-interface *string* address *string*
Tree	address
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[**ip-address**] *string*

Synopsis	IPv4 address for the video interface within the service
Context	**configure** service ies *string* video-interface *string* address *string*
Tree	address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

admin-state *keyword*

Synopsis	Administrative state of the video interface
Context	**configure** service ies *string* video-interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

channel [mcast-address] *string* source *string*

Synopsis	Enter the **channel** list instance
Context	**configure** service ies *string* video-interface *string* channel *string* source *string*
Tree	channel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[**mcast-address**] *string*

Synopsis	Multicast channel address

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Context	**configure** service ies *string* video-interface *string* channel *string* source *string*
Tree	channel
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

source *string*

Synopsis	Unicast source address
Context	**configure** service ies *string* video-interface *string* channel *string* source *string*
Tree	channel
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

channel-name *string*

Synopsis	Channel name
Context	**configure** service ies *string* video-interface *string* channel *string* source *string* channel-name *string*
Tree	channel-name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	**configure** service ies *string* video-interface *string* channel *string* source *string* description *string*
Tree	description
String Length	1 to 80

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

scte35-action *keyword*

Synopsis	Enable downstream forwarding of SCTE 35 cue avails
Context	**configure** service ies *string* video-interface *string* channel *string* source *string* scte35-action *keyword*
Tree	scte35-action
Options	forward, drop
Default	forward
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

zone-channel [zone-mcast-address] *string* zone-source *string*

Synopsis	Enter the **zone-channel** list instance
Context	**configure** service ies *string* video-interface *string* channel *string* source *string* zone-channel *string* zone-source *string*
Tree	zone-channel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[**zone-mcast-address**] *string*

Synopsis	Multicast zone channel address
Context	**configure** service ies *string* video-interface *string* channel *string* source *string* zone-channel *string* zone-source *string*
Tree	zone-channel
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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zone-source *string*

Synopsis	Unicast source address
Context	**configure** service ies *string* video-interface *string* channel *string* source *string* zone-channel *string* zone-source *string*
Tree	zone-channel
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

adi-channel-name *string*

Synopsis	Zone channel name
Context	**configure** service ies *string* video-interface *string* channel *string* source *string* zone-channel *string* zone-source *string* adi-channel-name *string*
Tree	adi-channel-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

cpu-protection *reference*

Synopsis	CPU protection policy
Context	**configure** service ies *string* video-interface *string* cpu-protection *reference*
Tree	cpu-protection
Reference	**configure** system security cpu-protection policy *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	**configure** service ies *string* video-interface *string* description *string*
Tree	description
String Length	1 to 80

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

multicast-service *number*

Synopsis	Associated multicast service ID
Context	**configure** service ies *string* video-interface *string* multicast-service *number*
Tree	multicast-service
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

output-format *keyword*

Synopsis	Output format
Context	**configure** service ies *string* video-interface *string* output-format *keyword*
Tree	output-format
Options	udp, rtp-udp
Default	rtp-udp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

video-sap

Synopsis	Enable the **video-sap** context
Context	**configure** service ies *string* video-interface *string* video-sap
Tree	video-sap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

egress

Synopsis	Enter the **egress** context

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Context	**configure** service ies *string* video-interface *string* video-sap egress
Tree	egress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

filter

Synopsis	Enter the **filter** context
Context	**configure** service ies *string* video-interface *string* video-sap egress filter
Tree	filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service ies *string* video-interface *string* video-sap egress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos

Synopsis	Enter the **qos** context
Context	**configure** service ies *string* video-interface *string* video-sap egress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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policy-name *reference*

Synopsis	SAP egress QoS policy ID
Context	**configure** service ies *string* video-interface *string* video-sap egress qos policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-egress *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service ies *string* video-interface *string* video-sap ingress
Tree	ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

filter

Synopsis	Enter the **filter** context
Context	**configure** service ies *string* video-interface *string* video-sap ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service ies *string* video-interface *string* video-sap ingress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos

Synopsis	Enter the **qos** context
Context	**configure** service ies *string* video-interface *string* video-sap ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

policy-name *reference*

Synopsis	SAP ingress QoS policy ID
Context	**configure** service ies *string* video-interface *string* video-sap ingress qos policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-ingress *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

video-group-id *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Video group ID
Context	**configure** service ies *string* video-interface *string* video-sap video-group-id *reference*
Tree	video-group-id
Reference	**configure** isa video-group *number*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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vpn-id *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPN identifier for the service
Context	**configure** service ies *string* vpn-id *number*
Tree	vpn-id
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

ipfix

Synopsis	Enter the **ipfix** context
Context	**configure** service ipfix
Tree	ipfix
Introduced	16.0.R1
Platforms	All

export-policy [name] *string*

Synopsis	Enter the **export-policy** list instance
Context	**configure** service ipfix export-policy *string*
Tree	export-policy
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	IPFIX policy name
Context	**configure** service ipfix export-policy *string*
Tree	export-policy
String Length	1 to 32
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	All

collector router-instance *string* ip-address *string*

Synopsis	Enter the **collector** list instance
Context	**configure** service ipfix export-policy *string* collector router-instance *string* ip-address *string*
Tree	collector
Introduced	16.0.R1
Platforms	All

router-instance *string*

Synopsis	Router where the collector is reached
Context	**configure** service ipfix export-policy *string* collector router-instance *string* ip-address *string*
Tree	collector
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

ip-address *string*

Synopsis	IPv4 address of the external collector node
Context	**configure** service ipfix export-policy *string* collector router-instance *string* ip-address *string*
Tree	collector
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the collector

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Context	**configure** service ipfix export-policy *string* collector router-instance *string* ip-address *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

mtu *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum Transmission Unit
Context	**configure** service ipfix export-policy *string* collector router-instance *string* ip-address *string* mtu *number*
Tree	mtu
Range	512 to 9212
Units	octets
Default	1500
Introduced	16.0.R1
Platforms	All

refresh-timeout *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPFIX template refresh time
Context	**configure** service ipfix export-policy *string* collector router-instance *string* ip-address *string* refresh-timeout *number*
Tree	refresh-timeout
Range	240 to 86400
Units	seconds
Default	600

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Introduced	16.0.R1
Platforms	All

source-ip-address *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Source IP address from which UDP streams are sent
Context	**configure** service ipfix export-policy *string* collector router-instance *string* ip-address *string* source-ip-address *string*
Tree	source-ip-address
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service ipfix export-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

template-format *keyword*

Synopsis	Template format used by this IPFIX export policy
Context	**configure** service ipfix export-policy *string* template-format *keyword*
Tree	template-format
Options	format1, format2
Default	format1
Introduced	16.0.R1
Platforms	All

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ipipe [service-name] *string*

Synopsis	Enter the **ipipe** list instance
Context	**configure** service ipipe *string*
Tree	ipipe
Introduced	20.10.R1
Platforms	All

[**service-name**] *string*

Synopsis	Administrative service name
Context	**configure** service ipipe *string*
Tree	ipipe
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the service
Context	**configure** service ipipe *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	All

ce-address-discovery

Synopsis	Enable the **ce-address-discovery** context
Context	**configure** service ipipe *string* ce-address-discovery
Tree	ce-address-discovery
Introduced	20.10.R1
Platforms	All

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customer *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service customer ID
Context	**configure** service ipipe *string* customer *reference*
Tree	customer
Reference	**configure** service customer *string*
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service ipipe *string* description *string*
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	All

endpoint [name] *string*

Synopsis	Enter the **endpoint** list instance
Context	**configure** service ipipe *string* endpoint *string*
Tree	endpoint
Max. Instances	2
Introduced	20.10.R1
Platforms	All

[**name**] *string*

Synopsis	Service endpoint name

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Context	**configure** service ipipe *string* endpoint *string*
Tree	endpoint
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service ipipe *string* endpoint *string* description *string*
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	All

hold-time-active *number*

Synopsis	Time before entering standby when MC-LAG SAP goes down
Context	**configure** service ipipe *string* endpoint *string* hold-time-active *number*
Tree	hold-time-active
Range	1 to 60
Units	deciseconds
Introduced	20.10.R1
Platforms	All

revert-time *(number | keyword)*

Synopsis	Time to wait before reverting to primary spoke SDP
Context	**configure** service ipipe *string* endpoint *string* revert-time *(number | keyword)*
Tree	revert-time
Range	1 to 600
Units	seconds
Options	never, immediate
Default	immediate

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Introduced	20.10.R1
Platforms	All

standby-signaling *keyword*

Synopsis	Endpoint behavior for status of sending PW standby bit
Context	**configure** service ipipe *string* endpoint *string* standby-signaling *keyword*
Tree	standby-signaling
Options	master
Introduced	20.10.R1
Platforms	All

sap [sap-id] *string*

Synopsis	Enter the **sap** list instance
Context	**configure** service ipipe *string* sap *string*
Tree	sap
Introduced	20.10.R1
Platforms	All

[**sap-id**] *string*

Synopsis	SAP ID
Context	**configure** service ipipe *string* sap *string*
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

accounting-policy *reference*

Synopsis	Accounting policy
Context	**configure** service ipipe *string* sap *string* accounting-policy *reference*
Tree	accounting-policy

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Reference	**configure** log accounting-policy *number*
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the SAP
Context	**configure** service ipipe *string* sap *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	20.10.R1
Platforms	All

app-profile *reference*

Synopsis	Application profile name
Context	**configure** service ipipe *string* sap *string* app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bandwidth *number*

Synopsis	SAP bandwidth
Context	**configure** service ipipe *string* sap *string* bandwidth *number*
Tree	bandwidth
Range	1 to 6400000000
Units	kilobps
Introduced	20.10.R1
Platforms	All

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ce-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the CE device
Context	**configure** service ipipe *string* sap *string* ce-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ce-address
Introduced	20.10.R1
Platforms	All

collect-stats *boolean*

Synopsis	Collect accounting statistics
Context	**configure** service ipipe *string* sap *string* collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	20.10.R1
Platforms	All

cpu-protection

Synopsis	Enter the **cpu-protection** context
Context	**configure** service ipipe *string* sap *string* cpu-protection
Tree	cpu-protection
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	**configure** service ipipe *string* sap *string* cpu-protection mac-monitoring
Tree	mac-monitoring
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

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policy-id *reference*

Synopsis	CPM protection policy
Context	**configure** service ipipe *string* sap *string* cpu-protection policy-id *reference*
Tree	policy-id
Reference	**configure** system security cpu-protection policy *number*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** service ipipe *string* sap *string* description *string*
Tree	description
String Length	1 to 160
Introduced	20.10.R1
Platforms	All

dist-cpu-protection *reference*

Synopsis	Distributed CPU protection policy for SAP
Context	**configure** service ipipe *string* sap *string* dist-cpu-protection *reference*
Tree	dist-cpu-protection
Reference	**configure** system security dist-cpu-protection policy *string*
Introduced	20.10.R1
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** service ipipe *string* sap *string* egress
Tree	egress
Introduced	20.10.R1
Platforms	All

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agg-rate

Synopsis	Enter the **agg-rate** context
Context	**configure** service ipipe *string* sap *string* egress agg-rate
Tree	agg-rate
Introduced	20.10.R1
Platforms	All

adaptation-rule *keyword*

Synopsis	Adaptation rule to compute the operational PIR value when an aggregate shaper is used
Context	**configure** service ipipe *string* sap *string* egress agg-rate adaptation-rule *keyword*
Tree	adaptation-rule
Options	max, min, closest
Default	closest
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

burst-limit *(number | keyword)*

Synopsis	Shaping burst size when an aggregate shaper is used
Context	**configure** service ipipe *string* sap *string* egress agg-rate burst-limit *(number | keyword)*
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

limit-unused-bandwidth *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	**configure** service ipipe *string* sap *string* egress agg-rate limit-unused-bandwidth *boolean*
Tree	limit-unused-bandwidth

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Default	false
Introduced	20.10.R1
Platforms	All

rate *number*

Synopsis	Enforced aggregate rate for all queues
Context	**configure** service ipipe *string* sap *string* egress agg-rate rate *number*
Tree	rate
Range	1 to 6400000000
Units	kilobps
Introduced	20.10.R1
Platforms	All

filter

Synopsis	Enter the **filter** context
Context	**configure** service ipipe *string* sap *string* egress filter
Tree	filter
Introduced	20.10.R1
Platforms	All

ip *reference*

Synopsis	MAC filter ID
Context	**configure** service ipipe *string* sap *string* egress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	20.10.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter identifier
Context	**configure** service ipipe *string* sap *string* egress filter ipv6 *reference*

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Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	20.10.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** service ipipe *string* sap *string* egress qos
Tree	qos
Introduced	20.10.R1
Platforms	All

policer-control-policy

Synopsis	Enter the **policer-control-policy** context
Context	**configure** service ipipe *string* sap *string* egress qos policer-control-policy
Tree	policer-control-policy
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis	Enable the **overrides** context
Context	**configure** service ipipe *string* sap *string* egress qos policer-control-policy overrides
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

root

Synopsis	Enter the **root** context
Context	**configure** service ipipe *string* sap *string* egress qos policer-control-policy overrides root
Tree	root
Introduced	20.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate *(number | keyword)*

Synopsis	Maximum frame-based bandwidth limit
Context	**configure** service ipipe *string* sap *string* egress qos policer-control-policy overrides root max-rate *(number | keyword)*
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis	Enter the **priority-mbs-thresholds** context
Context	**configure** service ipipe *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-thresh-separation *(number | keyword)*

Synopsis	Minimum amount of separation buffer space
Context	**configure** service ipipe *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation *(number | keyword)*
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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priority [priority-level] *number*

Synopsis	Enter the **priority** list instance
Context	**configure** service ipipe *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*
Tree	priority
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**priority-level**] *number*

Synopsis	Priority level
Context	**configure** service ipipe *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution *(number | keyword)*

Synopsis	Minimum amount of cumulative buffer space allowed
Context	**configure** service ipipe *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds priority *number* mbs-contribution *(number | keyword)*
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	**configure** service ipipe *string* sap *string* egress qos policer-control-policy policy-name *reference*

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Tree	policy-name
Reference	**configure** qos policer-control-policy *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

qinq-mark-top-only *boolean*

Synopsis	Mark top Q-tags
Context	**configure** service ipipe *string* sap *string* egress qos qinq-mark-top-only *boolean*
Tree	qinq-mark-top-only
Default	false
Introduced	20.10.R1
Platforms	All

sap-egress

Synopsis	Enter the **sap-egress** context
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress
Tree	sap-egress
Introduced	20.10.R1
Platforms	All

overrides

Synopsis	Enter the **overrides** context
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides
Tree	overrides
Introduced	20.10.R1
Platforms	All

hs-secondary-shaper *string*

Synopsis	HS Secondary Shaper
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides hs-secondary-shaper *string*

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Tree	hs-secondary-shaper
String Length	1 to 32
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

hs-wrr-group [group-id] *reference*

Synopsis	Enter the **hs-wrr-group** list instance
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides hs-wrr-group *reference*
Tree	hs-wrr-group
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

[**group-id**] *reference*

Synopsis	HS WRR group identifier
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides hs-wrr-group *reference*
Tree	hs-wrr-group
Reference	**configure** qos sap-egress *string* hs-wrr-group *number*
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

hs-class-weight *number*

Synopsis	Class weight override of the WRR group
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides hs-wrr-group *reference* hs-class-weight *number*
Tree	hs-class-weight
Range	1 | 2 | 4 | 8
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

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percent-rate *decimal-number*

Synopsis	Percent rate override applied to the HS WRR group
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides hs-wrr-group *reference* percent-rate *decimal-number*
Tree	percent-rate
Range	0.01 to 100.00
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

rate *(number | keyword)*

Synopsis	Scheduling rate override applied to the HS WRR group
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides hs-wrr-group *reference* rate *(number | keyword)*
Tree	rate
Range	1 to 2000000000
Units	kilobps
Options	max
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

policer [policer-id] *reference*

Synopsis	Enter the **policer** list instance
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides policer *reference*
Tree	policer
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**policer-id**] *reference*

Synopsis	Policer unique ID

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Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides policer *reference*
Tree	policer
Reference	**configure** qos sap-egress *string* policer *number*
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs *(number | keyword)*

Synopsis	CBS
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides policer *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides policer *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information

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Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides policer *reference* packet-byte-offset *number*
Tree	packet-byte-offset
Range	-64 to 31
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides policer *reference* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *decimal-number*

Synopsis	CIR percent rate
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides policer *reference* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *decimal-number*

Synopsis	PIR percent rate
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides policer *reference* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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rate

Synopsis	Enter the **rate** context
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides policer *reference* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *(number | keyword)*

Synopsis	CIR rate
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides policer *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *(number | keyword)*

Synopsis	PIR rate
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides policer *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides policer *reference* stat-mode *keyword*
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue [queue-id] *reference*

Synopsis	Enter the **queue** list instance
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference*
Tree	queue
Introduced	20.10.R1
Platforms	All

[**queue-id**] *reference*

Synopsis	Policer unique ID
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference*
Tree	queue
Reference	**configure** qos sap-egress *string* queue *number*
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference* adaptation-rule
Tree	adaptation-rule

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Introduced	20.10.R1
Platforms	All

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference* adaptation-rule cir *keyword*
Tree	cir
Options	max, min, closest
Introduced	20.10.R1
Platforms	All

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Introduced	20.10.R1
Platforms	All

avg-frame-overhead *decimal-number*

Synopsis	Average packet-to-frame encapsulation overhead
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference* avg-frame-overhead *decimal-number*
Tree	avg-frame-overhead
Range	0.00 to 100.00
Introduced	20.10.R1
Platforms	All

burst-limit *(number | keyword)*

Synopsis	Explicit shaping burst size for the queue

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Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference* burst-limit *(number | keyword)*
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	All

cbs *(number | keyword)*

Synopsis	CBS
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	20.10.R1
Platforms	All

drop-tail

Synopsis	Enter the **drop-tail** context
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference* drop-tail
Tree	drop-tail
Introduced	20.10.R1
Platforms	All

low

Synopsis	Enter the **low** context
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference* drop-tail low
Tree	low

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Introduced	20.10.R1
Platforms	All

percent-reduction-from-mbs *(number | keyword)*

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference* drop-tail low percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	20.10.R1
Platforms	All

hs-class-weight *number*

Synopsis	Class weight override for the queue
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference* hs-class-weight *number*
Tree	hs-class-weight
Range	1 | 2 | 4 | 8
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

hs-wred-queue

Synopsis	Enter the **hs-wred-queue** context
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference* hs-wred-queue
Tree	hs-wred-queue
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

policy *reference*

Synopsis	Slope policy applied to the HSQ queue group queue

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Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference* hs-wred-queue policy *reference*
Tree	policy
Reference	**configure** qos slope-policy *string*
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

hs-wrr-weight *number*

Synopsis	WRR weight to parent with the queue into the scheduler
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference* hs-wrr-weight *number*
Tree	hs-wrr-weight
Range	1 to 127
Default	1
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the **monitor-queue-depth** context
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference* monitor-queue-depth
Tree	monitor-queue-depth

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Introduced	20.10.R1
Platforms	All

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference* monitor-queue-depth fast-polling *boolean*
Tree	fast-polling
Description	When configured to **true**, this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth.
Default	false
Introduced	20.10.R1
Platforms	All

violation-threshold *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference* monitor-queue-depth violation-threshold *decimal-number*
Tree	violation-threshold
Description	This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

parent

Synopsis	Enter the **parent** context
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference* parent
Tree	parent
Introduced	20.10.R1
Platforms	All

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cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	20.10.R1
Platforms	All

weight *number*

Synopsis	PIR parameter that overrides parent for queue group
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference* parent weight *number*
Tree	weight
Range	0 to 100
Introduced	20.10.R1
Platforms	All

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	All

cir *decimal-number*

Synopsis	CIR percent rate
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00

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Introduced	20.10.R1
Platforms	All

pir *decimal-number*

Synopsis	PIR percent rate
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	All

cir *(number | keyword)*

Synopsis	CIR rate
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	All

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pir *(number | keyword)*

Synopsis	PIR rate
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress overrides queue *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	All

policy-name *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-egress *string*
Introduced	20.10.R1
Platforms	All

port-redirect-group

Synopsis	Enter the **port-redirect-group** context
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress port-redirect-group
Tree	port-redirect-group
Introduced	20.10.R1
Platforms	All

group-name *reference*

Synopsis	Name of the queue group redirect list policy
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress port-redirect-group group-name *reference*
Tree	group-name
Reference	**configure** qos queue-group-templates egress queue-group *string*

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Introduced	20.10.R1
Platforms	All

instance *number*

Synopsis	Instance of port queue group
Context	**configure** service ipipe *string* sap *string* egress qos sap-egress port-redirect-group instance *number*
Tree	instance
Range	1 to 65535
Introduced	20.10.R1
Platforms	All

scheduler-policy

Synopsis	Enter the **scheduler-policy** context
Context	**configure** service ipipe *string* sap *string* egress qos scheduler-policy
Tree	scheduler-policy
Introduced	20.10.R1
Platforms	All

overrides

Synopsis	Enter the **overrides** context
Context	**configure** service ipipe *string* sap *string* egress qos scheduler-policy overrides
Tree	overrides
Introduced	20.10.R1
Platforms	All

scheduler [scheduler-name] *string*

Synopsis	Enter the **scheduler** list instance
Context	**configure** service ipipe *string* sap *string* egress qos scheduler-policy overrides scheduler *string*
Tree	scheduler
Introduced	20.10.R1

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Platforms	All

[**scheduler-name**] *string*

Synopsis	Scheduler name
Context	**configure** service ipipe *string* sap *string* egress qos scheduler-policy overrides scheduler *string*
Tree	scheduler
Description	This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands. If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name. If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

parent

Synopsis	Enter the **parent** context
Context	**configure** service ipipe *string* sap *string* egress qos scheduler-policy overrides scheduler *string* parent
Tree	parent
Introduced	20.10.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level

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Context	**configure** service ipipe *string* sap *string* egress qos scheduler-policy overrides scheduler *string* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	20.10.R1
Platforms	All

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	**configure** service ipipe *string* sap *string* egress qos scheduler-policy overrides scheduler *string* parent weight *number*
Tree	weight
Range	0 to 100
Introduced	20.10.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** service ipipe *string* sap *string* egress qos scheduler-policy overrides scheduler *string* rate
Tree	rate
Introduced	20.10.R1
Platforms	All

cir *(number | keyword)*

Synopsis	CIR at which the queue it to operate
Context	**configure** service ipipe *string* sap *string* egress qos scheduler-policy overrides scheduler *string* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	20.10.R1

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Platforms	All

pir *(number | keyword)*

Synopsis	PIR at which the queue is to operate
Context	**configure** service ipipe *string* sap *string* egress qos scheduler-policy overrides scheduler *string* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy name
Context	**configure** service ipipe *string* sap *string* egress qos scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos scheduler-policy *string*
Introduced	20.10.R1
Platforms	All

endpoint *reference*

Synopsis	Endpoint name
Context	**configure** service ipipe *string* sap *string* endpoint *reference*
Tree	endpoint
Reference	**configure** service ipipe *string* endpoint *string*
Introduced	20.10.R1
Platforms	All

ingress

Synopsis	Enter the **ingress** context

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Context	**configure** service ipipe *string* sap *string* ingress
Tree	ingress
Introduced	20.10.R1
Platforms	All

filter

Synopsis	Enter the **filter** context
Context	**configure** service ipipe *string* sap *string* ingress filter
Tree	filter
Introduced	20.10.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service ipipe *string* sap *string* ingress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	20.10.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service ipipe *string* sap *string* ingress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	20.10.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** service ipipe *string* sap *string* ingress qos

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Tree	qos
Introduced	20.10.R1
Platforms	All

match-qinq-dot1p *keyword*

Synopsis	Ingress match QinQ Dot1p
Context	**configure** service ipipe *string* sap *string* ingress qos match-qinq-dot1p *keyword*
Tree	match-qinq-dot1p
Options	top, bottom
Introduced	20.10.R1
Platforms	All

policer-control-policy

Synopsis	Enter the **policer-control-policy** context
Context	**configure** service ipipe *string* sap *string* ingress qos policer-control-policy
Tree	policer-control-policy
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis	Enable the **overrides** context
Context	**configure** service ipipe *string* sap *string* ingress qos policer-control-policy overrides
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

root

Synopsis	Enter the **root** context
Context	**configure** service ipipe *string* sap *string* ingress qos policer-control-policy overrides root
Tree	root
Introduced	20.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate *(number | keyword)*

Synopsis	Maximum frame-based bandwidth limit
Context	**configure** service ipipe *string* sap *string* ingress qos policer-control-policy overrides root max-rate *(number | keyword)*
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis	Enter the **priority-mbs-thresholds** context
Context	**configure** service ipipe *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-thresh-separation *(number | keyword)*

Synopsis	Minimum amount of separation buffer space
Context	**configure** service ipipe *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation *(number | keyword)*
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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priority [priority-level] *number*

Synopsis	Enter the **priority** list instance
Context	**configure** service ipipe *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*
Tree	priority
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**priority-level**] *number*

Synopsis	Priority level
Context	**configure** service ipipe *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution *(number | keyword)*

Synopsis	Minimum amount of cumulative buffer space allowed
Context	**configure** service ipipe *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds priority *number* mbs-contribution *(number | keyword)*
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	**configure** service ipipe *string* sap *string* ingress qos policer-control-policy policy-name *reference*

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Tree	policy-name
Reference	**configure** qos policer-control-policy *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

sap-ingress

Synopsis	Enter the **sap-ingress** context
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress
Tree	sap-ingress
Introduced	20.10.R1
Platforms	All

fp-redirect-group

Synopsis	Enter the **fp-redirect-group** context
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress fp-redirect-group
Tree	fp-redirect-group
Introduced	20.10.R1
Platforms	All

group-name *reference*

Synopsis	Queue group template name created on forwarding plane
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress fp-redirect-group group-name *reference*
Tree	group-name
Reference	**configure** qos queue-group-templates ingress queue-group *string*
Introduced	20.10.R1
Platforms	All

instance *number*

Synopsis	Queue group instance
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress fp-redirect-group instance *number*

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Tree	instance
Range	1 to 65535
Introduced	20.10.R1
Platforms	All

overrides

Synopsis	Enter the **overrides** context
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides
Tree	overrides
Introduced	20.10.R1
Platforms	All

policer [policer-id] *reference*

Synopsis	Enter the **policer** list instance
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides policer *reference*
Tree	policer
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**policer-id**] *reference*

Synopsis	Policer unique ID
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides policer *reference*
Tree	policer
Reference	**configure** qos sap-ingress *string* policer *number*
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs *(number | keyword)*

Synopsis	CBS

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Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* packet-byte-offset *number*
Tree	packet-byte-offset
Range	-32 to 31
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* percent-rate

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Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *decimal-number*

Synopsis	CIR percent rate
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *decimal-number*

Synopsis	PIR percent rate
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis	Enter the **rate** context
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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cir *(number | keyword)*

Synopsis	CIR rate
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *(number | keyword)*

Synopsis	PIR rate
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides policer *reference* stat-mode *keyword*
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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queue [queue-id] *reference*

Synopsis	Enter the **queue** list instance
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides queue *reference*
Tree	queue
Introduced	20.10.R1
Platforms	All

[**queue-id**] *reference*

Synopsis	Policer unique ID
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides queue *reference*
Tree	queue
Reference	**configure** qos sap-ingress *string* queue *number*
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* adaptation-rule
Tree	adaptation-rule
Introduced	20.10.R1
Platforms	All

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* adaptation-rule cir *keyword*
Tree	cir
Options	max, min, closest
Introduced	20.10.R1

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Platforms	All

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Introduced	20.10.R1
Platforms	All

cbs *(number | keyword)*

Synopsis	CBS
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	20.10.R1
Platforms	All

drop-tail

Synopsis	Enter the **drop-tail** context
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* drop-tail
Tree	drop-tail
Introduced	20.10.R1
Platforms	All

low

Synopsis	Enter the **low** context

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Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* drop-tail low
Tree	low
Introduced	20.10.R1
Platforms	All

percent-reduction-from-mbs *(number | keyword)*

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* drop-tail low percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	20.10.R1
Platforms	All

mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the **monitor-queue-depth** context
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* monitor-queue-depth
Tree	monitor-queue-depth
Introduced	21.7.R1

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Platforms	All

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* monitor-queue-depth fast-polling *boolean*
Tree	fast-polling
Default	false
Introduced	21.7.R1
Platforms	All

parent

Synopsis	Enter the **parent** context
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* parent
Tree	parent
Introduced	20.10.R1
Platforms	All

cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	20.10.R1
Platforms	All

weight *number*

Synopsis	PIR parameter that overrides parent for queue group
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* parent weight *number*
Tree	weight

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Range	0 to 100
Introduced	20.10.R1
Platforms	All

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	All

cir *decimal-number*

Synopsis	CIR percent rate
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Introduced	20.10.R1
Platforms	All

pir *decimal-number*

Synopsis	PIR percent rate
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	All

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rate

Synopsis	Enter the **rate** context
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	20.10.R1
Platforms	All

cir *(number | keyword)*

Synopsis	CIR rate
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	All

pir *(number | keyword)*

Synopsis	PIR rate
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress overrides queue *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	All

policy-name *reference*

Synopsis	Policy ID

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Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-ingress *string*
Introduced	20.10.R1
Platforms	All

queuing-type *keyword*

Synopsis	Queuing type
Context	**configure** service ipipe *string* sap *string* ingress qos sap-ingress queuing-type *keyword*
Tree	queuing-type
Options	shared, multipoint-shared
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR

scheduler-policy

Synopsis	Enter the **scheduler-policy** context
Context	**configure** service ipipe *string* sap *string* ingress qos scheduler-policy
Tree	scheduler-policy
Introduced	20.10.R1
Platforms	All

overrides

Synopsis	Enter the **overrides** context
Context	**configure** service ipipe *string* sap *string* ingress qos scheduler-policy overrides
Tree	overrides
Introduced	20.10.R1
Platforms	All

scheduler [scheduler-name] *string*

Synopsis	Enter the **scheduler** list instance

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Context	**configure** service ipipe *string* sap *string* ingress qos scheduler-policy overrides scheduler *string*
Tree	scheduler
Introduced	20.10.R1
Platforms	All

[**scheduler-name**] *string*

Synopsis	Scheduler name
Context	**configure** service ipipe *string* sap *string* ingress qos scheduler-policy overrides scheduler *string*
Tree	scheduler
Description	This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands. If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name. If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

parent

Synopsis	Enter the **parent** context
Context	**configure** service ipipe *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* parent
Tree	parent
Introduced	20.10.R1
Platforms	All

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cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	**configure** service ipipe *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	20.10.R1
Platforms	All

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	**configure** service ipipe *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* parent weight *number*
Tree	weight
Range	0 to 100
Introduced	20.10.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** service ipipe *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* rate
Tree	rate
Introduced	20.10.R1
Platforms	All

cir *(number | keyword)*

Synopsis	CIR at which the queue it to operate
Context	**configure** service ipipe *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000

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Units	kilobps
Options	sum, max
Introduced	20.10.R1
Platforms	All

pir *(number | keyword)*

Synopsis	PIR at which the queue is to operate
Context	**configure** service ipipe *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy name
Context	**configure** service ipipe *string* sap *string* ingress qos scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos scheduler-policy *string*
Introduced	20.10.R1
Platforms	All

lag

Synopsis	Enter the **lag** context
Context	**configure** service ipipe *string* sap *string* lag
Tree	lag
Introduced	20.10.R1
Platforms	All

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link-map-profile *number*

Synopsis	LAG link map profile for a SAP or network interface
Context	**configure** service ipipe *string* sap *string* lag link-map-profile *number*
Tree	link-map-profile
Description	This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration. If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.
Range	1 to 64
Introduced	20.10.R1
Platforms	All

per-link-hash

Synopsis	Enter the **per-link-hash** context
Context	**configure** service ipipe *string* sap *string* lag per-link-hash
Tree	per-link-hash
Introduced	20.10.R1
Platforms	All

class *number*

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	**configure** service ipipe *string* sap *string* lag per-link-hash class *number*
Tree	class
Range	1 to 3
Default	1
Introduced	20.10.R1
Platforms	All

weight *number*

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	**configure** service ipipe *string* sap *string* lag per-link-hash weight *number*

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Tree	weight
Range	1 to 1024
Default	1
Introduced	20.10.R1
Platforms	All

mac *string*

Synopsis	MAC address of the Ipipe Ethernet SAP
Context	**configure** service ipipe *string* sap *string* mac *string*
Tree	mac
Default	00:00:00:00:00:00
Introduced	20.10.R1
Platforms	All

mac-refresh *number*

Synopsis	MAC refresh interval
Context	**configure** service ipipe *string* sap *string* mac-refresh *number*
Tree	mac-refresh
Range	0 to 65535
Default	14400
Introduced	20.10.R1
Platforms	All

multi-service-site *reference*

Synopsis	Multi service site name
Context	**configure** service ipipe *string* sap *string* multi-service-site *reference*
Tree	multi-service-site
Reference	**configure** service customer *string* multi-service-site *string*
Introduced	20.10.R1
Platforms	All

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transit-policy

Synopsis	Enable the **transit-policy** context
Context	**configure** service ipipe *string* sap *string* transit-policy
Tree	transit-policy
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	**configure** service ipipe *string* sap *string* transit-policy prefix *reference*
Tree	prefix
Reference	**configure** application-assurance group *number* partition *number* transit-prefix-policy *number*
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

use-broadcast-mac *boolean*

Synopsis	Allow broadcast MAC on SAP
Context	**configure** service ipipe *string* sap *string* use-broadcast-mac *boolean*
Tree	use-broadcast-mac
Default	false
Introduced	20.10.R1
Platforms	All

service-id *number*

WARNING:
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Synopsis	Service ID
Context	**configure** service ipipe *string* service-id *number*
Tree	service-id
Range	1 to 2147483647
Introduced	20.10.R1
Platforms	All

service-mtu *number*

Synopsis	MTU size
Context	**configure** service ipipe *string* service-mtu *number*
Tree	service-mtu
Description	This command configures the Maximum Transmission Unit (MTU) value (payload) for the service. The system uses the value to validate the operational state of the SAP and SDP binding within the service. The value overrides the default MTU for the service type. The service MTU and a SAP's service delineation encapsulation overhead (4 bytes for a dot1q tag) are used to derive the required MTU of the physical port or channel on which the SAP was created. If the required payload is larger than the port or channel MTU, the SAP is placed in an inoperative state. If the required MTU is equal to or less than the port or channel MTU, the SAP transitions to the operative state. When binding an SDP to a service, the service MTU is compared to the path MTU associated with the SDP. The path MTU can be administratively defined in the context of the SDP. The default or administrative path MTU can be dynamically reduced due to the MTU capabilities discovered by the tunneling mechanism of the SDP or the egress interface MTU capabilities based on the next hop in the tunnel path. If the service MTU is larger than the path MTU, the SDP binding for the service is placed in an inoperative state. If the service MTU is equal to or less than the path MTU, the SDP binding is placed in an operational state. If a service MTU, port or channel MTU, or path MTU is dynamically or administratively modified, all associated SAP and SDP binding operational states are automatically reevaluated. Binding operational states are automatically reevaluated. For I-VPLS and Epipes bound to a B-VPLS, the service MTU must be at least 18 bytes smaller than the B-VPLS service MTU to accommodate the PBB header. Because this connects a Layer 2 to a Layer 3 service, adjust the service MTU under the Epipe service. The MTU that is advertised from the Epipe side is service MTU minus EtherHeaderSize. In the **configure service epipe spoke-sdp** context, the **adv-service-mtu** command can be used to override the configured MTU value used in T-LDP signaling to the far-end of an Epipe spoke-sdp. The **adv-service-mtu** command is also used to validate the value signaled by the far-end PE.

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Range	1 to 9194
Introduced	20.10.R1
Platforms	All

spoke-sdp [sdp-bind-id] *string*

Synopsis	Enter the **spoke-sdp** list instance
Context	**configure** service ipipe *string* spoke-sdp *string*
Tree	spoke-sdp
Introduced	20.10.R1
Platforms	All

[**sdp-bind-id**] *string*

Synopsis	SDP binding ID
Context	**configure** service ipipe *string* spoke-sdp *string*
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

aarp

Synopsis	Enable the **aarp** context
Context	**configure** service ipipe *string* spoke-sdp *string* aarp
Tree	aarp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id *reference*

WARNING:
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Synopsis	AARP instance ID
Context	**configure** service ipipe *string* spoke-sdp *string* aarp id *reference*
Tree	id
Reference	**configure** application-assurance aarp *number*
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Role of the spoke SDP referenced by the AARP
Context	**configure** service ipipe *string* spoke-sdp *string* aarp type *keyword*
Tree	type
Options	subscriber-side-shunt, network-side-shunt
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the SDP binding to the service
Context	**configure** service ipipe *string* spoke-sdp *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	20.10.R1
Platforms	All

app-profile *reference*

Synopsis	Application profile name for this SDP

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Context	**configure** service ipipe *string* spoke-sdp *string* app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bandwidth *(number | keyword)*

Synopsis	Bandwidth that is reserved for this SDP binding
Context	**configure** service ipipe *string* spoke-sdp *string* bandwidth *(number | keyword)*
Tree	bandwidth
Range	0 to 100000000
Units	kilobps
Options	max
Default	0
Introduced	20.10.R1
Platforms	All

bfd

Synopsis	Enter the **bfd** context
Context	**configure** service ipipe *string* spoke-sdp *string* bfd
Tree	bfd
Introduced	21.2.R1
Platforms	All

bfd-liveness

Synopsis	Enable the **bfd-liveness** context
Context	**configure** service ipipe *string* spoke-sdp *string* bfd bfd-liveness
Tree	bfd-liveness
Introduced	21.2.R1
Platforms	All

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encap *keyword*

Synopsis	BFD encapsulation used on the SDP binding
Context	**configure** service ipipe *string* spoke-sdp *string* bfd bfd-liveness encap *keyword*
Tree	encap
Options	ipv4
Default	ipv4
Introduced	21.2.R1
Platforms	All

bfd-template *reference*

Synopsis	BFD template associated with the SDP binding
Context	**configure** service ipipe *string* spoke-sdp *string* bfd bfd-template *reference*
Tree	bfd-template
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the **configure router bfd** context.
Reference	**configure** bfd bfd-template *string*
Introduced	21.2.R1
Platforms	All

ce-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the CE device
Context	**configure** service ipipe *string* spoke-sdp *string* ce-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ce-address
Introduced	20.10.R1
Platforms	All

control-word *boolean*

Synopsis	Use control word as part of packet encapsulation
Context	**configure** service ipipe *string* spoke-sdp *string* control-word *boolean*
Tree	control-word

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Default	false
Introduced	20.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service ipipe *string* spoke-sdp *string* description *string*
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** service ipipe *string* spoke-sdp *string* egress
Tree	egress
Introduced	20.10.R1
Platforms	All

filter

Synopsis	Enter the **filter** context
Context	**configure** service ipipe *string* spoke-sdp *string* egress filter
Tree	filter
Introduced	20.10.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service ipipe *string* spoke-sdp *string* egress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*

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Introduced	20.10.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service ipipe *string* spoke-sdp *string* egress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	20.10.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** service ipipe *string* spoke-sdp *string* egress qos
Tree	qos
Introduced	20.10.R1
Platforms	All

network

Synopsis	Enter the **network** context
Context	**configure** service ipipe *string* spoke-sdp *string* egress qos network
Tree	network
Introduced	20.10.R1
Platforms	All

policy-name *reference*

Synopsis	Network policy ID
Context	**configure** service ipipe *string* spoke-sdp *string* egress qos network policy-name *reference*
Tree	policy-name
Reference	**configure** qos network *string*

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Introduced	20.10.R1
Platforms	All

port-redirect-group

Synopsis	Enter the **port-redirect-group** context
Context	**configure** service ipipe *string* spoke-sdp *string* egress qos network port-redirect-group
Tree	port-redirect-group
Introduced	20.10.R1
Platforms	All

group-name *reference*

Synopsis	Name of the egress port queue group
Context	**configure** service ipipe *string* spoke-sdp *string* egress qos network port-redirect-group group-name *reference*
Tree	group-name
Reference	**configure** qos queue-group-templates egress queue-group *string*
Introduced	20.10.R1
Platforms	All

instance *number*

Synopsis	Queue-group instance ID
Context	**configure** service ipipe *string* spoke-sdp *string* egress qos network port-redirect-group instance *number*
Tree	instance
Range	1 to 65535
Introduced	20.10.R1
Platforms	All

vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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Synopsis	Egress MPLS VC label to send packets to the far end
Context	**configure** service ipipe *string* spoke-sdp *string* egress vc-label *number*
Tree	vc-label
Range	16 to 1048575
Introduced	20.10.R1
Platforms	All

endpoint

Synopsis	Enter the **endpoint** context
Context	**configure** service ipipe *string* spoke-sdp *string* endpoint
Tree	endpoint
Introduced	20.10.R1
Platforms	All

name *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Endpoint name to which SDP bind is attached
Context	**configure** service ipipe *string* spoke-sdp *string* endpoint name *reference*
Tree	name
Reference	**configure** service ipipe *string* endpoint *string*
Introduced	20.10.R1
Platforms	All

precedence *(number | keyword)*

Synopsis	Precedence when multiple SDP binds are on one endpoint
Context	**configure** service ipipe *string* spoke-sdp *string* endpoint precedence *(number | keyword)*
Tree	precedence
Range	1 to 4
Options	primary

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Default	4
Introduced	20.10.R1
Platforms	All

entropy-label

Synopsis	Enable the use of entropy labels for spoke SDPs
Context	**configure** service ipipe *string* spoke-sdp *string* entropy-label
Tree	entropy-label
Notes	The following elements are part of a choice: **entropy-label** or **hash-label**.
Introduced	20.10.R1
Platforms	All

hash-label

Synopsis	Enable the **hash-label** context
Context	**configure** service ipipe *string* spoke-sdp *string* hash-label
Tree	hash-label
Description	Commands in this context configure the use of hash labels for egress datapaths. For information about hash-label handling, see the "Hash labels" section of the *7450 ESS, 7750 SR, 7950 XRS, and VSR MPLS Guide*.
Notes	The following elements are part of a choice: **entropy-label** or **hash-label**.
Introduced	20.10.R1
Platforms	All

signal-capability

Synopsis	Signal hash label capability to the remote PE
Context	**configure** service ipipe *string* spoke-sdp *string* hash-label signal-capability
Tree	signal-capability
Description	When configured, this command enables the signaling and negotiating of the hash label between the local and remote PE nodes. The signaling process outcome determines whether the local PE inserts the hash label on the user packets. This outcome can override the local PE configuration.
Introduced	20.10.R1

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Platforms	All

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service ipipe *string* spoke-sdp *string* ingress
Tree	ingress
Introduced	20.10.R1
Platforms	All

filter

Synopsis	Enter the **filter** context
Context	**configure** service ipipe *string* spoke-sdp *string* ingress filter
Tree	filter
Introduced	20.10.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service ipipe *string* spoke-sdp *string* ingress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	20.10.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service ipipe *string* spoke-sdp *string* ingress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	20.10.R1
Platforms	All

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qos

Synopsis	Enter the **qos** context
Context	**configure** service ipipe *string* spoke-sdp *string* ingress qos
Tree	qos
Introduced	20.10.R1
Platforms	All

network

Synopsis	Enter the **network** context
Context	**configure** service ipipe *string* spoke-sdp *string* ingress qos network
Tree	network
Introduced	20.10.R1
Platforms	All

fp-redirect-group

Synopsis	Enter the **fp-redirect-group** context
Context	**configure** service ipipe *string* spoke-sdp *string* ingress qos network fp-redirect-group
Tree	fp-redirect-group
Introduced	20.10.R1
Platforms	All

group-name *reference*

Synopsis	Name of the forwarding plane queue group template
Context	**configure** service ipipe *string* spoke-sdp *string* ingress qos network fp-redirect-group group-name *reference*
Tree	group-name
Reference	**configure** qos queue-group-templates ingress queue-group *string*
Introduced	20.10.R1
Platforms	All

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instance *number*

Synopsis	Instance of FP ingress queue group for the SDP binding
Context	**configure** service ipipe *string* spoke-sdp *string* ingress qos network fp-redirect-group instance *number*
Tree	instance
Range	1 to 65535
Introduced	20.10.R1
Platforms	All

policy-name *reference*

Synopsis	Network policy ID
Context	**configure** service ipipe *string* spoke-sdp *string* ingress qos network policy-name *reference*
Tree	policy-name
Reference	**configure** qos network *string*
Introduced	20.10.R1
Platforms	All

vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
Context	**configure** service ipipe *string* spoke-sdp *string* ingress vc-label *number*
Tree	vc-label
Range	1 to 1048575
Introduced	20.10.R1
Platforms	All

transit-policy

Synopsis	Enable the **transit-policy** context
Context	**configure** service ipipe *string* spoke-sdp *string* transit-policy

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Tree	transit-policy
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	**configure** service ipipe *string* spoke-sdp *string* transit-policy prefix *reference*
Tree	prefix
Reference	**configure** application-assurance group *number* partition *number* transit-prefix-policy *number*
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vc-switching *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Use PW switching signaling for spoke SDPs in service
Context	**configure** service ipipe *string* vc-switching *boolean*
Tree	vc-switching
Default	false
Introduced	20.10.R1
Platforms	All

vpn-id *number*

WARNING:
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Synopsis	VPN identifier for the service
Context	**configure** service ipipe *string* vpn-id *number*
Tree	vpn-id
Range	1 to 2147483647
Introduced	20.10.R1
Platforms	All

mac-list [name] *string*

Synopsis	Enter the **mac-list** list instance
Context	**configure** service mac-list *string*
Tree	mac-list
Description	Commands in this context specify the MAC addresses to be included in a MAC list to be used with the Auto-Learn MAC Protect (ALMP) functionality. The list is used to exclude certain MAC addresses from protection, for example, on SAPs or spoke SDPs configured with ALMP where certain MAC addresses (such as VRRP virtual MAC addresses) must be able to move to other objects.
Introduced	20.5.R1
Platforms	All

[**name**] *string*

Synopsis	MAC list name
Context	**configure** service mac-list *string*
Tree	mac-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service mac-list *string* description *string*
Tree	description
String Length	1 to 80

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Introduced	20.5.R1
Platforms	All

mac [address] *string*

Synopsis	Enter the **mac** list instance
Context	**configure** service mac-list *string* mac *string*
Tree	mac
Introduced	20.5.R1
Platforms	All

[**address**] *string*

Synopsis	MAC address
Context	**configure** service mac-list *string* mac *string*
Tree	mac
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

mask *string*

Synopsis	Mask for the MAC address
Context	**configure** service mac-list *string* mac *string* mask *string*
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	20.5.R1
Platforms	All

md-auto-id

Synopsis	Enter the **md-auto-id** context
Context	**configure** service md-auto-id
Tree	md-auto-id
Introduced	16.0.R1

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Platforms	All

customer-id-range

Synopsis	Enable the **customer-id-range** context
Context	**configure** service md-auto-id customer-id-range
Tree	customer-id-range
Introduced	16.0.R1
Platforms	All

end *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the ID range
Context	**configure** service md-auto-id customer-id-range end *number*
Tree	end
Range	2 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the ID range
Context	**configure** service md-auto-id customer-id-range start *number*
Tree	start
Range	2 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R1

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Platforms	All

pw-template-id-range

Synopsis	Enable the **pw-template-id-range** context
Context	**configure** service md-auto-id pw-template-id-range
Tree	pw-template-id-range
Introduced	16.0.R1
Platforms	All

end *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the PW template ID range
Context	**configure** service md-auto-id pw-template-id-range end *number*
Tree	end
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the PW template ID range
Context	**configure** service md-auto-id pw-template-id-range start *number*
Tree	start
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R1

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Platforms	All

service-id-range

Synopsis	Enable the **service-id-range** context
Context	**configure** service md-auto-id service-id-range
Tree	service-id-range
Introduced	16.0.R1
Platforms	All

end *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the service ID range
Context	**configure** service md-auto-id service-id-range end *number*
Tree	end
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the service ID range
Context	**configure** service md-auto-id service-id-range start *number*
Tree	start
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R1

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Platforms	All

mrp

Synopsis	Enter the **mrp** context
Context	**configure** service mrp
Tree	mrp
Introduced	20.10.R1
Platforms	All

policy [policy-name] *string*

Synopsis	Enter the **policy** list instance
Context	**configure** service mrp policy *string*
Tree	policy
Introduced	20.10.R1
Platforms	All

[**policy-name**] *string*

Synopsis	Specify the policy name associated with the MRP
Context	**configure** service mrp policy *string*
Tree	policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

default-action *keyword*

Synopsis	Action for packets not matching any MRP policy entries
Context	**configure** service mrp policy *string* default-action *keyword*
Tree	default-action
Options	block, allow
Default	allow

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Introduced	20.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service mrp policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	All

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** service mrp policy *string* entry *number*
Tree	entry
Introduced	20.10.R1
Platforms	All

[**entry-id**] *number*

Synopsis	Sepcify an id for the MRP policy entry
Context	**configure** service mrp policy *string* entry *number*
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

action *keyword*

Synopsis	Action applied for matching packets
Context	**configure** service mrp policy *string* entry *number* action *keyword*
Tree	action

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Options	block, allow, end-station
Introduced	20.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service mrp policy *string* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	All

match

Synopsis	Enter the **match** context
Context	**configure** service mrp policy *string* entry *number* match
Tree	match
Introduced	20.10.R1
Platforms	All

isid [value] *number*

Synopsis	Enter the **isid** list instance
Context	**configure** service mrp policy *string* entry *number* match isid *number*
Tree	isid
Introduced	20.10.R1
Platforms	All

[**value**] *number*

Synopsis	Lowest service instance ID to match the entry
Context	**configure** service mrp policy *string* entry *number* match isid *number*
Tree	isid
Range	0 to 16777215

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Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

higher-value *number*

Synopsis	Highest service instance ID to match the entry
Context	**configure** service mrp policy *string* entry *number* match isid *number* higher-value *number*
Tree	higher-value
Range	0 to 16777215
Introduced	20.10.R1
Platforms	All

scope *keyword*

Synopsis	Specify the scope of the mrp-policy definition
Context	**configure** service mrp policy *string* scope *keyword*
Tree	scope
Options	exclusive, template
Default	template
Introduced	20.10.R1
Platforms	All

nat

Synopsis	Enter the **nat** context
Context	**configure** service nat
Tree	nat
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

classifier [name] *string*

Synopsis	Enter the **classifier** list instance

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Context	**configure** service nat classifier *string*
Tree	classifier
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	NAT classifier name
Context	**configure** service nat classifier *string*
Tree	classifier
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default

Synopsis	Enter the **default** context
Context	**configure** service nat classifier *string* default
Tree	default
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action

Synopsis	Enter the **action** context
Context	**configure** service nat classifier *string* default action
Tree	action
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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destination-nat

Synopsis	Enable the **destination-nat** context
Context	**configure** service nat classifier *string* default action destination-nat
Tree	destination-nat
Notes	The following elements are part of a choice: (**destination-nat**, **dnat**, and **dnat-ip-address**) or **forward**.
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis	Substitute destination IP address of matching packets
Context	**configure** service nat classifier *string* default action destination-nat ip-address *string*
Tree	ip-address
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

forward

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Forward mode of operation
Context	**configure** service nat classifier *string* default action forward
Tree	forward
Notes	The following elements are part of a choice: (**destination-nat**, **dnat**, and **dnat-ip-address**) or **forward**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dnat-ip-address *string*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Default destination IP address for matching entries with dNAT action

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Context	**configure** service nat classifier *string* default dnat-ip-address *string*
Tree	dnat-ip-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service nat classifier *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** service nat classifier *string* entry *number*
Tree	entry
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	Classifier rule entry ID
Context	**configure** service nat classifier *string* entry *number*
Tree	entry
Range	1 to 1000
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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action

Synopsis	Enter the **action** context
Context	**configure** service nat classifier *string* entry *number* action
Tree	action
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

destination-nat

Synopsis	Enable the **destination-nat** context
Context	**configure** service nat classifier *string* entry *number* action destination-nat
Tree	destination-nat
Notes	The following elements are part of a choice: (**destination-nat**, **dnat**, and **dnat-ip-address**) or **forward**.
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis	Replacement destination IP address for packets
Context	**configure** service nat classifier *string* entry *number* action destination-nat ip-address *string*
Tree	ip-address
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

forward

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Forward mode of operation
Context	**configure** service nat classifier *string* entry *number* action forward
Tree	forward
Notes	The following elements are part of a choice: (**destination-nat**, **dnat**, and **dnat-ip-address**) or **forward**.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service nat classifier *string* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis	Enter the **match** context
Context	**configure** service nat classifier *string* entry *number* match
Tree	match
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dst-port-range

Synopsis	Enter the **dst-port-range** context
Context	**configure** service nat classifier *string* entry *number* match dst-port-range
Tree	dst-port-range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Upper bound of the port range
Context	**configure** service nat classifier *string* entry *number* match dst-port-range end *number*
Tree	end

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Range	0 | 1 to 65535
Default	65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start *number*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Lower bound of the port range
Context	**configure** service nat classifier *string* entry *number* match dst-port-range start *number*
Tree	start
Range	0 | 1 to 65535
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

foreign-ip-address *string*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Foreign IP address as the match criterion
Context	**configure** service nat classifier *string* entry *number* match foreign-ip-address *string*
Tree	foreign-ip-address
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocol *keyword*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	IP protocol to match
Context	**configure** service nat classifier *string* entry *number* match protocol *keyword*
Tree	protocol

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Options	tcp, udp
Default	udp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

deterministic-script

Synopsis	Enter the **deterministic-script** context
Context	**configure** service nat deterministic-script
Tree	deterministic-script
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

location *string*

Synopsis	Remote location where Python script is exported
Context	**configure** service nat deterministic-script location *string*
Tree	location
String Length	1 to 180
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

firewall-policy [name] *string*

Synopsis	Enter the **firewall-policy** list instance
Context	**configure** service nat firewall-policy *string*
Tree	firewall-policy
Description	Commands in this context configure the attributes of the firewall policy, for use in contexts where basic protection from outside attack vectors is required. Firewall policies cannot be deleted if they are in use.
Max. Instances	2048
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**name**] *string*

Synopsis	Firewall policy name
Context	**configure** service nat firewall-policy *string*
Tree	firewall-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

alg

Synopsis	Enter the **alg** context
Context	**configure** service nat firewall-policy *string* alg
Tree	alg
Description	Commands in this context configure the Application Layer Gateway (ALG) attributes of the policy.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ftp *boolean*

Synopsis	Use FTP ALG for the policy
Context	**configure** service nat firewall-policy *string* alg ftp *boolean*
Tree	ftp
Default	true
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtsp *boolean*

Synopsis	Use RTSP ALG for the policy
Context	**configure** service nat firewall-policy *string* alg rtsp *boolean*
Tree	rtsp
Description	When configured to **true**, Real-Time Streaming Protocol (RTSP) ALG is used for the policy.

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Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

sip *boolean*

Synopsis	Use SIP ALG for the policy
Context	**configure** service nat firewall-policy *string* alg sip *boolean*
Tree	sip
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service nat firewall-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

domain

Synopsis	Enter the **domain** context
Context	**configure** service nat firewall-policy *string* domain
Tree	domain
Description	Commands in this context configure the attributes of the domain for the firewall policy. All associated traffic must be part of the prefixes specified by this domain.
Notes	The following elements are part of a choice: **domain** or **l2-outside**.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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name *string*

Synopsis	Firewall domain name
Context	**configure** service nat firewall-policy *string* domain name *string*
Tree	name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Router or VPRN service name
Context	**configure** service nat firewall-policy *string* domain router-instance *string*
Tree	router-instance
Description	This command specifies the router instance or VPRN service for this domain. All associated traffic must be part of the prefixes specified by this domain.
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

filtering *keyword*

Synopsis	Filtering method for inbound traffic for the policy
Context	**configure** service nat firewall-policy *string* filtering *keyword*
Tree	filtering
Options	endpoint-independent, address-and-port-dependent
Default	endpoint-independent
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2-outside

Synopsis	Use Layer 2 outside service address location
Context	**configure** service nat firewall-policy *string* l2-outside
Tree	l2-outside
Description	This command specifies Layer 2 outside service address location for the NAT policy instead of Layer 3 outside service.

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Notes	The following elements are part of a choice: **domain** or **l2-outside**.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-limits

Synopsis	Enter the **port-limits** context
Context	**configure** service nat firewall-policy *string* port-limits
Tree	port-limits
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

forwarding *number*

Synopsis	Maximum number of port forwarding entries
Context	**configure** service nat firewall-policy *string* port-limits forwarding *number*
Tree	forwarding
Range	1 to 64
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority-sessions

Synopsis	Enter the **priority-sessions** context
Context	**configure** service nat firewall-policy *string* priority-sessions
Tree	priority-sessions
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

fc

Synopsis	Enter the **fc** context
Context	**configure** service nat firewall-policy *string* priority-sessions fc
Tree	fc

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Description	Commands in this context specify which Forwarding Class (FC) options have prioritized sessions.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

af *boolean*

Synopsis	Prioritize traffic from AF forwarding classes
Context	**configure** service nat firewall-policy *string* priority-sessions fc af *boolean*
Tree	af
Description	When configured to **true**, traffic from Assured Forwarding (AF) FC sessions is prioritized. When configured to **false**, AF traffic is not prioritized.
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

be *boolean*

Synopsis	Prioritize traffic from BE forwarding classes
Context	**configure** service nat firewall-policy *string* priority-sessions fc be *boolean*
Tree	be
Description	When configured to **true**, traffic from Best Effort (BE) FC sessions is prioritized. When configured to **false**, BE traffic is not prioritized.
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ef *boolean*

Synopsis	Prioritize traffic from EF forwarding classes
Context	**configure** service nat firewall-policy *string* priority-sessions fc ef *boolean*
Tree	ef
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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h1 *boolean*

Synopsis	Prioritize traffic from H1 forwarding classes
Context	**configure** service nat firewall-policy *string* priority-sessions fc h1 *boolean*
Tree	h1
Description	When configured to **true**, traffic from H1 sessions is prioritized. When configured to false, H1 traffic is not prioritized.
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

h2 *boolean*

Synopsis	Prioritize traffic from H2 forwarding classes
Context	**configure** service nat firewall-policy *string* priority-sessions fc h2 *boolean*
Tree	h2
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

l1 *boolean*

Synopsis	Prioritize traffic from L1 forwarding classes
Context	**configure** service nat firewall-policy *string* priority-sessions fc l1 *boolean*
Tree	l1
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2 *boolean*

Synopsis	Prioritize traffic from L2 forwarding classes
Context	**configure** service nat firewall-policy *string* priority-sessions fc l2 *boolean*
Tree	l2

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Description	When configured to **true**, traffic from L2 sessions is prioritized. When configured to false, L2 traffic is not prioritized.
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

nc *boolean*

Synopsis	Prioritize traffic from NC forwarding classes
Context	**configure** service nat firewall-policy *string* priority-sessions fc nc *boolean*
Tree	nc
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-limits

Synopsis	Enter the **session-limits** context
Context	**configure** service nat firewall-policy *string* session-limits
Tree	session-limits
Description	Commands in this context configure session-limit attributes for the policy.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

max *number*

Synopsis	Maximum number of sessions per subscriber
Context	**configure** service nat firewall-policy *string* session-limits max *number*
Tree	max
Range	1 to 65535
Default	65535
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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reserved *number*

Synopsis	Number of sessions reserved for prioritized sessions
Context	**configure** service nat firewall-policy *string* session-limits reserved *number*
Tree	reserved
Description	This command configures the number of sessions per block that are reserved for prioritized sessions.
Range	1 to 65534
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the **watermarks** context
Context	**configure** service nat firewall-policy *string* session-limits watermarks
Tree	watermarks
Description	This command configures watermarks for NAT resources.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis	High watermark percentage
Context	**configure** service nat firewall-policy *string* session-limits watermarks high *number*
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

low *number*

Synopsis	Low watermark percentage

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Context	**configure** service nat firewall-policy *string* session-limits watermarks low *number*
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp

Synopsis	Enter the **tcp** context
Context	**configure** service nat firewall-policy *string* tcp
Tree	tcp
Description	Commands in this context configure the transmission control protocol (TCP) attributes of the policy.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mss-adjust *number*

Synopsis	TCP MSS adjustment value
Context	**configure** service nat firewall-policy *string* tcp mss-adjust *number*
Tree	mss-adjust
Description	This command configures the value to use to adjust the TCP Maximum Segment Size (MSS) option, if not already present or the present value is higher.
Range	160 to 10240
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

timeouts

Synopsis	Enter the **timeouts** context
Context	**configure** service nat firewall-policy *string* timeouts

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Tree	timeouts
Description	Commands in this context configure the attributes of session idle timeouts for the policy.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp6-query *number*

Synopsis	Timeout applied to an ICMPv6 Query session
Context	**configure** service nat firewall-policy *string* timeouts icmp6-query *number*
Tree	icmp6-query
Range	60 to 240
Units	seconds
Default	60
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

sip *number*

Synopsis	SIP inactive media timeout
Context	**configure** service nat firewall-policy *string* timeouts sip *number*
Tree	sip
Range	10 to 7200
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp

Synopsis	Enter the **tcp** context
Context	**configure** service nat firewall-policy *string* timeouts tcp
Tree	tcp
Description	Commands in this context configure TCP timeout attributes.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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established *number*

Synopsis	Idle timeout for TCP session in established state
Context	**configure** service nat firewall-policy *string* timeouts tcp established *number*
Tree	established
Range	60 to 86400
Units	seconds
Default	7440
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

rst *number*

Synopsis	Suspend time for TCP connection ports closed by RST
Context	**configure** service nat firewall-policy *string* timeouts tcp rst *number*
Tree	rst
Description	This command configures the suspend time for outside TCP ports that are used in translations for TCP connections, when they are closed by TCP Reset (RST). After the timer expires, the outside ports can be reused for new TCP translations.
Range	0 to 240
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

syn *number*

Synopsis	TCP session timeout when synchronizing initial sequence
Context	**configure** service nat firewall-policy *string* timeouts tcp syn *number*
Tree	syn
Range	6 to 86400
Units	seconds
Default	15
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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time-wait *number*

Synopsis	Timeout applied to a TCP session in the time-wait state
Context	**configure** service nat firewall-policy *string* timeouts tcp time-wait *number*
Tree	time-wait
Range	0 to 240
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

transitory *number*

Synopsis	Idle timeout for TCP session in transitory state
Context	**configure** service nat firewall-policy *string* timeouts tcp transitory *number*
Tree	transitory
Range	60 to 86400
Units	seconds
Default	240
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp

Synopsis	Enter the **udp** context
Context	**configure** service nat firewall-policy *string* timeouts udp
Tree	udp
Description	Commands in this context configure the User Datagram Protocol (UDP) mapping timeout attributes.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns *number*

Synopsis	Timeout applied to UDP session with destination port 53

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Context	**configure** service nat firewall-policy *string* timeouts udp dns *number*
Tree	dns
Range	15 to 86400
Units	seconds
Default	15
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial *number*

Synopsis	UDP mapping timeout applied to new sessions
Context	**configure** service nat firewall-policy *string* timeouts udp initial *number*
Tree	initial
Range	10 to 300
Units	seconds
Default	15
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

normal *number*

Synopsis	UDP mapping timeout
Context	**configure** service nat firewall-policy *string* timeouts udp normal *number*
Tree	normal
Range	60 to 86400
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

unknown-protocol *number*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

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Synopsis	Timeout for flows with an unknown protocol
Context	**configure** service nat firewall-policy *string* timeouts unknown-protocol *number*
Tree	unknown-protocol
Range	60 to 86400
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp

Synopsis	Enter the **udp** context
Context	**configure** service nat firewall-policy *string* udp
Tree	udp
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

inbound-refresh *boolean*

Synopsis	Extend UDP session timeout on inbound traffic
Context	**configure** service nat firewall-policy *string* udp inbound-refresh *boolean*
Tree	inbound-refresh
Description	When configured to **true**, this command extends the UDP session timeout on inbound traffic. When configured to **false**, the UDP session timeout is not extended.
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

unknown-protocols

Synopsis	Enter the **unknown-protocols** context
Context	**configure** service nat firewall-policy *string* unknown-protocols
Tree	unknown-protocols

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Description	Commands in this context configure the treatment of flows of unknown Layer 4 protocols that cannot be natively handled by the system.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

all

Synopsis	Allow all protocols to create unknown flows
Context	**configure** service nat firewall-policy *string* unknown-protocols all
Tree	all
Description	This command specifies that all protocols are permitted to create unknown flows. Protocol or IPv6 extension header values that are explicitly supported by SR OS are not treated as unknown protocols.
Notes	The following elements are part of a choice: **all** or **protocol**.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocol *number*

Synopsis	IANA number of protocol allowed to create unknown flow
Context	**configure** service nat firewall-policy *string* unknown-protocols protocol *number*
Tree	protocol
Description	This command specifies the Internet Assigned Numbers Authority (IANA) number of a protocol that is permitted to create unknown flows. Protocol or IPv6 extension header values that are explicitly supported by SR OS can be configured but are not treated as unknown protocols.
Range	0 to 255
Max. Instances	8
Notes	The following elements are part of a choice: **all** or **protocol**.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

map-t

Synopsis	Enter the **map-t** context
Context	**configure** service nat map-t

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Tree	map-t
Introduced	16.0.R4
Platforms	VSR

domain [name] *string*

Synopsis	Enter the **domain** list instance
Context	**configure** service nat map-t domain *string*
Tree	domain
Max. Instances	63
Introduced	16.0.R4
Platforms	VSR

[**name**] *string*

Synopsis	MAP domain name
Context	**configure** service nat map-t domain *string*
Tree	domain
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	VSR

admin-state *keyword*

Synopsis	Administrative state of the MAP domain
Context	**configure** service nat map-t domain *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	VSR

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description *string*

Synopsis	Text description
Context	**configure** service nat map-t domain *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	VSR

dmr-prefix *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	The Default Mapping Rule prefix
Context	**configure** service nat map-t domain *string* dmr-prefix *string*
Tree	dmr-prefix
Introduced	16.0.R4
Platforms	VSR

ip-fragmentation

Synopsis	Enter the **ip-fragmentation** context
Context	**configure** service nat map-t domain *string* ip-fragmentation
Tree	ip-fragmentation
Introduced	16.0.R4
Platforms	VSR

v6-frag-header *boolean*

Synopsis	Enable insertion of fragmentation header in IPv6 packet
Context	**configure** service nat map-t domain *string* ip-fragmentation v6-frag-header *boolean*
Tree	v6-frag-header
Default	false
Introduced	16.0.R4
Platforms	VSR

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mapping-rule [rule-name] *string*

Synopsis	Enter the **mapping-rule** list instance
Context	**configure** service nat map-t domain *string* mapping-rule *string*
Tree	mapping-rule
Max. Instances	16383
Introduced	16.0.R4
Platforms	VSR

[**rule-name**] *string*

Synopsis	The name that identifies this mapping rule
Context	**configure** service nat map-t domain *string* mapping-rule *string*
Tree	mapping-rule
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	VSR

admin-state *keyword*

Synopsis	Administrative state of the MAP rule
Context	**configure** service nat map-t domain *string* mapping-rule *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	VSR

description *string*

Synopsis	Text description
Context	**configure** service nat map-t domain *string* mapping-rule *string* description *string*
Tree	description

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String Length	1 to 80
Introduced	16.0.R4
Platforms	VSR

ea-length *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	The length of the EA bits field in the End-user IPv6 prefix part of the IPv6 Map Address
Context	**configure** service nat map-t domain *string* mapping-rule *string* ea-length *number*
Tree	ea-length
Range	0 to 48
Default	0
Introduced	16.0.R4
Platforms	VSR

ipv4-prefix *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	The IPv4 prefix
Context	**configure** service nat map-t domain *string* mapping-rule *string* ipv4-prefix *string*
Tree	ipv4-prefix
Introduced	16.0.R4
Platforms	VSR

psid-offset *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	The offset of the Port Set ID (PSID) within a 16 bits wide port space
Context	**configure** service nat map-t domain *string* mapping-rule *string* psid-offset *number*

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Tree	psid-offset
Range	0 to 16
Default	6
Introduced	16.0.R4
Platforms	VSR

rule-prefix *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	The IPv6 prefix
Context	**configure** service nat map-t domain *string* mapping-rule *string* rule-prefix *string*
Tree	rule-prefix
Introduced	16.0.R4
Platforms	VSR

mtu *number*

Synopsis	Configure the MTU
Context	**configure** service nat map-t domain *string* mtu *number*
Tree	mtu
Range	160 to 8686
Default	8686
Introduced	16.0.R4
Platforms	VSR

tcp-mss-adjust *number*

Synopsis	The value to adjust the TCP Maximum Segment Size (MSS) option
Context	**configure** service nat map-t domain *string* tcp-mss-adjust *number*
Tree	tcp-mss-adjust
Range	0 | 160 to 8626
Default	0
Introduced	16.0.R4

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Platforms	VSR

nat-policy [name] *string*

Synopsis	Enter the **nat-policy** list instance
Context	**configure** service nat nat-policy *string*
Tree	nat-policy
Max. Instances	4096
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	NAT policy name
Context	**configure** service nat nat-policy *string*
Tree	nat-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

alg

Synopsis	Enter the **alg** context
Context	**configure** service nat nat-policy *string* alg
Tree	alg
Description	Commands in this context configure the Application Layer Gateway (ALG) attributes of the policy.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ftp *boolean*

Synopsis	Use FTP ALG for the policy
Context	**configure** service nat nat-policy *string* alg ftp *boolean*

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Tree	ftp
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pptp *boolean*

Synopsis	Use PPTP ALG for the policy
Context	**configure** service nat nat-policy *string* alg pptp *boolean*
Tree	pptp
Description	When configured to **true**, the policy uses Point-to-Point Tunneling Protocol (PPTP) ALG. PPTP sessions can only be initiated from NAT inside. GRE traffic is allowed through NAT only if the corresponding mapping exists. There can be seven calls (GRE tunnels) per control session. When configured to **false**, PPTP ALG is not used.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtsp *boolean*

Synopsis	Use RTSP ALG for the policy
Context	**configure** service nat nat-policy *string* alg rtsp *boolean*
Tree	rtsp
Description	When configured to **true**, Real-Time Streaming Protocol (RTSP) ALG is used for the policy.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sip *boolean*

Synopsis	Use SIP ALG for the policy
Context	**configure** service nat nat-policy *string* alg sip *boolean*
Tree	sip

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Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-limit *number*

Synopsis	Maximum number of port blocks per subscriber
Context	**configure** service nat nat-policy *string* block-limit *number*
Tree	block-limit
Range	1 to 40
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service nat nat-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dnat

Synopsis	Enter the **dnat** context
Context	**configure** service nat nat-policy *string* dnat
Tree	dnat
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

classifier *reference*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

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Synopsis	NAT classifier
Context	**configure** service nat nat-policy *string* dnat classifier *reference*
Tree	classifier
Description	When configured within the NAT policy, this command references a NAT classifier that activates DNAT functionality. The configuration uses a filter-like approach to identify the traffic that is subjected to DNAT. It is required for translation of the destination IP address.
Reference	**configure** service nat classifier *string*
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dnat-only

Synopsis	Enable the **dnat-only** context
Context	**configure** service nat nat-policy *string* dnat-only
Tree	dnat-only
Description	Commands in this context configure the attributes of DNAT-only. When DNAT-only is configured, no source or port NAT (SNAPT) is performed. Only the destination IP address (going from inside to outside) is translated; the source IP address and port are not translated.
Notes	The following elements are part of a choice: **dnat-only**, **l2-outside**, or **pool**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group *reference*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group
Context	**configure** service nat nat-policy *string* dnat-only nat-group *reference*
Tree	nat-group
Description	This command configures the NAT group in which DNAT translation takes place for the outside routing context.

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Reference	**configure** isa nat-group *number*
Notes	The following elements are part of a mandatory choice: **nat-group** or **wlan-gw-group**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Router name or VPRN service name
Context	**configure** service nat nat-policy *string* dnat-only router-instance *string*
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	WLAN GW group used for NAT
Context	**configure** service nat nat-policy *string* dnat-only wlan-gw-group *reference*
Tree	wlan-gw-group
Description	This command configures the NAT WLAN Gateway (GW) group in which DNAT translation takes place for the outside routing context.
Reference	**configure** isa wlan-gw-group *number*
Notes	The following elements are part of a mandatory choice: **nat-group** or **wlan-gw-group**.
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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filtering *keyword*

Synopsis	Filtering method for inbound traffic for the policy
Context	**configure** service nat nat-policy *string* filtering *keyword*
Tree	filtering
Options	endpoint-independent, address-and-port-dependent
Default	endpoint-independent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-log-policy

Synopsis	Enter the **flow-log-policy** context
Context	**configure** service nat nat-policy *string* flow-log-policy
Tree	flow-log-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipfix *reference*

Synopsis	IPFIX export policy
Context	**configure** service nat nat-policy *string* flow-log-policy ipfix *reference*
Tree	ipfix
Description	This command specifies an IP flow information export policy for the flow-log policy.
Reference	**configure** service ipfix export-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

syslog *reference*

Synopsis	Syslog export policy name
Context	**configure** service nat nat-policy *string* flow-log-policy syslog *reference*
Tree	syslog
Description	This command configures a syslog export policy with a set of transport parameters used to transmit NAT flow records in syslog format to an external collector node. The policy name is referenced from the NAT policy applied to an inside routing context.

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Reference	**configure** service nat syslog export-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2-outside

Synopsis	Use Layer 2 outside service address location
Context	**configure** service nat nat-policy *string* l2-outside
Tree	l2-outside
Description	This command specifies Layer 2 outside service address location for the NAT policy instead of Layer 3 outside service.
Notes	The following elements are part of a choice: **dnat-only**, **l2-outside**, or **pool**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool

Synopsis	Enter the **pool** context
Context	**configure** service nat nat-policy *string* pool
Tree	pool
Notes	The following elements are part of a choice: **dnat-only**, **l2-outside**, or **pool**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT pool name
Context	**configure** service nat nat-policy *string* pool name *string*
Tree	name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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router-instance *string*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Router or VPRN service name
Context	**configure** service nat nat-policy *string* pool router-instance *string*
Tree	router-instance
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-forwarding-range-end *number*

Synopsis	End of the port forwarding range
Context	**configure** service nat nat-policy *string* port-forwarding-range-end *number*
Tree	port-forwarding-range-end
Description	This command specifies the end of the port range available for port forwarding. The start of the range is always equal to one. The number of ports that can be configured is half of the available block => 64512 / 2 = 32256. In combination with the configured value for **port-forwarding-range-end**, the formulas are: max port-reservation blocks = 65535 - port-forwarding-range-end max port-reservation ports = (65535 - port-forwarding-range-end) / 2 If **port-reservation** is already configured, the following applies for the maximum port-forwarding-range-end: max port-forwarding-range-end = 65535 - port-reservation blocksmax port-forwarding-range-end = 65535 - (port-reservation ports * 2)
Range	1023 to 65535
Default	1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-limits

Synopsis	Enter the **port-limits** context
Context	**configure** service nat nat-policy *string* port-limits
Tree	port-limits

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

forwarding *number*

Synopsis	Maximum number of port forwarding entries
Context	**configure** service nat nat-policy *string* port-limits forwarding *number*
Tree	forwarding
Range	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reserved *number*

Synopsis	Number of ports reserved for prioritized sessions
Context	**configure** service nat nat-policy *string* port-limits reserved *number*
Tree	reserved
Description	This command configures the number of ports per block that are reserved for prioritized sessions.
Range	1 to 65534
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the **watermarks** context
Context	**configure** service nat nat-policy *string* port-limits watermarks
Tree	watermarks
Description	This command configures watermarks for NAT resources.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis	High watermark percentage

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Context	**configure** service nat nat-policy *string* port-limits watermarks high *number*
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low *number*

Synopsis	Low watermark percentage
Context	**configure** service nat nat-policy *string* port-limits watermarks low *number*
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority-sessions

Synopsis	Enter the **priority-sessions** context
Context	**configure** service nat nat-policy *string* priority-sessions
Tree	priority-sessions
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fc

Synopsis	Enter the **fc** context
Context	**configure** service nat nat-policy *string* priority-sessions fc

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Tree	fc
Description	Commands in this context specify which Forwarding Class (FC) options have prioritized sessions.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

af *boolean*

Synopsis	Prioritize traffic from AF forwarding classes
Context	**configure** service nat nat-policy *string* priority-sessions fc af *boolean*
Tree	af
Description	When configured to **true**, traffic from Assured Forwarding (AF) FC sessions is prioritized. When configured to **false**, AF traffic is not prioritized.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

be *boolean*

Synopsis	Prioritize traffic from BE forwarding classes
Context	**configure** service nat nat-policy *string* priority-sessions fc be *boolean*
Tree	be
Description	When configured to **true**, traffic from Best Effort (BE) FC sessions is prioritized. When configured to **false**, BE traffic is not prioritized.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ef *boolean*

Synopsis	Prioritize traffic from EF forwarding classes
Context	**configure** service nat nat-policy *string* priority-sessions fc ef *boolean*
Tree	ef
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

h1 *boolean*

Synopsis	Prioritize traffic from H1 forwarding classes
Context	**configure** service nat nat-policy *string* priority-sessions fc h1 *boolean*
Tree	h1
Description	When configured to **true**, traffic from H1 sessions is prioritized. When configured to false, H1 traffic is not prioritized.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

h2 *boolean*

Synopsis	Prioritize traffic from H2 forwarding classes
Context	**configure** service nat nat-policy *string* priority-sessions fc h2 *boolean*
Tree	h2
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l1 *boolean*

Synopsis	Prioritize traffic from L1 forwarding classes
Context	**configure** service nat nat-policy *string* priority-sessions fc l1 *boolean*
Tree	l1
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2 *boolean*

Synopsis	Prioritize traffic from L2 forwarding classes
Context	**configure** service nat nat-policy *string* priority-sessions fc l2 *boolean*

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Tree	l2
Description	When configured to **true**, traffic from L2 sessions is prioritized. When configured to false, L2 traffic is not prioritized.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nc *boolean*

Synopsis	Prioritize traffic from NC forwarding classes
Context	**configure** service nat nat-policy *string* priority-sessions fc nc *boolean*
Tree	nc
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-limits

Synopsis	Enter the **session-limits** context
Context	**configure** service nat nat-policy *string* session-limits
Tree	session-limits
Description	Commands in this context configure session-limit attributes for the policy.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max *number*

Synopsis	Maximum number of sessions per subscriber
Context	**configure** service nat nat-policy *string* session-limits max *number*
Tree	max
Range	1 to 65535
Default	65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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reserved *number*

Synopsis	Number of sessions reserved for prioritized sessions
Context	**configure** service nat nat-policy *string* session-limits reserved *number*
Tree	reserved
Description	This command configures the number of sessions per block that are reserved for prioritized sessions.
Range	1 to 65534
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the **watermarks** context
Context	**configure** service nat nat-policy *string* session-limits watermarks
Tree	watermarks
Description	This command configures watermarks for NAT resources.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis	High watermark percentage
Context	**configure** service nat nat-policy *string* session-limits watermarks high *number*
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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low *number*

Synopsis	Low watermark percentage
Context	**configure** service nat nat-policy *string* session-limits watermarks low *number*
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp

Synopsis	Enter the **tcp** context
Context	**configure** service nat nat-policy *string* tcp
Tree	tcp
Description	Commands in this context configure the transmission control protocol (TCP) attributes of the policy.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mss-adjust *number*

Synopsis	TCP MSS adjustment value
Context	**configure** service nat nat-policy *string* tcp mss-adjust *number*
Tree	mss-adjust
Description	This command configures the value to use to adjust the TCP Maximum Segment Size (MSS) option, if not already present or the present value is higher.
Range	160 to 10240
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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reset-unknown *boolean*

Synopsis	Generate TCP reset for packets from unknown flows
Context	**configure** service nat nat-policy *string* tcp reset-unknown *boolean*
Tree	reset-unknown
Description	When configured to **true**, TCP packets are dropped and a TCP reset is generated if the NAT inside receives a TCP packet without the SYN flag set for an unknown flow. When configured to **false**, no TCP reset is generated.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

timeouts

Synopsis	Enter the **timeouts** context
Context	**configure** service nat nat-policy *string* timeouts
Tree	timeouts
Description	Commands in this context configure the attributes of session idle timeouts for the policy.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp-query *number*

Synopsis	Timeout applied to an ICMP Query session
Context	**configure** service nat nat-policy *string* timeouts icmp-query *number*
Tree	icmp-query
Range	60 to 240
Units	seconds
Default	60
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sip *number*

Synopsis	SIP inactive media timeout
Context	**configure** service nat nat-policy *string* timeouts sip *number*

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Tree	sip
Range	10 to 7200
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-retention *number*

Synopsis	IP address hold time after host and port blocks expire
Context	**configure** service nat nat-policy *string* timeouts subscriber-retention *number*
Tree	subscriber-retention
Description	This command configures the time to keep a NAT subscriber and its associated IP address after all hosts and associated port blocks expire. If a NAT subscriber host appears before the retention timeout elapses, it is given the same outside IP address.
Range	0 to 1440
Units	minutes
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp

Synopsis	Enter the **tcp** context
Context	**configure** service nat nat-policy *string* timeouts tcp
Tree	tcp
Description	Commands in this context configure TCP timeout attributes.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

established *number*

Synopsis	Idle timeout for TCP session in established state
Context	**configure** service nat nat-policy *string* timeouts tcp established *number*
Tree	established

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Range	60 to 86400
Units	seconds
Default	7440
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rst *number*

Synopsis	Suspend time for TCP connection ports closed by RST
Context	**configure** service nat nat-policy *string* timeouts tcp rst *number*
Tree	rst
Description	This command configures the suspend time for outside TCP ports that are used in translations for TCP connections, when they are closed by TCP Reset (RST). After the timer expires, the outside ports can be reused for new TCP translations.
Range	0 to 240
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

syn *number*

Synopsis	TCP session timeout when synchronizing initial sequence
Context	**configure** service nat nat-policy *string* timeouts tcp syn *number*
Tree	syn
Range	6 to 86400
Units	seconds
Default	15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-wait *number*

Synopsis	Timeout applied to a TCP session in the time-wait state
Context	**configure** service nat nat-policy *string* timeouts tcp time-wait *number*

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Tree	time-wait
Range	0 to 240
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

transitory *number*

Synopsis	Idle timeout for TCP session in transitory state
Context	**configure** service nat nat-policy *string* timeouts tcp transitory *number*
Tree	transitory
Range	60 to 86400
Units	seconds
Default	240
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp

Synopsis	Enter the **udp** context
Context	**configure** service nat nat-policy *string* timeouts udp
Tree	udp
Description	Commands in this context configure the User Datagram Protocol (UDP) mapping timeout attributes.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns *number*

Synopsis	Timeout applied to UDP session with destination port 53
Context	**configure** service nat nat-policy *string* timeouts udp dns *number*
Tree	dns
Range	15 to 86400
Units	seconds

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Default	15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial *number*

Synopsis	UDP mapping timeout applied to new sessions
Context	**configure** service nat nat-policy *string* timeouts udp initial *number*
Tree	initial
Range	10 to 300
Units	seconds
Default	15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

normal *number*

Synopsis	UDP mapping timeout
Context	**configure** service nat nat-policy *string* timeouts udp normal *number*
Tree	normal
Range	60 to 86400
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp

Synopsis	Enter the **udp** context
Context	**configure** service nat nat-policy *string* udp
Tree	udp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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inbound-refresh *boolean*

Synopsis	Extend UDP session timeout on inbound traffic
Context	**configure** service nat nat-policy *string* udp inbound-refresh *boolean*
Tree	inbound-refresh
Description	When configured to **true**, this command extends the UDP session timeout on inbound traffic. When configured to **false**, the UDP session timeout is not extended.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pcp-server-policy [name] *string*

Synopsis	Enter the **pcp-server-policy** list instance
Context	**configure** service nat pcp-server-policy *string*
Tree	pcp-server-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	PCP server policy name
Context	**configure** service nat pcp-server-policy *string*
Tree	pcp-server-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service nat pcp-server-policy *string* description *string*
Tree	description
String Length	1 to 80

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lifetime

Synopsis	Enter the **lifetime** context
Context	**configure** service nat pcp-server-policy *string* lifetime
Tree	lifetime
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

maximum *number*

Synopsis	Maximum lifetime of explicit mappings made by the PCP servers
Context	**configure** service nat pcp-server-policy *string* lifetime maximum *number*
Tree	maximum
Range	61 to 86400
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

minimum *number*

Synopsis	Minimum lifetime of explicit mappings made by the PCP servers
Context	**configure** service nat pcp-server-policy *string* lifetime minimum *number*
Tree	minimum
Range	60 to 86399
Default	120
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-description-size *number*

Synopsis	Maximum length of mapping descriptions made by the PCP servers
Context	**configure** service nat pcp-server-policy *string* max-description-size *number*

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Tree	max-description-size
Range	1 to 64
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opcode

Synopsis	Enter the **opcode** context
Context	**configure** service nat pcp-server-policy *string* opcode
Tree	opcode
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

announce *boolean*

Synopsis	Process the announce PCP requests
Context	**configure** service nat pcp-server-policy *string* opcode announce *boolean*
Tree	announce
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

get *boolean*

Synopsis	Process the get PCP requests
Context	**configure** service nat pcp-server-policy *string* opcode get *boolean*
Tree	get
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

map *boolean*

Synopsis	Process the map PCP requests

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Context	**configure** service nat pcp-server-policy *string* opcode map *boolean*
Tree	map
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

option

Synopsis	Enter the **option** context
Context	**configure** service nat pcp-server-policy *string* option
Tree	option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *boolean*

Synopsis	Text description
Context	**configure** service nat pcp-server-policy *string* option description *boolean*
Tree	description
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

next *boolean*

Synopsis	Process the PCP requests that contain the next option
Context	**configure** service nat pcp-server-policy *string* option next *boolean*
Tree	next
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-reservation *boolean*

Synopsis	Process the PCP requests that contain the prefer failure option

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Context	**configure** service nat pcp-server-policy *string* option port-reservation *boolean*
Tree	port-reservation
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-set *boolean*

Synopsis	Support the PORT_SET option in PCP MAP requests
Context	**configure** service nat pcp-server-policy *string* option port-set *boolean*
Tree	port-set
Description	When configured to **true**, the PCP MAP option optimizes PCP performance for applications that require multiple sets of port forwards. A range of consecutive port forwards can be requested by the PCP client with a single PCP request. When configured to **false**, the default behavior is applied, where a plain MAP option is used to allocate a single port in a single request.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefer-failure *boolean*

Synopsis	Process the PCP requests that contain the port reservation option
Context	**configure** service nat pcp-server-policy *string* option prefer-failure *boolean*
Tree	prefer-failure
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

third-party *boolean*

Synopsis	Process the PCP requests that contain the third party option
Context	**configure** service nat pcp-server-policy *string* option third-party *boolean*
Tree	third-party
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reuse-external-ip-address *boolean*

Synopsis	Reuse external IP address for NAT subscriber
Context	**configure** service nat pcp-server-policy *string* reuse-external-ip-address *boolean*
Tree	reuse-external-ip-address
Description	When configured to **true**, the system reuses the external IP address assigned to a subscriber when the requested well-known port or external IP mapping is not available. When configured to **false**, a request for a well-known port is allocated as requested on a different external IP address if the port is already allocated to another subscriber sharing the same external IP address. The existing external IP address is initially allocated to the subscriber as a result of the initial traffic flow. This configuration flag can be set dynamically but the flag affects only PCP port forwards that are created after the flag has been set.
Default	false
Introduced	19.10.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

version

Synopsis	Enter the **version** context
Context	**configure** service nat pcp-server-policy *string* version
Tree	version
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

maximum *number*

Synopsis	Maximum protocol version supported by the PCP servers
Context	**configure** service nat pcp-server-policy *string* version maximum *number*
Tree	maximum
Range	1 to 255
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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minimum *number*

Synopsis	Minimum protocol version supported by the PCP servers
Context	**configure** service nat pcp-server-policy *string* version minimum *number*
Tree	minimum
Range	1 to 255
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix-list [name] *string*

Synopsis	Enter the **prefix-list** list instance
Context	**configure** service nat prefix-list *string*
Tree	prefix-list
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	NAT prefix list name
Context	**configure** service nat prefix-list *string*
Tree	prefix-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

application *keyword*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

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WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Prefix list for the application
Context	**configure** service nat prefix-list *string* application *keyword*
Tree	application
Options	l2-aware-dest-to-policy, dnat-only-subscribers
Default	l2-aware-dest-to-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix [ip-prefix] *string*

Synopsis	Enter the **prefix** list instance
Context	**configure** service nat prefix-list *string* prefix *string*
Tree	prefix
Max. Instances	1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**ip-prefix**] *string*

Synopsis	NAT prefix
Context	**configure** service nat prefix-list *string* prefix *string*
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

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WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT policy for LSN
Context	**configure** service nat prefix-list *string* prefix *string* nat-policy *reference*
Tree	nat-policy
Reference	**configure** service nat nat-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

syslog

Synopsis	Enter the **syslog** context
Context	**configure** service nat syslog
Tree	syslog
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-policy [name] *string*

Synopsis	Enter the **export-policy** list instance
Context	**configure** service nat syslog export-policy *string*
Tree	export-policy
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Syslog export policy name
Context	**configure** service nat syslog export-policy *string*
Tree	export-policy
String Length	1 to 32
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collector router-instance *string* ip-address *string*

Synopsis	Enter the **collector** list instance
Context	**configure** service nat syslog export-policy *string* collector router-instance *string* ip-address *string*
Tree	collector
Max. Instances	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Router instance
Context	**configure** service nat syslog export-policy *string* collector router-instance *string* ip-address *string*
Tree	collector
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis	IPv4 address of the external collector node
Context	**configure** service nat syslog export-policy *string* collector router-instance *string* ip-address *string*
Tree	collector
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of the collector node
Context	**configure** service nat syslog export-policy *string* collector router-instance *string* ip-address *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

destination-port *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination port
Context	**configure** service nat syslog export-policy *string* collector router-instance *string* ip-address *string* destination-port *number*
Tree	destination-port
Range	1 to 65535
Default	514
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4-source-address *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 source address
Context	**configure** service nat syslog export-policy *string* collector router-instance *string* ip-address *string* ipv4-source-address *string*
Tree	ipv4-source-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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description *string*

Synopsis	Text description
Context	**configure** service nat syslog export-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

facility *keyword*

Synopsis	Facility number in the PRI part of the NAT SYSLOG messages
Context	**configure** service nat syslog export-policy *string* facility *keyword*
Tree	facility
Options	kernel, user, mail, systemd, auth, syslogd, printer, netnews, uucp, cron, authpriv, ftp, ntp, logaudit, logalert, cron2, local0, local1, local2, local3, local4, local5, local6, local7
Default	local0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

include

Synopsis	Enter the **include** context
Context	**configure** service nat syslog export-policy *string* include
Tree	include
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

destination-ip *boolean*

Synopsis	Include the translated destination IP address
Context	**configure** service nat syslog export-policy *string* include destination-ip *boolean*
Tree	destination-ip
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

foreign-ip *boolean*

Synopsis	Include the original destination IPv4 address
Context	**configure** service nat syslog export-policy *string* include foreign-ip *boolean*
Tree	foreign-ip
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

foreign-port *boolean*

Synopsis	Include the original destination port
Context	**configure** service nat syslog export-policy *string* include foreign-port *boolean*
Tree	foreign-port
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy-name *boolean*

Synopsis	Include the NAT policy name in the flow log
Context	**configure** service nat syslog export-policy *string* include nat-policy-name *boolean*
Tree	nat-policy-name
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sub-id *boolean*

Synopsis	Subscriber ID in subscriber aware NAT
Context	**configure** service nat syslog export-policy *string* include sub-id *boolean*
Tree	sub-id
Default	false

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

log-prefix *string*

Synopsis	Optional prefix text in the MSG part of the NAT syslog messages
Context	**configure** service nat syslog export-policy *string* log-prefix *string*
Tree	log-prefix
String Length	1 to 32
Default	TMNX
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-tx-delay *number*

Synopsis	Maximum time a syslog message delays in the output buffer to aggregate multiple events
Context	**configure** service nat syslog export-policy *string* max-tx-delay *number*
Tree	max-tx-delay
Range	0 to 100
Units	deciseconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtu *number*

Synopsis	Maximum transmission unit
Context	**configure** service nat syslog export-policy *string* mtu *number*
Tree	mtu
Range	512 to 9000
Default	1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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rate-limit *number*

Synopsis	Frame limit
Context	**configure** service nat syslog export-policy *string* rate-limit *number*
Tree	rate-limit
Range	10 to 2147483647
Units	packets per second
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

severity-level *keyword*

Synopsis	Severity level in the PRI part of the syslog messages
Context	**configure** service nat syslog export-policy *string* severity-level *keyword*
Tree	severity-level
Options	emergency, alert, critical, error, warning, notice, info, debug
Default	info
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

up-nat-policy [name] *string*

Synopsis	Enter the **up-nat-policy** list instance
Context	**configure** service nat up-nat-policy *string*
Tree	up-nat-policy
Max. Instances	32
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	UP NAT policy name
Context	**configure** service nat up-nat-policy *string*
Tree	up-nat-policy
Description	This command specifies the UP NAT policy name. The name default has a special meaning representing the default UP NAT policy template. The system uses the

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	default template when the BNG CPF does not receive a more specific name when the subscriber is instantiated.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

alg

Synopsis	Enter the **alg** context
Context	**configure** service nat up-nat-policy *string* alg
Tree	alg
Description	Commands in this context configure the Application Layer Gateway (ALG) attributes of the policy.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ftp *boolean*

Synopsis	Use FTP ALG for the policy
Context	**configure** service nat up-nat-policy *string* alg ftp *boolean*
Tree	ftp
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pptp *boolean*

Synopsis	Use PPTP ALG for the policy
Context	**configure** service nat up-nat-policy *string* alg pptp *boolean*
Tree	pptp
Description	When configured to **true**, the policy uses Point-to-Point Tunneling Protocol (PPTP) ALG. PPTP sessions can only be initiated from NAT inside. GRE traffic is allowed through NAT only if the corresponding mapping exists. There can be seven calls (GRE tunnels) per control session.

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When configured to **false**, PPTP ALG is not used.

Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtsp *boolean*

Synopsis	Use RTSP ALG for the policy
Context	**configure** service nat up-nat-policy *string* alg rtsp *boolean*
Tree	rtsp
Description	When configured to **true**, Real-Time Streaming Protocol (RTSP) ALG is used for the policy.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sip *boolean*

Synopsis	Use SIP ALG for the policy
Context	**configure** service nat up-nat-policy *string* alg sip *boolean*
Tree	sip
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-limit *number*

Synopsis	Maximum number of port blocks per NAT subscriber
Context	**configure** service nat up-nat-policy *string* block-limit *number*
Tree	block-limit
Range	1 to 10
Default	1
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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default-host

Synopsis	Enable the **default-host** context
Context	**configure** service nat up-nat-policy *string* default-host
Tree	default-host
Description	Commands in this context configure the default DMZ host options. A default DMZ host is a node on the inside to which all unknown traffic is redirected by changing the destination IPv4 address in the traffic header. During this operation, the checksums in the Layer 3 and Layer 4 header (UDP and TCP) are recalculated. Unknown traffic in NAT represent all unmatched traffic arriving from the outside (where there is no pinhole or a matching flow record created by traffic initiated from the inside). The purpose of the default DMZ host is to capture and analyze the unknown traffic as part of threat analysis. The rate of redirected unknown traffic can be restricted by configuration.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside-router-instance *string*

Synopsis	Router instance of the DMZ
Context	**configure** service nat up-nat-policy *string* default-host inside-router-instance *string*
Tree	inside-router-instance
Description	This command configures the router instance on the inside where the default DMZ host resides.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis	IP address of the default DMZ host
Context	**configure** service nat up-nat-policy *string* default-host ip-address *string*
Tree	ip-address
Description	This command configures the IP address of the default DMZ host. Redirection to the default DMZ host is achieved by replacing the destination IP address in the traffic header in the unknown traffic initiated from the outside with the one of the default DMZ host.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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rate-limit *number*

Synopsis	Rate limit for unknown traffic sent to default DMZ host
Context	**configure** service nat up-nat-policy *string* default-host rate-limit *number*
Tree	rate-limit
Description	This command configures the rate limit of the unknown traffic sent to the default DMZ host. Unknown traffic sent to the default DMZ host is rate limited by a configurable value expressed in mbps. The rate limit is configurable per NAT pool per ISA, vISA, or ESA-VM.
Range	1 to 10000
Units	megabps
Default	10
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service nat up-nat-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filtering *keyword*

Synopsis	Filtering method for inbound traffic for the policy
Context	**configure** service nat up-nat-policy *string* filtering *keyword*
Tree	filtering
Options	endpoint-independent, address-and-port-dependent
Default	endpoint-independent
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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flow-log-policy

Synopsis	Enter the **flow-log-policy** context
Context	**configure** service nat up-nat-policy *string* flow-log-policy
Tree	flow-log-policy
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipfix *reference*

Synopsis	IPFIX export policy
Context	**configure** service nat up-nat-policy *string* flow-log-policy ipfix *reference*
Tree	ipfix
Description	This command specifies an IP flow information export policy for the flow-log policy.
Reference	**configure** service ipfix export-policy *string*
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp-echo-reply *boolean*

Synopsis	Enable replies to ICMP Echo Request messages
Context	**configure** service nat up-nat-policy *string* icmp-echo-reply *boolean*
Tree	icmp-echo-reply
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-block-extension

Synopsis	Enable the **port-block-extension** context
Context	**configure** service nat up-nat-policy *string* port-block-extension
Tree	port-block-extension
Description	Commands in this context configure the attributes for dynamic allocation of NAT port-blocks beyond the initial port-blocks.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ports *number*

Synopsis	Number of ports per dynamic port block
Context	**configure** service nat up-nat-policy *string* port-block-extension ports *number*
Tree	ports
Range	10 to 5000
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the **watermarks** context
Context	**configure** service nat up-nat-policy *string* port-block-extension watermarks
Tree	watermarks
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis	High watermark percentage
Context	**configure** service nat up-nat-policy *string* port-block-extension watermarks high *number*
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low *number*

Synopsis	Low watermark percentage
Context	**configure** service nat up-nat-policy *string* port-block-extension watermarks low *number*

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Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-limits

Synopsis	Enter the **port-limits** context
Context	**configure** service nat up-nat-policy *string* port-limits
Tree	port-limits
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reserved *number*

Synopsis	Number of ports reserved for prioritized sessions
Context	**configure** service nat up-nat-policy *string* port-limits reserved *number*
Tree	reserved
Description	This command configures the number of ports per block that are reserved for prioritized sessions.
Range	1 to 65534
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the **watermarks** context
Context	**configure** service nat up-nat-policy *string* port-limits watermarks
Tree	watermarks
Description	This command configures watermarks for NAT resources.
Introduced	20.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis	High watermark percentage
Context	**configure** service nat up-nat-policy *string* port-limits watermarks high *number*
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low *number*

Synopsis	Low watermark percentage
Context	**configure** service nat up-nat-policy *string* port-limits watermarks low *number*
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority-sessions

Synopsis	Enter the **priority-sessions** context
Context	**configure** service nat up-nat-policy *string* priority-sessions
Tree	priority-sessions
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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fc

Synopsis	Enter the **fc** context
Context	**configure** service nat up-nat-policy *string* priority-sessions fc
Tree	fc
Description	Commands in this context specify which Forwarding Class (FC) options have prioritized sessions.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

af *boolean*

Synopsis	Prioritize traffic from AF forwarding classes
Context	**configure** service nat up-nat-policy *string* priority-sessions fc af *boolean*
Tree	af
Description	When configured to **true**, traffic from Assured Forwarding (AF) FC sessions is prioritized. When configured to **false**, AF traffic is not prioritized.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

be *boolean*

Synopsis	Prioritize traffic from BE forwarding classes
Context	**configure** service nat up-nat-policy *string* priority-sessions fc be *boolean*
Tree	be
Description	When configured to **true**, traffic from Best Effort (BE) FC sessions is prioritized. When configured to **false**, BE traffic is not prioritized.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ef *boolean*

Synopsis	Prioritize traffic from EF forwarding classes
Context	**configure** service nat up-nat-policy *string* priority-sessions fc ef *boolean*

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Tree	ef
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

h1 *boolean*

Synopsis	Prioritize traffic from H1 forwarding classes
Context	**configure** service nat up-nat-policy *string* priority-sessions fc h1 *boolean*
Tree	h1
Description	When configured to **true**, traffic from H1 sessions is prioritized. When configured to false, H1 traffic is not prioritized.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

h2 *boolean*

Synopsis	Prioritize traffic from H2 forwarding classes
Context	**configure** service nat up-nat-policy *string* priority-sessions fc h2 *boolean*
Tree	h2
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l1 *boolean*

Synopsis	Prioritize traffic from L1 forwarding classes
Context	**configure** service nat up-nat-policy *string* priority-sessions fc l1 *boolean*
Tree	l1
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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l2 *boolean*

Synopsis	Prioritize traffic from L2 forwarding classes
Context	**configure** service nat up-nat-policy *string* priority-sessions fc l2 *boolean*
Tree	l2
Description	When configured to **true**, traffic from L2 sessions is prioritized. When configured to false, L2 traffic is not prioritized.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nc *boolean*

Synopsis	Prioritize traffic from NC forwarding classes
Context	**configure** service nat up-nat-policy *string* priority-sessions fc nc *boolean*
Tree	nc
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-limits

Synopsis	Enter the **session-limits** context
Context	**configure** service nat up-nat-policy *string* session-limits
Tree	session-limits
Description	Commands in this context configure session-limit attributes for the policy.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max *number*

Synopsis	Maximum number of sessions per subscriber
Context	**configure** service nat up-nat-policy *string* session-limits max *number*
Tree	max
Range	1 to 65535
Default	65535

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Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reserved *number*

Synopsis	Number of sessions reserved for prioritized sessions
Context	**configure** service nat up-nat-policy *string* session-limits reserved *number*
Tree	reserved
Description	This command configures the number of sessions per block that are reserved for prioritized sessions.
Range	1 to 65534
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the **watermarks** context
Context	**configure** service nat up-nat-policy *string* session-limits watermarks
Tree	watermarks
Description	This command configures watermarks for NAT resources.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis	High watermark percentage
Context	**configure** service nat up-nat-policy *string* session-limits watermarks high *number*
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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low *number*

Synopsis	Low watermark percentage
Context	**configure** service nat up-nat-policy *string* session-limits watermarks low *number*
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp

Synopsis	Enter the **tcp** context
Context	**configure** service nat up-nat-policy *string* tcp
Tree	tcp
Description	Commands in this context configure the transmission control protocol (TCP) attributes of the policy.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mss-adjust *number*

Synopsis	TCP MSS adjustment value
Context	**configure** service nat up-nat-policy *string* tcp mss-adjust *number*
Tree	mss-adjust
Description	This command configures the value to use to adjust the TCP Maximum Segment Size (MSS) option, if not already present or the present value is higher.
Range	160 to 10240
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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reset-unknown *boolean*

Synopsis	Generate TCP reset for packets from unknown flows
Context	**configure** service nat up-nat-policy *string* tcp reset-unknown *boolean*
Tree	reset-unknown
Description	When configured to **true**, TCP packets are dropped and a TCP reset is generated if the NAT inside receives a TCP packet without the SYN flag set for an unknown flow. When configured to **false**, no TCP reset is generated.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

timeouts

Synopsis	Enter the **timeouts** context
Context	**configure** service nat up-nat-policy *string* timeouts
Tree	timeouts
Description	Commands in this context configure the attributes of session idle timeouts for the policy.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp-query *number*

Synopsis	Timeout applied to an ICMP Query session
Context	**configure** service nat up-nat-policy *string* timeouts icmp-query *number*
Tree	icmp-query
Range	60 to 240
Units	seconds
Default	60
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sip *number*

Synopsis	SIP inactive media timeout
Context	**configure** service nat up-nat-policy *string* timeouts sip *number*

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Tree	sip
Range	10 to 7200
Units	seconds
Default	120
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-retention *number*

Synopsis	IP address hold time after host and port blocks expire
Context	**configure** service nat up-nat-policy *string* timeouts subscriber-retention *number*
Tree	subscriber-retention
Description	This command configures the time to keep a NAT subscriber and its associated IP address after all hosts and associated port blocks expire. If a NAT subscriber host appears before the retention timeout elapses, it is given the same outside IP address.
Range	0 to 1440
Units	minutes
Default	0
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp

Synopsis	Enter the **tcp** context
Context	**configure** service nat up-nat-policy *string* timeouts tcp
Tree	tcp
Description	Commands in this context configure TCP timeout attributes.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

established *number*

Synopsis	Idle timeout for TCP session in established state
Context	**configure** service nat up-nat-policy *string* timeouts tcp established *number*
Tree	established

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Range	60 to 86400
Units	seconds
Default	7440
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rst *number*

Synopsis	Suspend time for TCP connection ports closed by RST
Context	**configure** service nat up-nat-policy *string* timeouts tcp rst *number*
Tree	rst
Description	This command configures the suspend time for outside TCP ports that are used in translations for TCP connections, when they are closed by TCP Reset (RST). After the timer expires, the outside ports can be reused for new TCP translations.
Range	0 to 240
Units	seconds
Default	0
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

syn *number*

Synopsis	TCP session timeout when synchronizing initial sequence
Context	**configure** service nat up-nat-policy *string* timeouts tcp syn *number*
Tree	syn
Range	6 to 86400
Units	seconds
Default	15
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-wait *number*

Synopsis	Timeout applied to a TCP session in the time-wait state
Context	**configure** service nat up-nat-policy *string* timeouts tcp time-wait *number*

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Tree	time-wait
Range	0 to 240
Units	seconds
Default	0
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

transitory *number*

Synopsis	Idle timeout for TCP session in transitory state
Context	**configure** service nat up-nat-policy *string* timeouts tcp transitory *number*
Tree	transitory
Range	60 to 86400
Units	seconds
Default	240
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp

Synopsis	Enter the **udp** context
Context	**configure** service nat up-nat-policy *string* timeouts udp
Tree	udp
Description	Commands in this context configure the User Datagram Protocol (UDP) mapping timeout attributes.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns *number*

Synopsis	Timeout applied to UDP session with destination port 53
Context	**configure** service nat up-nat-policy *string* timeouts udp dns *number*
Tree	dns
Range	15 to 86400
Units	seconds

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Default	15
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial *number*

Synopsis	UDP mapping timeout applied to new sessions
Context	**configure** service nat up-nat-policy *string* timeouts udp initial *number*
Tree	initial
Range	10 to 300
Units	seconds
Default	15
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

normal *number*

Synopsis	UDP mapping timeout
Context	**configure** service nat up-nat-policy *string* timeouts udp normal *number*
Tree	normal
Range	60 to 86400
Units	seconds
Default	300
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp

Synopsis	Enter the **udp** context
Context	**configure** service nat up-nat-policy *string* udp
Tree	udp
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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inbound-refresh *boolean*

Synopsis	Extend UDP session timeout on inbound traffic
Context	**configure** service nat up-nat-policy *string* udp inbound-refresh *boolean*
Tree	inbound-refresh
Description	When configured to **true**, this command extends the UDP session timeout on inbound traffic. When configured to **false**, the UDP session timeout is not extended.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

oper-group [name] *string*

Synopsis	Enter the **oper-group** list instance
Context	**configure** service oper-group *string*
Tree	oper-group
Max. Instances	32768
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	Operational group name
Context	**configure** service oper-group *string*
Tree	oper-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enable the **bfd-liveness** context
Context	**configure** service oper-group *string* bfd-liveness

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Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

dest-ip *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination address for BFD
Context	**configure** service oper-group *string* bfd-liveness dest-ip *string*
Tree	dest-ip
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

interface-name *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Source interface name
Context	**configure** service oper-group *string* bfd-liveness interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

router-instance *string*

WARNING:
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Synopsis	Routing context used for route lookup
Context	**configure** service oper-group *string* bfd-liveness router-instance *string*
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

hold-time

Synopsis	Enter the **hold-time** context
Context	**configure** service oper-group *string* hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	All

down *number*

Synopsis	Oper group hold down time
Context	**configure** service oper-group *string* hold-time down *number*
Tree	down
Range	1 to 3600
Units	seconds
Introduced	16.0.R3
Platforms	All

up *number*

Synopsis	Oper group hold up time
Context	**configure** service oper-group *string* hold-time up *number*
Tree	up
Range	0 to 3600
Units	seconds
Default	4
Introduced	16.0.R3
Platforms	All

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pbb

Synopsis	Enter the **pbb** context
Context	**configure** service pbb
Tree	pbb
Introduced	16.0.R1
Platforms	All

mac [name] *string*

Synopsis	Enter the **mac** list instance
Context	**configure** service pbb mac *string*
Tree	mac
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	MAC name for the MAC address
Context	**configure** service pbb mac *string*
Tree	mac
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	IEEE address assigned to the MAC name
Context	**configure** service pbb mac *string* address *string*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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mac-notification

Synopsis	Enter the **mac-notification** context
Context	**configure** service pbb mac-notification
Tree	mac-notification
Introduced	16.0.R1
Platforms	All

count *number*

Synopsis	MAC notification messages count
Context	**configure** service pbb mac-notification count *number*
Tree	count
Range	1 to 10
Default	3
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Interval for MAC-notification messages
Context	**configure** service pbb mac-notification interval *number*
Tree	interval
Range	1 to 100
Units	deciseconds
Default	1
Introduced	16.0.R1
Platforms	All

source-bmac

Synopsis	Enter the **source-bmac** context
Context	**configure** service pbb source-bmac
Tree	source-bmac
Introduced	16.0.R1

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Platforms	All

address *string*

Synopsis	Source B-VPLS MAC address to use with PBB
Context	**configure** service pbb source-bmac address *string*
Tree	address
Introduced	16.0.R1
Platforms	All

evpn-etree-leaf-address *string*

Synopsis	Source Backbone VPLS MAC address to use with Provider Backbone Bridging (PBB)
Context	**configure** service pbb source-bmac evpn-etree-leaf-address *string*
Tree	evpn-etree-leaf-address
Introduced	16.0.R1
Platforms	All

proxy-arp-nd

Synopsis	Enter the **proxy-arp-nd** context
Context	**configure** service proxy-arp-nd
Tree	proxy-arp-nd
Introduced	16.0.R1
Platforms	All

mac-list

Synopsis	Enter the **mac-list** context
Context	**configure** service proxy-arp-nd mac-list
Tree	mac-list
Introduced	16.0.R1
Platforms	All

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list [list-name] *string*

Synopsis	Enter the **list** list instance
Context	**configure** service proxy-arp-nd mac-list list *string*
Tree	list
Introduced	16.0.R1
Platforms	All

[**list-name**] *string*

Synopsis	Specify name for mac list
Context	**configure** service proxy-arp-nd mac-list list *string*
Tree	list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

mac [address] *string*

Synopsis	Add a list entry for **mac**
Context	**configure** service proxy-arp-nd mac-list list *string* mac *string*
Tree	mac
Max. Instances	10
Introduced	16.0.R1
Platforms	All

[**address**] *string*

Synopsis	MAC address to be added to the list
Context	**configure** service proxy-arp-nd mac-list list *string* mac *string*
Tree	mac
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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pw-template [pw-template-name] *string*

Synopsis	Enter the **pw-template** list instance
Context	**configure** service pw-template *string*
Tree	pw-template
Max. Instances	2048
Introduced	16.0.R1
Platforms	All

[**pw-template-name**] *string*

Synopsis	SDP template name
Context	**configure** service pw-template *string*
Tree	pw-template
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

accounting-policy *number*

Synopsis	Accounting policy
Context	**configure** service pw-template *string* accounting-policy *number*
Tree	accounting-policy
Range	1 to 99
Introduced	16.0.R1
Platforms	All

allow-fragmentation *boolean*

Synopsis	Allow packets to be sent without setting DF bit
Context	**configure** service pw-template *string* allow-fragmentation *boolean*
Tree	allow-fragmentation
Default	false

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Introduced	16.0.R1
Platforms	All

auto-gre-sdp *boolean*

WARNING:
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Synopsis	Use a GRE tunnel to automatically create an SDP
Context	**configure** service pw-template *string* auto-gre-sdp *boolean*
Tree	auto-gre-sdp
Default	false
Introduced	16.0.R1
Platforms	All

block-on-peer-fault *boolean*

Synopsis	Enable block traffic on peer fault
Context	**configure** service pw-template *string* block-on-peer-fault *boolean*
Tree	block-on-peer-fault
Default	false
Introduced	16.0.R1
Platforms	All

collect-stats *boolean*

Synopsis	Collect statistics
Context	**configure** service pw-template *string* collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

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control-word *boolean*

Synopsis	Enable/Disable the use of ControlWord
Context	**configure** service pw-template *string* control-word *boolean*
Tree	control-word
Default	false
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** service pw-template *string* egress
Tree	egress
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the **filter** context
Context	**configure** service pw-template *string* egress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip *string*

Synopsis	IPv4 filter policy name
Context	**configure** service pw-template *string* egress filter ip *string*
Tree	ip
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

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ipv6 *string*

Synopsis	IPv6 filter policy name
Context	**configure** service pw-template *string* egress filter ipv6 *string*
Tree	ipv6
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

mac *string*

Synopsis	MAC filter policy name
Context	**configure** service pw-template *string* egress filter mac *string*
Tree	mac
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

mfib-allowed-mda-destinations

Synopsis	Enter the **mfib-allowed-mda-destinations** context
Context	**configure** service pw-template *string* egress mfib-allowed-mda-destinations
Tree	mfib-allowed-mda-destinations
Introduced	16.0.R1
Platforms	All

mda [mda-id] *string*

Synopsis	Add a list entry for **mda**
Context	**configure** service pw-template *string* egress mfib-allowed-mda-destinations mda *string*
Tree	mda
Introduced	16.0.R1
Platforms	All

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[**mda-id**] *string*

Synopsis	MFIB allowed MDA destination
Context	**configure** service pw-template *string* egress mfib-allowed-mda-destinations mda *string*
Tree	mda
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** service pw-template *string* egress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

network

Synopsis	Enter the **network** context
Context	**configure** service pw-template *string* egress qos network
Tree	network
Introduced	16.0.R1
Platforms	All

policy-name *string*

Synopsis	Network policy ID
Context	**configure** service pw-template *string* egress qos network policy-name *string*
Tree	policy-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

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port-redirect-group

Synopsis	Enter the **port-redirect-group** context
Context	**configure** service pw-template *string* egress qos network port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *string*

Synopsis	Name of the egress port queue group template
Context	**configure** service pw-template *string* egress qos network port-redirect-group group-name *string*
Tree	group-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Instance for FP ingress queue group
Context	**configure** service pw-template *string* egress qos network port-redirect-group instance *number*
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

encryption-keygroup

Synopsis	Enter the **encryption-keygroup** context
Context	**configure** service pw-template *string* encryption-keygroup
Tree	encryption-keygroup
Introduced	19.10.R1
Platforms	VSR

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inbound *number*

Synopsis	Keygroup identifier in the inbound direction
Context	**configure** service pw-template *string* encryption-keygroup inbound *number*
Tree	inbound
Range	1 to 127
Introduced	19.10.R1
Platforms	VSR

outbound *number*

Synopsis	Keygroup identifier in the outbound direction
Context	**configure** service pw-template *string* encryption-keygroup outbound *number*
Tree	outbound
Range	1 to 127
Introduced	19.10.R1
Platforms	VSR

entropy-label

Synopsis	Enable the use of an entropy label
Context	**configure** service pw-template *string* entropy-label
Tree	entropy-label
Notes	The following elements are part of a choice: **entropy-label** or **hash-label**.
Introduced	16.0.R1
Platforms	All

fdb

Synopsis	Enter the **fdb** context
Context	**configure** service pw-template *string* fdb
Tree	fdb
Introduced	16.0.R1
Platforms	All

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auto-learn-mac-protect *boolean*

Synopsis	Enable automatic update of MAC protect list
Context	**configure** service pw-template *string* fdb auto-learn-mac-protect *boolean*
Tree	auto-learn-mac-protect
Default	false
Introduced	16.0.R1
Platforms	All

auto-learn-mac-protect-exclude-list *string*

Synopsis	Name of the MAC protect exclusion list
Context	**configure** service pw-template *string* fdb auto-learn-mac-protect-exclude-list *string*
Tree	auto-learn-mac-protect-exclude-list
Description	This command configures the name of a MAC protect exclusion list. Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list. An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object.
String Length	1 to 32
Introduced	20.5.R1
Platforms	All

discard-unknown-source *boolean*

Synopsis	Discard frames with unknown source
Context	**configure** service pw-template *string* fdb discard-unknown-source *boolean*
Tree	discard-unknown-source
Default	false
Introduced	16.0.R1
Platforms	All

limit-mac-move *keyword*

Synopsis	MAC move limit
Context	**configure** service pw-template *string* fdb limit-mac-move *keyword*

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Tree	limit-mac-move
Options	blockable, non-blockable
Default	blockable
Introduced	16.0.R1
Platforms	All

mac-learning

Synopsis	Enter the **mac-learning** context
Context	**configure** service pw-template *string* fdb mac-learning
Tree	mac-learning
Introduced	16.0.R1
Platforms	All

aging *boolean*

Synopsis	Enable aging of MAC addresses
Context	**configure** service pw-template *string* fdb mac-learning aging *boolean*
Tree	aging
Default	true
Introduced	16.0.R1
Platforms	All

learning *boolean*

Synopsis	Enable learning of new MAC addresses
Context	**configure** service pw-template *string* fdb mac-learning learning *boolean*
Tree	learning
Default	true
Introduced	16.0.R1
Platforms	All

mac-pinning *boolean*

Synopsis	Enable MAC address pinning on this spoke SDP

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Context	**configure** service pw-template *string* fdb mac-pinning *boolean*
Tree	mac-pinning
Default	false
Introduced	16.0.R1
Platforms	All

maximum-mac-addresses *number*

Synopsis	Maximum number of MAC address entries in the FDB
Context	**configure** service pw-template *string* fdb maximum-mac-addresses *number*
Tree	maximum-mac-addresses
Description	This command specifies the maximum number of FDB entries for both learned and static MAC addresses for this PW template. When the configured limit is reached, no new addresses are learned from the SAP or spoke SDP until at least one FDB entry is aged out or cleared. When the configured limit is reached and the **configure service pw-template fdb discard-unknown-source** command is set to **true** for this PW template, packets with unknown source MAC addresses are discarded. If **discard-unknown-source** is set to **false**, the packets are forwarded if their destination MAC addresses are known, or flooded if their destination MAC addresses are unknown. However, if the **configure service vpls fdb discard-unknown** command is set to **true**, packets with unknown destination MAC addresses are discarded, even if the limit of FDB entries on the specific VPLS instance is not reached. When unconfigured, the PW template uses the global MAC learning limitations.
Range	1 to 511999
Introduced	16.0.R1
Platforms	All

protected-src-mac-violation-action *keyword*

Synopsis	Action for protected source MAC restriction
Context	**configure** service pw-template *string* fdb protected-src-mac-violation-action *keyword*
Tree	protected-src-mac-violation-action
Options	sdp-bind-oper-down, alarm-only, discard
Introduced	16.0.R1
Platforms	All

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force-vc-forwarding *keyword*

Synopsis	VC forwarding action
Context	**configure** service pw-template *string* force-vc-forwarding *keyword*
Tree	force-vc-forwarding
Options	vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag
Introduced	16.0.R1
Platforms	All

hash-label

Synopsis	Enable the **hash-label** context
Context	**configure** service pw-template *string* hash-label
Tree	hash-label
Description	Commands in this context configure the use of hash labels for egress datapaths. For information about hash-label handling, see the "Hash labels" section of the *7450 ESS, 7750 SR, 7950 XRS, and VSR MPLS Guide*.
Notes	The following elements are part of a choice: **entropy-label** or **hash-label**.
Introduced	16.0.R1
Platforms	All

signal-capability

Synopsis	Signal hash label capability to the remote PE
Context	**configure** service pw-template *string* hash-label signal-capability
Tree	signal-capability
Description	When configured, this command enables the signaling and negotiating of the hash label between the local and remote PE nodes. The signaling process outcome determines whether the local PE inserts the hash label on the user packets. This outcome can override the local PE configuration. The node must withdraw the label it sent to its peer and send a new label mapping message with the new value of the F-bit in the flow label interface option sub-TLV of the pseudowire ID FEC element.
Introduced	16.0.R1
Platforms	All

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igmp-snooping

Synopsis	Enter the **igmp-snooping** context
Context	**configure** service pw-template *string* igmp-snooping
Tree	igmp-snooping
Introduced	16.0.R1
Platforms	All

fast-leave *boolean*

Synopsis	Allow IGMP fast leave processing
Context	**configure** service pw-template *string* igmp-snooping fast-leave *boolean*
Tree	fast-leave
Default	false
Introduced	16.0.R1
Platforms	All

import-policy *string*

Synopsis	Import policy that filters IGMP packets
Context	**configure** service pw-template *string* igmp-snooping import-policy *string*
Tree	import-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

maximum-number-groups *number*

Synopsis	Maximum multicast groups
Context	**configure** service pw-template *string* igmp-snooping maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

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query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** service pw-template *string* igmp-snooping query-interval *number*
Tree	query-interval
Range	2 to 1024
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	**configure** service pw-template *string* igmp-snooping query-last-member-interval *number*
Tree	query-last-member-interval
Range	1 to 50
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	**configure** service pw-template *string* igmp-snooping query-response-interval *number*
Tree	query-response-interval
Range	1 to 1023
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

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robust-count *number*

Synopsis	Number of retries after expected message loss
Context	**configure** service pw-template *string* igmp-snooping robust-count *number*
Tree	robust-count
Range	2 to 7
Default	2
Introduced	16.0.R1
Platforms	All

send-queries *boolean*

Synopsis	Generate IGMP general queries
Context	**configure** service pw-template *string* igmp-snooping send-queries *boolean*
Tree	send-queries
Default	false
Introduced	16.0.R1
Platforms	All

version *keyword*

Synopsis	IGMP version
Context	**configure** service pw-template *string* igmp-snooping version *keyword*
Tree	version
Options	1, 2, 3
Default	3
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service pw-template *string* ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

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filter

Synopsis	Enter the **filter** context
Context	**configure** service pw-template *string* ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip *string*

Synopsis	IPv4 filter policy name
Context	**configure** service pw-template *string* ingress filter ip *string*
Tree	ip
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

ipv6 *string*

Synopsis	IPv6 filter policy name
Context	**configure** service pw-template *string* ingress filter ipv6 *string*
Tree	ipv6
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

mac *string*

Synopsis	MAC filter policy name
Context	**configure** service pw-template *string* ingress filter mac *string*
Tree	mac
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

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qos

Synopsis	Enter the **qos** context
Context	**configure** service pw-template *string* ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

network

Synopsis	Enter the **network** context
Context	**configure** service pw-template *string* ingress qos network
Tree	network
Introduced	16.0.R1
Platforms	All

fp-redirect-group

Synopsis	Enter the **fp-redirect-group** context
Context	**configure** service pw-template *string* ingress qos network fp-redirect-group
Tree	fp-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *string*

Synopsis	Name of the forwarding plane queue group template
Context	**configure** service pw-template *string* ingress qos network fp-redirect-group group-name *string*
Tree	group-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

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instance *number*

Synopsis	Instance for FP ingress queue group
Context	**configure** service pw-template *string* ingress qos network fp-redirect-group instance *number*
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

policy-name *string*

Synopsis	Network policy ID
Context	**configure** service pw-template *string* ingress qos network policy-name *string*
Tree	policy-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

l2pt

Synopsis	Enter the **l2pt** context
Context	**configure** service pw-template *string* l2pt
Tree	l2pt
Introduced	16.0.R1
Platforms	All

termination

Synopsis	Enable the **termination** context
Context	**configure** service pw-template *string* l2pt termination
Tree	termination
Introduced	16.0.R1
Platforms	All

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protocols

Synopsis	Enter the **protocols** context
Context	**configure** service pw-template *string* l2pt termination protocols
Tree	protocols
Introduced	16.0.R1
Platforms	All

cdp *boolean*

Synopsis	Enable Cisco discovery protocol
Context	**configure** service pw-template *string* l2pt termination protocols cdp *boolean*
Tree	cdp
Default	false
Introduced	16.0.R1
Platforms	All

dtp *boolean*

Synopsis	Enable dynamic trunking protocol
Context	**configure** service pw-template *string* l2pt termination protocols dtp *boolean*
Tree	dtp
Default	false
Introduced	16.0.R1
Platforms	All

pagp *boolean*

Synopsis	Enable port aggregation protocol
Context	**configure** service pw-template *string* l2pt termination protocols pagp *boolean*
Tree	pagp
Default	false
Introduced	16.0.R1
Platforms	All

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stp *boolean*

Synopsis	Enable all spanning tree protocols
Context	**configure** service pw-template *string* l2pt termination protocols stp *boolean*
Tree	stp
Default	true
Introduced	16.0.R1
Platforms	All

udld *boolean*

Synopsis	Enable unidirectional link detection
Context	**configure** service pw-template *string* l2pt termination protocols udld *boolean*
Tree	udld
Default	false
Introduced	16.0.R1
Platforms	All

vtp *boolean*

Synopsis	Enable virtual trunk protocol
Context	**configure** service pw-template *string* l2pt termination protocols vtp *boolean*
Tree	vtp
Default	false
Introduced	16.0.R1
Platforms	All

provisioned-sdp *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Provisioned SDP type
Context	**configure** service pw-template *string* provisioned-sdp *keyword*
Tree	provisioned-sdp
Options	use, prefer

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Introduced	16.0.R1
Platforms	All

pw-template-id *number*

WARNING:
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Synopsis	PW Template Id
Context	**configure** service pw-template *string* pw-template-id *number*
Tree	pw-template-id
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

sdp-exclude [group-name] *reference*

Synopsis	Add a list entry for **sdp-exclude**
Context	**configure** service pw-template *string* sdp-exclude *reference*
Tree	sdp-exclude
Introduced	16.0.R1
Platforms	All

[**group-name**] *reference*

Synopsis	SDP group name
Context	**configure** service pw-template *string* sdp-exclude *reference*
Tree	sdp-exclude
Reference	**configure** service sdp-group group-name *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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sdp-include [group-name] *reference*

Synopsis	Add a list entry for **sdp-include**
Context	**configure** service pw-template *string* sdp-include *reference*
Tree	sdp-include
Introduced	16.0.R1
Platforms	All

[**group-name**] *reference*

Synopsis	SDP group name
Context	**configure** service pw-template *string* sdp-include *reference*
Tree	sdp-include
Reference	**configure** service sdp-group group-name *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

split-horizon-group

Synopsis	Enter the **split-horizon-group** context
Context	**configure** service pw-template *string* split-horizon-group
Tree	split-horizon-group
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service pw-template *string* split-horizon-group description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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fdb

Synopsis	Enter the **fdb** context
Context	**configure** service pw-template *string* split-horizon-group fdb
Tree	fdb
Introduced	16.0.R1
Platforms	All

saps

Synopsis	Enter the **saps** context
Context	**configure** service pw-template *string* split-horizon-group fdb saps
Tree	saps
Introduced	16.0.R1
Platforms	All

auto-learn-mac-protect *boolean*

Synopsis	Enable automatic update of MAC protect list
Context	**configure** service pw-template *string* split-horizon-group fdb saps auto-learn-mac-protect *boolean*
Tree	auto-learn-mac-protect
Default	false
Introduced	16.0.R1
Platforms	All

discard-unprotected-dest-mac *boolean*

Synopsis	Enable/disable unprotected dest MAC restriction
Context	**configure** service pw-template *string* split-horizon-group fdb saps discard-unprotected-dest-mac *boolean*
Tree	discard-unprotected-dest-mac
Default	false
Introduced	16.0.R1
Platforms	All

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protected-src-mac-violation-action *keyword*

Synopsis	Action for protected source MAC restriction
Context	**configure** service pw-template *string* split-horizon-group fdb saps protected-src-mac-violation-action *keyword*
Tree	protected-src-mac-violation-action
Options	sap-oper-down, alarm-only, discard
Introduced	16.0.R1
Platforms	All

name *string*

Synopsis	Split horizon group name to which the SDP belongs
Context	**configure** service pw-template *string* split-horizon-group name *string*
Tree	name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

stp

Synopsis	Enter the **stp** context
Context	**configure** service pw-template *string* stp
Tree	stp
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of STP
Context	**configure** service pw-template *string* stp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R4
Platforms	All

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auto-edge *boolean*

Synopsis	Enable automatic detection of edge port characteristics
Context	**configure** service pw-template *string* stp auto-edge *boolean*
Tree	auto-edge
Default	true
Introduced	16.0.R4
Platforms	All

edge-port *boolean*

Synopsis	Designate SAP or SDP as an edge port
Context	**configure** service pw-template *string* stp edge-port *boolean*
Tree	edge-port
Default	false
Introduced	16.0.R4
Platforms	All

link-type *keyword*

Synopsis	Configure STP link-type
Context	**configure** service pw-template *string* stp link-type *keyword*
Tree	link-type
Options	pt-pt, shared
Default	pt-pt
Introduced	16.0.R4
Platforms	All

path-cost *number*

Synopsis	Configure path-cost
Context	**configure** service pw-template *string* stp path-cost *number*
Tree	path-cost
Range	1 to 200000000
Default	10
Introduced	16.0.R4

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Platforms	All

priority *number*

Synopsis	Configure STP priority
Context	**configure** service pw-template *string* stp priority *number*
Tree	priority
Range	0 to 255
Default	128
Introduced	16.0.R4
Platforms	All

root-guard *boolean*

Synopsis	Enable/disable STP root-guard
Context	**configure** service pw-template *string* stp root-guard *boolean*
Tree	root-guard
Default	false
Introduced	16.0.R4
Platforms	All

vc-type *keyword*

Synopsis	Virtual circuit type associated with the SDP bind
Context	**configure** service pw-template *string* vc-type *keyword*
Tree	vc-type
Options	ether, vlan
Default	ether
Introduced	16.0.R1
Platforms	All

vlan-vc-tag *number*

Synopsis	VLAN VC tag
Context	**configure** service pw-template *string* vlan-vc-tag *number*

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Tree	vlan-vc-tag
Range	0 to 4094
Introduced	16.0.R1
Platforms	All

sdp [sdp-id] *number*

Synopsis	Enter the **sdp** list instance
Context	**configure** service sdp *number*
Tree	sdp
Introduced	16.0.R1
Platforms	All

[**sdp-id**] *number*

Synopsis	Service Distribution Point (SDP) identifier
Context	**configure** service sdp *number*
Tree	sdp
Range	1 to 32767
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

accounting-policy *reference*

Synopsis	Accounting policy associated with an SDP
Context	**configure** service sdp *number* accounting-policy *reference*
Tree	accounting-policy
Description	This command associates an accounting policy with an SDP. When unconfigured, there is no accounting policy applied to the SDP.
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the SDP
Context	**configure** service sdp *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

adv-mtu-override *boolean*

Synopsis	Override the advertised VC-type MTU using the SDP ID
Context	**configure** service sdp *number* adv-mtu-override *boolean*
Tree	adv-mtu-override
Default	false
Introduced	16.0.R1
Platforms	All

allow-fragmentation *boolean*

Synopsis	Allow packets to be sent without setting DF bit
Context	**configure** service sdp *number* allow-fragmentation *boolean*
Tree	allow-fragmentation
Default	false
Introduced	16.0.R1
Platforms	All

bgp-tunnel *boolean*

Synopsis	Allow use of BGP route tunnels to reach far-end nodes
Context	**configure** service sdp *number* bgp-tunnel *boolean*
Tree	bgp-tunnel
Default	false
Introduced	16.0.R1
Platforms	All

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booking-factor *number*

Synopsis	Percentage of SDP max available bandwidth for VLL CAC
Context	**configure** service sdp *number* booking-factor *number*
Tree	booking-factor
Range	0 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

class-forwarding

Synopsis	Enable the **class-forwarding** context
Context	**configure** service sdp *number* class-forwarding
Tree	class-forwarding
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of class-based forwarding
Context	**configure** service sdp *number* class-forwarding admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

default-lsp *reference*

Synopsis	Default LSP for class-based forwarding on the SDP
Context	**configure** service sdp *number* class-forwarding default-lsp *reference*
Tree	default-lsp
Reference	**configure** service sdp *number* lsp *string*
Notes	This element is mandatory.

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Introduced	16.0.R1
Platforms	All

enforce-diffserv-lsp-fc *boolean*

Synopsis	Enable RSVP validation of FC support by the LSP
Context	**configure** service sdp *number* class-forwarding enforce-diffserv-lsp-fc *boolean*
Tree	enforce-diffserv-lsp-fc
Default	false
Introduced	16.0.R1
Platforms	All

fc [fc-name] *keyword*

Synopsis	Enter the **fc** list instance
Context	**configure** service sdp *number* class-forwarding fc *keyword*
Tree	fc
Introduced	16.0.R1
Platforms	All

[**fc-name**] *keyword*

Synopsis	Forwarding class to LSP mapping
Context	**configure** service sdp *number* class-forwarding fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

lsp *reference*

Synopsis	LSP name used to forward service packets
Context	**configure** service sdp *number* class-forwarding fc *keyword* lsp *reference*
Tree	lsp

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Reference	**configure** service sdp *number* lsp *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

multicast-lsp *reference*

Synopsis	LSP to forward all multicast traffic
Context	**configure** service sdp *number* class-forwarding multicast-lsp *reference*
Tree	multicast-lsp
Reference	**configure** service sdp *number* lsp *string*
Introduced	16.0.R1
Platforms	All

collect-stats *boolean*

Synopsis	Collect accounting statistics for this SDP
Context	**configure** service sdp *number* collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

delivery-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Delivery type used by the SDP
Context	**configure** service sdp *number* delivery-type *keyword*
Tree	delivery-type
Options	gre, mpls, l2tpv3, gre-eth-bridged
Introduced	16.0.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** service sdp *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

far-end

Synopsis	Enter the **far-end** context
Context	**configure** service sdp *number* far-end
Tree	far-end
Introduced	16.0.R1
Platforms	All

ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address of the far end destination router
Context	**configure** service sdp *number* far-end ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-address
Introduced	16.0.R3
Platforms	All

keep-alive

Synopsis	Enter the **keep-alive** context
Context	**configure** service sdp *number* keep-alive
Tree	keep-alive
Introduced	16.0.R1

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Platforms	All

admin-state *keyword*

Synopsis	Administrative state of keepalive mechanism for the SDP
Context	**configure** service sdp *number* keep-alive admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

hello-time *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time period between SDP keepalive messages
Context	**configure** service sdp *number* keep-alive hello-time *number*
Tree	hello-time
Range	1 to 3600
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

hold-down-time *number*

Synopsis	Minimum time the SDP remains in the down state
Context	**configure** service sdp *number* keep-alive hold-down-time *number*
Tree	hold-down-time
Range	0 to 3600
Units	seconds
Default	10
Introduced	16.0.R1

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Platforms	All

maximum-drop-count *number*

Synopsis	Maximum failed request attempts when SDP is down
Context	**configure** service sdp *number* keep-alive maximum-drop-count *number*
Tree	maximum-drop-count
Range	1 to 5
Default	3
Introduced	16.0.R1
Platforms	All

message-length *number*

Synopsis	Length of the keepalive request messages transmitted
Context	**configure** service sdp *number* keep-alive message-length *number*
Tree	message-length
Range	40 to 9198
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Time SDP waits before tearing down the session
Context	**configure** service sdp *number* keep-alive timeout *number*
Tree	timeout
Range	1 to 10
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

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ldp *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable LDP-signaled LSPs
Context	**configure** service sdp *number* ldp *boolean*
Tree	ldp
Default	false
Introduced	16.0.R1
Platforms	All

local-end *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local end address of tunnel defined by the SDP
Context	**configure** service sdp *number* local-end *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	local-end
Introduced	16.0.R1
Platforms	All

lsp [lsp-name] *string*

Synopsis	Add a list entry for **lsp**
Context	**configure** service sdp *number* lsp *string*
Tree	lsp
Max. Instances	16
Introduced	16.0.R1
Platforms	All

[**lsp-name**] *string*

Synopsis	LSP name to associate with the SDP

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Context	**configure** service sdp *number* lsp *string*
Tree	lsp
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	Metric used in tunnel table manager for decision making
Context	**configure** service sdp *number* metric *number*
Tree	metric
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

mixed-lsp-mode

Synopsis	Enable the **mixed-lsp-mode** context
Context	**configure** service sdp *number* mixed-lsp-mode
Tree	mixed-lsp-mode
Introduced	16.0.R1
Platforms	All

revert-time *(number | keyword)*

Synopsis	Delay before SDP can revert to higher priority LSP type
Context	**configure** service sdp *number* mixed-lsp-mode revert-time *(number | keyword)*
Tree	revert-time
Range	1 to 600
Units	seconds
Options	never, immediate
Default	immediate
Introduced	16.0.R1
Platforms	All

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network-domain *reference*

Synopsis	Network domain name associated with the SDP
Context	**configure** service sdp *number* network-domain *reference*
Tree	network-domain
Reference	**configure** router *string* network-domains network-domain *string*
Introduced	16.0.R1
Platforms	All

path-mtu *number*

Synopsis	Maximum Transmission Unit (MTU) the SDP can transmit
Context	**configure** service sdp *number* path-mtu *number*
Tree	path-mtu
Range	576 to 9782
Units	bytes
Introduced	16.0.R1
Platforms	All

pbb-etype *string*

Synopsis	Ethertype used for PBB
Context	**configure** service sdp *number* pbb-etype *string*
Tree	pbb-etype
String Length	5 to 6
Default	0x88E7
Introduced	16.0.R1
Platforms	All

pw-port

Synopsis	Enter the **pw-port** context
Context	**configure** service sdp *number* pw-port
Tree	pw-port
Introduced	16.0.R4

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Platforms	All

binding-port *string*

Synopsis	Binding port
Context	**configure** service sdp *number* pw-port binding-port *string*
Tree	binding-port
Introduced	16.0.R4
Platforms	All

sdp-group [group-name] *reference*

Synopsis	Add a list entry for **sdp-group**
Context	**configure** service sdp *number* sdp-group *reference*
Tree	sdp-group
Introduced	16.0.R1
Platforms	All

[**group-name**] *reference*

Synopsis	SDP administrative group name
Context	**configure** service sdp *number* sdp-group *reference*
Tree	sdp-group
Reference	**configure** service sdp-group group-name *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

signaling *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Signaling protocol used to obtain pseudowire labels
Context	**configure** service sdp *number* signaling *keyword*

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Tree	signaling
Description	This command specifies the signaling protocol used to obtain the ingress and egress pseudowire labels in frames transmitted and received on the SDP. The signaling value can only be changed while the administrative status of the SDP is down. Additionally, the signaling can only be changed on an SDP if the SDP is not in use by BGP-AD or BGP-VPLS. BGP signaling can only be enabled if the SDP does not already have pseudowires signaled over it. Also, BGP signaling is not supported with mixed mode LSP SDPs. **Note**: If the **tldp** option is selected as the mechanism for exchanging service labels over an MPLS or GRE SDP and the T-LDP session is automatically established, an explicit T-LDP session that is subsequently configured takes precedence over the automatic T-LDP session. However, if the explicit, manually-configured session is then removed, the system does not revert to the automatic session and the automatic session is also deleted. To address this, recreate the T-LDP session by using the **admin-state** command to administratively disable and then enable the SDP.
Options	off, tldp, bgp
Introduced	16.0.R1
Platforms	All

source-bmac-lsb

Synopsis	Enter the **source-bmac-lsb** context
Context	**configure** service sdp *number* source-bmac-lsb
Tree	source-bmac-lsb
Introduced	16.0.R1
Platforms	All

control-pw-vc-id *number*

Synopsis	VC ID of the control pseudowire
Context	**configure** service sdp *number* source-bmac-lsb control-pw-vc-id *number*
Tree	control-pw-vc-id
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

value *string*

Synopsis	16 least significant bits of virtual backbone MAC

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Context	**configure** service sdp *number* source-bmac-lsb value *string*
Tree	value
Introduced	16.0.R1
Platforms	All

sr-isis *boolean*

Synopsis	Enable Segment Routing for IS-IS
Context	**configure** service sdp *number* sr-isis *boolean*
Tree	sr-isis
Default	false
Introduced	16.0.R1
Platforms	All

sr-ospf *boolean*

Synopsis	Enable an MPLS SDP of LSP type OSPF Segment Routing
Context	**configure** service sdp *number* sr-ospf *boolean*
Tree	sr-ospf
Default	false
Introduced	16.0.R1
Platforms	All

tunnel-far-end *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System address of the far-end router for the SDP
Context	**configure** service sdp *number* tunnel-far-end *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	tunnel-far-end
Introduced	16.0.R1
Platforms	All

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vlan-vc-etype *string*

Synopsis	VLAN VC Ethertype
Context	**configure** service sdp *number* vlan-vc-etype *string*
Tree	vlan-vc-etype
String Length	5 to 6
Default	0x8100
Introduced	16.0.R1
Platforms	All

weighted-ecmp *boolean*

Synopsis	Allow weighted load-balancing on an SDP
Context	**configure** service sdp *number* weighted-ecmp *boolean*
Tree	weighted-ecmp
Default	false
Introduced	16.0.R1
Platforms	All

sdp-group

Synopsis	Enter the **sdp-group** context
Context	**configure** service sdp-group
Tree	sdp-group
Introduced	16.0.R1
Platforms	All

group-name [group-name] *string*

Synopsis	Enter the **group-name** list instance
Context	**configure** service sdp-group group-name *string*
Tree	group-name
Introduced	16.0.R1
Platforms	All

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[**group-name**] *string*

Synopsis	SDP administrative group name
Context	**configure** service sdp-group group-name *string*
Tree	group-name
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

value *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Unique group value associated with the SDP admin group
Context	**configure** service sdp-group group-name *string* value *number*
Tree	value
Range	0 to 31
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

system

Synopsis	Enter the **system** context
Context	**configure** service system
Tree	system
Introduced	16.0.R1
Platforms	All

bgp

Synopsis	Enter the **bgp** context
Context	**configure** service system bgp

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Tree	bgp
Introduced	16.0.R1
Platforms	All

evpn

Synopsis	Enter the **evpn** context
Context	**configure** service system bgp evpn
Tree	evpn
Introduced	16.0.R1
Platforms	All

ad-per-es-route

Synopsis	Enter the **ad-per-es-route** context
Context	**configure** service system bgp evpn ad-per-es-route
Tree	ad-per-es-route
Introduced	16.0.R1
Platforms	All

extended-evi-range *boolean*

Synopsis	Reserve extended RD comm-values for AD per-ES routes
Context	**configure** service system bgp evpn ad-per-es-route extended-evi-range *boolean*
Tree	extended-evi-range
Description	When configured to **true**, the system reserves the Route Distinguisher (RD) comm-values 1 to 65535 out of the type 1 RD that is used for AD per-ES routes. If **ad-per-es-route route-target-type** is also configured to **evi-route-target-set**, the system can pack the maximum number of EVI route targets in the AD per-ES routes When configured to **false**, this command only reserves comm-values 1 to 512.
Default	false
Introduced	21.10.R1
Platforms	All

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route-distinguisher-ip-address *string*

Synopsis	IP address for route distinguisher for EVPN AD-ES routes
Context	**configure** service system bgp evpn ad-per-es-route route-distinguisher-ip-address *string*
Tree	route-distinguisher-ip-address
Introduced	16.0.R1
Platforms	All

route-target-type *keyword*

Synopsis	Method for the AD per-ES routes advertisement
Context	**configure** service system bgp evpn ad-per-es-route route-target-type *keyword*
Tree	route-target-type
Options	evi-route-target, evi-route-target-set
Default	evi-route-target
Introduced	16.0.R1
Platforms	All

ethernet-segment [ethernet-segment-name] *string*

Synopsis	Enter the **ethernet-segment** list instance
Context	**configure** service system bgp evpn ethernet-segment *string*
Tree	ethernet-segment
Max. Instances	4095
Introduced	16.0.R1
Platforms	All

[**ethernet-segment-name**] *string*

Synopsis	Specify name for Ethernet segment
Context	**configure** service system bgp evpn ethernet-segment *string*
Tree	ethernet-segment
String Length	1 to 32
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	All

ac-df-capability *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	AC-influenced DF election capability
Context	**configure** service system bgp evpn ethernet-segment *string* ac-df-capability *keyword*
Tree	ac-df-capability
Description	This command configures the Attachment Circuit-influenced (AC-influenced) designated forwarder (DF) election capability (AC-DF) into the DF election for the Ethernet Segment (ES). AC-DF supports EVPN Auto-Discovery per EVI/ES (AD per EVI/ES) routes for a specific PE, to ensure the PE is included in the candidate DF election list. When AC-DF is excluded on a specific ES, the presence or absence of the AD per EVI/ES routes from the ES peers does not modify the candidate DF election list for the ES. Excluding the AC-DF is recommended in ESs that use an operational group monitored by the access LAG to signal the standby LACP or to power-off.
Options	include, exclude
Default	include
Introduced	21.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the Ethernet segment instance
Context	**configure** service system bgp evpn ethernet-segment *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

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association

Synopsis	Enter the **association** context
Context	**configure** service system bgp evpn ethernet-segment *string* association
Tree	association
Introduced	16.0.R1
Platforms	All

lag [lag-name] *reference*

Synopsis	Enter the **lag** list instance
Context	**configure** service system bgp evpn ethernet-segment *string* association lag *reference*
Tree	lag
Max. Instances	1
Notes	The following elements are part of a choice: **lag**, **network-interconnect-vxlan**, **port**, **pw-port**, **sdp**, or **vprn-next-hop**.
Introduced	16.0.R1
Platforms	All

[**lag-name**] *reference*

Synopsis	LAG multi-homed with the Ethernet segment entry
Context	**configure** service system bgp evpn ethernet-segment *string* association lag *reference*
Tree	lag
Reference	**configure** lag *string*
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

virtual-ranges

Synopsis	Enter the **virtual-ranges** context
Context	**configure** service system bgp evpn ethernet-segment *string* association lag *reference* virtual-ranges
Tree	virtual-ranges

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Introduced	16.0.R4
Platforms	All

dot1q

Synopsis	Enter the **dot1q** context
Context	**configure** service system bgp evpn ethernet-segment *string* association lag *reference* virtual-ranges dot1q
Tree	dot1q
Introduced	16.0.R4
Platforms	All

q-tag [start] *(number | keyword)*

Synopsis	Enter the **q-tag** list instance
Context	**configure** service system bgp evpn ethernet-segment *string* association lag *reference* virtual-ranges dot1q q-tag *(number | keyword)*
Tree	q-tag
Max. Instances	8
Introduced	16.0.R4
Platforms	All

[**start**] *(number | keyword)*

Synopsis	Lower bound of the q-tag VLAN ID range
Context	**configure** service system bgp evpn ethernet-segment *string* association lag *reference* virtual-ranges dot1q q-tag *(number | keyword)*
Tree	q-tag
Range	0 to 4094
Options	tag-*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

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end *(number | keyword)*

Synopsis	Upper bound of the q-tag VLAN ID range
Context	**configure** service system bgp evpn ethernet-segment *string* association lag *reference* virtual-ranges dot1q q-tag *(number | keyword)* end *(number | keyword)*
Tree	end
Range	0 to 4094
Options	tag-*
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

qinq

Synopsis	Enter the **qinq** context
Context	**configure** service system bgp evpn ethernet-segment *string* association lag *reference* virtual-ranges qinq
Tree	qinq
Introduced	16.0.R4
Platforms	All

s-tag [start] *(number | keyword)*

Synopsis	Enter the **s-tag** list instance
Context	**configure** service system bgp evpn ethernet-segment *string* association lag *reference* virtual-ranges qinq s-tag *(number | keyword)*
Tree	s-tag
Max. Instances	8
Introduced	16.0.R4
Platforms	All

[**start**] *(number | keyword)*

Synopsis	Lower bound of the s-tag VLAN ID range
Context	**configure** service system bgp evpn ethernet-segment *string* association lag *reference* virtual-ranges qinq s-tag *(number | keyword)*

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Tree	s-tag
Range	0 to 4094
Options	tag-*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

end *(number | keyword)*

Synopsis	Upper bound of the s-tag VLAN ID range
Context	**configure** service system bgp evpn ethernet-segment *string* association lag *reference* virtual-ranges qinq s-tag *(number | keyword)* end *(number | keyword)*
Tree	end
Range	0 to 4094
Options	tag-*
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

s-tag-c-tag [s-tag] *(number | keyword)* c-tag-start *(number | keyword)*

Synopsis	Enter the **s-tag-c-tag** list instance
Context	**configure** service system bgp evpn ethernet-segment *string* association lag *reference* virtual-ranges qinq s-tag-c-tag *(number | keyword)* c-tag-start *(number | keyword)*
Tree	s-tag-c-tag
Max. Instances	8
Introduced	16.0.R4
Platforms	All

[**s-tag**] *(number | keyword)*

Synopsis	Starting value of the qinq s-tag range associated with a virtual ethernet segment
Context	**configure** service system bgp evpn ethernet-segment *string* association lag *reference* virtual-ranges qinq s-tag-c-tag *(number | keyword)* c-tag-start *(number | keyword)*
Tree	s-tag-c-tag

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Range	0 to 4094
Options	tag-*, null
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

c-tag-start *(number | keyword)*

Synopsis	Starting value of the qinq c-tag range
Context	**configure** service system bgp evpn ethernet-segment *string* association lag *reference* virtual-ranges qinq s-tag-c-tag *(number | keyword)* c-tag-start *(number | keyword)*
Tree	s-tag-c-tag
Range	0 to 4094
Options	tag-*, null
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

c-tag-end *(number | keyword)*

Synopsis	End value of the qinq c-tag range
Context	**configure** service system bgp evpn ethernet-segment *string* association lag *reference* virtual-ranges qinq s-tag-c-tag *(number | keyword)* c-tag-start *(number | keyword)* c-tag-end *(number | keyword)*
Tree	c-tag-end
Range	0 to 4094
Options	tag-*, null
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

network-interconnect-vxlan [network-interconnect-vxlan-id] *number*

Synopsis	Enter the **network-interconnect-vxlan** list instance
Context	**configure** service system bgp evpn ethernet-segment *string* association network-interconnect-vxlan *number*

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Tree	network-interconnect-vxlan
Max. Instances	1
Notes	The following elements are part of a choice: **lag**, **network-interconnect-vxlan**, **port**, **pw-port**, **sdp**, or **vprn-next-hop**.
Introduced	16.0.R1
Platforms	All

[**network-interconnect-vxlan-id**] *number*

Synopsis	VXLAN instance ID associated with the virtual ES
Context	**configure** service system bgp evpn ethernet-segment *string* association network-interconnect-vxlan *number*
Tree	network-interconnect-vxlan
Range	1
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

virtual-ranges

Synopsis	Enter the **virtual-ranges** context
Context	**configure** service system bgp evpn ethernet-segment *string* association network-interconnect-vxlan *number* virtual-ranges
Tree	virtual-ranges
Introduced	16.0.R4
Platforms	All

service-id [start] *number*

Synopsis	Enter the **service-id** list instance
Context	**configure** service system bgp evpn ethernet-segment *string* association network-interconnect-vxlan *number* virtual-ranges service-id *number*
Tree	service-id
Max. Instances	8
Introduced	16.0.R4

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Platforms	All

[**start**] *number*

Synopsis	Lower bound of the service ID range
Context	**configure** service system bgp evpn ethernet-segment *string* association network-interconnect-vxlan *number* virtual-ranges service-id *number*
Tree	service-id
Range	1 to 2147483647
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

end *number*

Synopsis	Upper bound of the service ID range
Context	**configure** service system bgp evpn ethernet-segment *string* association network-interconnect-vxlan *number* virtual-ranges service-id *number* end *number*
Tree	end
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

port [port-id] *reference*

Synopsis	Enter the **port** list instance
Context	**configure** service system bgp evpn ethernet-segment *string* association port *reference*
Tree	port
Max. Instances	1
Notes	The following elements are part of a choice: **lag**, **network-interconnect-vxlan**, **port**, **pw-port**, **sdp**, or **vprn-next-hop**.
Introduced	16.0.R1
Platforms	All

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[**port-id**] *reference*

Synopsis	Port multi-homed with this Ethernet segment entry
Context	**configure** service system bgp evpn ethernet-segment *string* association port *reference*
Tree	port
Reference	**configure** port *string*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

virtual-ranges

Synopsis	Enter the **virtual-ranges** context
Context	**configure** service system bgp evpn ethernet-segment *string* association port *reference* virtual-ranges
Tree	virtual-ranges
Introduced	16.0.R4
Platforms	All

dot1q

Synopsis	Enter the **dot1q** context
Context	**configure** service system bgp evpn ethernet-segment *string* association port *reference* virtual-ranges dot1q
Tree	dot1q
Introduced	16.0.R4
Platforms	All

q-tag [start] *(number | keyword)*

Synopsis	Enter the **q-tag** list instance
Context	**configure** service system bgp evpn ethernet-segment *string* association port *reference* virtual-ranges dot1q q-tag *(number | keyword)*
Tree	q-tag
Max. Instances	8

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Introduced	16.0.R4
Platforms	All

[**start**] *(number | keyword)*

Synopsis	Lower bound of the q-tag VLAN ID range
Context	**configure** service system bgp evpn ethernet-segment *string* association port *reference* virtual-ranges dot1q q-tag *(number | keyword)*
Tree	q-tag
Range	0 to 4094
Options	tag-*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

end *(number | keyword)*

Synopsis	Upper bound of the q-tag VLAN ID range
Context	**configure** service system bgp evpn ethernet-segment *string* association port *reference* virtual-ranges dot1q q-tag *(number | keyword)* end *(number | keyword)*
Tree	end
Range	0 to 4094
Options	tag-*
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

qinq

Synopsis	Enter the **qinq** context
Context	**configure** service system bgp evpn ethernet-segment *string* association port *reference* virtual-ranges qinq
Tree	qinq
Introduced	16.0.R4
Platforms	All

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s-tag [start] *(number | keyword)*

Synopsis	Enter the **s-tag** list instance
Context	**configure** service system bgp evpn ethernet-segment *string* association port *reference* virtual-ranges qinq s-tag *(number | keyword)*
Tree	s-tag
Max. Instances	8
Introduced	16.0.R4
Platforms	All

[**start**] *(number | keyword)*

Synopsis	Lower bound of the s-tag VLAN ID range
Context	**configure** service system bgp evpn ethernet-segment *string* association port *reference* virtual-ranges qinq s-tag *(number | keyword)*
Tree	s-tag
Range	0 to 4094
Options	tag-*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

end *(number | keyword)*

Synopsis	Upper bound of the s-tag VLAN ID range
Context	**configure** service system bgp evpn ethernet-segment *string* association port *reference* virtual-ranges qinq s-tag *(number | keyword)* end *(number | keyword)*
Tree	end
Range	0 to 4094
Options	tag-*
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

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s-tag-c-tag [s-tag] *(number | keyword)* c-tag-start *(number | keyword)*

Synopsis	Enter the **s-tag-c-tag** list instance
Context	**configure** service system bgp evpn ethernet-segment *string* association port *reference* virtual-ranges qinq s-tag-c-tag *(number | keyword)* c-tag-start *(number | keyword)*
Tree	s-tag-c-tag
Max. Instances	8
Introduced	16.0.R4
Platforms	All

[**s-tag**] *(number | keyword)*

Synopsis	Starting value of the qinq s-tag range associated with a virtual ethernet segment
Context	**configure** service system bgp evpn ethernet-segment *string* association port *reference* virtual-ranges qinq s-tag-c-tag *(number | keyword)* c-tag-start *(number | keyword)*
Tree	s-tag-c-tag
Range	0 to 4094
Options	tag-*, null
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

c-tag-start *(number | keyword)*

Synopsis	Starting value of the qinq c-tag range
Context	**configure** service system bgp evpn ethernet-segment *string* association port *reference* virtual-ranges qinq s-tag-c-tag *(number | keyword)* c-tag-start *(number | keyword)*
Tree	s-tag-c-tag
Range	0 to 4094
Options	tag-*, null
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

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c-tag-end *(number | keyword)*

Synopsis	End value of the qinq c-tag range
Context	**configure** service system bgp evpn ethernet-segment *string* association port *reference* virtual-ranges qinq s-tag-c-tag *(number | keyword)* c-tag-start *(number | keyword)* c-tag-end *(number | keyword)*
Tree	c-tag-end
Range	0 to 4094
Options	tag-*, null
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

pw-port [pw-port-id] *reference*

Synopsis	Enter the **pw-port** list instance
Context	**configure** service system bgp evpn ethernet-segment *string* association pw-port *reference*
Tree	pw-port
Max. Instances	1
Notes	The following elements are part of a choice: **lag**, **network-interconnect-vxlan**, **port**, **pw-port**, **sdp**, or **vprn-next-hop**.
Introduced	16.0.R4
Platforms	All

[**pw-port-id**] *reference*

Synopsis	Pw-port multi-homed with this Ethernet segment entry
Context	**configure** service system bgp evpn ethernet-segment *string* association pw-port *reference*
Tree	pw-port
Reference	**configure** pw-port *number*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

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pw-port-headend *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Control state of PW SAPs on PW port using EVPN
Context	**configure** service system bgp evpn ethernet-segment *string* association pw-port *reference* pw-port-headend *boolean*
Tree	pw-port-headend
Description	When configured to **true,** this command allows EVPN and its multi-homing procedures to control the state of the PW SAPs on the PW port. When configured to **false**, this command disallows EVPN and its multi-homing procedures to control the state of the PW SAPs on the PW port.
Default	false
Introduced	22.2.R1
Platforms	All

virtual-ranges

Synopsis	Enter the **virtual-ranges** context
Context	**configure** service system bgp evpn ethernet-segment *string* association pw-port *reference* virtual-ranges
Tree	virtual-ranges
Introduced	16.0.R4
Platforms	All

dot1q

Synopsis	Enter the **dot1q** context
Context	**configure** service system bgp evpn ethernet-segment *string* association pw-port *reference* virtual-ranges dot1q
Tree	dot1q
Introduced	16.0.R4
Platforms	All

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q-tag [start] *(number | keyword)*

Synopsis	Enter the **q-tag** list instance
Context	**configure** service system bgp evpn ethernet-segment *string* association pw-port *reference* virtual-ranges dot1q q-tag *(number | keyword)*
Tree	q-tag
Max. Instances	8
Introduced	16.0.R4
Platforms	All

[**start**] *(number | keyword)*

Synopsis	Lower bound of the q-tag VLAN ID range
Context	**configure** service system bgp evpn ethernet-segment *string* association pw-port *reference* virtual-ranges dot1q q-tag *(number | keyword)*
Tree	q-tag
Range	0 to 4094
Options	tag-*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

end *(number | keyword)*

Synopsis	Upper bound of the q-tag VLAN ID range
Context	**configure** service system bgp evpn ethernet-segment *string* association pw-port *reference* virtual-ranges dot1q q-tag *(number | keyword)* end *(number | keyword)*
Tree	end
Range	0 to 4094
Options	tag-*
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

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qinq

Synopsis	Enter the **qinq** context
Context	**configure** service system bgp evpn ethernet-segment *string* association pw-port *reference* virtual-ranges qinq
Tree	qinq
Introduced	16.0.R4
Platforms	All

s-tag [start] *(number | keyword)*

Synopsis	Enter the **s-tag** list instance
Context	**configure** service system bgp evpn ethernet-segment *string* association pw-port *reference* virtual-ranges qinq s-tag *(number | keyword)*
Tree	s-tag
Max. Instances	8
Introduced	16.0.R4
Platforms	All

[**start**] *(number | keyword)*

Synopsis	Lower bound of the s-tag VLAN ID range
Context	**configure** service system bgp evpn ethernet-segment *string* association pw-port *reference* virtual-ranges qinq s-tag *(number | keyword)*
Tree	s-tag
Range	0 to 4094
Options	tag-*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

end *(number | keyword)*

Synopsis	Upper bound of the s-tag VLAN ID range
Context	**configure** service system bgp evpn ethernet-segment *string* association pw-port *reference* virtual-ranges qinq s-tag *(number | keyword)* end *(number | keyword)*

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Tree	end
Range	0 to 4094
Options	tag-*
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

s-tag-c-tag [s-tag] *(number | keyword)* c-tag-start *(number | keyword)*

Synopsis	Enter the **s-tag-c-tag** list instance
Context	**configure** service system bgp evpn ethernet-segment *string* association pw-port *reference* virtual-ranges qinq s-tag-c-tag *(number | keyword)* c-tag-start *(number | keyword)*
Tree	s-tag-c-tag
Max. Instances	8
Introduced	16.0.R4
Platforms	All

[**s-tag**] *(number | keyword)*

Synopsis	Starting value of the qinq s-tag range associated with a virtual ethernet segment
Context	**configure** service system bgp evpn ethernet-segment *string* association pw-port *reference* virtual-ranges qinq s-tag-c-tag *(number | keyword)* c-tag-start *(number | keyword)*
Tree	s-tag-c-tag
Range	0 to 4094
Options	tag-*, null
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

c-tag-start *(number | keyword)*

Synopsis	Starting value of the qinq c-tag range

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Context	**configure** service system bgp evpn ethernet-segment *string* association pw-port *reference* virtual-ranges qinq s-tag-c-tag *(number | keyword)* c-tag-start *(number | keyword)*
Tree	s-tag-c-tag
Range	0 to 4094
Options	tag-*, null
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

c-tag-end *(number | keyword)*

Synopsis	End value of the qinq c-tag range
Context	**configure** service system bgp evpn ethernet-segment *string* association pw-port *reference* virtual-ranges qinq s-tag-c-tag *(number | keyword)* c-tag-start *(number | keyword)* c-tag-end *(number | keyword)*
Tree	c-tag-end
Range	0 to 4094
Options	tag-*, null
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

sdp [sdp-id] *reference*

Synopsis	Enter the **sdp** list instance
Context	**configure** service system bgp evpn ethernet-segment *string* association sdp *reference*
Tree	sdp
Max. Instances	1
Notes	The following elements are part of a choice: **lag**, **network-interconnect-vxlan**, **port**, **pw-port**, **sdp**, or **vprn-next-hop**.
Introduced	16.0.R1
Platforms	All

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[**sdp-id**] *reference*

Synopsis	Sdp multi-homed with this Ethernet segment entry
Context	**configure** service system bgp evpn ethernet-segment *string* association sdp *reference*
Tree	sdp
Reference	**configure** service sdp *number*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

virtual-ranges

Synopsis	Enter the **virtual-ranges** context
Context	**configure** service system bgp evpn ethernet-segment *string* association sdp *reference* virtual-ranges
Tree	virtual-ranges
Introduced	16.0.R4
Platforms	All

vc-id [start] *number*

Synopsis	Enter the **vc-id** list instance
Context	**configure** service system bgp evpn ethernet-segment *string* association sdp *reference* virtual-ranges vc-id *number*
Tree	vc-id
Max. Instances	8
Introduced	16.0.R4
Platforms	All

[**start**] *number*

Synopsis	Lower bound of the VC-ID range
Context	**configure** service system bgp evpn ethernet-segment *string* association sdp *reference* virtual-ranges vc-id *number*
Tree	vc-id
Range	1 to 4294967295

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Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

end *number*

Synopsis	Upper bound of the VC-ID range
Context	**configure** service system bgp evpn ethernet-segment *string* association sdp *reference* virtual-ranges vc-id *number* end *number*
Tree	end
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

vprn-next-hop [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **vprn-next-hop** list instance
Context	**configure** service system bgp evpn ethernet-segment *string* association vprn-next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	vprn-next-hop
Description	Commands in this list instance are used to associate an IPv4 or IPv6 address to an Ethernet segment. A virtual Ethernet segment using this VPRN next-hop association represents a Layer 3 Ethernet segment as described in *draft-sajassi-bess-evpn-ip-aliasing*. This IP address must be installed in the route table of the VPRN service identified by the EVI so that the Auto-Discovery per-ES or EVI routes for the ES are advertised. Only one VPRN next hop is supported per Ethernet segment.
Max. Instances	1
Notes	The following elements are part of a choice: **lag**, **network-interconnect-vxlan**, **port**, **pw-port**, **sdp**, or **vprn-next-hop**.
Introduced	22.10.R1
Platforms	All

[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	VPRN next-hop address

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Context	**configure** service system bgp evpn ethernet-segment *string* association vprn-next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	vprn-next-hop
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

virtual-ranges

Synopsis	Enter the **virtual-ranges** context
Context	**configure** service system bgp evpn ethernet-segment *string* association vprn-next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)* virtual-ranges
Tree	virtual-ranges
Introduced	22.10.R1
Platforms	All

evi [start] *number*

Synopsis	Add a list entry for **evi**
Context	**configure** service system bgp evpn ethernet-segment *string* association vprn-next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)* virtual-ranges evi *number*
Tree	evi
Max. Instances	1
Introduced	22.10.R1
Platforms	All

[**start**] *number*

Synopsis	EVI range start information
Context	**configure** service system bgp evpn ethernet-segment *string* association vprn-next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)* virtual-ranges evi *number*
Tree	evi
Range	1 to 16777215
Notes	This element is part of a list key.
Introduced	22.10.R1

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Platforms	All

auto-esi *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	EVPN Ethernet segment auto-ESI type
Context	**configure** service system bgp evpn ethernet-segment *string* auto-esi *keyword*
Tree	auto-esi
Description	This command configures the auto-ESI type to use in the Ethernet segment (ES).When **type-1** is configured, a manual ESI cannot be configured and the ESI is automatically derived in accordance with the RFC 7432 ESI type 1 definition.When configured to **none**, a manual ESI must be configured.
Options	none, type-1
Default	none
Introduced	21.5.R1
Platforms	All

df-election

Synopsis	Enter the **df-election** context
Context	**configure** service system bgp evpn ethernet-segment *string* df-election
Tree	df-election
Introduced	16.0.R1
Platforms	All

es-activation-timer *number*

Synopsis	Activation timer per Ethernet segment
Context	**configure** service system bgp evpn ethernet-segment *string* df-election es-activation-timer *number*
Tree	es-activation-timer
Range	0 to 100
Units	seconds
Introduced	16.0.R1

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Platforms	All

manual

Synopsis	Enter the **manual** context
Context	**configure** service system bgp evpn ethernet-segment *string* df-election manual
Tree	manual
Introduced	16.0.R1
Platforms	All

evi [start] *number*

Synopsis	Enter the **evi** list instance
Context	**configure** service system bgp evpn ethernet-segment *string* df-election manual evi *number*
Tree	evi
Introduced	16.0.R1
Platforms	All

[**start**] *number*

Synopsis	Lower bound of EVI range for which the PE is primary
Context	**configure** service system bgp evpn ethernet-segment *string* df-election manual evi *number*
Tree	evi
Range	1 to 16777215
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of EVI range for which the PE is primary
Context	**configure** service system bgp evpn ethernet-segment *string* df-election manual evi *number* end *number*
Tree	end

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Range	1 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

isid [start] *number*

Synopsis	Enter the **isid** list instance
Context	**configure** service system bgp evpn ethernet-segment *string* df-election manual isid *number*
Tree	isid
Introduced	16.0.R1
Platforms	All

[**start**] *number*

Synopsis	Lower bound of ISID range for which the PE is primary
Context	**configure** service system bgp evpn ethernet-segment *string* df-election manual isid *number*
Tree	isid
Range	1 to 16777215
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of ISID range for which the PE is primary
Context	**configure** service system bgp evpn ethernet-segment *string* df-election manual isid *number* end *number*
Tree	end
Range	1 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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preference

Synopsis	Enable the **preference** context
Context	**configure** service system bgp evpn ethernet-segment *string* df-election manual preference
Tree	preference
Introduced	16.0.R1
Platforms	All

mode *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Method used to elect the DF
Context	**configure** service system bgp evpn ethernet-segment *string* df-election manual preference mode *keyword*
Tree	mode
Options	revertive, non-revertive
Default	revertive
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Preference that is used to elect the designated forwarder
Context	**configure** service system bgp evpn ethernet-segment *string* df-election manual preference value *number*
Tree	value
Range	0 to 65535
Default	32767
Introduced	16.0.R1
Platforms	All

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service-carving-mode *keyword*

WARNING:
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Synopsis	Mode of service carving enabled per EVPN associated with this Ethernet segment entry
Context	**configure** service system bgp evpn ethernet-segment *string* df-election service-carving-mode *keyword*
Tree	service-carving-mode
Options	auto, manual, off
Default	auto
Introduced	16.0.R1
Platforms	All

esi *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ethernet segment identifier
Context	**configure** service system bgp evpn ethernet-segment *string* esi *string*
Tree	esi
Introduced	16.0.R1
Platforms	All

multi-homing-mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Multi-homing mode of the Ethernet segment
Context	**configure** service system bgp evpn ethernet-segment *string* multi-homing-mode *keyword*
Tree	multi-homing-mode
Options	none, single-active, single-active-no-esi-label, all-active
Default	none

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Introduced	16.0.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group ID
Context	**configure** service system bgp evpn ethernet-segment *string* oper-group *reference*
Tree	oper-group
Reference	**configure** service oper-group *string*
Introduced	19.10.R1
Platforms	All

orig-ip *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Originating IP address advertised in the ES route
Context	**configure** service system bgp evpn ethernet-segment *string* orig-ip *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	orig-ip
Introduced	16.0.R4
Platforms	All

pbb

Synopsis	Enter the **pbb** context
Context	**configure** service system bgp evpn ethernet-segment *string* pbb
Tree	pbb
Introduced	16.0.R1
Platforms	All

es-bmac-table-size *number*

Synopsis	Size of virtual backbone mac table for this ethernet segment

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Context	**configure** service system bgp evpn ethernet-segment *string* pbb es-bmac-table-size *number*
Tree	es-bmac-table-size
Range	1 to 511999
Default	8
Introduced	16.0.R1
Platforms	All

source-bmac-lsb *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Least significant bytes of the B-MAC for packet source
Context	**configure** service system bgp evpn ethernet-segment *string* pbb source-bmac-lsb *string*
Tree	source-bmac-lsb
Introduced	16.0.R1
Platforms	All

route-next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Next-hop IP address for ES and AD per ES routes
Context	**configure** service system bgp evpn ethernet-segment *string* route-next-hop *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	route-next-hop
Introduced	16.0.R4
Platforms	All

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type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Ethernet Segment type
Context	**configure** service system bgp evpn ethernet-segment *string* type *keyword*
Tree	type
Options	none, virtual
Default	none
Introduced	16.0.R1
Platforms	All

etree-leaf-label *boolean*

Synopsis	Enable E-Tree leaf label for PE
Context	**configure** service system bgp evpn etree-leaf-label *boolean*
Tree	etree-leaf-label
Description	When configured to **true**, this command enables EVPN Ethernet-Tree (E-Tree) VPLS services on the router (not B-VPLS), allocates an E-Tree leaf label for the Provider Edge (PE) device, and configures the ILM entry.This command ensures that in-flight traffic can perform an ILM entry lookup at any time, and avoids discards when administratively enabling or disabling services, or reduces the timing window so that it does not occur during normal operation or configuration. The value for the E-Tree leaf label is set via the **etree-leaf-label-value** command. When configured to **false**, PE leaf labels are not supported.
Default	false
Introduced	16.0.R1
Platforms	All

etree-leaf-label-value *(number | keyword)*

Synopsis	Global E-tree leaf label for PE in EVPN E-Tree services
Context	**configure** service system bgp evpn etree-leaf-label-value *(number | keyword)*
Tree	etree-leaf-label-value
Range	32 to 524526
Options	dynamic

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Default	dynamic
Introduced	21.7.R1
Platforms	All

ip-prefix-routes

Synopsis	Enter the **ip-prefix-routes** context
Context	**configure** service system bgp evpn ip-prefix-routes
Tree	ip-prefix-routes
Introduced	21.2.R1
Platforms	All

d-path-length-ignore *boolean*

Synopsis	Ignore D-PATH length for BGP path selection of EVPN-IFF
Context	**configure** service system bgp evpn ip-prefix-routes d-path-length-ignore *boolean*
Tree	d-path-length-ignore
Default	false
Introduced	21.10.R1
Platforms	All

iff-attribute-uniform-propagation *boolean*

Synopsis	Enable uniform propagation of BGP attributes
Context	**configure** service system bgp evpn ip-prefix-routes iff-attribute-uniform-propagation *boolean*
Tree	iff-attribute-uniform-propagation
Description	When configured to **true**, this command enables the uniform propagation of BGP attributes for EVPN-IFF (Interfaceful) routes. EVPN-IFF is used in R-VPLS services with **bgp-evpn ip-route-advertisement**. When enabled, the received EVPN-IFF routes for the R-VPLS can be propagated with the original BGP path attributes into EVPN-IFL, IPVPN, EVPN-IFF (in other R-VPLS services) or BGP IP routes advertised for the attached VPRN. The command also enables the attribute propagation in the opposite direction, for example, from EVPN-IFL/IPVPN/IP/EVPN-IFF routes into EVPN-IFF routes. The propagation follows the uniform mode defined in draft-ietf-bess-evpn-ipvpn-interworking.

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When configured to **false**, this command re-originates the BGP Path Attributes when propagating EVPN-IFF routes into other Inter-Subnet Forwarding families.

Default false

Introduced 21.2.R1

Platforms All

iff-bgp-path-selection *boolean*

Synopsis Enable BGP path selection for EVPN-IFF routes

Context **configure** service system bgp evpn ip-prefix-routes iff-bgp-path-selection *boolean*

Tree iff-bgp-path-selection

Description When configured to **true**, this command enables the EVPN-IFF routes to be ordered and selected in a similar manner as IPVPN or EVPN-IFL routes, that is, based on the regular BGP path selection process.

When configured to **false**, this command makes the system order EVPN-IFF routes based on their {RVPLS Ifindex, RD, Ethernet Tag}. For example, if two EVPN-IFF routes are received for the same prefix on the same R-VPLS and with different RDs (Route Distinguishers), the route with the lowest RD is selected.

Default false

Introduced 21.2.R1

Platforms All

multicast-leave-sync-propagation *number*

Synopsis Multicast leave group synchronization delay

Context **configure** service system bgp evpn multicast-leave-sync-propagation *number*

Tree multicast-leave-sync-propagation

Description This command configures the additional amount of time that the system waits before removing a multicast state that was synchronized in an Ethernet Segment via Multicast Join or Leave Synch routes. This value represents a delta corresponding to the time it takes for a BGP advertisement to propagate to ES peers.

The node triggering the route computes the maximum response time as the product of the locally configured values, Last Member Query Count and Last Member Query Interval, and adds the delta value to the maximum response time. The query count value is configured in the **configure services vrpn igmp robust-count** command. The query interval value is taken from the **configure service vpls sap igmp-snooping query-last-member-interval** or the **configure service vpls spoke-sdp igmp-snooping query-last-member-interval** configuration, depending on the Ethernet Segment.

Increasing the maximum response time by this value can help minimize the churn of removing and recreating the state on the node.

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	This value should be configured consistently in all ES peers.
Range	0 to 300
Units	seconds
Default	5
Introduced	20.7.R1
Platforms	All

route-distinguisher *string*

Synopsis	Route distinguisher for ES routes
Context	**configure** service system bgp evpn route-distinguisher *string*
Tree	route-distinguisher
Introduced	16.0.R1
Platforms	All

bgp-auto-rd-range

Synopsis	Enter the **bgp-auto-rd-range** context
Context	**configure** service system bgp-auto-rd-range
Tree	bgp-auto-rd-range
Introduced	16.0.R1
Platforms	All

community-value

Synopsis	Enter the **community-value** context
Context	**configure** service system bgp-auto-rd-range community-value
Tree	community-value
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of BGP route distinguisher community range
Context	**configure** service system bgp-auto-rd-range community-value end *number*

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Tree	end
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of BGP route distinguisher community range
Context	**configure** service system bgp-auto-rd-range community-value start *number*
Tree	start
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

ip-address *string*

Synopsis	IP address used for selecting the route distinguisher
Context	**configure** service system bgp-auto-rd-range ip-address *string*
Tree	ip-address
Introduced	16.0.R1
Platforms	All

extended-default-qinq-sap-lookup *boolean*

Synopsis	Control the forwarding of the packets
Context	**configure** service system extended-default-qinq-sap-lookup *boolean*
Tree	extended-default-qinq-sap-lookup
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR

fdb

Synopsis	Enter the **fdb** context
Context	**configure** service system fdb
Tree	fdb

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Introduced	16.0.R1
Platforms	All

table-size *number*

Synopsis	Maximum FDB entries in the system
Context	**configure** service system fdb table-size *number*
Tree	table-size
Description	This command determines the maximum number of MAC entries in the forwarding database (FDB) for the system instance on this node. Do not configure the **table-size** command. This command is automatically initialized by SR OS on boot up.
Range	4095 to 2047999
Introduced	16.0.R1
Platforms	All

gre-eth-bridged

Synopsis	Enter the **gre-eth-bridged** context
Context	**configure** service system gre-eth-bridged
Tree	gre-eth-bridged
Introduced	16.0.R1
Platforms	All

tunnel-termination [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **tunnel-termination** list instance
Context	**configure** service system gre-eth-bridged tunnel-termination *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	tunnel-termination
Introduced	16.0.R1
Platforms	All

[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Tunnel end-point IP address in the SR OS node

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Context	**configure** service system gre-eth-bridged tunnel-termination *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	tunnel-termination
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fpe-id *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	FPE ID
Context	**configure** service system gre-eth-bridged tunnel-termination *(ipv4-address-no-zone | ipv6-address-no-zone)* fpe-id *reference*
Tree	fpe-id
Reference	**configure** fwd-path-ext fpe *number*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

pw-port-list

Synopsis	Enter the **pw-port-list** context
Context	**configure** service system pw-port-list
Tree	pw-port-list
Introduced	16.0.R6
Platforms	VSR

port [port-id] *string*

Synopsis	Add a list entry for **port**
Context	**configure** service system pw-port-list port *string*
Tree	port
Introduced	16.0.R6

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Platforms	VSR

[**port-id**] *string*

Synopsis	Port ID
Context	**configure** service system pw-port-list port *string*
Tree	port
Notes	This element is part of a list key.
Introduced	16.0.R6
Platforms	VSR

vpn-gre-source-ip *string*

Synopsis	VPN GRE source ip-address
Context	**configure** service system vpn-gre-source-ip *string*
Tree	vpn-gre-source-ip
Introduced	16.0.R4
Platforms	All

vxlan

Synopsis	Enter the **vxlan** context
Context	**configure** service system vxlan
Tree	vxlan
Introduced	16.0.R1
Platforms	All

assisted-replication

Synopsis	Enter the **assisted-replication** context
Context	**configure** service system vxlan assisted-replication
Tree	assisted-replication
Introduced	16.0.R1
Platforms	All

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ip-address *string*

Synopsis	IP address for assisted replication in the router
Context	**configure** service system vxlan assisted-replication ip-address *string*
Tree	ip-address
Introduced	16.0.R1
Platforms	All

tunnel-termination [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **tunnel-termination** list instance
Context	**configure** service system vxlan tunnel-termination *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	tunnel-termination
Introduced	16.0.R1
Platforms	All

[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Non-system IP address that terminates the VXLAN
Context	**configure** service system vxlan tunnel-termination *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	tunnel-termination
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fpe-id *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	FPE id for this entry
Context	**configure** service system vxlan tunnel-termination *(ipv4-address-no-zone | ipv6-address-no-zone)* fpe-id *reference*
Tree	fpe-id

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Reference	**configure** fwd-path-ext fpe *number*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

template

Synopsis	Enter the **template** context
Context	**configure** service template
Tree	template
Introduced	16.0.R1
Platforms	All

epipe-sap-template [name] *string*

Synopsis	Enter the **epipe-sap-template** list instance
Context	**configure** service template epipe-sap-template *string*
Tree	epipe-sap-template
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	SAP template name
Context	**configure** service template epipe-sap-template *string*
Tree	epipe-sap-template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the **egress** context
Context	**configure** service template epipe-sap-template *string* egress

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Tree	egress
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis	Enter the **filter** context
Context	**configure** service template epipe-sap-template *string* egress filter
Tree	filter
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service template epipe-sap-template *string* egress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service template epipe-sap-template *string* egress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac *reference*

Synopsis	MAC filter policy name
Context	**configure** service template epipe-sap-template *string* egress filter mac *reference*
Tree	mac

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Reference	**configure** filter mac-filter *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the **qos** context
Context	**configure** service template epipe-sap-template *string* egress qos
Tree	qos
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	SAP egress QoS policy name to apply to the SAP
Context	**configure** service template epipe-sap-template *string* egress qos policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-egress *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service template epipe-sap-template *string* ingress
Tree	ingress
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis	Enter the **filter** context
Context	**configure** service template epipe-sap-template *string* ingress filter
Tree	filter
Introduced	16.0.R1

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Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service template epipe-sap-template *string* ingress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service template epipe-sap-template *string* ingress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac *reference*

Synopsis	MAC filter policy name
Context	**configure** service template epipe-sap-template *string* ingress filter mac *reference*
Tree	mac
Reference	**configure** filter mac-filter *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the **qos** context
Context	**configure** service template epipe-sap-template *string* ingress qos
Tree	qos
Introduced	16.0.R1

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Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	SAP ingress QoS policy name to apply to the SAP
Context	**configure** service template epipe-sap-template *string* ingress qos policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-ingress *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

queuing-type *keyword*

Synopsis	Queuing type
Context	**configure** service template epipe-sap-template *string* ingress qos queuing-type *keyword*
Tree	queuing-type
Options	shared, multipoint-shared
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

upnp

Synopsis	Enter the **upnp** context
Context	**configure** service upnp
Tree	upnp
Description	Commands in this context configure Universal Plug 'n Play (UPnP) for the service.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy [name] *string*

Synopsis	Enter the **policy** list instance
Context	**configure** service upnp policy *string*
Tree	policy

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Description	Commands in this context configure the attributes of the UPnP policy.
Max. Instances	255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	UPnP policy name
Context	**configure** service upnp policy *string*
Tree	policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service upnp policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mapping-limit *number*

Synopsis	Maximum number of UPnP mappings per subscriber
Context	**configure** service upnp policy *string* mapping-limit *number*
Tree	mapping-limit
Range	1 to 256
Default	256
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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port *number*

Synopsis	HTTP TCP port to which the UPnP IGD listens
Context	**configure** service upnp policy *string* port *number*
Tree	port
Range	1 to 65535
Default	5000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

strict-mode *boolean*

Synopsis	Enable UPnP strict mode
Context	**configure** service upnp policy *string* strict-mode *boolean*
Tree	strict-mode
Description	When configured to **true**, this command enables UPnP strict mode, in which the system only allows changes to an existing UPnP mapping if the request comes from the same UPnP client.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vpls [service-name] *string*

Synopsis	Enter the **vpls** list instance
Context	**configure** service vpls *string*
Tree	vpls
Introduced	16.0.R1
Platforms	All

[**service-name**] *string*

Synopsis	Administrative service name
Context	**configure** service vpls *string*
Tree	vpls
String Length	1 to 64

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the service
Context	**configure** service vpls *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

bgp [bgp-instance] *number*

Synopsis	Enter the **bgp** list instance
Context	**configure** service vpls *string* bgp *number*
Tree	bgp
Introduced	16.0.R1
Platforms	All

[**bgp-instance**] *number*

Synopsis	BGP instance
Context	**configure** service vpls *string* bgp *number*
Tree	bgp
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adv-service-mtu *number*

Synopsis	Advertised service MTU value

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Context	**configure** service vpls *string* bgp *number* adv-service-mtu *number*
Tree	adv-service-mtu
Description	This command configures the MTU signaled value used in the BGP for the service. When configured, the router uses the value for signaling and for validation with the received MTU instead of the service MTU. However, the value does not affect the locally enforced value, which is still based on the service MTU.
Range	0 to 9782
Introduced	22.2.R1
Platforms	All

pw-template-binding [pw-template-name] *reference*

Synopsis	Enter the **pw-template-binding** list instance
Context	**configure** service vpls *string* bgp *number* pw-template-binding *reference*
Tree	pw-template-binding
Max. Instances	100
Introduced	16.0.R1
Platforms	All

[**pw-template-name**] *reference*

Synopsis	Policy name
Context	**configure** service vpls *string* bgp *number* pw-template-binding *reference*
Tree	pw-template-binding
Reference	**configure** service pw-template *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD
Context	**configure** service vpls *string* bgp *number* pw-template-binding *reference* bfd-liveness *boolean*
Tree	bfd-liveness

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Default	false
Introduced	16.0.R1
Platforms	All

bfd-template *reference*

Synopsis	BFD template name for PW-Template binding
Context	**configure** service vpls *string* bgp *number* pw-template-binding *reference* bfd-template *reference*
Tree	bfd-template
Reference	**configure** bfd bfd-template *string*
Introduced	16.0.R1
Platforms	All

import-rt *string*

Synopsis	Import route-target communities
Context	**configure** service vpls *string* bgp *number* pw-template-binding *reference* import-rt *string*
Tree	import-rt
String Length	10 to 28
Max. Instances	5
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference*

Synopsis	Operational group to monitor
Context	**configure** service vpls *string* bgp *number* pw-template-binding *reference* monitor-oper-group *reference*
Tree	monitor-oper-group
Reference	**configure** service oper-group *string*
Notes	The following elements are part of a choice: **monitor-oper-group** or **oper-group**.
Introduced	16.0.R1
Platforms	All

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oper-group *reference*

Synopsis	Operational group
Context	**configure** service vpls *string* bgp *number* pw-template-binding *reference* oper-group *reference*
Tree	oper-group
Reference	**configure** service oper-group *string*
Notes	The following elements are part of a choice: **monitor-oper-group** or **oper-group**.
Introduced	16.0.R1
Platforms	All

split-horizon-group *string*

Synopsis	Split horizon group
Context	**configure** service vpls *string* bgp *number* pw-template-binding *reference* split-horizon-group *string*
Tree	split-horizon-group
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

route-distinguisher *(keyword | vpn-route-distinguisher)*

Synopsis	High-order 6 bytes that are used as string to compose VSI-ID for use in NLRI
Context	**configure** service vpls *string* bgp *number* route-distinguisher *(keyword | vpn-route-distinguisher)*
Tree	route-distinguisher
Options	auto-rd
Introduced	16.0.R1
Platforms	All

route-target

Synopsis	Enter the **route-target** context
Context	**configure** service vpls *string* bgp *number* route-target
Tree	route-target

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Introduced	16.0.R1
Platforms	All

export *string*

Synopsis	Extended community name for default import policy
Context	**configure** service vpls *string* bgp *number* route-target export *string*
Tree	export
String Length	10 to 28
Introduced	16.0.R1
Platforms	All

import *string*

Synopsis	Extended community name for default import policy
Context	**configure** service vpls *string* bgp *number* route-target import *string*
Tree	import
String Length	10 to 28
Introduced	16.0.R1
Platforms	All

vsi-export *reference*

Synopsis	VSI export policies
Context	**configure** service vpls *string* bgp *number* vsi-export *reference*
Tree	vsi-export
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

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vsi-import *reference*

Synopsis	VSI import policies
Context	**configure** service vpls *string* bgp *number* vsi-import *reference*
Tree	vsi-import
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

bgp-ad

Synopsis	Enable the **bgp-ad** context
Context	**configure** service vpls *string* bgp-ad
Tree	bgp-ad
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BGP Auto-Discovery
Context	**configure** service vpls *string* bgp-ad admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

vpls-id *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VPLS identifier as a 8-byte route distinguisher

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Context	**configure** service vpls *string* bgp-ad vpls-id *string*
Tree	vpls-id
Introduced	16.0.R1
Platforms	All

vsi-id-prefix *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VSI prefix value
Context	**configure** service vpls *string* bgp-ad vsi-id-prefix *string*
Tree	vsi-id-prefix
Introduced	16.0.R1
Platforms	All

bgp-evpn

Synopsis	Enable the **bgp-evpn** context
Context	**configure** service vpls *string* bgp-evpn
Tree	bgp-evpn
Introduced	16.0.R1
Platforms	All

accept-ivpls-evpn-flush *boolean*

Synopsis	Accept and process non-zero ethernet-tag MAC routes
Context	**configure** service vpls *string* bgp-evpn accept-ivpls-evpn-flush *boolean*
Tree	accept-ivpls-evpn-flush
Default	false
Introduced	16.0.R1
Platforms	All

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evi *number*

Synopsis	EVPN ID
Context	**configure** service vpls *string* bgp-evpn evi *number*
Tree	evi
Description	This command configures a 2-byte EVPN instance (EVI) unique in the system. It is used for the service-carving algorithm for multi-homing and auto-deriving route target and route distinguishers. If not specified, the EVPN ID value is zero and no route distinguisher or route targets are auto-derived from it. If the EVI ID value is specified and no other **route-distinguisher** or **route-target** is configured in the service, the following rules apply: • the route distinguisher is derived from <system_ip>:evi • the route target is derived from <autonomous-system>:evi If VSI import and export policies are configured, the route target must be configured in the policies and those values take precedence over the auto-derived route targets. If **bgp-ad vpls-id** and **bgp-evpn evi** are both configured on the same service, the VPLS ID auto-derived route target or route distinguisher takes precedence over the values auto-derived from the EVI. Use the **show service id bgp** command to display the operational route target for a service.
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

ignore-mtu-mismatch *boolean*

Synopsis	Ignore MTU mismatch
Context	**configure** service vpls *string* bgp-evpn ignore-mtu-mismatch *boolean*
Tree	ignore-mtu-mismatch
Description	When configured to **true**, the system ignores the received Layer 2 MTU in the L2 Attributes extended community of the IMET route for a peer. When configured to **false**, the system compares the local service MTU against the received Layer 2 MTU and if there is a mismatch, keeps the EVPN destination to the peer with operational state down.
Default	false
Introduced	23.3.R1
Platforms	All

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incl-mcast-orig-ip *string*

Synopsis	Originating IP address
Context	**configure** service vpls *string* bgp-evpn incl-mcast-orig-ip *string*
Tree	incl-mcast-orig-ip
Introduced	16.0.R1
Platforms	All

isid-route-target

Synopsis	Enter the **isid-route-target** context
Context	**configure** service vpls *string* bgp-evpn isid-route-target
Tree	isid-route-target
Introduced	16.0.R1
Platforms	All

range [start] *number*

Synopsis	Enter the **range** list instance
Context	**configure** service vpls *string* bgp-evpn isid-route-target range *number*
Tree	range
Max. Instances	8192
Introduced	16.0.R1
Platforms	All

[**start**] *number*

Synopsis	Lower bound of the ISID range
Context	**configure** service vpls *string* bgp-evpn isid-route-target range *number*
Tree	range
Range	1 to 16777215
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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end *number*

Synopsis	Upper bound of the ISID range
Context	**configure** service vpls *string* bgp-evpn isid-route-target range *number* end *number*
Tree	end
Range	1 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

route-target *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Route for the ISID range
Context	**configure** service vpls *string* bgp-evpn isid-route-target range *number* route-target *string*
Tree	route-target
String Length	10 to 28
Introduced	16.0.R1
Platforms	All

type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Method used to support the PBB-EVPN ISID-based route target advertisement
Context	**configure** service vpls *string* bgp-evpn isid-route-target range *number* type *keyword*
Tree	type
Options	auto, configured
Default	auto
Introduced	16.0.R1
Platforms	All

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mac-duplication

Synopsis	Enter the **mac-duplication** context
Context	**configure** service vpls *string* bgp-evpn mac-duplication
Tree	mac-duplication
Description	Commands in this context configure the BGP EVPN MAC duplication command options.
Introduced	16.0.R1
Platforms	All

blackhole *boolean*

Synopsis	Use duplicated MAC as a black-hole MAC
Context	**configure** service vpls *string* bgp-evpn mac-duplication blackhole *boolean*
Tree	blackhole
Default	false
Introduced	16.0.R1
Platforms	All

detect

Synopsis	Enter the **detect** context
Context	**configure** service vpls *string* bgp-evpn mac-duplication detect
Tree	detect
Description	Commands in this context monitor the number of moves of a MAC address for a period of time (window).
Introduced	16.0.R1
Platforms	All

num-moves *number*

Synopsis	BGP EVPN MAC duplication detection number of moves
Context	**configure** service vpls *string* bgp-evpn mac-duplication detect num-moves *number*
Tree	num-moves
Range	3 to 10
Default	5

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Introduced	16.0.R1
Platforms	All

trusted-mac-move-factor *number*

Synopsis	Trusted MAC move factor
Context	**configure** service vpls *string* bgp-evpn mac-duplication detect trusted-mac-move-factor *number*
Tree	trusted-mac-move-factor
Description	This command configures the factor by which the number of moves is multiplied when detecting a MAC duplication event for trusted MACs. For example, if the number of moves is 5 and the trusted MAC move factor is 3, 5 moves, within the window, is enough to declare a non-trusted MAC as duplicate. However, 15 moves are needed to declare a trusted MAC as duplicate. By default the factor for a trusted MAC is the same as for a non-trusted MAC. This provides a backwards compatible solution upon upgrade of the node.
Range	1 to 10
Default	1
Introduced	23.7.R1
Platforms	All

window *number*

Synopsis	BGP EVPN MAC duplication detection window
Context	**configure** service vpls *string* bgp-evpn mac-duplication detect window *number*
Tree	window
Range	1 to 15
Units	minutes
Default	3
Introduced	16.0.R1
Platforms	All

retry *(number | keyword)*

Synopsis	BGP EVPN MAC duplication retry time
Context	**configure** service vpls *string* bgp-evpn mac-duplication retry *(number | keyword)*
Tree	retry

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Range	2 to 60
Units	minutes
Options	never
Default	9
Introduced	16.0.R1
Platforms	All

trusted-mac-time *number*

Synopsis	Trusted MAC time
Context	**configure** service vpls *string* bgp-evpn mac-duplication trusted-mac-time *number*
Tree	trusted-mac-time
Description	This command configures how long a MAC address needs to stay in the FDB as type learned without being flushed or changed in its type so the MAC is declared as trusted for the MAC duplication procedures. If the MAC changes from SAP to SAP within the same VPLS service and node, the MAC does not reset its trusted MAC timer.
Range	1 to 15
Units	minutes
Default	5
Introduced	23.7.R1
Platforms	All

mpls [bgp-instance] *number*

Synopsis	Enter the **mpls** list instance
Context	**configure** service vpls *string* bgp-evpn mpls *number*
Tree	mpls
Introduced	16.0.R1
Platforms	All

[**bgp-instance**] *number*

Synopsis	BGP instance
Context	**configure** service vpls *string* bgp-evpn mpls *number*
Tree	mpls
Range	1 to 2

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BGP EVPN MPLS
Context	**configure** service vpls *string* bgp-evpn mpls *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

auto-bind-tunnel

Synopsis	Enter the **auto-bind-tunnel** context
Context	**configure** service vpls *string* bgp-evpn mpls *number* auto-bind-tunnel
Tree	auto-bind-tunnel
Introduced	16.0.R1
Platforms	All

allow-flex-algo-fallback *boolean*

Synopsis	Enable flexible algorithm fallback
Context	**configure** service vpls *string* bgp-evpn mpls *number* auto-bind-tunnel allow-flex-algo-fallback *boolean*
Tree	allow-flex-algo-fallback
Description	When configured to **true**, a BGP router with a Flex-Algorithm action configured (via the **configure policy-options policy-statement entry action flex-algo** command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available**.** When configured to **false**, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.
Default	false
Introduced	20.10.R1

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Platforms	All

ecmp *number*

Synopsis	Maximum ECMP routes information
Context	**configure** service vpls *string* bgp-evpn mpls *number* auto-bind-tunnel ecmp *number*
Tree	ecmp
Range	1 to 32
Default	1
Introduced	19.10.R1
Platforms	All

enforce-strict-tunnel-tagging *boolean*

Synopsis	Enable/disable enforcement of strict tunnel tagging
Context	**configure** service vpls *string* bgp-evpn mpls *number* auto-bind-tunnel enforce-strict-tunnel-tagging *boolean*
Tree	enforce-strict-tunnel-tagging
Default	false
Introduced	16.0.R4
Platforms	All

resolution *keyword*

Synopsis	Resolution method for tunnel selection
Context	**configure** service vpls *string* bgp-evpn mpls *number* auto-bind-tunnel resolution *keyword*
Tree	resolution
Options	none, filter, any
Default	none
Introduced	16.0.R1
Platforms	All

resolution-filter

Synopsis	Enter the **resolution-filter** context

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Context	**configure** service vpls *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter
Tree	resolution-filter
Introduced	16.0.R1
Platforms	All

bgp *boolean*

Synopsis	Use BGP tunneling for next-hop resolution
Context	**configure** service vpls *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter bgp *boolean*
Tree	bgp
Description	When configured to **true**, BGP searches the BGP LSP for the address of the BGP next hop. When configured to **false**, BGP tunneling is not used and inter-area or inter-as prefixes are not resolved.
Default	false
Introduced	16.0.R1
Platforms	All

ldp *boolean*

Synopsis	Use LDP tunneling for next-hop resolution
Context	**configure** service vpls *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter ldp *boolean*
Tree	ldp
Description	When configured to **true**, BGP searches for an LDP LSP with a FEC prefix corresponding to the address of the BGP next hop. When configured to **false**, LDP tunneling is not used for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

mpls-fwd-policy *boolean*

Synopsis	Use MPLS forwarding policy for next-hop resolution
Context	**configure** service vpls *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter mpls-fwd-policy *boolean*

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Tree	mpls-fwd-policy
Description	When configured to **true**, BGP uses the MPLS forwarding policy to determine the address of the BGP next hop. When configured to **false**, the MPLS forwarding policy is not used for next-hop resolution.
Default	false
Introduced	19.5.R1
Platforms	All

rib-api *boolean*

Synopsis	Use RIB API gRPC service for next-hop resolution
Context	**configure** service vpls *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter rib-api *boolean*
Tree	rib-api
Description	When configured to **true**, BGP uses tunnels programmed using the RIB API gRPC service to resolve the next hops of routes imported into the EVPN service. When configured to **false**, the RIB API service tunnels are not used for next-hop resolution.
Default	false
Introduced	19.5.R1
Platforms	All

rsvp *boolean*

Synopsis	Use RSVP tunneling for next-hop resolution
Context	**configure** service vpls *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter rsvp *boolean*
Tree	rsvp
Description	When configured to **true**, BGP searches the best metric RSVP LSP to determine the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface used by the BGP instance on the remote node. The LSP metric is provided by MPLS in the tunnel table. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID. When configured to **false**, the RSVP LSP is not used for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

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sr-isis *boolean*

Synopsis	Use IS-IS SR tunneling for next-hop resolution
Context	**configure** service vpls *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter sr-isis *boolean*
Tree	sr-isis
Description	When configured to **true**, BGP uses an IS-IS tunnel type to determine the address of the BGP next hop. The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered IS-IS instance. When configured to **false**, IS-IS tunneling is not used for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

sr-ospf *boolean*

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	**configure** service vpls *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter sr-ospf *boolean*
Tree	sr-ospf
Description	When configured to **true**, BGP uses an OSPF tunnel type to determine the address of the BGP next hop. The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OPSF instance. When configured to **false**, OSPF tunneling is not used for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

sr-ospf3 *boolean*

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
Context	**configure** service vpls *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter sr-ospf3 *boolean*
Tree	sr-ospf3
Description	When configured to **true**, BGP uses an OSPF3 tunnel type to determine the address of the BGP next hop.

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The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OPSF3 instance.

When configured to **false**, OSPF3 tunneling is not used for next-hop resolution.

Default	false
Introduced	19.10.R1
Platforms	All

sr-policy *boolean*

Synopsis	Use SR policies for next-hop resolution
Context	**configure** service vpls *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter sr-policy *boolean*
Tree	sr-policy
Description	When configured to **true**, this command instructs BGP to use an SR policy to determine the address of the BGP next hop.The SR policy search criteria includes a non-null endpoint and color value that matches the BGP next hop and color extended community value, respectively, of the EVPN route. When configured to **false**, SR policies are not used for next-hop resolution.
Default	false
Introduced	19.5.R1
Platforms	All

sr-te *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	**configure** service vpls *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter sr-te *boolean*
Tree	sr-te
Description	When configured to **true**, BGP uses an SR-TE tunnel type to determine the address of the BGP next hop. The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered tunnel ID. When configured to **false**, SR-TE tunneling is not used for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

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udp *boolean*

Synopsis	Use MPLS over UDP tunneling for next-hop resolution
Context	**configure** service vpls *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter udp *boolean*
Tree	udp
Description	When configured to **true**, BGP uses an MPLS over UDP tunnel type to determine the address of the BGP next hop. When configured to **false**, MPLS over UDP tunneling is not used for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

weighted-ecmp *boolean*

Synopsis	Allow weighted load balancing
Context	**configure** service vpls *string* bgp-evpn mpls *number* auto-bind-tunnel weighted-ecmp *boolean*
Tree	weighted-ecmp
Description	When configured to **true**, this router enables weighted ECMP for packets using tunnels that a VPLS or Epipe automatically binds to. Packets are sprayed across LSPs in the ECMP according to the outcome of the hash algorithm and the configured load balancing weight of each LSP. When configured to **false**, this command disables weighted ECMP for next-hop tunnel selection.
Default	false
Introduced	22.7.R1
Platforms	All

control-word *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable control word support
Context	**configure** service vpls *string* bgp-evpn mpls *number* control-word *boolean*
Tree	control-word

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Description	When configured to **true**, the router enables the transmission and reception of the control word for all EVPN-MPLS destinations at the same time.
Default	false
Introduced	16.0.R1
Platforms	All

default-route-tag *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default route tag
Context	**configure** service vpls *string* bgp-evpn mpls *number* default-route-tag *string*
Tree	default-route-tag
Description	This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed. When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority. The following are examples of the conflict priority handling: • If a service is configured with both **default-route-tag** *X* and **proxy-arp evpn-route-tag** *Y*, the EVPN uses route tag *Y* when sending EVPN proxy-arp routes to the BGP RIB for advertisement. • If a given IP-prefix route is tagged in the route-table with tag *A* and the R-VPLS, in which the route is advertised, uses *B* as the **default-route-tag**, then EVPN keeps tag *A* when sending the route to the BGP RIB. The **default-route-tag** configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.
Introduced	16.0.R4
Platforms	All

dynamic-egress-label-limit *boolean*

Synopsis	Enables dynamic egress label limit
Context	**configure** service vpls *string* bgp-evpn mpls *number* dynamic-egress-label-limit *boolean*
Tree	dynamic-egress-label-limit

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Description	When configured to **true**, this command relaxes the egress MPLS label limit check when resolving BGP next hops in the tunnel table. For VPRN services, the OAM label is never computed and, therefore, one more egress label is allowed. For EVPN (Epipe and VPLS) services, the system only computes the control word and ESI label if they are used. For the control word, the system reduces the egress label limit by one label if the control word is configured in the service. When configured, the ESI label is not counted for Epipes or VPLS services without an ES. When configured to **false** this command, for EVPN, Epipe, and VPLS services, always accounts for the ESI label and control word.
Default	false
Introduced	22.2.R1
Platforms	All

ecmp *number*

Synopsis	Maximum ECMP routes information
Context	**configure** service vpls *string* bgp-evpn mpls *number* ecmp *number*
Tree	ecmp
Range	1 to 32
Default	1
Introduced	16.0.R1
Platforms	All

entropy-label *boolean*

Synopsis	Allow use of entropy labels for spoke SDPs
Context	**configure** service vpls *string* bgp-evpn mpls *number* entropy-label *boolean*
Tree	entropy-label
Default	false
Introduced	16.0.R1
Platforms	All

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evi-three-byte-auto-rt *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Auto-derive the BGP EVPN route target
Context	**configure** service vpls *string* bgp-evpn mpls *number* evi-three-byte-auto-rt *boolean*
Tree	evi-three-byte-auto-rt
Description	When configured to **true**, the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID). Where: • Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken • A=0 (for auto-derivation) • Type=4 (EVI-based route-target) • D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance • Service ID=3-octet EVI When configured to **false**, route target derivation is not allowed.
Default	false
Introduced	21.10.R1
Platforms	All

fdb

Synopsis	Enter the **fdb** context
Context	**configure** service vpls *string* bgp-evpn mpls *number* fdb
Tree	fdb
Introduced	16.0.R1
Platforms	All

protected-src-mac-violation-action *keyword*

Synopsis	Relearn request for a protected MAC is received action
Context	**configure** service vpls *string* bgp-evpn mpls *number* fdb protected-src-mac-violation-action *keyword*

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Tree	protected-src-mac-violation-action
Options	discard
Introduced	16.0.R1
Platforms	All

force-vc-forwarding *keyword*

Synopsis	VC forwarding action
Context	**configure** service vpls *string* bgp-evpn mpls *number* force-vc-forwarding *keyword*
Tree	force-vc-forwarding
Options	vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag
Introduced	16.0.R1
Platforms	All

ingress-replication-bum-label *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use the same label as the one advertised for unicast traffic
Context	**configure** service vpls *string* bgp-evpn mpls *number* ingress-replication-bum-label *boolean*
Tree	ingress-replication-bum-label
Default	false
Introduced	16.0.R1
Platforms	All

mh-mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Multihoming mode
Context	**configure** service vpls *string* bgp-evpn mpls *number* mh-mode *keyword*
Tree	mh-mode

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Description	This command configures the multihoming mode for BGP-EVPN. Users can configure only one network instance for the service. If a provider tunnel is enabled for the service instance, this command must be configured using the **network** option.
Options	access, network
Default	network
Introduced	21.10.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group ID
Context	**configure** service vpls *string* bgp-evpn mpls *number* oper-group *reference*
Tree	oper-group
Reference	**configure** service oper-group *string*
Introduced	19.10.R1
Platforms	All

route-next-hop

Synopsis	Enter the **route-next-hop** context
Context	**configure** service vpls *string* bgp-evpn mpls *number* route-next-hop
Tree	route-next-hop
Description	Commands in this context configure the next hop of the EVPN routes.
Introduced	19.10.R1
Platforms	All

ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address of the next-hop for the service EVPN route
Context	**configure** service vpls *string* bgp-evpn mpls *number* route-next-hop ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-address

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Notes	The following elements are part of a choice: **ip-address**, **system-ipv4**, or **system-ipv6**.
Introduced	19.10.R1
Platforms	All

system-ipv4

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System IPv4 address for service EVPN route next hop
Context	**configure** service vpls *string* bgp-evpn mpls *number* route-next-hop system-ipv4
Tree	system-ipv4
Notes	The following elements are part of a choice: **ip-address**, **system-ipv4**, or **system-ipv6**.
Introduced	19.10.R1
Platforms	All

system-ipv6

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System IPv6 address for service EVPN route next hop
Context	**configure** service vpls *string* bgp-evpn mpls *number* route-next-hop system-ipv6
Tree	system-ipv6
Notes	The following elements are part of a choice: **ip-address**, **system-ipv4**, or **system-ipv6**.
Introduced	19.10.R1
Platforms	All

send-tunnel-encap

Synopsis	Enter the **send-tunnel-encap** context
Context	**configure** service vpls *string* bgp-evpn mpls *number* send-tunnel-encap
Tree	send-tunnel-encap
Introduced	16.0.R1

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Platforms	All

mpls *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable MPLS encapsulation
Context	**configure** service vpls *string* bgp-evpn mpls *number* send-tunnel-encap mpls *boolean*
Tree	mpls
Default	true
Introduced	16.0.R1
Platforms	All

mpls-over-udp *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable MPLS over UDP encapsulation
Context	**configure** service vpls *string* bgp-evpn mpls *number* send-tunnel-encap mpls-over-udp *boolean*
Tree	mpls-over-udp
Default	false
Introduced	16.0.R1
Platforms	All

split-horizon-group *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Split horizon group
Context	**configure** service vpls *string* bgp-evpn mpls *number* split-horizon-group *reference*
Tree	split-horizon-group

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Description	This command configures the value of split-horizon group for all BGP-EVPN segment routing v6 instances.
Reference	**configure** service vpls *string* split-horizon-group *string*
Introduced	16.0.R1
Platforms	All

routes

Synopsis	Enter the **routes** context
Context	**configure** service vpls *string* bgp-evpn routes
Tree	routes
Introduced	16.0.R1
Platforms	All

incl-mcast

Synopsis	Enter the **incl-mcast** context
Context	**configure** service vpls *string* bgp-evpn routes incl-mcast
Tree	incl-mcast
Introduced	16.0.R1
Platforms	All

advertise-ingress-replication *boolean*

Synopsis	BGP EVPN IMET-IR route advertisement
Context	**configure** service vpls *string* bgp-evpn routes incl-mcast advertise-ingress-replication *boolean*
Tree	advertise-ingress-replication
Default	true
Introduced	16.0.R1
Platforms	All

advertise-l2-attributes *boolean*

Synopsis	Advertise L2 attributes
Context	**configure** service vpls *string* bgp-evpn routes incl-mcast advertise-l2-attributes *boolean*

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Tree	advertise-l2-attributes
Description	When configured to **true**, the service advertises of the Layer-2 Attributes extended community including: • Service-MTU in the Layer 2 MTU field • C bit, which is set based on the configuration of the **control-word** command (when enabled, sets the C bit, otherwise it is unset) Upon reception, the service compares the Layer 2 MTU for a peer with the local service MTU. If there is a mismatch, the EVPN destination is operational state down, except if the **bgp-evpn ignore-mtu-mismatch** command is enabled. The received C bit from a peer is compared with the local **control-word** setting. Upon a mismatch, the EVPN destination becomes operationally down. When configured to **false**, the router cannot advertise the Layer 2 Attributes extended community along with the Inclusive Multicast Ethernet Tag route for the service.
Default	false
Introduced	23.3.R1
Platforms	All

ip-prefix

Synopsis	Enter the **ip-prefix** context
Context	**configure** service vpls *string* bgp-evpn routes ip-prefix
Tree	ip-prefix
Introduced	16.0.R1
Platforms	All

advertise *boolean*

Synopsis	Status for the IP prefix routes advertisement
Context	**configure** service vpls *string* bgp-evpn routes ip-prefix advertise *boolean*
Tree	advertise
Default	false
Introduced	16.0.R1
Platforms	All

domain-id *string*

Synopsis	Domain ID of received BGP route before readvertisement

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Context	**configure** service vpls *string* bgp-evpn routes ip-prefix domain-id *string*
Tree	domain-id
Description	This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in *draft-ietf-bess-evpn-ipvpn-interworking*. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances). Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred). In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N: Seg Len=1 / 65000:1:128 If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows: Seg Len=2 / 65000:2:70 / 65000:1:128 That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.
Introduced	21.10.R1
Platforms	All

include-direct-interface-host *boolean*

Synopsis	Advertise the interface host address in EVPN
Context	**configure** service vpls *string* bgp-evpn routes ip-prefix include-direct-interface-host *boolean*
Tree	include-direct-interface-host
Default	false
Introduced	16.0.R1
Platforms	All

link-bandwidth

Synopsis	Enter the **link-bandwidth** context
Context	**configure** service vpls *string* bgp-evpn routes ip-prefix link-bandwidth
Tree	link-bandwidth

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Introduced	22.7.R1
Platforms	All

advertise

Synopsis	Enable the **advertise** context
Context	**configure** service vpls *string* bgp-evpn routes ip-prefix link-bandwidth advertise
Tree	advertise
Introduced	22.7.R1
Platforms	All

max-dynamic-weight *number*

Synopsis	Maximum weight of the advertised evpn-iff route
Context	**configure** service vpls *string* bgp-evpn routes ip-prefix link-bandwidth advertise max-dynamic-weight *number*
Tree	max-dynamic-weight
Range	1 to 128
Default	128
Introduced	22.7.R1
Platforms	All

weight *(number | keyword)*

Synopsis	Weight of the advertised evpn-iff route
Context	**configure** service vpls *string* bgp-evpn routes ip-prefix link-bandwidth advertise weight *(number | keyword)*
Tree	weight
Range	1 to 128
Options	dynamic
Default	dynamic
Introduced	22.7.R1
Platforms	All

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weighted-ecmp *boolean*

Synopsis	Enable weighted ECMP
Context	**configure** service vpls *string* bgp-evpn routes ip-prefix link-bandwidth weighted-ecmp *boolean*
Tree	weighted-ecmp
Default	false
Introduced	22.7.R1
Platforms	All

mac-ip

Synopsis	Enter the **mac-ip** context
Context	**configure** service vpls *string* bgp-evpn routes mac-ip
Tree	mac-ip
Introduced	16.0.R1
Platforms	All

advertise *boolean*

Synopsis	Status for the BGP-EVPN MAC/IP routes advertisement
Context	**configure** service vpls *string* bgp-evpn routes mac-ip advertise *boolean*
Tree	advertise
Default	true
Introduced	16.0.R1
Platforms	All

arp-nd-extended-community *boolean*

Synopsis	Enable ARP/ND extended community
Context	**configure** service vpls *string* bgp-evpn routes mac-ip arp-nd-extended-community *boolean*
Tree	arp-nd-extended-community
Description	When configured to **true**, the system advertises the RFC9047 ARP/ND extended community along with the MAC/IP routes advertised for local static and dynamic proxy ARP or ND entries. The system also processes the ARP/ND extended community and selects the ARP or ND entries based on the immutable flag.

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When configured to **false**, the system does not advertise the RFC9047 ARP/ND extended community.

Default	false
Introduced	23.3.R1
Platforms	All

cfm-mac *boolean*

Synopsis	Enable advertisement and withdrawal of MAC address
Context	**configure** service vpls *string* bgp-evpn routes mac-ip cfm-mac *boolean*
Tree	cfm-mac
Default	false
Introduced	16.0.R1
Platforms	All

unknown-mac *boolean*

Synopsis	Enable advertisement of unknown MAC route in BGP
Context	**configure** service vpls *string* bgp-evpn routes mac-ip unknown-mac *boolean*
Tree	unknown-mac
Default	false
Introduced	16.0.R1
Platforms	All

sel-mcast

Synopsis	Enter the **sel-mcast** context
Context	**configure** service vpls *string* bgp-evpn routes sel-mcast
Tree	sel-mcast
Introduced	19.10.R2
Platforms	All

advertise *boolean*

Synopsis	Advertise Selective Multicast Ethernet Tag routes
Context	**configure** service vpls *string* bgp-evpn routes sel-mcast advertise *boolean*

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Tree	advertise
Default	false
Introduced	19.10.R2
Platforms	All

segment-routing-v6 [bgp-instance] *number*

Synopsis	Enter the **segment-routing-v6** list instance
Context	**configure** service vpls *string* bgp-evpn segment-routing-v6 *number*
Tree	segment-routing-v6
Description	Commands in this context configure the SRv6 instance used in the service.
Max. Instances	1
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**bgp-instance**] *number*

Synopsis	BGP instance
Context	**configure** service vpls *string* bgp-evpn segment-routing-v6 *number*
Tree	segment-routing-v6
Range	1 to 2
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis	Administrative state of segment routing over IPv6
Context	**configure** service vpls *string* bgp-evpn segment-routing-v6 *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	22.7.R1

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Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

default-route-tag *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Default route tag

Context **configure** service vpls *string* bgp-evpn segment-routing-v6 *number* default-route-tag *string*

Tree default-route-tag

Description This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.

When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.

The following are examples of the conflict priority handling:

- If a service is configured with both **default-route-tag** *X* and **proxy-arp evpn-route-tag** *Y*, the EVPN uses route tag *Y* when sending EVPN proxy-arp routes to the BGP RIB for advertisement.
- If a given IP-prefix route is tagged in the route-table with tag *A* and the R-VPLS, in which the route is advertised, uses *B* as the **default-route-tag**, then EVPN keeps tag *A* when sending the route to the BGP RIB.

The **default-route-tag** configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

ecmp *number*

Synopsis Maximum ECMP value configured on the service

Context **configure** service vpls *string* bgp-evpn segment-routing-v6 *number* ecmp *number*

Tree ecmp

Range 1 to 32

Default 1

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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evi-three-byte-auto-rt *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Auto-derive the BGP EVPN route target
Context	**configure** service vpls *string* bgp-evpn segment-routing-v6 *number* evi-three-byte-auto-rt *boolean*
Tree	evi-three-byte-auto-rt
Description	When configured to **true**, the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID). Where: • Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken • A=0 (for auto-derivation) • Type=4 (EVI-based route-target) • D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance • Service ID=3-octet EVI When configured to **false**, route target derivation is not allowed.
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

fdb

Synopsis	Enter the **fdb** context
Context	**configure** service vpls *string* bgp-evpn segment-routing-v6 *number* fdb
Tree	fdb
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

protected-src-mac-violation-action *keyword*

Synopsis	Relearn request for a protected MAC is received action

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Context	**configure** service vpls *string* bgp-evpn segment-routing-v6 *number* fdb protected-src-mac-violation-action *keyword*
Tree	protected-src-mac-violation-action
Options	discard
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

force-vc-forwarding *keyword*

Synopsis	Datapath forwarding to force vlan-vc-type
Context	**configure** service vpls *string* bgp-evpn segment-routing-v6 *number* force-vc-forwarding *keyword*
Tree	force-vc-forwarding
Description	This command allows the system to preserve the VLAN ID and 802.1p bits of the service-delimiting qtag in a new tag added in the customer frame before sending it to the EVPN destinations. This command may be used in conjunction with the **sap ingress vlan-translation** command. If so used, the configured translated VLAN ID is the VLAN ID sent to the EVPN destinations as opposed to the service-delimiting tag VLAN ID. If the ingress SAP/SDP binding is 'null'-encapsulated, the output VLAN ID and pbits is zero.
Options	vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

mh-mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Multihoming mode
Context	**configure** service vpls *string* bgp-evpn segment-routing-v6 *number* mh-mode *keyword*
Tree	mh-mode
Options	access, network
Default	network
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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oper-group *reference*

Synopsis	Operational group
Context	**configure** service vpls *string* bgp-evpn segment-routing-v6 *number* oper-group *reference*
Tree	oper-group
Description	This command adds the BGP EVPN SRv6 instance or an Ethernet Segment (ES) as a member of the operational group. When configured on a BGP EVPN instance, the operational group is up when it is either empty (meaning that the operational group has no members) or at least an EVPN destination is created under the EVPN instance added as member. When configured, no other SAP, SDP binding, or BGP EVPN instance can be added to the same operational group within the same or different service. The operational group is down when it is applied on a BGP EVPN instance as well as: • the service is administratively disabled • the BGP EVPN MPLS and VXLAN is administratively disabled • all the EVPN destinations in the instance are removed When configured on an ES, the state of the operational group depends on the state of the SAPs contained in the ES. The operational group transitions to up if at least one SAP in the ES is up. The operational group goes down when all the associated SAPs are operationally down. Monitor the ES operational group on the LAG associated with the ES, along with single-active multihoming, so that the NDF state can be signaled to the CE by LAG standby signaling.
Reference	**configure** service oper-group *string*
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

resolution *keyword*

Synopsis	Resolution options for routes
Context	**configure** service vpls *string* bgp-evpn segment-routing-v6 *number* resolution *keyword*
Tree	resolution
Options	route-table, tunnel-table, fallback-tunnel-to-route-table
Default	route-table
Introduced	22.7.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

route-next-hop

Synopsis	Enter the **route-next-hop** context
Context	**configure** service vpls *string* bgp-evpn segment-routing-v6 *number* route-next-hop
Tree	route-next-hop
Description	Commands in this context configure the next hop of the EVPN routes.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address of the next-hop for the service EVPN route
Context	**configure** service vpls *string* bgp-evpn segment-routing-v6 *number* route-next-hop ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-address
Notes	The following elements are part of a choice: **ip-address**, **system-ipv4**, or **system-ipv6**.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

system-ipv4

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System IPv4 address for service EVPN route next hop
Context	**configure** service vpls *string* bgp-evpn segment-routing-v6 *number* route-next-hop system-ipv4
Tree	system-ipv4
Notes	The following elements are part of a choice: **ip-address**, **system-ipv4**, or **system-ipv6**.
Introduced	22.7.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

system-ipv6

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System IPv6 address for service EVPN route next hop
Context	**configure** service vpls *string* bgp-evpn segment-routing-v6 *number* route-next-hop system-ipv6
Tree	system-ipv6
Notes	The following elements are part of a choice: **ip-address**, **system-ipv4**, or **system-ipv6**.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

source-address *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Source IPv6 address
Context	**configure** service vpls *string* bgp-evpn segment-routing-v6 *number* source-address *string*
Tree	source-address
Description	When configured, this command specifies the source IPv6 address used in the SA field of the outer IPv6 header of the SRv6 encapsulated packet. When not configured, the source IPv6 address is inherited from the configuration of the global default address in the **router "base" segment-routing segment-routing-v6 source-address** context. A source IPv6 address must be configured in this context or in the base router context. The system does not check if the address entered is a valid local address.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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split-horizon-group *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Split horizon group
Context	**configure** service vpls *string* bgp-evpn segment-routing-v6 *number* split-horizon-group *reference*
Tree	split-horizon-group
Description	This command configures the value of split-horizon group for all BGP-EVPN segment routing v6 instances.
Reference	**configure** service vpls *string* split-horizon-group *string*
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

srv6

Synopsis	Enter the **srv6** context
Context	**configure** service vpls *string* bgp-evpn segment-routing-v6 *number* srv6
Tree	srv6
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

default-locator *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Default route locator
Context	**configure** service vpls *string* bgp-evpn segment-routing-v6 *number* srv6 default-locator *string*
Tree	default-locator
Description	This command specifies the locator that exists in the SRv6 service instance and is used as the default locator for the service.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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instance *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Segment Routing SRv6 instance
Context	**configure** service vpls *string* bgp-evpn segment-routing-v6 *number* srv6 instance *reference*
Tree	instance
Reference	**configure** service vpls *string* segment-routing-v6 *number*
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

vxlan [bgp-instance] *number*

Synopsis	Enter the **vxlan** list instance
Context	**configure** service vpls *string* bgp-evpn vxlan *number*
Tree	vxlan
Introduced	16.0.R1
Platforms	All

[**bgp-instance**] *number*

Synopsis	BGP instance
Context	**configure** service vpls *string* bgp-evpn vxlan *number*
Tree	vxlan
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of VXLAN auto-bindings creation
Context	**configure** service vpls *string* bgp-evpn vxlan *number* admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

default-route-tag *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default route tag
Context	**configure** service vpls *string* bgp-evpn vxlan *number* default-route-tag *string*
Tree	default-route-tag
Description	This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed. When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority. The following are examples of the conflict priority handling: • If a service is configured with both **default-route-tag** *X* and **proxy-arp evpn-route-tag** *Y*, the EVPN uses route tag *Y* when sending EVPN proxy-arp routes to the BGP RIB for advertisement. • If a given IP-prefix route is tagged in the route-table with tag *A* and the R-VPLS, in which the route is advertised, uses *B* as the **default-route-tag**, then EVPN keeps tag *A* when sending the route to the BGP RIB. The **default-route-tag** configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.
Introduced	16.0.R4
Platforms	All

ecmp *number*

Synopsis	Number of paths to reach a specified MAC address
Context	**configure** service vpls *string* bgp-evpn vxlan *number* ecmp *number*
Tree	ecmp
Range	1 to 32

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Default	1
Introduced	19.5.R1
Platforms	All

evi-three-byte-auto-rt *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Auto-derive the BGP EVPN route target
Context	**configure** service vpls *string* bgp-evpn vxlan *number* evi-three-byte-auto-rt *boolean*
Tree	evi-three-byte-auto-rt
Description	When configured to **true**, the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID). Where: • Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken • A=0 (for auto-derivation) • Type=4 (EVI-based route-target) • D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance • Service ID=3-octet EVI When configured to **false**, route target derivation is not allowed.
Default	false
Introduced	21.10.R1
Platforms	All

mh-mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Multi-homing mode
Context	**configure** service vpls *string* bgp-evpn vxlan *number* mh-mode *keyword*
Tree	mh-mode

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Options	access, network
Default	access
Introduced	19.5.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group ID
Context	**configure** service vpls *string* bgp-evpn vxlan *number* oper-group *reference*
Tree	oper-group
Reference	**configure** service oper-group *string*
Introduced	19.10.R1
Platforms	All

routes

Synopsis	Enter the **routes** context
Context	**configure** service vpls *string* bgp-evpn vxlan *number* routes
Tree	routes
Introduced	19.5.R1
Platforms	All

auto-disc

Synopsis	Enter the **auto-disc** context
Context	**configure** service vpls *string* bgp-evpn vxlan *number* routes auto-disc
Tree	auto-disc
Introduced	19.5.R1
Platforms	All

advertise *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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Synopsis	Advertise routes on auto-discovery
Context	**configure** service vpls *string* bgp-evpn vxlan *number* routes auto-disc advertise *boolean*
Tree	advertise
Default	false
Introduced	19.5.R1
Platforms	All

send-incl-mcast-ir-on-ndf *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow IMET-IR on NDF
Context	**configure** service vpls *string* bgp-evpn vxlan *number* send-incl-mcast-ir-on-ndf *boolean*
Tree	send-incl-mcast-ir-on-ndf
Default	true
Introduced	16.0.R1
Platforms	All

send-tunnel-encap *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send VXLAN value in encapsulation extended community
Context	**configure** service vpls *string* bgp-evpn vxlan *number* send-tunnel-encap *boolean*
Tree	send-tunnel-encap
Description	When configured to **true**, this command sends the VXLAN value in the encapsulation that is advertised with the EVPN routes for the service. The encapsulation is encoded in RFC5512-based tunnel encapsulation extended communities. When configured to **false**, no encapsulation extended community is sent.
Default	true
Introduced	16.0.R1
Platforms	All

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vxlan-instance *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VXLAN instance
Context	**configure** service vpls *string* bgp-evpn vxlan *number* vxlan-instance *reference*
Tree	vxlan-instance
Reference	**configure** service vpls *string* vxlan instance *number*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

bgp-mh-site [site-name] *string*

Synopsis	Enter the **bgp-mh-site** list instance
Context	**configure** service vpls *string* bgp-mh-site *string*
Tree	bgp-mh-site
Introduced	16.0.R1
Platforms	All

[**site-name**] *string*

Synopsis	Name for the specific site
Context	**configure** service vpls *string* bgp-mh-site *string*
Tree	bgp-mh-site
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

activation-timer *number*

Synopsis	Time that the local sites are in standby status, waiting for BGP updates
Context	**configure** service vpls *string* bgp-mh-site *string* activation-timer *number*

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Tree	activation-timer
Range	0 to 100
Units	seconds
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the VPLS BGP multi-homing site
Context	**configure** service vpls *string* bgp-mh-site *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

boot-timer *number*

Synopsis	Wait time after reboot to run the DF election algorithm
Context	**configure** service vpls *string* bgp-mh-site *string* boot-timer *number*
Tree	boot-timer
Range	0 to 600
Units	seconds
Introduced	16.0.R1
Platforms	All

failed-threshold *(number | keyword)*

Synopsis	Threshold for the site to be declared down
Context	**configure** service vpls *string* bgp-mh-site *string* failed-threshold *(number | keyword)*
Tree	failed-threshold
Range	1 to 1000
Options	all
Default	all
Introduced	16.0.R1

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Platforms	All

id *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Site ID
Context	**configure** service vpls *string* bgp-mh-site *string* id *number*
Tree	id
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

mesh-sdp-binds

Synopsis	Specify if a mesh-sdp-binding is associated with this site
Context	**configure** service vpls *string* bgp-mh-site *string* mesh-sdp-binds
Tree	mesh-sdp-binds
Notes	The following elements are part of a choice: **mesh-sdp-binds**, **sap**, **shg-name**, or **spoke-sdp**.
Introduced	16.0.R1
Platforms	All

min-down-timer *number*

Synopsis	Minimum downtime for BGP multi-homing site after transition from up to down
Context	**configure** service vpls *string* bgp-mh-site *string* min-down-timer *number*
Tree	min-down-timer
Range	0 to 100
Units	seconds
Introduced	16.0.R1
Platforms	All

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monitor-oper-group *reference*

Synopsis	Operational group to monitor
Context	**configure** service vpls *string* bgp-mh-site *string* monitor-oper-group *reference*
Tree	monitor-oper-group
Reference	**configure** service oper-group *string*
Introduced	16.0.R1
Platforms	All

sap *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SAP to be associated with this site
Context	**configure** service vpls *string* bgp-mh-site *string* sap *string*
Tree	sap
String Length	1 to 45
Notes	The following elements are part of a choice: **mesh-sdp-binds**, **sap**, **shg-name**, or **spoke-sdp**.
Introduced	16.0.R1
Platforms	All

shg-name *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SHG name to be associated with the site
Context	**configure** service vpls *string* bgp-mh-site *string* shg-name *string*
Tree	shg-name
String Length	1 to 32
Notes	The following elements are part of a choice: **mesh-sdp-binds**, **sap**, **shg-name**, or **spoke-sdp**.
Introduced	16.0.R1

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Platforms	All

spoke-sdp *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SDP associated with the site
Context	**configure** service vpls *string* bgp-mh-site *string* spoke-sdp *string*
Tree	spoke-sdp
String Length	3 to 16
Notes	The following elements are part of a choice: **mesh-sdp-binds**, **sap**, **shg-name**, or **spoke-sdp**.
Introduced	16.0.R1
Platforms	All

bgp-vpls

Synopsis	Enable the **bgp-vpls** context
Context	**configure** service vpls *string* bgp-vpls
Tree	bgp-vpls
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the BGP-VPLS instance
Context	**configure** service vpls *string* bgp-vpls admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

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maximum-ve-id *number*

Synopsis	Maximum vpls-edge id for BGP-VPLS
Context	**configure** service vpls *string* bgp-vpls maximum-ve-id *number*
Tree	maximum-ve-id
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

ve

Synopsis	Enter the **ve** context
Context	**configure** service vpls *string* bgp-vpls ve
Tree	ve
Introduced	16.0.R1
Platforms	All

id *number*

Synopsis	VPLS edge ID
Context	**configure** service vpls *string* bgp-vpls ve id *number*
Tree	id
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

name *string*

Synopsis	VPLS Edge instance name
Context	**configure** service vpls *string* bgp-vpls ve name *string*
Tree	name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

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capture-sap [sap-id] *string*

Synopsis	Enter the **capture-sap** list instance
Context	**configure** service vpls *string* capture-sap *string*
Tree	capture-sap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**sap-id**] *string*

Synopsis	SAP identifier
Context	**configure** service vpls *string* capture-sap *string*
Tree	capture-sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the SAP
Context	**configure** service vpls *string* capture-sap *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-dot1q-msaps *boolean*

Synopsis	Enable support for triggering managed SAP creation
Context	**configure** service vpls *string* capture-sap *string* allow-dot1q-msaps *boolean*
Tree	allow-dot1q-msaps
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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bandwidth *number*

Synopsis	SAP bandwidth
Context	**configure** service vpls *string* capture-sap *string* bandwidth *number*
Tree	bandwidth
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cpu-protection

Synopsis	Enter the **cpu-protection** context
Context	**configure** service vpls *string* capture-sap *string* cpu-protection
Tree	cpu-protection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	**configure** service vpls *string* capture-sap *string* cpu-protection mac-monitoring
Tree	mac-monitoring
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

policy-id *reference*

Synopsis	CPM protection policy
Context	**configure** service vpls *string* capture-sap *string* cpu-protection policy-id *reference*
Tree	policy-id
Reference	**configure** system security cpu-protection policy *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

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description *string*

Synopsis	Text description
Context	**configure** service vpls *string* capture-sap *string* description *string*
Tree	description
String Length	1 to 160
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp

Synopsis	Enter the **dhcp** context
Context	**configure** service vpls *string* capture-sap *string* dhcp
Tree	dhcp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy
Context	**configure** service vpls *string* capture-sap *string* dhcp python-policy *reference*
Tree	python-policy
Reference	**configure** python python-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

Synopsis	Local user database
Context	**configure** service vpls *string* capture-sap *string* dhcp user-db *reference*
Tree	user-db
Reference	**configure** subscriber-mgmt local-user-db *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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dhcp6

Synopsis	Enter the **dhcp6** context
Context	**configure** service vpls *string* capture-sap *string* dhcp6
Tree	dhcp6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy
Context	**configure** service vpls *string* capture-sap *string* dhcp6 python-policy *reference*
Tree	python-policy
Reference	**configure** python python-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

Synopsis	Local user database
Context	**configure** service vpls *string* capture-sap *string* dhcp6 user-db *reference*
Tree	user-db
Reference	**configure** subscriber-mgmt local-user-db *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dist-cpu-protection *reference*

Synopsis	Distributed CPU protection policy for SAP
Context	**configure** service vpls *string* capture-sap *string* dist-cpu-protection *reference*
Tree	dist-cpu-protection
Reference	**configure** system security dist-cpu-protection policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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host-lockout-policy *reference*

Synopsis	Host lockout policy
Context	**configure** service vpls *string* capture-sap *string* host-lockout-policy *reference*
Tree	host-lockout-policy
Reference	**configure** subscriber-mgmt host-lockout-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service vpls *string* capture-sap *string* ingress
Tree	ingress
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis	Enter the **filter** context
Context	**configure** service vpls *string* capture-sap *string* ingress filter
Tree	filter
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *reference*

Synopsis	MAC filter policy name
Context	**configure** service vpls *string* capture-sap *string* ingress filter mac *reference*
Tree	mac
Reference	**configure** filter mac-filter *string*
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ipoe-session

Synopsis	Enter the **ipoe-session** context
Context	**configure** service vpls *string* capture-sap *string* ipoe-session
Tree	ipoe-session
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of IPoE session management
Context	**configure** service vpls *string* capture-sap *string* ipoe-session admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vpls *string* capture-sap *string* ipoe-session description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-session-policy *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPoE Session policy to be used for new sessions
Context	**configure** service vpls *string* capture-sap *string* ipoe-session ipoe-session-policy *reference*
Tree	ipoe-session-policy
Reference	**configure** subscriber-mgmt ipoe-session-policy *string*

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local user database for IPoE session authentication
Context	**configure** service vpls *string* capture-sap *string* ipoe-session user-db *reference*
Tree	user-db
Reference	**configure** subscriber-mgmt local-user-db *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

msap-defaults

Synopsis	Enter the **msap-defaults** context
Context	**configure** service vpls *string* capture-sap *string* msap-defaults
Tree	msap-defaults
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface *string*

Synopsis	Group interface
Context	**configure** service vpls *string* capture-sap *string* msap-defaults group-interface *string*
Tree	group-interface
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	MSAP policy

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Context	**configure** service vpls *string* capture-sap *string* msap-defaults policy *reference*
Tree	policy
Reference	**configure** subscriber-mgmt msap-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-name *string*

Synopsis	Administrative service name
Context	**configure** service vpls *string* capture-sap *string* msap-defaults service-name *string*
Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nasreq-auth-policy *reference*

Synopsis	Diameter NASREQ application policy to use for authentication
Context	**configure** service vpls *string* capture-sap *string* nasreq-auth-policy *reference*
Tree	nasreq-auth-policy
Reference	**configure** subscriber-mgmt diameter-nasreq-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pfcp

Synopsis	Enter the **pfcp** context
Context	**configure** service vpls *string* capture-sap *string* pfcp
Tree	pfcp
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

association *reference*

Synopsis	Association used for PFCP messages on the capture SAP

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Context	**configure** service vpls *string* capture-sap *string* pfcp association *reference*
Tree	association
Description	This command links the capture SAP to a PFCP association. This enables CUPS for the capture SAP and any trigger packets are forwarded to the BNG CUPS CPF.
Reference	**configure** subscriber-mgmt pfcp association *string*
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2-access-id-alias *string*

Synopsis	String used as Layer 2 access ID for the capture SAP
Context	**configure** service vpls *string* capture-sap *string* pfcp l2-access-id-alias *string*
Tree	l2-access-id-alias
Description	This command defines a Layer 2 access ID alias for the capture SAP. It replaces the default underlying port-based or LAG-based Layer 2 access ID. Different capture SAPs on the same underlying port or LAG can have different Layer 2 access ID aliases.
String Length	1 to 32
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

up-resiliency

Synopsis	Enter the **up-resiliency** context
Context	**configure** service vpls *string* capture-sap *string* pfcp up-resiliency
Tree	up-resiliency
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

monitor-oper-group [oper-group] *reference*

Synopsis	Enter the **monitor-oper-group** list instance
Context	**configure** service vpls *string* capture-sap *string* pfcp up-resiliency monitor-oper-group *reference*
Tree	monitor-oper-group
Description	Commands in this context define parameters to derive the service health based on monitored operational groups. The BNG UPF sends the health value to the BNG CPF.

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The BNG CPF uses the value to determine the need for a BNG UPF status change (active or standby).

Note:

The following is only applicable for the **configure service vpls capture-sap** context.If the configured groups are not the same for all capture SAPs sharing the same underlying port or LAG, the configuration of a Layer 2 access ID alias is required, or else the system chooses arbitrarily one set of configured groups.

Max. Instances	2
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**oper-group**] *reference*

Synopsis	Operational group name
Context	**configure** service vpls *string* capture-sap *string* pfcp up-resiliency monitor-oper-group *reference*
Tree	monitor-oper-group
Reference	**configure** service oper-group *string*
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

health-drop *number*

Synopsis	Number subtracted from the health value per failure
Context	**configure** service vpls *string* capture-sap *string* pfcp up-resiliency monitor-oper-group *reference* health-drop *number*
Tree	health-drop
Description	This command configures the drop in the health value for every operational group member failure. Every failure of an operational group member decreases the base health value to a possible minimum of 0.
Range	1 to 255
Default	1
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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pppoe

Synopsis	Enter the **pppoe** context
Context	**configure** service vpls *string* capture-sap *string* pppoe
Tree	pppoe
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	PPP policy
Context	**configure** service vpls *string* capture-sap *string* pppoe policy *reference*
Tree	policy
Reference	**configure** subscriber-mgmt ppp-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy
Context	**configure** service vpls *string* capture-sap *string* pppoe python-policy *reference*
Tree	python-policy
Reference	**configure** python python-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

Synopsis	Local user database
Context	**configure** service vpls *string* capture-sap *string* pppoe user-db *reference*
Tree	user-db
Reference	**configure** subscriber-mgmt local-user-db *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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radius-auth-policy *reference*

Synopsis	RADIUS authentication policy
Context	**configure** service vpls *string* capture-sap *string* radius-auth-policy *reference*
Tree	radius-auth-policy
Reference	**configure** subscriber-mgmt radius-authentication-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-solicit

Synopsis	Enter the **router-solicit** context
Context	**configure** service vpls *string* capture-sap *string* router-solicit
Tree	router-solicit
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

Synopsis	Local user database
Context	**configure** service vpls *string* capture-sap *string* router-solicit user-db *reference*
Tree	user-db
Reference	**configure** subscriber-mgmt local-user-db *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-srrp *number*

Synopsis	SRRP instance that this capture SAP tracks
Context	**configure** service vpls *string* capture-sap *string* track-srrp *number*
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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trigger-packet

Synopsis	Enter the **trigger-packet** context
Context	**configure** service vpls *string* capture-sap *string* trigger-packet
Tree	trigger-packet
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arp *boolean*

Synopsis	ARP packet
Context	**configure** service vpls *string* capture-sap *string* trigger-packet arp *boolean*
Tree	arp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

data *boolean*

Synopsis	Data packet
Context	**configure** service vpls *string* capture-sap *string* trigger-packet data *boolean*
Tree	data
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp *boolean*

Synopsis	DHCP packet
Context	**configure** service vpls *string* capture-sap *string* trigger-packet dhcp *boolean*
Tree	dhcp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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dhcp6 *boolean*

Synopsis	DHCP6 packet
Context	**configure** service vpls *string* capture-sap *string* trigger-packet dhcp6 *boolean*
Tree	dhcp6
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe *boolean*

Synopsis	PPPoE packet
Context	**configure** service vpls *string* capture-sap *string* trigger-packet pppoe *boolean*
Tree	pppoe
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rtr-solicit *boolean*

Synopsis	Router-solicit packet
Context	**configure** service vpls *string* capture-sap *string* trigger-packet rtr-solicit *boolean*
Tree	rtr-solicit
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

customer *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service customer ID
Context	**configure** service vpls *string* customer *reference*
Tree	customer
Reference	**configure** service customer *string*

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vpls *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

endpoint [name] *string*

Synopsis	Enter the **endpoint** list instance
Context	**configure** service vpls *string* endpoint *string*
Tree	endpoint
Max. Instances	10
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	Service endpoint name
Context	**configure** service vpls *string* endpoint *string*
Tree	endpoint
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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block-on-mesh-failure *boolean*

Synopsis	Enable blocking after the endpoints are in a down state
Context	**configure** service vpls *string* endpoint *string* block-on-mesh-failure *boolean*
Tree	block-on-mesh-failure
Default	false
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vpls *string* endpoint *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

fdb

Synopsis	Enter the **fdb** context
Context	**configure** service vpls *string* endpoint *string* fdb
Tree	fdb
Introduced	16.0.R1
Platforms	All

auto-learn-mac-protect *boolean*

Synopsis	Populate automatically MAC protect list with MAC addresses learned on SDP with this endpoint
Context	**configure** service vpls *string* endpoint *string* fdb auto-learn-mac-protect *boolean*
Tree	auto-learn-mac-protect
Default	false
Introduced	16.0.R1
Platforms	All

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mac-pinning *boolean*

Synopsis	Activate MAC address pinning on this endpoint
Context	**configure** service vpls *string* endpoint *string* fdb mac-pinning *boolean*
Tree	mac-pinning
Default	false
Introduced	16.0.R1
Platforms	All

maximum-mac-addresses *number*

Synopsis	Maximum number of MAC address entries in the FDB
Context	**configure** service vpls *string* endpoint *string* fdb maximum-mac-addresses *number*
Tree	maximum-mac-addresses
Description	This command specifies the maximum number of FDB entries for both learned and static MAC addresses for this endpoint. When the configured limit is reached, no new addresses are learned from the SAP or spoke SDP until at least one FDB entry is aged out or cleared. Packets with unknown source MAC addresses are still forwarded if their destination MAC addresses are known, or flooded if their destination MAC addresses are unknown. However, if the **configure service vpls fdb discard-unknown** command is set to **true**, packets with unknown destination MAC addresses are discarded, even if the limit of FDB entries on the specific VPLS instance is not reached. When unconfigured, the endpoint uses the global MAC learning limitations.
Range	1 to 511999
Introduced	16.0.R1
Platforms	All

protected-src-mac-violation-action *keyword*

Synopsis	Action when a relearn request for a protected MAC is received on the SDP
Context	**configure** service vpls *string* endpoint *string* fdb protected-src-mac-violation-action *keyword*
Tree	protected-src-mac-violation-action
Options	sdp-bind-oper-down, alarm-only, discard
Introduced	16.0.R1
Platforms	All

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ignore-standby-signaling *boolean*

Synopsis	Ignore standby-bit received from TLDP peers when performing internal tasks
Context	**configure** service vpls *string* endpoint *string* ignore-standby-signaling *boolean*
Tree	ignore-standby-signaling
Default	false
Introduced	16.0.R1
Platforms	All

mc-endpoint [mc-ep-id] *number*

Synopsis	Enter the **mc-endpoint** list instance
Context	**configure** service vpls *string* endpoint *string* mc-endpoint *number*
Tree	mc-endpoint
Max. Instances	1
Introduced	22.10.R1
Platforms	All

[**mc-ep-id**] *number*

Synopsis	MC-EP ID
Context	**configure** service vpls *string* endpoint *string* mc-endpoint *number*
Tree	mc-endpoint
Description	This command configures the identifier associated with the MC-EP. The ID must be the same on both MC-EP peers.
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

mc-ep-peer

Synopsis	Enter the **mc-ep-peer** context
Context	**configure** service vpls *string* endpoint *string* mc-endpoint *number* mc-ep-peer

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Tree	mc-ep-peer
Introduced	22.10.R1
Platforms	All

name *string*

Synopsis	Name of the MC-EP peer
Context	**configure** service vpls *string* endpoint *string* mc-endpoint *number* mc-ep-peer name *string*
Tree	name
String Length	1 to 32
Notes	The following elements are part of a choice: **name** or **peer-address**.
Introduced	22.10.R1
Platforms	All

peer-address *reference*

Synopsis	IP address of the MC-EP peer
Context	**configure** service vpls *string* endpoint *string* mc-endpoint *number* mc-ep-peer peer-address *reference*
Tree	peer-address
Reference	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)*
Notes	The following elements are part of a choice: **name** or **peer-address**.
Introduced	22.10.R1
Platforms	All

revert-time *(number | keyword)*

Synopsis	Time to wait before reverting to primary spoke SDP
Context	**configure** service vpls *string* endpoint *string* revert-time *(number | keyword)*
Tree	revert-time
Range	1 to 600
Units	seconds
Options	never, immediate
Default	immediate

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Introduced	16.0.R1
Platforms	All

suppress-standby-signaling *boolean*

Synopsis	Do not send pseudowire standby bit to TLDP peer when specified spoke SDP is selected as standby
Context	**configure** service vpls *string* endpoint *string* suppress-standby-signaling *boolean*
Tree	suppress-standby-signaling
Default	true
Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the **eth-cfm** context
Context	**configure** service vpls *string* eth-cfm
Tree	eth-cfm
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*

Synopsis	Enter the **mep** list instance
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep

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Reference	**configure** eth-cfm domain *string*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string* association *string*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable

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Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the **alarm-notification** context
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification
Tree	alarm-notification
Description	Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm. Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-alarm-time *number*
Tree	fng-alarm-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-reset-time *number*
Tree	fng-reset-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R4

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis	Generate CCM messages
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm *boolean*
Tree	ccm
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-ltm-priority *number*
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-padding-size *number*
Tree	ccm-padding-size
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU. This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through **configure eth-cfm domain association ccm-interval)** is less than 1 second.
Range	3 to 1500
Introduced	16.0.R4

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cfm-vlan-tag *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* cfm-vlan-tag *string*
Tree	cfm-vlan-tag
String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the **eth-test** context
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the **oam eth-cfm eth-test** command.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm

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Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test bit-error-threshold *number*
Tree	bit-error-threshold
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis	Enter the **test-pattern** context
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern crc-tlv *boolean*
Tree	crc-tlv
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern pattern *keyword*
Tree	pattern

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Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the **grace** context
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the **eth-ed** context
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed max-rx-defect-window *number*
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds

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Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed priority *number*
Tree	priority
Range	0 to 7
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed rx-eth-ed *boolean*
Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed tx-eth-ed *boolean*
Tree	tx-eth-ed
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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eth-vsm-grace

Synopsis	Enter the **eth-vsm-grace** context
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace rx-eth-vsm-grace *boolean*
Tree	rx-eth-vsm-grace
Description	When configured to **true**, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to **false**, the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace tx-eth-vsm-grace *boolean*
Tree	tx-eth-vsm-grace
Description	When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards. The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

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When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* low-priority-defect *keyword*
Tree	low-priority-defect
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MEP
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* mac-address *string*
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	**configure** service vpls *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* one-way-delay-threshold *number*
Tree	one-way-delay-threshold
Range	0 to 600
Units	seconds

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Default	3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

etree *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Use VPLS service as an E-Tree VPLS
Context	**configure** service vpls *string* etree *boolean*
Tree	etree
Default	false
Introduced	16.0.R1
Platforms	All

fdb

Synopsis	Enter the **fdb** context
Context	**configure** service vpls *string* fdb
Tree	fdb
Introduced	16.0.R1
Platforms	All

discard-unknown *boolean*

Synopsis	Discard packets with unknown destination MAC addresses
Context	**configure** service vpls *string* fdb discard-unknown *boolean*
Tree	discard-unknown
Default	false
Introduced	16.0.R1
Platforms	All

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mac-learning

Synopsis	Enter the **mac-learning** context
Context	**configure** service vpls *string* fdb mac-learning
Tree	mac-learning
Introduced	16.0.R1
Platforms	All

aging *boolean*

Synopsis	Enable aging of MAC addresses
Context	**configure** service vpls *string* fdb mac-learning aging *boolean*
Tree	aging
Default	true
Introduced	16.0.R1
Platforms	All

learning *boolean*

Synopsis	Enable learning of new MAC addresses
Context	**configure** service vpls *string* fdb mac-learning learning *boolean*
Tree	learning
Default	true
Introduced	16.0.R1
Platforms	All

local-age-time *number*

Synopsis	Aging time for locally learned MAC addresses
Context	**configure** service vpls *string* fdb mac-learning local-age-time *number*
Tree	local-age-time
Description	This command configures the aging time for locally learned MAC addresses in the forwarding database (FDB) for the Virtual Private LAN Service (VPLS) instance. In a VPLS service, MAC addresses are associated with a Service Access Point (SAP) or a Service Distribution Point (SDP). MACs associated with a SAP are classified as local MACs, and MACs associated with an SDP are remote MACs. In each VPLS service instance, there are independent aging timers for locally learned MAC and remotely learned MAC entries in the FDB.

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As in a Layer 2 switch, learned MACs can be aged out if no packets are sourced from the MAC address for a period of time (the aging time).

Range	60 to 86400
Default	300
Introduced	16.0.R1
Platforms	All

remote-age-time *number*

Synopsis	Aging time for remotely learned MAC addresses
Context	**configure** service vpls *string* fdb mac-learning remote-age-time *number*
Tree	remote-age-time
Description	This command configures the aging time for remotely learned MAC addresses in the forwarding database (FDB) for the Virtual Private LAN Service (VPLS) instance. In a VPLS service, MAC addresses are associated with a Service Access Point (SAP) or a Service Distribution Point (SDP). MACs associated with a SAP are classified as local MACs, and MACs associated with an SDP are remote MACs. In each VPLS service instance, there are independent aging timers for locally learned MAC and remotely learned MAC entries in the FDB. As in a Layer 2 switch, learned MACs can be aged out if no packets are sourced from the MAC address for a period of time (the aging time). To reduce the amount of signaling required between switches, configure this time larger than the **local-age-time** command.
Range	60 to 86400
Default	900
Introduced	16.0.R1
Platforms	All

mac-move

Synopsis	Enter the **mac-move** context
Context	**configure** service vpls *string* fdb mac-move
Tree	mac-move
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of MAC move
Context	**configure** service vpls *string* fdb mac-move admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

hold-down-time *number*

Synopsis	Wait time before re-enabling disabled SAP
Context	**configure** service vpls *string* fdb mac-move hold-down-time *number*
Tree	hold-down-time
Range	0 to 600
Units	seconds
Default	10
Introduced	19.7.R1
Platforms	All

move-frequency *number*

Synopsis	Maximum rate MACs can be re-learned in the VPLS service
Context	**configure** service vpls *string* fdb mac-move move-frequency *number*
Tree	move-frequency
Range	1 to 10
Default	2
Introduced	16.0.R1
Platforms	All

primary-cumulative-factor *number*

Synopsis	Factor for MAC-relearn periods for MAC-relearn rate
Context	**configure** service vpls *string* fdb mac-move primary-cumulative-factor *number*
Tree	primary-cumulative-factor

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Range	3 to 10
Default	3
Introduced	19.7.R1
Platforms	All

retry-count *(number | keyword)*

Synopsis	Number of retries for re-enabling the SAP or SDP
Context	**configure** service vpls *string* fdb mac-move retry-count *(number | keyword)*
Tree	retry-count
Range	1 to 255
Options	unlimited
Default	3
Introduced	16.0.R1
Platforms	All

sap [sap-id] *reference*

Synopsis	Enter the **sap** list instance
Context	**configure** service vpls *string* fdb mac-move sap *reference*
Tree	sap
Introduced	19.7.R1
Platforms	All

[**sap-id**] *reference*

Synopsis	SAP identifier
Context	**configure** service vpls *string* fdb mac-move sap *reference*
Tree	sap
Reference	**configure** service vpls *string* sap *string*
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	All

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level *keyword*

Synopsis	Primary or secondary port level
Context	**configure** service vpls *string* fdb mac-move sap *reference* level *keyword*
Tree	level
Options	primary, secondary
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	All

secondary-cumulative-factor *number*

Synopsis	Number of periods to measure mac-relearn rate
Context	**configure** service vpls *string* fdb mac-move secondary-cumulative-factor *number*
Tree	secondary-cumulative-factor
Range	2 to 9
Default	2
Introduced	19.7.R1
Platforms	All

spoke-sdp [sdp-bind-id] *reference*

Synopsis	Enter the **spoke-sdp** list instance
Context	**configure** service vpls *string* fdb mac-move spoke-sdp *reference*
Tree	spoke-sdp
Introduced	19.7.R1
Platforms	All

[**sdp-bind-id**] *reference*

Synopsis	SDP binding ID
Context	**configure** service vpls *string* fdb mac-move spoke-sdp *reference*
Tree	spoke-sdp
Reference	**configure** service vpls *string* spoke-sdp *string*
Notes	This element is part of a list key.

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Introduced	19.7.R1
Platforms	All

level *keyword*

Synopsis	Primary or secondary port level
Context	**configure** service vpls *string* fdb mac-move spoke-sdp *reference* level *keyword*
Tree	level
Options	primary, secondary
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	All

mac-subnet-length *number*

Synopsis	Number of bits performing MAC learning or MAC switching
Context	**configure** service vpls *string* fdb mac-subnet-length *number*
Tree	mac-subnet-length
Range	24 to 48
Default	48
Introduced	16.0.R1
Platforms	All

selective-learning *boolean*

Synopsis	Allocate FDB entries on selectively learned line cards
Context	**configure** service vpls *string* fdb selective-learning *boolean*
Tree	selective-learning
Default	false
Introduced	16.0.R1
Platforms	All

static-mac

Synopsis	Enter the **static-mac** context

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Context	**configure** service vpls *string* fdb static-mac
Tree	static-mac
Introduced	16.0.R1
Platforms	All

mac [mac-address] *string*

Synopsis	Enter the **mac** list instance
Context	**configure** service vpls *string* fdb static-mac mac *string*
Tree	mac
Introduced	16.0.R1
Platforms	All

[**mac-address**] *string*

Synopsis	Static MAC address to SAP/SDP-binding or black-hole
Context	**configure** service vpls *string* fdb static-mac mac *string*
Tree	mac
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

blackhole

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Create a static FDB entry for the MAC address to black-hole traffic
Context	**configure** service vpls *string* fdb static-mac mac *string* blackhole
Tree	blackhole
Notes	The following elements are part of a mandatory choice: **blackhole**, **endpoint**, **mesh-sdp**, **sap**, or **spoke-sdp**.
Introduced	16.0.R1
Platforms	All

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endpoint *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Endpoint associated with the MAC
Context	**configure** service vpls *string* fdb static-mac mac *string* endpoint *reference*
Tree	endpoint
Reference	**configure** service vpls *string* endpoint *string*
Notes	The following elements are part of a mandatory choice: **blackhole**, **endpoint**, **mesh-sdp**, **sap**, or **spoke-sdp**.
Introduced	16.0.R1
Platforms	All

mesh-sdp *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Mesh SDP bind associated with this MAC
Context	**configure** service vpls *string* fdb static-mac mac *string* mesh-sdp *reference*
Tree	mesh-sdp
Reference	**configure** service vpls *string* mesh-sdp *string*
Notes	The following elements are part of a mandatory choice: **blackhole**, **endpoint**, **mesh-sdp**, **sap**, or **spoke-sdp**.
Introduced	16.0.R1
Platforms	All

monitor *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Entity to be monitored to decide whether this entry can be installed in the FDB
Context	**configure** service vpls *string* fdb static-mac mac *string* monitor *keyword*

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Tree	monitor
Options	none, forward-status
Default	none
Introduced	16.0.R1
Platforms	All

sap *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP associated with this MAC
Context	**configure** service vpls *string* fdb static-mac mac *string* sap *reference*
Tree	sap
Reference	**configure** service vpls *string* sap *string*
Notes	The following elements are part of a mandatory choice: **blackhole**, **endpoint**, **mesh-sdp**, **sap**, or **spoke-sdp**.
Introduced	16.0.R1
Platforms	All

spoke-sdp *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Spoke SDP bind associated with this MAC
Context	**configure** service vpls *string* fdb static-mac mac *string* spoke-sdp *reference*
Tree	spoke-sdp
Reference	**configure** service vpls *string* spoke-sdp *string*
Notes	The following elements are part of a mandatory choice: **blackhole**, **endpoint**, **mesh-sdp**, **sap**, or **spoke-sdp**.
Introduced	16.0.R1
Platforms	All

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table

Synopsis	Enter the **table** context
Context	**configure** service vpls *string* fdb table
Tree	table
Introduced	16.0.R1
Platforms	All

high-wmark *number*

Synopsis	High watermark for the FDB table
Context	**configure** service vpls *string* fdb table high-wmark *number*
Tree	high-wmark
Range	0 to 100
Default	95
Introduced	16.0.R1
Platforms	All

low-wmark *number*

Synopsis	Low watermark for the FDB table
Context	**configure** service vpls *string* fdb table low-wmark *number*
Tree	low-wmark
Range	0 to 100
Default	90
Introduced	16.0.R1
Platforms	All

size *number*

Synopsis	Maximum MAC entries in the FDB
Context	**configure** service vpls *string* fdb table size *number*
Tree	size
Range	1 to 511999
Default	250
Introduced	16.0.R1

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Platforms	All

gsmp

Synopsis	Enter the **gsmp** context
Context	**configure** service vpls *string* gsmp
Tree	gsmp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of GSMP
Context	**configure** service vpls *string* gsmp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

group [name] *string*

Synopsis	Enter the **group** list instance
Context	**configure** service vpls *string* gsmp group *string*
Tree	group
Max. Instances	1024
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	GSMP group name
Context	**configure** service vpls *string* gsmp group *string*
Tree	group
String Length	1 to 32

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the GSMP group
Context	**configure** service vpls *string* gsmp group *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

ancp

Synopsis	Enter the **ancp** context
Context	**configure** service vpls *string* gsmp group *string* ancp
Tree	ancp
Introduced	16.0.R1
Platforms	All

dynamic-topology-discovery *boolean*

Synopsis	Enable the ANCP dynamic topology discovery capability
Context	**configure** service vpls *string* gsmp group *string* ancp dynamic-topology-discovery *boolean*
Tree	dynamic-topology-discovery
Default	true
Introduced	16.0.R1
Platforms	All

oam *boolean*

Synopsis	Enable GSMP ANCP OAM capability at startup of GSMP connection

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Context	**configure** service vpls *string* gsmp group *string* ancp oam *boolean*
Tree	oam
Default	false
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vpls *string* gsmp group *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

hold-multiplier *number*

Synopsis	Hold-multiplier for the GSMP connections in this group
Context	**configure** service vpls *string* gsmp group *string* hold-multiplier *number*
Tree	hold-multiplier
Range	1 to 100
Default	3
Introduced	16.0.R1
Platforms	All

idle-filter *boolean*

Synopsis	Filter ANCP messages from IDLE DSL lines
Context	**configure** service vpls *string* gsmp group *string* idle-filter *boolean*
Tree	idle-filter
Default	false
Introduced	16.0.R1
Platforms	All

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keepalive *number*

Synopsis	Keepalive value for the GSMP connections in this group
Context	**configure** service vpls *string* gsmp group *string* keepalive *number*
Tree	keepalive
Range	1 to 25
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

neighbor [remote-address] *string*

Synopsis	Enter the **neighbor** list instance
Context	**configure** service vpls *string* gsmp group *string* neighbor *string*
Tree	neighbor
Introduced	16.0.R1
Platforms	All

[**remote-address**] *string*

Synopsis	GSMP neighbor remote IP address
Context	**configure** service vpls *string* gsmp group *string* neighbor *string*
Tree	neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the GSMP neighbor
Context	**configure** service vpls *string* gsmp group *string* neighbor *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1

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Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vpls *string* gsmp group *string* neighbor *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

local-address *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Restrict connections to this local address only within the service running ANCP
Context	**configure** service vpls *string* gsmp group *string* neighbor *string* local-address *string*
Tree	local-address
Introduced	16.0.R1
Platforms	All

priority-marking

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **priority-marking** context
Context	**configure** service vpls *string* gsmp group *string* neighbor *string* priority-marking
Tree	priority-marking
Introduced	16.0.R1
Platforms	All

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dscp *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DSCP that is used while remarking the in profile packets
Context	**configure** service vpls *string* gsmp group *string* neighbor *string* priority-marking dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	The following elements are part of a choice: **dscp** or **prec**.
Introduced	16.0.R1
Platforms	All

prec *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Precedence priority marking
Context	**configure** service vpls *string* gsmp group *string* neighbor *string* priority-marking prec *number*
Tree	prec
Range	0 to 7
Notes	The following elements are part of a choice: **dscp** or **prec**.
Introduced	16.0.R1
Platforms	All

persistency *boolean*

Synopsis	Store DSL line information when the GSMP connection terminates
Context	**configure** service vpls *string* gsmp group *string* persistency *boolean*
Tree	persistency

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Default	false
Introduced	16.0.R1
Platforms	All

igmp-host-tracking

Synopsis	Enter the **igmp-host-tracking** context
Context	**configure** service vpls *string* igmp-host-tracking
Tree	igmp-host-tracking
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of IGMP host tracking
Context	**configure** service vpls *string* igmp-host-tracking admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

expiry-time *number*

Synopsis	Time that the system continues to track inactive hosts
Context	**configure** service vpls *string* igmp-host-tracking expiry-time *number*
Tree	expiry-time
Range	1 to 65535
Units	seconds
Default	260
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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igmp-snooping

Synopsis	Enter the **igmp-snooping** context
Context	**configure** service vpls *string* igmp-snooping
Tree	igmp-snooping
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of snooping
Context	**configure** service vpls *string* igmp-snooping admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

evpn-proxy

Synopsis	Enter the **evpn-proxy** context
Context	**configure** service vpls *string* igmp-snooping evpn-proxy
Tree	evpn-proxy
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of EVPN proxy
Context	**configure** service vpls *string* igmp-snooping evpn-proxy admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	All

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mvr

Synopsis	Enter the **mvr** context
Context	**configure** service vpls *string* igmp-snooping mvr
Tree	mvr
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MVR
Context	**configure** service vpls *string* igmp-snooping mvr admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vpls *string* igmp-snooping mvr description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

group-policy *string*

Synopsis	Policy that applies MVR
Context	**configure** service vpls *string* igmp-snooping mvr group-policy *string*
Tree	group-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

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query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** service vpls *string* igmp-snooping query-interval *number*
Tree	query-interval
Range	1 to 65535
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

query-source-address *(keyword | ipv4-address)*

Synopsis	Source address for IGMP queries
Context	**configure** service vpls *string* igmp-snooping query-source-address *(keyword | ipv4-address)*
Tree	query-source-address
Options	system
Default	system
Introduced	16.0.R1
Platforms	All

report-source-address *string*

Synopsis	Source IP address used when generating IGMP reports
Context	**configure** service vpls *string* igmp-snooping report-source-address *string*
Tree	report-source-address
Introduced	16.0.R1
Platforms	All

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	**configure** service vpls *string* igmp-snooping robust-count *number*
Tree	robust-count

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Range	1 to 255
Default	2
Introduced	16.0.R1
Platforms	All

ignore-l2vpn-mtu-mismatch *boolean*

Synopsis	Ignore the L2 VPN MTU mismatch with local service MTU
Context	**configure** service vpls *string* ignore-l2vpn-mtu-mismatch *boolean*
Tree	ignore-l2vpn-mtu-mismatch
Description	When configured to **true**, the router does not check the value of the Layer 2 MTU in the Layer2 Info Extended Community received in a BGP update message against the local service MTU or locally signaled MTU. It may, therefore, bring up the BGP VPLS service regardless of any MTU mismatch. When configured to **false**, an MTU mismatch prevents the system from bringing up a BGP-VPLS service.
Default	false
Introduced	22.2.R1
Platforms	All

interface [interface-name] *string*

Synopsis	Enter the **interface** list instance
Context	**configure** service vpls *string* interface *string*
Tree	interface
Introduced	16.0.R1
Platforms	All

[**interface-name**] *string*

Synopsis	IP interface name
Context	**configure** service vpls *string* interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	**configure** service vpls *string* interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vpls *string* interface *string* description *string*
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

hold-time

Synopsis	Enter the **hold-time** context
Context	**configure** service vpls *string* interface *string* hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service vpls *string* interface *string* hold-time ipv4
Tree	ipv4
Introduced	16.0.R1

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Platforms	All

down

Synopsis	Enter the **down** context
Context	**configure** service vpls *string* interface *string* hold-time ipv4 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the **init-only** command.
Introduced	16.0.R1
Platforms	All

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	**configure** service vpls *string* interface *string* hold-time ipv4 down init-only *boolean*
Tree	init-only
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Down hold time for the IP interface
Context	**configure** service vpls *string* interface *string* hold-time ipv4 down seconds *number*
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

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up

Synopsis	Enter the **up** context
Context	**configure** service vpls *string* interface *string* hold-time ipv4 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Up hold time for the IP interface
Context	**configure** service vpls *string* interface *string* hold-time ipv4 up seconds *number*
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service vpls *string* interface *string* ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

neighbor-discovery

Synopsis	Enter the **neighbor-discovery** context
Context	**configure** service vpls *string* interface *string* ipv4 neighbor-discovery
Tree	neighbor-discovery
Introduced	16.0.R1
Platforms	All

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static-neighbor [ipv4-address] *string*

Synopsis	Enter the **static-neighbor** list instance
Context	**configure** service vpls *string* interface *string* ipv4 neighbor-discovery static-neighbor *string*
Tree	static-neighbor
Introduced	16.0.R1
Platforms	All

[**ipv4-address**] *string*

Synopsis	IPv4 address that corresponds to the physical address
Context	**configure** service vpls *string* interface *string* ipv4 neighbor-discovery static-neighbor *string*
Tree	static-neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

mac-address *string*

Synopsis	MAC address for the static neighbor
Context	**configure** service vpls *string* interface *string* ipv4 neighbor-discovery static-neighbor *string* mac-address *string*
Tree	mac-address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	ARP timeout value to determine how long an ARP entry remains in the ARP cache
Context	**configure** service vpls *string* interface *string* ipv4 neighbor-discovery timeout *number*
Tree	timeout
Range	0 to 65535
Units	seconds

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Default	14400
Introduced	16.0.R1
Platforms	All

primary

Synopsis	Enable the **primary** context
Context	**configure** service vpls *string* interface *string* ipv4 primary
Tree	primary
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	IP address of the interface
Context	**configure** service vpls *string* interface *string* ipv4 primary address *string*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	**configure** service vpls *string* interface *string* ipv4 primary prefix-length *number*
Tree	prefix-length
Range	0 to 31
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mac *string*

Synopsis	MAC address for the interface
Context	**configure** service vpls *string* interface *string* mac *string*

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Tree	mac
Introduced	16.0.R1
Platforms	All

isid-policy

Synopsis	Enter the **isid-policy** context
Context	**configure** service vpls *string* isid-policy
Tree	isid-policy
Introduced	19.10.R1
Platforms	All

entry [range-entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** service vpls *string* isid-policy entry *number*
Tree	entry
Introduced	19.10.R1
Platforms	All

[**range-entry-id**] *number*

Synopsis	ISID policy entry ID
Context	**configure** service vpls *string* isid-policy entry *number*
Tree	entry
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

advertise-local *boolean*

Synopsis	Advertise locally-defined I-VPLS ISIDs or static ISIDs
Context	**configure** service vpls *string* isid-policy entry *number* advertise-local *boolean*
Tree	advertise-local

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Default	true
Introduced	19.10.R1
Platforms	All

range

Synopsis	Enter the **range** context
Context	**configure** service vpls *string* isid-policy entry *number* range
Tree	range
Introduced	19.10.R1
Platforms	All

end *number*

Synopsis	Upper bound of the ISID range
Context	**configure** service vpls *string* isid-policy entry *number* range end *number*
Tree	end
Range	1 to 16777215
Introduced	19.10.R1
Platforms	All

start *number*

Synopsis	Lower bound of the ISID range
Context	**configure** service vpls *string* isid-policy entry *number* range start *number*
Tree	start
Range	1 to 16777215
Introduced	19.10.R1
Platforms	All

use-def-mcast *boolean*

Synopsis	Use default multicast tree to propagate ISIS range
Context	**configure** service vpls *string* isid-policy entry *number* use-def-mcast *boolean*
Tree	use-def-mcast

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Default	false
Introduced	19.10.R1
Platforms	All

load-balancing

Synopsis	Enter the **load-balancing** context
Context	**configure** service vpls *string* load-balancing
Tree	load-balancing
Introduced	16.0.R1
Platforms	All

lbl-eth-or-ip-l4-teid *boolean*

Synopsis	Enable hashing of MPLS ethernet and IP packets on SAPs
Context	**configure** service vpls *string* load-balancing lbl-eth-or-ip-l4-teid *boolean*
Tree	lbl-eth-or-ip-l4-teid
Description	When configured to **true**, this command enables hashing of MPLS Ethernet and MPLS IP packets received on the Epipe and VPLS service SAP using the MPLS labels, the inner IP addresses, the port numbers, and the GTP TEID field, if read by the system. This capability is supported on line cards that are FP4-based and later.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

per-service-hashing *boolean*

Synopsis	Enable per-service hashing for Ethernet services
Context	**configure** service vpls *string* load-balancing per-service-hashing *boolean*
Tree	per-service-hashing
Default	false
Introduced	16.0.R1
Platforms	All

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spi-load-balancing *boolean*

Synopsis	Allow use of SPI (Security Parameter Index) in hashing for ESP/AH encrypted IPv4/IPv6 traffic
Context	**configure** service vpls *string* load-balancing spi-load-balancing *boolean*
Tree	spi-load-balancing
Default	false
Introduced	16.0.R1
Platforms	All

teid-load-balancing *boolean*

Synopsis	Include TEID in hashing algorithm for GTP-U/C encapsulated traffic
Context	**configure** service vpls *string* load-balancing teid-load-balancing *boolean*
Tree	teid-load-balancing
Default	false
Introduced	16.0.R1
Platforms	All

m-vpls *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Specify whether this is a management VPLS
Context	**configure** service vpls *string* m-vpls *boolean*
Tree	m-vpls
Default	false
Introduced	16.0.R1
Platforms	All

mac-flush

Synopsis	Enter the **mac-flush** context
Context	**configure** service vpls *string* mac-flush
Tree	mac-flush

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Introduced	16.0.R1
Platforms	All

tldp

Synopsis	Enter the **tldp** context
Context	**configure** service vpls *string* mac-flush tldp
Tree	tldp
Introduced	16.0.R1
Platforms	All

propagate *boolean*

Synopsis	Propagate MAC flush messages received from the T-LDP
Context	**configure** service vpls *string* mac-flush tldp propagate *boolean*
Tree	propagate
Default	false
Introduced	16.0.R1
Platforms	All

send-on-failure *boolean*

Synopsis	Send MAC withdraw message on SAP/Spoke-SDP failure
Context	**configure** service vpls *string* mac-flush tldp send-on-failure *boolean*
Tree	send-on-failure
Default	false
Introduced	16.0.R1
Platforms	All

mac-protect

Synopsis	Enter the **mac-protect** context
Context	**configure** service vpls *string* mac-protect
Tree	mac-protect
Introduced	19.10.R1

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Platforms	All

mac [mac-address] *string*

Synopsis	Add a list entry for **mac**
Context	**configure** service vpls *string* mac-protect mac *string*
Tree	mac
Introduced	19.10.R1
Platforms	All

[**mac-address**] *string*

Synopsis	Protected MAC address
Context	**configure** service vpls *string* mac-protect mac *string*
Tree	mac
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

mcast-ipv6-snooping-scope *keyword*

Synopsis	IPv6 multicast snooping scope
Context	**configure** service vpls *string* mcast-ipv6-snooping-scope *keyword*
Tree	mcast-ipv6-snooping-scope
Options	sg-based, mac-based
Default	mac-based
Introduced	16.0.R1
Platforms	All

mcr-default-gtw

Synopsis	Enter the **mcr-default-gtw** context
Context	**configure** service vpls *string* mcr-default-gtw
Tree	mcr-default-gtw
Introduced	16.0.R1

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Platforms	All

ip *string*

Synopsis	Multi-chassis ring default gateway IP address
Context	**configure** service vpls *string* mcr-default-gtw ip *string*
Tree	ip
Introduced	16.0.R1
Platforms	All

mac *string*

Synopsis	Multi-chassis ring default gateway MAC address
Context	**configure** service vpls *string* mcr-default-gtw mac *string*
Tree	mac
Default	00:00:00:00:00:00
Introduced	16.0.R1
Platforms	All

mesh-sdp [sdp-bind-id] *string*

Synopsis	Enter the **mesh-sdp** list instance
Context	**configure** service vpls *string* mesh-sdp *string*
Tree	mesh-sdp
Introduced	16.0.R1
Platforms	All

[**sdp-bind-id**] *string*

Synopsis	SDP binding ID
Context	**configure** service vpls *string* mesh-sdp *string*
Tree	mesh-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

accounting-policy *reference*

Synopsis	Policy to collect accounting statistics
Context	**configure** service vpls *string* mesh-sdp *string* accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the SDP binding to the service
Context	**configure** service vpls *string* mesh-sdp *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

bfd

Synopsis	Enter the **bfd** context
Context	**configure** service vpls *string* mesh-sdp *string* bfd
Tree	bfd
Introduced	21.2.R1
Platforms	All

bfd-liveness

Synopsis	Enable the **bfd-liveness** context
Context	**configure** service vpls *string* mesh-sdp *string* bfd bfd-liveness
Tree	bfd-liveness
Introduced	21.2.R1

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Platforms	All

encap *keyword*

Synopsis	BFD encapsulation used on the SDP binding
Context	**configure** service vpls *string* mesh-sdp *string* bfd bfd-liveness encap *keyword*
Tree	encap
Options	ipv4
Default	ipv4
Introduced	21.2.R1
Platforms	All

bfd-template *reference*

Synopsis	BFD template associated with the SDP binding
Context	**configure** service vpls *string* mesh-sdp *string* bfd bfd-template *reference*
Tree	bfd-template
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the **configure router bfd** context.
Reference	**configure** bfd bfd-template *string*
Introduced	21.2.R1
Platforms	All

collect-stats *boolean*

Synopsis	Allow agent to collect accounting statistics
Context	**configure** service vpls *string* mesh-sdp *string* collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

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control-word *boolean*

Synopsis	Use the control word as preferred
Context	**configure** service vpls *string* mesh-sdp *string* control-word *boolean*
Tree	control-word
Default	false
Introduced	16.0.R1
Platforms	All

cpu-protection

Synopsis	Enter the **cpu-protection** context
Context	**configure** service vpls *string* mesh-sdp *string* cpu-protection
Tree	cpu-protection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

eth-cfm-monitoring

Synopsis	Enable the **eth-cfm-monitoring** context
Context	**configure** service vpls *string* mesh-sdp *string* cpu-protection eth-cfm-monitoring
Tree	eth-cfm-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

aggregate

Synopsis	Apply rate limit to the sum of the per peer packet rates
Context	**configure** service vpls *string* mesh-sdp *string* cpu-protection eth-cfm-monitoring aggregate
Tree	aggregate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

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car

Synopsis	Ignore Ethernet CFM packets when enforcing overall rate
Context	**configure** service vpls *string* mesh-sdp *string* cpu-protection eth-cfm-monitoring car
Tree	car
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	**configure** service vpls *string* mesh-sdp *string* cpu-protection mac-monitoring
Tree	mac-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

policy-id *reference*

Synopsis	CPM protection policy
Context	**configure** service vpls *string* mesh-sdp *string* cpu-protection policy-id *reference*
Tree	policy-id
Reference	**configure** system security cpu-protection policy *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** service vpls *string* mesh-sdp *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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dhcp

Synopsis	Enter the **dhcp** context
Context	**configure** service vpls *string* mesh-sdp *string* dhcp
Tree	dhcp
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vpls *string* mesh-sdp *string* dhcp description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

snoop *boolean*

Synopsis	Allow DHCP snooping of DHCP messages on the SAP or SDP
Context	**configure** service vpls *string* mesh-sdp *string* dhcp snoop *boolean*
Tree	snoop
Default	false
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** service vpls *string* mesh-sdp *string* egress
Tree	egress
Introduced	16.0.R1
Platforms	All

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filter

Synopsis	Enter the **filter** context
Context	**configure** service vpls *string* mesh-sdp *string* egress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service vpls *string* mesh-sdp *string* egress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service vpls *string* mesh-sdp *string* egress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	All

mac *reference*

Synopsis	MAC filter policy name
Context	**configure** service vpls *string* mesh-sdp *string* egress filter mac *reference*
Tree	mac
Reference	**configure** filter mac-filter *string*
Introduced	16.0.R1
Platforms	All

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mfib-allowed-mda-destinations

Synopsis	Enter the **mfib-allowed-mda-destinations** context
Context	**configure** service vpls *string* mesh-sdp *string* egress mfib-allowed-mda-destinations
Tree	mfib-allowed-mda-destinations
Introduced	16.0.R4
Platforms	All

mda [mda-id] *string*

Synopsis	Add a list entry for **mda**
Context	**configure** service vpls *string* mesh-sdp *string* egress mfib-allowed-mda-destinations mda *string*
Tree	mda
Introduced	16.0.R4
Platforms	All

[**mda-id**] *string*

Synopsis	MFIB allowed MDA destination
Context	**configure** service vpls *string* mesh-sdp *string* egress mfib-allowed-mda-destinations mda *string*
Tree	mda
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** service vpls *string* mesh-sdp *string* egress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

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network

Synopsis	Enter the **network** context
Context	**configure** service vpls *string* mesh-sdp *string* egress qos network
Tree	network
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Network policy ID
Context	**configure** service vpls *string* mesh-sdp *string* egress qos network policy-name *reference*
Tree	policy-name
Reference	**configure** qos network *string*
Introduced	16.0.R1
Platforms	All

port-redirect-group

Synopsis	Enter the **port-redirect-group** context
Context	**configure** service vpls *string* mesh-sdp *string* egress qos network port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Name of the egress port queue group
Context	**configure** service vpls *string* mesh-sdp *string* egress qos network port-redirect-group group-name *reference*
Tree	group-name
Reference	**configure** qos queue-group-templates egress queue-group *string*
Introduced	16.0.R1
Platforms	All

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instance *number*

Synopsis	Queue-group instance ID
Context	**configure** service vpls *string* mesh-sdp *string* egress qos network port-redirect-group instance *number*
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	**configure** service vpls *string* mesh-sdp *string* egress vc-label *number*
Tree	vc-label
Range	16 to 1048575
Introduced	16.0.R1
Platforms	All

entropy-label

Synopsis	Enable the use of entropy labels for spoke SDPs
Context	**configure** service vpls *string* mesh-sdp *string* entropy-label
Tree	entropy-label
Notes	The following elements are part of a choice: **entropy-label** or **hash-label**.
Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the **eth-cfm** context
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm
Tree	eth-cfm

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-fc-stats

Synopsis	Enter the **collect-lmm-fc-stats** context
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm collect-lmm-fc-stats
Tree	collect-lmm-fc-stats
Description	Commands in this context configure per forwarding class (FC) LMM information collection. The commands **fc-in-profile** and **fc** in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively. This command and the **collect-lmm-stats** command are mutually exclusive when there is entity resource contention.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc *keyword*

Synopsis	Forwarding class name for profile-unaware counter
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm collect-lmm-fc-stats fc *keyword*
Tree	fc
Description	This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter. An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the **fc-in-profile** command under the **collect-lmm-fc-stats** context. When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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fc-in-profile *keyword*

Synopsis	Forwarding class name for profile-aware counter
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm collect-lmm-fc-stats fc-in-profile *keyword*
Tree	fc-in-profile
Description	This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter. An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the **fc** command under the **collect-lmm-fc-stats** context. When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm collect-lmm-stats *boolean*
Tree	collect-lmm-stats
Description	When configured to **true**, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings. The **show eth-cfm collect-lmm-stats** command displays entities that have been enabled to collect transit and receive counters. When configured to **false**, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*

Synopsis	Enter the **mep** list instance

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Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string* association *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais

Synopsis	Enable the **ais** context
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais
Tree	ais
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

client-meg-level *number*

Synopsis	Client MEG level for AIS message generation
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais client-meg-level *number*
Tree	client-meg-level
Range	1 to 7
Max. Instances	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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interface-support *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais interface-support *boolean*
Tree	interface-support
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number*

Synopsis	Transmission interval for AIS messages
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais interval *number*
Tree	interval
Range	1 | 60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais low-priority-defect *keyword*
Tree	low-priority-defect
Options	all-def, mac-rem-err-xcon
Default	all-def
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Priority of the AIS messages generated by the node

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Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais priority *number*
Tree	priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the **alarm-notification** context
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification
Tree	alarm-notification
Description	Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm. Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-alarm-time *number*
Tree	fng-alarm-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset

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Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-reset-time *number*
Tree	fng-reset-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis	Generate CCM messages
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm *boolean*
Tree	ccm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-ltm-priority *number*
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-padding-size *number*
Tree	ccm-padding-size
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.

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This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through **configure eth-cfm domain association ccm-interval)** is less than 1 second.

Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cfm-vlan-tag *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* cfm-vlan-tag *string*
Tree	cfm-vlan-tag
String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

csf

Synopsis	Enable the **csf** context
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* csf
Tree	csf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* csf multiplier *decimal-number*
Tree	multiplier
Range	0.0 | 2.0 to 30.0
Default	3.5
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

direction *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Direction the MEP faces
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* direction *keyword*
Tree	direction
Options	down, up
Default	down
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the **eth-test** context
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the **oam eth-cfm eth-test** command.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test bit-error-threshold *number*
Tree	bit-error-threshold
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis	Enter the **test-pattern** context
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern crc-tlv *boolean*
Tree	crc-tlv
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern pattern *keyword*
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fault-propagation *keyword*

Synopsis	Fault propagation for the MEP
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* fault-propagation *keyword*
Tree	fault-propagation
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the **grace** context
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the **eth-ed** context

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Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed max-rx-defect-window *number*
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed priority *number*
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed rx-eth-ed *boolean*
Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.

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Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed tx-eth-ed *boolean*
Tree	tx-eth-ed
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis	Enter the **eth-vsm-grace** context
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace rx-eth-vsm-grace *boolean*
Tree	rx-eth-vsm-grace
Description	When configured to **true**, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to **false**, the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1

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Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis Transmit ETH-ED PDUs from the MEP

Context **configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace tx-eth-vsm-grace *boolean*

Tree tx-eth-vsm-grace

Description When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.

The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lbm-svc-act-responder *boolean*

Synopsis Process service activation streams in ETH-CFM LBM

Context **configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* lbm-svc-act-responder *boolean*

Tree lbm-svc-act-responder

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis Lowest priority defect allowed to generate fault alarm

Context **configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* low-priority-defect *keyword*

Tree low-priority-defect

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Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MEP
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* mac-address *string*
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* one-way-delay-threshold *number*
Tree	one-way-delay-threshold
Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

primary-vlan *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MEP provisioned using MA primary VLAN ID

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Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* primary-vlan *boolean*
Tree	primary-vlan
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mip primary-vlan *(number | keyword)*

Synopsis	Enter the **mip** list instance
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mip primary-vlan *(number | keyword)*
Tree	mip
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

primary-vlan *(number | keyword)*

Synopsis	VLAN ID to which the MIP is attached
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mip primary-vlan *(number | keyword)*
Tree	mip
Description	This command provides an option for linking a MIP with a Primary VLAN number or none. When the **none** option is provided, the MIP does not include the primary vlan.
Range	1 to 4094
Options	none
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cfm-vlan-tag *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mip primary-vlan *(number | keyword)* cfm-vlan-tag *string*
Tree	cfm-vlan-tag

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Description	This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration.
String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MIP
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm mip primary-vlan *(number | keyword)* mac-address *string*
Tree	mac-address
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch-ingress-ctag-levels *number*

Synopsis	Squelch levels using additional VLAN C-Tag space
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm squelch-ingress-ctag-levels *number*
Tree	squelch-ingress-ctag-levels
Description	This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding plus an additional VLAN, up to a maximum tag length of two tags. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option. The list of levels must be a complete contiguous list from 0 up to the highest level to be dropped.
Range	0 to 7
Max. Instances	8
Introduced	21.2.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch-ingress-levels *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm squelch-ingress-levels *number*
Tree	squelch-ingress-levels
Description	This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option. The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.
Range	0 to 7
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vmep-filter *boolean*

Synopsis	Suppress eth-cfm PDUs based on level lower than or equal to configured Virtual MEP
Context	**configure** service vpls *string* mesh-sdp *string* eth-cfm vmep-filter *boolean*
Tree	vmep-filter
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

etree-leaf *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable etree leaf access-circuit status
Context	**configure** service vpls *string* mesh-sdp *string* etree-leaf *boolean*

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Tree	etree-leaf
Default	false
Introduced	16.0.R1
Platforms	All

etree-root-leaf-tag *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Status for E-tree root leaf tag
Context	**configure** service vpls *string* mesh-sdp *string* etree-root-leaf-tag *boolean*
Tree	etree-root-leaf-tag
Default	false
Introduced	16.0.R1
Platforms	All

fdb

Synopsis	Enter the **fdb** context
Context	**configure** service vpls *string* mesh-sdp *string* fdb
Tree	fdb
Introduced	16.0.R1
Platforms	All

auto-learn-mac-protect *boolean*

Synopsis	Enable automatic population of the MAC protect list
Context	**configure** service vpls *string* mesh-sdp *string* fdb auto-learn-mac-protect *boolean*
Tree	auto-learn-mac-protect
Default	false
Introduced	16.0.R4
Platforms	All

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auto-learn-mac-protect-exclude-list *reference*

Synopsis	Referenced MAC protect exclusion list name
Context	**configure** service vpls *string* mesh-sdp *string* fdb auto-learn-mac-protect-exclude-list *reference*
Tree	auto-learn-mac-protect-exclude-list
Description	This command references the name of a MAC protect exclusion list. Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list. An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object.
Reference	**configure** service mac-list *string*
Introduced	20.5.R1
Platforms	All

mac-pinning *boolean*

Synopsis	MAC address pinning in active status
Context	**configure** service vpls *string* mesh-sdp *string* fdb mac-pinning *boolean*
Tree	mac-pinning
Default	false
Introduced	16.0.R1
Platforms	All

protected-src-mac-violation-action *keyword*

Synopsis	Action to take whenever a relearn request for a protected MAC is received
Context	**configure** service vpls *string* mesh-sdp *string* fdb protected-src-mac-violation-action *keyword*
Tree	protected-src-mac-violation-action
Options	sdp-bind-oper-down, alarm-only, discard
Introduced	16.0.R4
Platforms	All

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force-vc-forwarding *keyword*

Synopsis	VC forwarding action
Context	**configure** service vpls *string* mesh-sdp *string* force-vc-forwarding *keyword*
Tree	force-vc-forwarding
Options	vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag
Introduced	16.0.R1
Platforms	All

hash-label

Synopsis	Enable the **hash-label** context
Context	**configure** service vpls *string* mesh-sdp *string* hash-label
Tree	hash-label
Description	Commands in this context configure the use of hash labels for egress datapaths. For information about hash-label handling, see the "Hash labels" section of the *7450 ESS, 7750 SR, 7950 XRS, and VSR MPLS Guide*.
Notes	The following elements are part of a choice: **entropy-label** or **hash-label**.
Introduced	16.0.R1
Platforms	All

signal-capability

Synopsis	Signal hash label capability to the remote PE
Context	**configure** service vpls *string* mesh-sdp *string* hash-label signal-capability
Tree	signal-capability
Description	When configured, this command enables the signaling and negotiating of the hash label between the local and remote PE nodes. The signaling process outcome determines whether the local PE inserts the hash label on the user packets. This outcome can override the local PE configuration.
Introduced	16.0.R1
Platforms	All

igmp-snooping

Synopsis	Enter the **igmp-snooping** context
Context	**configure** service vpls *string* mesh-sdp *string* igmp-snooping

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Tree	igmp-snooping
Introduced	16.0.R1
Platforms	All

fast-leave *boolean*

Synopsis	Allow IGMP fast leave processing
Context	**configure** service vpls *string* mesh-sdp *string* igmp-snooping fast-leave *boolean*
Tree	fast-leave
Default	false
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	**configure** service vpls *string* mesh-sdp *string* igmp-snooping import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	All

maximum-number-group-sources *number*

Synopsis	Maximum group source combinations
Context	**configure** service vpls *string* mesh-sdp *string* igmp-snooping maximum-number-group-sources *number*
Tree	maximum-number-group-sources
Range	1 to 32000
Introduced	16.0.R1
Platforms	All

maximum-number-groups *number*

Synopsis	Maximum groups allowed

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Context	**configure** service vpls *string* mesh-sdp *string* igmp-snooping maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

maximum-number-sources *number*

Synopsis	Maximum sources that are allowed per group
Context	**configure** service vpls *string* mesh-sdp *string* igmp-snooping maximum-number-sources *number*
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

mcac

Synopsis	Enter the **mcac** context
Context	**configure** service vpls *string* mesh-sdp *string* igmp-snooping mcac
Tree	mcac
Introduced	16.0.R1
Platforms	All

bandwidth

Synopsis	Enter the **bandwidth** context
Context	**configure** service vpls *string* mesh-sdp *string* igmp-snooping mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	All

mandatory *(number | keyword)*

Synopsis	Pre-reserved bandwidth for all mandatory channels

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Context	**configure** service vpls *string* mesh-sdp *string* igmp-snooping mcac bandwidth mandatory *(number | keyword)*
Tree	mandatory
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

total *(number | keyword)*

Synopsis	Maximum allowed bandwidth
Context	**configure** service vpls *string* mesh-sdp *string* igmp-snooping mcac bandwidth total *(number | keyword)*
Tree	total
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	**configure** service vpls *string* mesh-sdp *string* igmp-snooping mcac interface-policy *reference*
Tree	interface-policy
Reference	**configure** mcac interface-policy *string*
Introduced	16.0.R1
Platforms	All

policy *reference*

Synopsis	Multicast CAC policy name
Context	**configure** service vpls *string* mesh-sdp *string* igmp-snooping mcac policy *reference*
Tree	policy

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Description	This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment. Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode. If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect. Hierarchical MCAC (HMCAC) is supported on two levels simultaneously: • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).
Reference	**configure** mcac policy *string*
Introduced	16.0.R1
Platforms	All

mrouter-port *boolean*

Synopsis	Operate port as a multicast router port
Context	**configure** service vpls *string* mesh-sdp *string* igmp-snooping mrouter-port *boolean*
Tree	mrouter-port
Default	false
Introduced	16.0.R1
Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** service vpls *string* mesh-sdp *string* igmp-snooping query-interval *number*
Tree	query-interval
Range	2 to 1024
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

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query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	**configure** service vpls *string* mesh-sdp *string* igmp-snooping query-last-member-interval *number*
Tree	query-last-member-interval
Range	1 to 50
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	**configure** service vpls *string* mesh-sdp *string* igmp-snooping query-response-interval *number*
Tree	query-response-interval
Range	1 to 1023
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	**configure** service vpls *string* mesh-sdp *string* igmp-snooping robust-count *number*
Tree	robust-count
Range	2 to 7
Default	2
Introduced	16.0.R1
Platforms	All

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router-alert-check *boolean*

Synopsis	Enable IP router alert check option
Context	**configure** service vpls *string* mesh-sdp *string* igmp-snooping router-alert-check *boolean*
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	All

send-queries *boolean*

Synopsis	Generate IGMP general queries
Context	**configure** service vpls *string* mesh-sdp *string* igmp-snooping send-queries *boolean*
Tree	send-queries
Default	false
Introduced	16.0.R1
Platforms	All

static

Synopsis	Enter the **static** context
Context	**configure** service vpls *string* mesh-sdp *string* igmp-snooping static
Tree	static
Introduced	16.0.R1
Platforms	All

group [group-address] *string*

Synopsis	Enter the **group** list instance
Context	**configure** service vpls *string* mesh-sdp *string* igmp-snooping static group *string*
Tree	group
Introduced	16.0.R1
Platforms	All

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[**group-address**] *string*

Synopsis	Group address of static IGMP multicast channel
Context	**configure** service vpls *string* mesh-sdp *string* igmp-snooping static group *string*
Tree	group
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [source-address] *string*

Synopsis	Add a list entry for **source**
Context	**configure** service vpls *string* mesh-sdp *string* igmp-snooping static group *string* source *string*
Tree	source
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R1
Platforms	All

[**source-address**] *string*

Synopsis	Source IP address of multicast channel sending data
Context	**configure** service vpls *string* mesh-sdp *string* igmp-snooping static group *string* source *string*
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	any source address (*,G)
Context	**configure** service vpls *string* mesh-sdp *string* igmp-snooping static group *string* starg
Tree	starg

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Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R2
Platforms	All

version *keyword*

Synopsis	IGMP protocol version
Context	**configure** service vpls *string* mesh-sdp *string* igmp-snooping version *keyword*
Tree	version
Options	1, 2, 3
Default	3
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service vpls *string* mesh-sdp *string* ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the **filter** context
Context	**configure** service vpls *string* mesh-sdp *string* ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service vpls *string* mesh-sdp *string* ingress filter ip *reference*
Tree	ip

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Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service vpls *string* mesh-sdp *string* ingress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	All

mac *reference*

Synopsis	MAC filter policy name
Context	**configure** service vpls *string* mesh-sdp *string* ingress filter mac *reference*
Tree	mac
Reference	**configure** filter mac-filter *string*
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** service vpls *string* mesh-sdp *string* ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

network

Synopsis	Enter the **network** context
Context	**configure** service vpls *string* mesh-sdp *string* ingress qos network
Tree	network

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Introduced	16.0.R1
Platforms	All

fp-redirect-group

Synopsis	Enter the **fp-redirect-group** context
Context	**configure** service vpls *string* mesh-sdp *string* ingress qos network fp-redirect-group
Tree	fp-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Name of the forwarding plane queue group template
Context	**configure** service vpls *string* mesh-sdp *string* ingress qos network fp-redirect-group group-name *reference*
Tree	group-name
Reference	**configure** qos queue-group-templates ingress queue-group *string*
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Instance of FP ingress queue group for the SDP binding
Context	**configure** service vpls *string* mesh-sdp *string* ingress qos network fp-redirect-group instance *number*
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Network policy ID
Context	**configure** service vpls *string* mesh-sdp *string* ingress qos network policy-name *reference*

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Tree	policy-name
Reference	**configure** qos network *string*
Introduced	16.0.R1
Platforms	All

vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
Context	**configure** service vpls *string* mesh-sdp *string* ingress vc-label *number*
Tree	vc-label
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

mld-snooping

Synopsis	Enter the **mld-snooping** context
Context	**configure** service vpls *string* mesh-sdp *string* mld-snooping
Tree	mld-snooping
Introduced	16.0.R1
Platforms	All

fast-leave *boolean*

Synopsis	Allow IGMP fast leave processing
Context	**configure** service vpls *string* mesh-sdp *string* mld-snooping fast-leave *boolean*
Tree	fast-leave
Default	false
Introduced	16.0.R1
Platforms	All

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import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	**configure** service vpls *string* mesh-sdp *string* mld-snooping import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	All

maximum-number-groups *number*

Synopsis	Maximum groups allowed
Context	**configure** service vpls *string* mesh-sdp *string* mld-snooping maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

mrouter-port *boolean*

Synopsis	Operate port as a multicast router port
Context	**configure** service vpls *string* mesh-sdp *string* mld-snooping mrouter-port *boolean*
Tree	mrouter-port
Default	false
Introduced	16.0.R1
Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** service vpls *string* mesh-sdp *string* mld-snooping query-interval *number*
Tree	query-interval
Range	2 to 1024
Units	seconds
Default	125

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Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	**configure** service vpls *string* mesh-sdp *string* mld-snooping query-last-member-interval *number*
Tree	query-last-member-interval
Range	1 to 50
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	**configure** service vpls *string* mesh-sdp *string* mld-snooping query-response-interval *number*
Tree	query-response-interval
Range	1 to 1023
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	**configure** service vpls *string* mesh-sdp *string* mld-snooping robust-count *number*
Tree	robust-count
Range	2 to 7
Default	2
Introduced	16.0.R1

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Platforms	All

router-alert-check *boolean*

Synopsis	Enable IP router alert check option
Context	**configure** service vpls *string* mesh-sdp *string* mld-snooping router-alert-check *boolean*
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	All

send-queries *boolean*

Synopsis	Generate IGMP general queries
Context	**configure** service vpls *string* mesh-sdp *string* mld-snooping send-queries *boolean*
Tree	send-queries
Default	false
Introduced	16.0.R1
Platforms	All

static

Synopsis	Enter the **static** context
Context	**configure** service vpls *string* mesh-sdp *string* mld-snooping static
Tree	static
Introduced	16.0.R1
Platforms	All

group [group-address] *string*

Synopsis	Enter the **group** list instance
Context	**configure** service vpls *string* mesh-sdp *string* mld-snooping static group *string*
Tree	group
Introduced	16.0.R1
Platforms	All

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[**group-address**] *string*

Synopsis	Group address of multicast channel
Context	**configure** service vpls *string* mesh-sdp *string* mld-snooping static group *string*
Tree	group
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [source-address] *string*

Synopsis	Add a list entry for **source**
Context	**configure** service vpls *string* mesh-sdp *string* mld-snooping static group *string* source *string*
Tree	source
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R1
Platforms	All

[**source-address**] *string*

Synopsis	Source IP address
Context	**configure** service vpls *string* mesh-sdp *string* mld-snooping static group *string* source *string*
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	any source address (*,G)
Context	**configure** service vpls *string* mesh-sdp *string* mld-snooping static group *string* starg
Tree	starg
Notes	The following elements are part of a mandatory choice: **source** or **starg**.

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Introduced	16.0.R2
Platforms	All

version *keyword*

Synopsis	Version of MLD running on the SAP or SDP
Context	**configure** service vpls *string* mesh-sdp *string* mld-snooping version *keyword*
Tree	version
Options	1, 2
Default	2
Introduced	16.0.R1
Platforms	All

mrp

Synopsis	Enter the **mrp** context
Context	**configure** service vpls *string* mesh-sdp *string* mrp
Tree	mrp
Introduced	20.10.R1
Platforms	All

join-time *number*

Synopsis	Maximum rate for attribute join messages sent on SDP
Context	**configure** service vpls *string* mesh-sdp *string* mrp join-time *number*
Tree	join-time
Range	1 to 10
Units	deciseconds
Default	2
Introduced	20.10.R1
Platforms	All

leave-all-time *number*

Synopsis	Frequency of LeaveAll PDUs by LeaveAll state machine

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Context	**configure** service vpls *string* mesh-sdp *string* mrp leave-all-time *number*
Tree	leave-all-time
Range	60 to 300
Units	deciseconds
Default	100
Introduced	20.10.R1
Platforms	All

leave-time *number*

Synopsis	Time in LV state before transition to MT state
Context	**configure** service vpls *string* mesh-sdp *string* mrp leave-time *number*
Tree	leave-time
Range	30 to 60
Units	deciseconds
Default	30
Introduced	20.10.R1
Platforms	All

periodic-time *number*

Synopsis	Frequency of periodic events generated by state machine
Context	**configure** service vpls *string* mesh-sdp *string* mrp periodic-time *number*
Tree	periodic-time
Range	10 to 100
Units	deciseconds
Default	10
Introduced	20.10.R1
Platforms	All

periodic-timer *boolean*

Synopsis	Enable the Periodic Transmission Timer
Context	**configure** service vpls *string* mesh-sdp *string* mrp periodic-timer *boolean*
Tree	periodic-timer

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Default	false
Introduced	20.10.R1
Platforms	All

policy *reference*

Synopsis	MRP policy to control Group B-MAC attributes
Context	**configure** service vpls *string* mesh-sdp *string* mrp policy *reference*
Tree	policy
Reference	**configure** service mrp policy *string*
Introduced	20.10.R1
Platforms	All

pbb

Synopsis	Enter the **pbb** context
Context	**configure** service vpls *string* mesh-sdp *string* pbb
Tree	pbb
Introduced	20.10.R1
Platforms	All

fault-propagation

Synopsis	Enter the **fault-propagation** context
Context	**configure** service vpls *string* mesh-sdp *string* pbb fault-propagation
Tree	fault-propagation
Introduced	20.10.R1
Platforms	All

backbone-mac-address [address] *string*

Synopsis	Add a list entry for **backbone-mac-address**
Context	**configure** service vpls *string* mesh-sdp *string* pbb fault-propagation backbone-mac-address *string*
Tree	backbone-mac-address

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Introduced	20.10.R1
Platforms	All

[**address**] *string*

Synopsis	Backbone MAC address
Context	**configure** service vpls *string* mesh-sdp *string* pbb fault-propagation backbone-mac-address *string*
Tree	backbone-mac-address
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

backbone-mac-name [name] *reference*

Synopsis	Add a list entry for **backbone-mac-name**
Context	**configure** service vpls *string* mesh-sdp *string* pbb fault-propagation backbone-mac-name *reference*
Tree	backbone-mac-name
Introduced	20.10.R1
Platforms	All

[**name**] *reference*

Synopsis	Backbone MAC address name
Context	**configure** service vpls *string* mesh-sdp *string* pbb fault-propagation backbone-mac-name *reference*
Tree	backbone-mac-name
Reference	**configure** service pbb mac *string*
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

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vc-type *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Type of virtual circuit (VC) associated with the SDP binding; VPLS not supported
Context	**configure** service vpls *string* mesh-sdp *string* vc-type *keyword*
Tree	vc-type
Options	ether, vlan
Default	ether
Introduced	16.0.R1
Platforms	All

vlan-vc-tag *number*

Synopsis	SDP bind VC tag
Context	**configure** service vpls *string* mesh-sdp *string* vlan-vc-tag *number*
Tree	vlan-vc-tag
Range	0 to 4094
Introduced	16.0.R1
Platforms	All

mfib

Synopsis	Enter the **mfib** context
Context	**configure** service vpls *string* mfib
Tree	mfib
Introduced	16.0.R1
Platforms	All

table

Synopsis	Enter the **table** context
Context	**configure** service vpls *string* mfib table
Tree	table
Introduced	16.0.R1

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Platforms	All

high-wmark *number*

Synopsis	High watermark for the MFIB table
Context	**configure** service vpls *string* mfib table high-wmark *number*
Tree	high-wmark
Range	0 to 100
Default	95
Introduced	16.0.R1
Platforms	All

low-wmark *number*

Synopsis	Low watermark for the MFIB table
Context	**configure** service vpls *string* mfib table low-wmark *number*
Tree	low-wmark
Range	0 to 100
Default	90
Introduced	16.0.R1
Platforms	All

size *number*

Synopsis	Maximum SG entries in the MFIB
Context	**configure** service vpls *string* mfib table size *number*
Tree	size
Range	1 to 40959
Introduced	16.0.R1
Platforms	All

mld-snooping

Synopsis	Enter the **mld-snooping** context
Context	**configure** service vpls *string* mld-snooping

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Tree	mld-snooping
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of snooping
Context	**configure** service vpls *string* mld-snooping admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

evpn-proxy

Synopsis	Enter the **evpn-proxy** context
Context	**configure** service vpls *string* mld-snooping evpn-proxy
Tree	evpn-proxy
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of EVPN proxy
Context	**configure** service vpls *string* mld-snooping evpn-proxy admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	All

mvr

Synopsis	Enter the **mvr** context

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Context	**configure** service vpls *string* mld-snooping mvr
Tree	mvr
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MVR
Context	**configure** service vpls *string* mld-snooping mvr admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vpls *string* mld-snooping mvr description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

group-policy *string*

Synopsis	Policy that applies MVR
Context	**configure** service vpls *string* mld-snooping mvr group-policy *string*
Tree	group-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

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query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** service vpls *string* mld-snooping query-interval *number*
Tree	query-interval
Range	1 to 65535
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

query-source-address *(keyword | ipv6-address)*

Synopsis	Source IP address used in MLD queries
Context	**configure** service vpls *string* mld-snooping query-source-address *(keyword | ipv6-address)*
Tree	query-source-address
Options	system
Default	system
Introduced	16.0.R1
Platforms	All

report-source-address *string*

Synopsis	Source IP address used when generating MLD reports
Context	**configure** service vpls *string* mld-snooping report-source-address *string*
Tree	report-source-address
Introduced	16.0.R1
Platforms	All

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	**configure** service vpls *string* mld-snooping robust-count *number*
Tree	robust-count
Range	1 to 255

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Default	2
Introduced	16.0.R1
Platforms	All

mrp

Synopsis	Enter the **mrp** context
Context	**configure** service vpls *string* mrp
Tree	mrp
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MRP
Context	**configure** service vpls *string* mrp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	All

mmrp

Synopsis	Enter the **mmrp** context
Context	**configure** service vpls *string* mrp mmrp
Tree	mmrp
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MMRP
Context	**configure** service vpls *string* mrp mmrp admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Introduced	20.10.R1
Platforms	All

attribute-table

Synopsis	Enter the **attribute-table** context
Context	**configure** service vpls *string* mrp mmrp attribute-table
Tree	attribute-table
Introduced	20.10.R1
Platforms	All

high-wmark *number*

Synopsis	High watermark for the MMRP attribute table
Context	**configure** service vpls *string* mrp mmrp attribute-table high-wmark *number*
Tree	high-wmark
Range	0 to 100
Default	95
Introduced	20.10.R1
Platforms	All

low-wmark *number*

Synopsis	Low watermark for the MMRP attribute table
Context	**configure** service vpls *string* mrp mmrp attribute-table low-wmark *number*
Tree	low-wmark
Range	0 to 100
Default	90
Introduced	20.10.R1
Platforms	All

size *number*

Synopsis	Maximum number of attributes accepted by B-VPLS

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Context	**configure** service vpls *string* mrp mmrp attribute-table size *number*
Tree	size
Range	1 to 8192
Default	2048
Introduced	20.10.R1
Platforms	All

end-station-only *boolean*

Synopsis	Prevent generation or processing of MMRP messages
Context	**configure** service vpls *string* mrp mmrp end-station-only *boolean*
Tree	end-station-only
Default	false
Introduced	20.10.R1
Platforms	All

flood-time *number*

Synopsis	Time when traffic is flooded after status change
Context	**configure** service vpls *string* mrp mmrp flood-time *number*
Tree	flood-time
Range	3 to 600
Introduced	20.10.R1
Platforms	All

multicast-info-policy *reference*

Synopsis	Multicast information policy
Context	**configure** service vpls *string* multicast-info-policy *reference*
Tree	multicast-info-policy
Reference	**configure** multicast-management multicast-info-policy *string*
Introduced	16.0.R1
Platforms	All

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pbb

Synopsis	Enter the **pbb** context
Context	**configure** service vpls *string* pbb
Tree	pbb
Introduced	16.0.R1
Platforms	All

backbone-vpls [backbone-vpls-service-name] *reference*

Synopsis	Enter the **backbone-vpls** list instance
Context	**configure** service vpls *string* pbb backbone-vpls *reference*
Tree	backbone-vpls
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[**backbone-vpls-service-name**] *reference*

Synopsis	Service name
Context	**configure** service vpls *string* pbb backbone-vpls *reference*
Tree	backbone-vpls
Reference	**configure** service vpls *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fdb

Synopsis	Enter the **fdb** context
Context	**configure** service vpls *string* pbb backbone-vpls *reference* fdb
Tree	fdb
Introduced	20.2.R1
Platforms	All

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protected-src-mac-violation-action *keyword*

Synopsis	Action taken upon a relearn request for protected MAC
Context	**configure** service vpls *string* pbb backbone-vpls *reference* fdb protected-src-mac-violation-action *keyword*
Tree	protected-src-mac-violation-action
Options	discard
Introduced	20.5.R1
Platforms	All

igmp-snooping

Synopsis	Enter the **igmp-snooping** context
Context	**configure** service vpls *string* pbb backbone-vpls *reference* igmp-snooping
Tree	igmp-snooping
Introduced	16.0.R1
Platforms	All

mrouter-destination [mac-reference] *reference*

Synopsis	Add a list entry for **mrouter-destination**
Context	**configure** service vpls *string* pbb backbone-vpls *reference* igmp-snooping mrouter-destination *reference*
Tree	mrouter-destination
Introduced	16.0.R1
Platforms	All

[**mac-reference**] *reference*

Synopsis	Mac name reference
Context	**configure** service vpls *string* pbb backbone-vpls *reference* igmp-snooping mrouter-destination *reference*
Tree	mrouter-destination
Reference	**configure** service pbb mac *string*
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

isid *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Backbone VPLS ISID
Context	**configure** service vpls *string* pbb backbone-vpls *reference* isid *number*
Tree	isid
Range	0 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mesh-sdp [sdp-bind-id] *reference*

Synopsis	Enter the **mesh-sdp** list instance
Context	**configure** service vpls *string* pbb backbone-vpls *reference* mesh-sdp *reference*
Tree	mesh-sdp
Introduced	16.0.R1
Platforms	All

[**sdp-bind-id**] *reference*

Synopsis	Backbone VPLS SDP Binding ID
Context	**configure** service vpls *string* pbb backbone-vpls *reference* mesh-sdp *reference*
Tree	mesh-sdp
Reference	**configure** service vpls *string* mesh-sdp *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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igmp-snooping

Synopsis	Enter the **igmp-snooping** context
Context	**configure** service vpls *string* pbb backbone-vpls *reference* mesh-sdp *reference* igmp-snooping
Tree	igmp-snooping
Introduced	16.0.R1
Platforms	All

mrouter-port *boolean*

Synopsis	Operate port as a multicast router port
Context	**configure** service vpls *string* pbb backbone-vpls *reference* mesh-sdp *reference* igmp-snooping mrouter-port *boolean*
Tree	mrouter-port
Default	false
Introduced	16.0.R1
Platforms	All

mld-snooping

Synopsis	Enter the **mld-snooping** context
Context	**configure** service vpls *string* pbb backbone-vpls *reference* mesh-sdp *reference* mld-snooping
Tree	mld-snooping
Introduced	16.0.R1
Platforms	All

mrouter-port *boolean*

Synopsis	Operate port as a multicast router port
Context	**configure** service vpls *string* pbb backbone-vpls *reference* mesh-sdp *reference* mld-snooping mrouter-port *boolean*
Tree	mrouter-port
Default	false
Introduced	16.0.R1
Platforms	All

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mld-snooping

Synopsis	Enter the **mld-snooping** context
Context	**configure** service vpls *string* pbb backbone-vpls *reference* mld-snooping
Tree	mld-snooping
Introduced	16.0.R1
Platforms	All

mrouter-destination [mac-reference] *reference*

Synopsis	Add a list entry for **mrouter-destination**
Context	**configure** service vpls *string* pbb backbone-vpls *reference* mld-snooping mrouter-destination *reference*
Tree	mrouter-destination
Introduced	16.0.R1
Platforms	All

[**mac-reference**] *reference*

Synopsis	Mac name reference
Context	**configure** service vpls *string* pbb backbone-vpls *reference* mld-snooping mrouter-destination *reference*
Tree	mrouter-destination
Reference	**configure** service pbb mac *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

sap [sap-id] *reference*

Synopsis	Enter the **sap** list instance
Context	**configure** service vpls *string* pbb backbone-vpls *reference* sap *reference*
Tree	sap
Introduced	16.0.R1
Platforms	All

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[**sap-id**] *reference*

Synopsis	Backbone VPLS SAP
Context	**configure** service vpls *string* pbb backbone-vpls *reference* sap *reference*
Tree	sap
Reference	**configure** service vpls *string* sap *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

igmp-snooping

Synopsis	Enter the **igmp-snooping** context
Context	**configure** service vpls *string* pbb backbone-vpls *reference* sap *reference* igmp-snooping
Tree	igmp-snooping
Introduced	16.0.R1
Platforms	All

mrouter-port *boolean*

Synopsis	Operate port as a multicast router port
Context	**configure** service vpls *string* pbb backbone-vpls *reference* sap *reference* igmp-snooping mrouter-port *boolean*
Tree	mrouter-port
Default	false
Introduced	16.0.R1
Platforms	All

mld-snooping

Synopsis	Enter the **mld-snooping** context
Context	**configure** service vpls *string* pbb backbone-vpls *reference* sap *reference* mld-snooping
Tree	mld-snooping
Introduced	16.0.R1

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Platforms	All

mrouter-port *boolean*

Synopsis	Operate port as a multicast router port
Context	**configure** service vpls *string* pbb backbone-vpls *reference* sap *reference* mld-snooping mrouter-port *boolean*
Tree	mrouter-port
Default	false
Introduced	16.0.R1
Platforms	All

spoke-sdp [sdp-bind-id] *reference*

Synopsis	Enter the **spoke-sdp** list instance
Context	**configure** service vpls *string* pbb backbone-vpls *reference* spoke-sdp *reference*
Tree	spoke-sdp
Introduced	16.0.R1
Platforms	All

[**sdp-bind-id**] *reference*

Synopsis	Backbone VPLS SDP Binding ID
Context	**configure** service vpls *string* pbb backbone-vpls *reference* spoke-sdp *reference*
Tree	spoke-sdp
Reference	**configure** service vpls *string* spoke-sdp *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

igmp-snooping

Synopsis	Enter the **igmp-snooping** context
Context	**configure** service vpls *string* pbb backbone-vpls *reference* spoke-sdp *reference* igmp-snooping
Tree	igmp-snooping

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Introduced	16.0.R1
Platforms	All

mrouter-port *boolean*

Synopsis	Operate port as a multicast router port
Context	**configure** service vpls *string* pbb backbone-vpls *reference* spoke-sdp *reference* igmp-snooping mrouter-port *boolean*
Tree	mrouter-port
Default	false
Introduced	16.0.R1
Platforms	All

mld-snooping

Synopsis	Enter the **mld-snooping** context
Context	**configure** service vpls *string* pbb backbone-vpls *reference* spoke-sdp *reference* mld-snooping
Tree	mld-snooping
Introduced	16.0.R1
Platforms	All

mrouter-port *boolean*

Synopsis	Operate port as a multicast router port
Context	**configure** service vpls *string* pbb backbone-vpls *reference* spoke-sdp *reference* mld-snooping mrouter-port *boolean*
Tree	mrouter-port
Default	false
Introduced	16.0.R1
Platforms	All

force-qtag-forwarding *boolean*

Synopsis	Add an IEEE 802.1q tag after C-MAC addresses PBB header
Context	**configure** service vpls *string* pbb force-qtag-forwarding *boolean*

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Tree	force-qtag-forwarding
Default	false
Introduced	16.0.R1
Platforms	All

i-vpls-mac-flush

Synopsis	Enter the **i-vpls-mac-flush** context
Context	**configure** service vpls *string* pbb i-vpls-mac-flush
Tree	i-vpls-mac-flush
Introduced	16.0.R1
Platforms	All

bgp-evpn

Synopsis	Enter the **bgp-evpn** context
Context	**configure** service vpls *string* pbb i-vpls-mac-flush bgp-evpn
Tree	bgp-evpn
Introduced	16.0.R1
Platforms	All

send-to-bvpls *boolean*

Synopsis	Send b-VPLS EVPN flush
Context	**configure** service vpls *string* pbb i-vpls-mac-flush bgp-evpn send-to-bvpls *boolean*
Tree	send-to-bvpls
Default	false
Introduced	16.0.R1
Platforms	All

tldp

Synopsis	Enter the **tldp** context
Context	**configure** service vpls *string* pbb i-vpls-mac-flush tldp
Tree	tldp

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Introduced	16.0.R1
Platforms	All

propagate-from-bvpls *boolean*

Synopsis	Propagate MAC flush message from B-VPLS into local I-VPLS
Context	**configure** service vpls *string* pbb i-vpls-mac-flush tldp propagate-from-bvpls *boolean*
Tree	propagate-from-bvpls
Default	false
Introduced	16.0.R1
Platforms	All

send-on-bvpls-failure *boolean*

Synopsis	Send negative flush message (flush-all-from-me) on B-VPLS failure
Context	**configure** service vpls *string* pbb i-vpls-mac-flush tldp send-on-bvpls-failure *boolean*
Tree	send-on-bvpls-failure
Default	false
Introduced	16.0.R1
Platforms	All

send-to-bvpls

Synopsis	Enter the **send-to-bvpls** context
Context	**configure** service vpls *string* pbb i-vpls-mac-flush tldp send-to-bvpls
Tree	send-to-bvpls
Introduced	16.0.R1
Platforms	All

all-but-mine *boolean*

Synopsis	Generate LDP MAC withdraw message to b-VPLS
Context	**configure** service vpls *string* pbb i-vpls-mac-flush tldp send-to-bvpls all-but-mine *boolean*
Tree	all-but-mine
Default	false

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Introduced	16.0.R1
Platforms	All

all-from-me *boolean*

Synopsis	Generate LDP MAC withdraw all from me message to b-VPLS
Context	**configure** service vpls *string* pbb i-vpls-mac-flush tldp send-to-bvpls all-from-me *boolean*
Tree	all-from-me
Default	false
Introduced	16.0.R1
Platforms	All

mac-notification

Synopsis	Enter the **mac-notification** context
Context	**configure** service vpls *string* pbb mac-notification
Tree	mac-notification
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MAC notification messages
Context	**configure** service vpls *string* pbb mac-notification admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

count *number*

Synopsis	MAC notification messages count
Context	**configure** service vpls *string* pbb mac-notification count *number*
Tree	count

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Range	1 to 10
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Interval for MAC notification messages
Context	**configure** service vpls *string* pbb mac-notification interval *number*
Tree	interval
Range	1 to 100
Units	deciseconds
Introduced	16.0.R1
Platforms	All

renotify *(number | keyword)*

Synopsis	Re-notify interval for MAC-notification messages
Context	**configure** service vpls *string* pbb mac-notification renotify *(number | keyword)*
Tree	renotify
Range	240 to 840
Units	seconds
Options	none
Default	none
Introduced	16.0.R1
Platforms	All

source-bmac

Synopsis	Enter the **source-bmac** context
Context	**configure** service vpls *string* pbb source-bmac
Tree	source-bmac
Introduced	16.0.R1
Platforms	All

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address *string*

Synopsis	Base source B-MAC address for the B-VPLS
Context	**configure** service vpls *string* pbb source-bmac address *string*
Tree	address
Introduced	16.0.R1
Platforms	All

use-es-bmac-lsb *boolean*

Synopsis	Use LSB from Ethernet-segment backbone MAC
Context	**configure** service vpls *string* pbb source-bmac use-es-bmac-lsb *boolean*
Tree	use-es-bmac-lsb
Default	false
Introduced	16.0.R1
Platforms	All

use-mclag-bmac-lsb *boolean*

Synopsis	Use MC LAG backbone MAC LSB
Context	**configure** service vpls *string* pbb source-bmac use-mclag-bmac-lsb *boolean*
Tree	use-mclag-bmac-lsb
Default	false
Introduced	16.0.R1
Platforms	All

pbb-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PBB VPLS type
Context	**configure** service vpls *string* pbb-type *keyword*
Tree	pbb-type
Options	b-vpls, i-vpls
Introduced	16.0.R1

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Platforms	All

pim-snooping

Synopsis	Enable the **pim-snooping** context
Context	**configure** service vpls *string* pim-snooping
Tree	pim-snooping
Introduced	16.0.R1
Platforms	All

group-policy *string*

Synopsis	Group policy name
Context	**configure** service vpls *string* pim-snooping group-policy *string*
Tree	group-policy
String Length	1 to 255
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

hold-time *number*

Synopsis	Duration that allows the PIM-snooping switch to snoop all the PIM states in the VPLS
Context	**configure** service vpls *string* pim-snooping hold-time *number*
Tree	hold-time
Range	0 to 300
Units	seconds
Default	90
Introduced	16.0.R1
Platforms	All

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ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service vpls *string* pim-snooping ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of snooping for multicast traffic
Context	**configure** service vpls *string* pim-snooping ipv4 admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** service vpls *string* pim-snooping ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of snooping for multicast traffic
Context	**configure** service vpls *string* pim-snooping ipv6 admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

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provider-tunnel

Synopsis	Enable the **provider-tunnel** context
Context	**configure** service vpls *string* provider-tunnel
Tree	provider-tunnel
Introduced	19.7.R1
Platforms	All

inclusive

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **inclusive** context
Context	**configure** service vpls *string* provider-tunnel inclusive
Tree	inclusive
Introduced	19.7.R1
Platforms	All

admin-state *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of P2MP LSP as the I-PMSI
Context	**configure** service vpls *string* provider-tunnel inclusive admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.7.R1
Platforms	All

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data-delay-interval *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	I-PMSI data delay timer
Context	**configure** service vpls *string* provider-tunnel inclusive data-delay-interval *number*
Tree	data-delay-interval
Range	3 to 180
Units	seconds
Default	15
Introduced	19.7.R1
Platforms	All

mldp

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable/Disable MLDP
Context	**configure** service vpls *string* provider-tunnel inclusive mldp
Tree	mldp
Notes	The following elements are part of a choice: **mldp** or **rsvp**.
Introduced	19.7.R1
Platforms	All

owner *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure provider-tunnel owner
Context	**configure** service vpls *string* provider-tunnel inclusive owner *keyword*
Tree	owner
Options	bgp-ad, bgp-vpls, bgp-evpn-mpls

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Introduced	19.7.R1
Platforms	All

root-and-leaf *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure whether the provider tunnel acts as a leaf or both a root and leaf
Context	**configure** service vpls *string* provider-tunnel inclusive root-and-leaf *boolean*
Tree	root-and-leaf
Default	false
Introduced	19.7.R1
Platforms	All

rsvp

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **rsvp** context
Context	**configure** service vpls *string* provider-tunnel inclusive rsvp
Tree	rsvp
Notes	The following elements are part of a choice: **mldp** or **rsvp**.
Introduced	19.7.R1
Platforms	All

lsp-template *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure LSP template name
Context	**configure** service vpls *string* provider-tunnel inclusive rsvp lsp-template *reference*

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Tree	lsp-template
Reference	**configure** router *string* mpls lsp-template *string*
Introduced	19.7.R1
Platforms	All

selective

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **selective** context
Context	**configure** service vpls *string* provider-tunnel selective
Tree	selective
Introduced	23.3.R1
Platforms	All

admin-state *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of the selective provider tunnel
Context	**configure** service vpls *string* provider-tunnel selective admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	23.3.R1
Platforms	All

data-delay-interval *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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Synopsis	S-PMSI data delay timer
Context	**configure** service vpls *string* provider-tunnel selective data-delay-interval *number*
Tree	data-delay-interval
Description	This command configures the S-PMSI data delay timer. The data delay interval determines the time the router takes to switch over the traffic from the Ingress Replication binds to the wildcard S-PMSI or from the wildcard S-PMSI to the S-PMSI, after the S-PMSI is created. This time should account for the time it takes for BGP to propagate the S-PMSI A-D route to the downstream PEs and the time it takes the downstream PEs to join the tree all the way up to the root.
Range	3 to 180
Units	seconds
Default	3
Introduced	23.3.R1
Platforms	All

data-threshold

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **data-threshold** context
Context	**configure** service vpls *string* provider-tunnel selective data-threshold
Tree	data-threshold
Description	Commands in this context specify the data rate threshold that triggers the switch from the inclusive provider tunnel to the selective provider tunnel for (C-S, C-G) within the group range. Optionally, PE thresholds to create or delete ng-MVPN S-PMSI may also be specified. Omitting the PE thresholds preserves the currently set value (or defaults if never set). Multiple statements (one per a unique group) are allowed in the configuration. This command is not applicable to multistream S-PMSI. This command for S-PMSI trees can also be used in EVPN services. The command options are used in the same way as in MVPN when applied to EVPN, in particular the rate and PE thresholds.
Introduced	23.3.R1
Platforms	All

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group-prefix [ip-group-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **group-prefix** list instance
Context	**configure** service vpls *string* provider-tunnel selective data-threshold group-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	group-prefix
Introduced	23.3.R1
Platforms	All

[**ip-group-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Multicast group prefix
Context	**configure** service vpls *string* provider-tunnel selective data-threshold group-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

pe-threshold-add *number*

Synopsis	Number of receiver PEs for S-PMSI tunnel creation
Context	**configure** service vpls *string* provider-tunnel selective data-threshold group-prefix *(ipv4-prefix | ipv6-prefix)* pe-threshold-add *number*
Tree	pe-threshold-add
Description	This command specifies the number of Receiver PEs for creating S-PMSI. A S-PMSI is created when the following apply: • The number of receiver PEs for a multicast group is non-zero. • The number of receiver PEs is below the threshold. • The BW threshold is satisfied.
Range	1 to 65535
Default	65535
Introduced	23.3.R1
Platforms	All

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pe-threshold-delete *number*

Synopsis	Number of receiver PEs for S-PMSI tunnel deletion
Context	**configure** service vpls *string* provider-tunnel selective data-threshold group-prefix *(ipv4-prefix | ipv6-prefix)* pe-threshold-delete *number*
Tree	pe-threshold-delete
Description	This command specifies the number of Receiver PEs to delete S-PMSI. When the number of receiver PEs for a multicast group configuration is above the threshold, S-PMSI is deleted and the multicast group is moved to IR or a wildcard S-PMSI. Nokia recommends that the delete threshold be configured to be significantly larger than the add threshold to avoid re-signaling of S-PMSI as the Receiver PE count fluctuates
Range	2 to 65535
Default	65535
Introduced	23.3.R1
Platforms	All

threshold *number*

Synopsis	Threshold rate for a group prefix
Context	**configure** service vpls *string* provider-tunnel selective data-threshold group-prefix *(ipv4-prefix | ipv6-prefix)* threshold *number*
Tree	threshold
Description	This command specifies the threshold rate for a group prefix. If the rate for a (C-S, C-G) within the specified group range exceeds the threshold, traffic for the (C-S, C-G) is switched to the selective provider tunnel.
Range	0 to 4294967294
Units	kilobps
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

maximum-p2mp-spmsi *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of P2MP S-PMSIi tunnels
Context	**configure** service vpls *string* provider-tunnel selective maximum-p2mp-spmsi *number*

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Tree	maximum-p2mp-spmsi
Description	This command specifies the maximum number of S-PMSI tunnels for the EVPN service. When the limit is reached, no more RSVP P2MP S-PMSI or LDP P2MP S-PMSI are created and traffic over the data threshold value stays on I-PMSI
Range	1 to 4000
Default	10
Introduced	23.3.R1
Platforms	All

mldp *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable MLDP
Context	**configure** service vpls *string* provider-tunnel selective mldp *boolean*
Tree	mldp
Description	When configured to **true**, this command enables the use of MLDP as a protocol for an LDP P2MP LSP that is used for forwarding Broadcast, Unicast unknown, and Multicast (BUM) packets of a VPLS or B-VPLS instance. This command is also used used for forwarding IP multicast packets of an EVPN VPLS or R-VPLS service. When configured to **false**, this command disables the use of MLDP as a protocol to set up the P2MP LSP.
Default	false
Introduced	23.3.R1
Platforms	All

owner *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Provider-tunnel selective owner
Context	**configure** service vpls *string* provider-tunnel selective owner *keyword*
Tree	owner
Description	This command selects the owner protocol of the S-PMSI tunnel in the service.

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The owner must be explicitly set before the provider tunnel can be enabled.

Options	bgp-evpn-mpls
Introduced	23.3.R1
Platforms	All

wildcard-spmsi *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable wildcard S-PMSI support
Context	**configure** service vpls *string* provider-tunnel selective wildcard-spmsi *boolean*
Tree	wildcard-spmsi
Description	When configured to **true**, the system enables RFC 6625 (C-*, C-*) S-PMSI functionality for EVPN VPLS or R-VPLS services. When enabled, (C-*, C-*) S-PMSI is used instead of I-PMSI for this EVPN VPLS or RVPLS service. The **configure service vprn pim rp auto-rp-discovery** command and this command are mutually exclusive. When configured to **false**, the system disables the (C-*, C-*) S-PMSI functionality.
Default	false
Introduced	23.3.R1
Platforms	All

proxy-arp

Synopsis	Enable the **proxy-arp** context
Context	**configure** service vpls *string* proxy-arp
Tree	proxy-arp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the proxy
Context	**configure** service vpls *string* proxy-arp admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

age-time *(number | keyword)*

Synopsis	Aging timer for proxy entries, where entries are flushed upon timer expiry
Context	**configure** service vpls *string* proxy-arp age-time *(number | keyword)*
Tree	age-time
Range	60 to 86400
Units	seconds
Options	never
Default	never
Introduced	16.0.R1
Platforms	All

duplicate-detect

Synopsis	Enter the **duplicate-detect** context
Context	**configure** service vpls *string* proxy-arp duplicate-detect
Tree	duplicate-detect
Introduced	16.0.R1
Platforms	All

anti-spoof-mac *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MAC address to replace the proxy-ARP/ND offending entry's MAC
Context	**configure** service vpls *string* proxy-arp duplicate-detect anti-spoof-mac *string*
Tree	anti-spoof-mac
Introduced	16.0.R1
Platforms	All

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hold-down-time *(number | keyword)*

Synopsis	Hold down time for a duplicate entry
Context	**configure** service vpls *string* proxy-arp duplicate-detect hold-down-time *(number | keyword)*
Tree	hold-down-time
Range	2 to 60
Units	minutes
Options	max
Default	9
Introduced	16.0.R1
Platforms	All

num-moves *number*

Synopsis	Number of moves required to declare a duplicate entry
Context	**configure** service vpls *string* proxy-arp duplicate-detect num-moves *number*
Tree	num-moves
Range	3 to 10
Default	5
Introduced	16.0.R1
Platforms	All

static-blackhole *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Consider anti-spoof MAC as black-hole static MAC in FDB
Context	**configure** service vpls *string* proxy-arp duplicate-detect static-blackhole *boolean*
Tree	static-blackhole
Default	false
Introduced	16.0.R1
Platforms	All

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window *number*

Synopsis	Time to monitor the MAC address in the anti-spoofing mechanism
Context	**configure** service vpls *string* proxy-arp duplicate-detect window *number*
Tree	window
Range	1 to 15
Units	minutes
Default	3
Introduced	16.0.R1
Platforms	All

dynamic-arp

Synopsis	Enter the **dynamic-arp** context
Context	**configure** service vpls *string* proxy-arp dynamic-arp
Tree	dynamic-arp
Introduced	16.0.R1
Platforms	All

ip-address [ipv4-address] *string*

Synopsis	Enter the **ip-address** list instance
Context	**configure** service vpls *string* proxy-arp dynamic-arp ip-address *string*
Tree	ip-address
Introduced	16.0.R1
Platforms	All

[**ipv4-address**] *string*

Synopsis	Proxy ARP IPv4 address
Context	**configure** service vpls *string* proxy-arp dynamic-arp ip-address *string*
Tree	ip-address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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mac-list *reference*

Synopsis	MAC list for the dynamic entry
Context	**configure** service vpls *string* proxy-arp dynamic-arp ip-address *string* mac-list *reference*
Tree	mac-list
Reference	**configure** service proxy-arp-nd mac-list list *string*
Introduced	16.0.R1
Platforms	All

resolve-retry-time *number*

Synopsis	Frequency at which the resolve messages are sent
Context	**configure** service vpls *string* proxy-arp dynamic-arp ip-address *string* resolve-retry-time *number*
Tree	resolve-retry-time
Range	1 to 60
Units	minutes
Default	5
Introduced	16.0.R1
Platforms	All

dynamic-populate *boolean*

Synopsis	Populate proxy ARP entries from snooped GARP/ARP/ND messages on SAPs/SDP-bindings
Context	**configure** service vpls *string* proxy-arp dynamic-populate *boolean*
Tree	dynamic-populate
Default	false
Introduced	16.0.R1
Platforms	All

evpn

Synopsis	Enter the **evpn** context
Context	**configure** service vpls *string* proxy-arp evpn
Tree	evpn

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Introduced	16.0.R1
Platforms	All

flood

Synopsis	Enter the **flood** context
Context	**configure** service vpls *string* proxy-arp evpn flood
Tree	flood
Introduced	16.0.R1
Platforms	All

gratuitous-arp *boolean*

Synopsis	Flood GARP-requests/GARP-replies to the EVPN
Context	**configure** service vpls *string* proxy-arp evpn flood gratuitous-arp *boolean*
Tree	gratuitous-arp
Default	true
Introduced	16.0.R1
Platforms	All

unknown-arp-req *boolean*

Synopsis	Flood ARP-requests (with source squelching) if there is no active proxy-ARP entry for requested IP
Context	**configure** service vpls *string* proxy-arp evpn flood unknown-arp-req *boolean*
Tree	unknown-arp-req
Default	true
Introduced	16.0.R1
Platforms	All

route-tag *number*

WARNING:
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Synopsis	Route tag used on export policies to match MAC/IP routes generated by proxy-ARP or proxy-ND module
Context	**configure** service vpls *string* proxy-arp evpn route-tag *number*
Tree	route-tag
Range	0 | 1 to 255
Default	0
Introduced	16.0.R1
Platforms	All

process-arp-probes *boolean*

Synopsis	Enable replies to DAD ARP probes
Context	**configure** service vpls *string* proxy-arp process-arp-probes *boolean*
Tree	process-arp-probes
Default	true
Introduced	22.7.R1
Platforms	All

send-refresh *(number | keyword)*

Synopsis	Time at which to send a refresh message
Context	**configure** service vpls *string* proxy-arp send-refresh *(number | keyword)*
Tree	send-refresh
Range	120 to 86400
Options	never
Default	never
Introduced	16.0.R1
Platforms	All

static-arp

Synopsis	Enter the **static-arp** context
Context	**configure** service vpls *string* proxy-arp static-arp
Tree	static-arp
Introduced	16.0.R1

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Platforms	All

ip-address [ipv4-address] *string*

Synopsis	Enter the **ip-address** list instance
Context	**configure** service vpls *string* proxy-arp static-arp ip-address *string*
Tree	ip-address
Introduced	16.0.R1
Platforms	All

[**ipv4-address**] *string*

Synopsis	Proxy ARP IPv4 address
Context	**configure** service vpls *string* proxy-arp static-arp ip-address *string*
Tree	ip-address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

mac *string*

Synopsis	Proxy ARP MAC address for static entry
Context	**configure** service vpls *string* proxy-arp static-arp ip-address *string* mac *string*
Tree	mac
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

table-size *number*

Synopsis	Maximum number of learned and static entries allowed in the proxy table of this service
Context	**configure** service vpls *string* proxy-arp table-size *number*
Tree	table-size
Range	1 to 16383
Default	250

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Introduced	16.0.R1
Platforms	All

proxy-nd

Synopsis	Enable the **proxy-nd** context
Context	**configure** service vpls *string* proxy-nd
Tree	proxy-nd
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the proxy
Context	**configure** service vpls *string* proxy-nd admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

age-time *(number | keyword)*

Synopsis	Aging timer for proxy entries, where entries are flushed upon timer expiry
Context	**configure** service vpls *string* proxy-nd age-time *(number | keyword)*
Tree	age-time
Range	60 to 86400
Units	seconds
Options	never
Default	never
Introduced	16.0.R1
Platforms	All

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duplicate-detect

Synopsis	Enter the **duplicate-detect** context
Context	**configure** service vpls *string* proxy-nd duplicate-detect
Tree	duplicate-detect
Introduced	16.0.R1
Platforms	All

anti-spoof-mac *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MAC address to replace the proxy-ARP/ND offending entry's MAC
Context	**configure** service vpls *string* proxy-nd duplicate-detect anti-spoof-mac *string*
Tree	anti-spoof-mac
Introduced	16.0.R1
Platforms	All

hold-down-time *(number | keyword)*

Synopsis	Hold down time for a duplicate entry
Context	**configure** service vpls *string* proxy-nd duplicate-detect hold-down-time *(number | keyword)*
Tree	hold-down-time
Range	2 to 60
Units	minutes
Options	max
Default	9
Introduced	16.0.R1
Platforms	All

num-moves *number*

Synopsis	Number of moves required to declare a duplicate entry
Context	**configure** service vpls *string* proxy-nd duplicate-detect num-moves *number*

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Tree	num-moves
Range	3 to 10
Default	5
Introduced	16.0.R1
Platforms	All

static-blackhole *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Consider anti-spoof MAC as black-hole static MAC in FDB
Context	**configure** service vpls *string* proxy-nd duplicate-detect static-blackhole *boolean*
Tree	static-blackhole
Default	false
Introduced	16.0.R1
Platforms	All

window *number*

Synopsis	Time to monitor the MAC address in the anti-spoofing mechanism
Context	**configure** service vpls *string* proxy-nd duplicate-detect window *number*
Tree	window
Range	1 to 15
Units	minutes
Default	3
Introduced	16.0.R1
Platforms	All

dynamic-neighbor

Synopsis	Enter the **dynamic-neighbor** context
Context	**configure** service vpls *string* proxy-nd dynamic-neighbor
Tree	dynamic-neighbor
Introduced	16.0.R1

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Platforms	All

ip-address [ipv6-address] *string*

Synopsis	Enter the **ip-address** list instance
Context	**configure** service vpls *string* proxy-nd dynamic-neighbor ip-address *string*
Tree	ip-address
Introduced	16.0.R1
Platforms	All

[**ipv6-address**] *string*

Synopsis	Proxy ND IPv6 address
Context	**configure** service vpls *string* proxy-nd dynamic-neighbor ip-address *string*
Tree	ip-address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

mac-list *reference*

Synopsis	MAC list for the dynamic entry
Context	**configure** service vpls *string* proxy-nd dynamic-neighbor ip-address *string* mac-list *reference*
Tree	mac-list
Reference	**configure** service proxy-arp-nd mac-list list *string*
Introduced	16.0.R1
Platforms	All

resolve-retry-time *number*

Synopsis	Frequency at which the resolve messages are sent
Context	**configure** service vpls *string* proxy-nd dynamic-neighbor ip-address *string* resolve-retry-time *number*
Tree	resolve-retry-time
Range	1 to 60

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Units	minutes
Default	5
Introduced	16.0.R1
Platforms	All

dynamic-populate *boolean*

Synopsis	Populate proxy ARP entries from snooped GARP/ARP/ND messages on SAPs/SDP-bindings
Context	**configure** service vpls *string* proxy-nd dynamic-populate *boolean*
Tree	dynamic-populate
Default	false
Introduced	16.0.R1
Platforms	All

evpn

Synopsis	Enter the **evpn** context
Context	**configure** service vpls *string* proxy-nd evpn
Tree	evpn
Introduced	16.0.R1
Platforms	All

advertise-neighbor-type *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Advertisement type of static or dynamic entries in EVPN
Context	**configure** service vpls *string* proxy-nd evpn advertise-neighbor-type *keyword*
Tree	advertise-neighbor-type
Description	This command enables the advertisement of static or dynamic entries that are learned as host, router, or host and router (only one option is possible in a specified service). It also determines the R flag (host or router) when sending Neighbor Advertisement (NA) messages for existing EVPN entries in the proxy-ND table. The **router-host** command option is only possible when the ARP/ND extended community is advertised along with the MAC/IP routes. It determines that both host and

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router (dynamic and static) entries are advertised in MAC/IP routes, with an indication whether the entry is host or router in the R flag. These EVPN entries are installed as host or router entries depending on the R flag of the route, and NA messages for them are sent with the proper host or router indication.

Options	router, host, router-host
Default	router
Introduced	16.0.R1
Platforms	All

flood

Synopsis	Enter the **flood** context
Context	**configure** service vpls *string* proxy-nd evpn flood
Tree	flood
Introduced	16.0.R1
Platforms	All

unknown-neighbor-advertise-host *boolean*

Synopsis	Flood host unsolicited Neighbor Advertisement (NA) replies to EVPN
Context	**configure** service vpls *string* proxy-nd evpn flood unknown-neighbor-advertise-host *boolean*
Tree	unknown-neighbor-advertise-host
Default	true
Introduced	16.0.R1
Platforms	All

unknown-neighbor-advertise-router *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Flood router unsolicited Neighbor Advertisement (NA) replies to EVPN
Context	**configure** service vpls *string* proxy-nd evpn flood unknown-neighbor-advertise-router *boolean*
Tree	unknown-neighbor-advertise-router
Default	true

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Introduced	16.0.R1
Platforms	All

unknown-neighbor-solicitation *boolean*

Synopsis	Flood unsolicited Neighbor Solicitation messages (with source squelching) into EVPN network
Context	**configure** service vpls *string* proxy-nd evpn flood unknown-neighbor-solicitation *boolean*
Tree	unknown-neighbor-solicitation
Default	true
Introduced	16.0.R1
Platforms	All

route-tag *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Route tag used on export policies to match MAC/IP routes generated by proxy-ARP or proxy-ND module
Context	**configure** service vpls *string* proxy-nd evpn route-tag *number*
Tree	route-tag
Range	0 | 1 to 255
Default	0
Introduced	16.0.R1
Platforms	All

process-dad-neighbor-solicitations *boolean*

Synopsis	Enable replies to DAD neighbor solicitations
Context	**configure** service vpls *string* proxy-nd process-dad-neighbor-solicitations *boolean*
Tree	process-dad-neighbor-solicitations
Default	true
Introduced	22.7.R1
Platforms	All

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send-refresh *(number | keyword)*

Synopsis	Time at which to send a refresh message
Context	**configure** service vpls *string* proxy-nd send-refresh *(number | keyword)*
Tree	send-refresh
Range	120 to 86400
Options	never
Default	never
Introduced	16.0.R1
Platforms	All

static-neighbor

Synopsis	Enter the **static-neighbor** context
Context	**configure** service vpls *string* proxy-nd static-neighbor
Tree	static-neighbor
Introduced	16.0.R1
Platforms	All

ip-address [ipv6-address] *string*

Synopsis	Enter the **ip-address** list instance
Context	**configure** service vpls *string* proxy-nd static-neighbor ip-address *string*
Tree	ip-address
Introduced	16.0.R1
Platforms	All

[**ipv6-address**] *string*

Synopsis	Proxy ND IPv6 address
Context	**configure** service vpls *string* proxy-nd static-neighbor ip-address *string*
Tree	ip-address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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mac *string*

Synopsis	Proxy ARP MAC address for static entry
Context	**configure** service vpls *string* proxy-nd static-neighbor ip-address *string* mac *string*
Tree	mac
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Entry type
Context	**configure** service vpls *string* proxy-nd static-neighbor ip-address *string* type *keyword*
Tree	type
Options	host, router
Default	router
Introduced	16.0.R1
Platforms	All

table-size *number*

Synopsis	Maximum number of learned and static entries allowed in the proxy table of this service
Context	**configure** service vpls *string* proxy-nd table-size *number*
Tree	table-size
Range	1 to 16383
Default	250
Introduced	16.0.R1
Platforms	All

routed-vpls

Synopsis	Enable the **routed-vpls** context
Context	**configure** service vpls *string* routed-vpls
Tree	routed-vpls
Introduced	16.0.R1

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Platforms	All

evpn-mpls-ecmp *boolean*

Synopsis	Enable ECMP behavior on R-VPLS services
Context	**configure** service vpls *string* routed-vpls evpn-mpls-ecmp *boolean*
Tree	evpn-mpls-ecmp
Default	false
Introduced	19.10.R1
Platforms	All

multicast

Synopsis	Enter the **multicast** context
Context	**configure** service vpls *string* routed-vpls multicast
Tree	multicast
Introduced	16.0.R1
Platforms	All

evpn-gateway

Synopsis	Enable the **evpn-gateway** context
Context	**configure** service vpls *string* routed-vpls multicast evpn-gateway
Tree	evpn-gateway
Introduced	21.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the multicast EVPN gateway
Context	**configure** service vpls *string* routed-vpls multicast evpn-gateway admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1

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Platforms	All

advertise *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Type of the multicast EVPN gateway
Context	**configure** service vpls *string* routed-vpls multicast evpn-gateway advertise *keyword*
Tree	advertise
Description	This command configures EVPN OISM to advertise the type of OISM gateway function in the Inclusive Multicast Ethernet Tag routes.
Options	mvpn-pim, mvpn-only, pim-only
Default	mvpn-pim
Introduced	21.10.R1
Platforms	All

dr-activation-timer *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DR activation timer for the EVPN gateway
Context	**configure** service vpls *string* routed-vpls multicast evpn-gateway dr-activation-timer *number*
Tree	dr-activation-timer
Description	This command configures the the designated router (DR) activation timer for the EVPN gateway. After the DR activation timer expires, each provider edge router (PE) runs the MEG or PEG DR election. The timer allows the PE to collect Inclusive Multicast Ethernet Tag routes from other MEG or PEG gateways and avoids running the DR election multiple times.
Range	0 to 100
Units	seconds
Default	3
Introduced	21.10.R1

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Platforms	All

non-dr-attract-traffic *keyword*

WARNING:
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Synopsis	Multicast traffic attraction option on non-DR router GW
Context	**configure** service vpls *string* routed-vpls multicast evpn-gateway non-dr-attract-traffic *keyword*
Tree	non-dr-attract-traffic
Options	none, from-evpn, from-pim-mvpn, from-evpn-pim-mvpn
Default	from-pim-mvpn
Introduced	21.10.R1
Platforms	All

ip-multicast-ecmp *boolean*

Synopsis	ECMP behaviour for multicast traffic on bgp-evpn mpls and vxlan
Context	**configure** service vpls *string* routed-vpls multicast ip-multicast-ecmp *boolean*
Tree	ip-multicast-ecmp
Default	false
Introduced	19.10.R1
Platforms	All

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service vpls *string* routed-vpls multicast ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

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forward-to-ip-interface *boolean*

Synopsis	Forward IPv4 multicast from RVPLS to L3 interface
Context	**configure** service vpls *string* routed-vpls multicast ipv4 forward-to-ip-interface *boolean*
Tree	forward-to-ip-interface
Default	false
Introduced	16.0.R1
Platforms	All

igmp-snooping

Synopsis	Enter the **igmp-snooping** context
Context	**configure** service vpls *string* routed-vpls multicast ipv4 igmp-snooping
Tree	igmp-snooping
Introduced	16.0.R1
Platforms	All

mrouter-port *boolean*

Synopsis	Operate VPLS L3 interface as a multicast router port
Context	**configure** service vpls *string* routed-vpls multicast ipv4 igmp-snooping mrouter-port *boolean*
Tree	mrouter-port
Default	false
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** service vpls *string* routed-vpls multicast ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

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forward-to-ip-interface *boolean*

Synopsis	Forward IPv6 multicast from RVPLS to L3 interface
Context	**configure** service vpls *string* routed-vpls multicast ipv6 forward-to-ip-interface *boolean*
Tree	forward-to-ip-interface
Default	false
Introduced	16.0.R1
Platforms	All

mld-snooping

Synopsis	Enter the **mld-snooping** context
Context	**configure** service vpls *string* routed-vpls multicast ipv6 mld-snooping
Tree	mld-snooping
Introduced	16.0.R1
Platforms	All

mrouter-port *boolean*

Synopsis	Operate VPLS L3 interface as a multicast router port
Context	**configure** service vpls *string* routed-vpls multicast ipv6 mld-snooping mrouter-port *boolean*
Tree	mrouter-port
Default	false
Introduced	16.0.R1
Platforms	All

vxlan-ipv4-tep-ecmp *boolean*

Synopsis	Use ECMP on VXLAN IPv4 destinations for R-VPLS services
Context	**configure** service vpls *string* routed-vpls vxlan-ipv4-tep-ecmp *boolean*
Tree	vxlan-ipv4-tep-ecmp
Default	false
Introduced	16.0.R1
Platforms	All

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sap [sap-id] *string*

Synopsis	Enter the **sap** list instance
Context	**configure** service vpls *string* sap *string*
Tree	sap
Introduced	16.0.R1
Platforms	All

[**sap-id**] *string*

Synopsis	SAP identifier
Context	**configure** service vpls *string* sap *string*
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

accounting-policy *reference*

Synopsis	Accounting policy
Context	**configure** service vpls *string* sap *string* accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the SAP
Context	**configure** service vpls *string* sap *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1

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Platforms	All

anti-spoof *keyword*

Synopsis	Type of anti-spoof filtering
Context	**configure** service vpls *string* sap *string* anti-spoof *keyword*
Tree	anti-spoof
Options	source-ip-addr, source-mac-addr, source-ip-and-mac-addr, next-hop-ip-and-mac-addr
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Application profile name
Context	**configure** service vpls *string* sap *string* app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

arp-host

Synopsis	Enter the **arp-host** context
Context	**configure** service vpls *string* sap *string* arp-host
Tree	arp-host
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of ARP hosts
Context	**configure** service vpls *string* sap *string* arp-host admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-limit *number*

Synopsis	Maximum number of ARP triggered hosts
Context	**configure** service vpls *string* sap *string* arp-host host-limit *number*
Tree	host-limit
Range	1 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-auth-interval *number*

Synopsis	Minimum authentication interval
Context	**configure** service vpls *string* sap *string* arp-host min-auth-interval *number*
Tree	min-auth-interval
Range	1 to 6000
Units	minutes
Default	15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arp-reply-agent *keyword*

Synopsis	Enable arp-reply-agent function
Context	**configure** service vpls *string* sap *string* arp-reply-agent *keyword*
Tree	arp-reply-agent
Options	true, with-subscr-ident
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	SAP bandwidth
Context	**configure** service vpls *string* sap *string* bandwidth *number*

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Tree	bandwidth
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

bgp-vpls-mh-veid *number*

Synopsis	BGP-VPLS multi-homing VE-ID
Context	**configure** service vpls *string* sap *string* bgp-vpls-mh-veid *number*
Tree	bgp-vpls-mh-veid
Description	This command specifies a VE ID that is configured on SAPs that are part of an EVPN single-active Ethernet Segment. The configuration of this command allows the advertisement of L2VPN routes that indicate the state of multi-homed SAPs to the remote BGP-VPLS PEs, which can trigger a MAC flush operation on the service to avoid traffic from being blackholed when a failure occurs in the active PE. When unconfigured from the SAP, L2VPN routes are withdrawn, which causes MAC flush processing on the remote BGP-VPLS.
Range	1 to 65535
Introduced	20.5.R1
Platforms	All

bpdu-translation *keyword*

Synopsis	Bpdu translation on this SAP
Context	**configure** service vpls *string* sap *string* bpdu-translation *keyword*
Tree	bpdu-translation
Options	auto, pvst, stp, pvst-rw, auto-rw
Introduced	16.0.R1
Platforms	All

calling-station-id *string*

Synopsis	Calling station ID
Context	**configure** service vpls *string* sap *string* calling-station-id *string*
Tree	calling-station-id
String Length	1 to 64

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cflowd *boolean*

Synopsis	Enable Cflowd collection and analysis on this SAP
Context	**configure** service vpls *string* sap *string* cflowd *boolean*
Tree	cflowd
Default	false
Introduced	16.0.R1
Platforms	All

collect-stats *boolean*

Synopsis	Collect accounting statistics
Context	**configure** service vpls *string* sap *string* collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

cpu-protection

Synopsis	Enter the **cpu-protection** context
Context	**configure** service vpls *string* sap *string* cpu-protection
Tree	cpu-protection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

eth-cfm-monitoring

Synopsis	Enable the **eth-cfm-monitoring** context
Context	**configure** service vpls *string* sap *string* cpu-protection eth-cfm-monitoring
Tree	eth-cfm-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

aggregate

Synopsis	Apply rate limit to the sum of the per peer packet rates
Context	**configure** service vpls *string* sap *string* cpu-protection eth-cfm-monitoring aggregate
Tree	aggregate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

car

Synopsis	Ignore Ethernet CFM packets when enforcing overall rate
Context	**configure** service vpls *string* sap *string* cpu-protection eth-cfm-monitoring car
Tree	car
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	**configure** service vpls *string* sap *string* cpu-protection mac-monitoring
Tree	mac-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

policy-id *reference*

Synopsis	CPM protection policy
Context	**configure** service vpls *string* sap *string* cpu-protection policy-id *reference*
Tree	policy-id
Reference	**configure** system security cpu-protection policy *number*
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** service vpls *string* sap *string* description *string*
Tree	description
String Length	1 to 160
Introduced	16.0.R1
Platforms	All

dhcp

Synopsis	Enter the **dhcp** context
Context	**configure** service vpls *string* sap *string* dhcp
Tree	dhcp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of DHCP
Context	**configure** service vpls *string* sap *string* dhcp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vpls *string* sap *string* dhcp description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1

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Platforms	All

lease-populate

Synopsis	Enter the **lease-populate** context
Context	**configure** service vpls *string* sap *string* dhcp lease-populate
Tree	lease-populate
Introduced	16.0.R1
Platforms	All

max-leases *number*

Synopsis	Maximum number of DHCPv4 leases
Context	**configure** service vpls *string* sap *string* dhcp lease-populate max-leases *number*
Tree	max-leases
Range	0 to 131071
Introduced	16.0.R1
Platforms	All

option-82

Synopsis	Enter the **option-82** context
Context	**configure** service vpls *string* sap *string* dhcp option-82
Tree	option-82
Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	16.0.R1
Platforms	All

action *keyword*

Synopsis	Action to take with received DHCP Option 82
Context	**configure** service vpls *string* sap *string* dhcp option-82 action *keyword*
Tree	action
Options	replace, drop, keep

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Default	keep
Introduced	16.0.R1
Platforms	All

circuit-id

Synopsis	Enter the **circuit-id** context
Context	**configure** service vpls *string* sap *string* dhcp option-82 circuit-id
Tree	circuit-id
Introduced	16.0.R1
Platforms	All

ascii-tuple

Synopsis	Use the ASCII-encoded tuple for the circuit ID
Context	**configure** service vpls *string* sap *string* dhcp option-82 circuit-id ascii-tuple
Tree	ascii-tuple
Notes	The following elements are part of a choice: **ascii-tuple**, **hex-string**, **none**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	All

hex-string *string*

Synopsis	User-defined hexadeciaml value of the option
Context	**configure** service vpls *string* sap *string* dhcp option-82 circuit-id hex-string *string*
Tree	hex-string
String Length	1 to 66
Notes	The following elements are part of a choice: **ascii-tuple**, **hex-string**, **none**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	All

none

Synopsis	Do not include the circuit ID

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Context	**configure** service vpls *string* sap *string* dhcp option-82 circuit-id none
Tree	none
Notes	The following elements are part of a choice: **ascii-tuple**, **hex-string**, **none**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	All

vlan-ascii-tuple

Synopsis	Include the VLAN ID and dot1p bits in the ASCII tuple
Context	**configure** service vpls *string* sap *string* dhcp option-82 circuit-id vlan-ascii-tuple
Tree	vlan-ascii-tuple
Description	When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet. When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty.
Notes	The following elements are part of a choice: **ascii-tuple**, **hex-string**, **none**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	All

remote-id

Synopsis	Enter the **remote-id** context
Context	**configure** service vpls *string* sap *string* dhcp option-82 remote-id
Tree	remote-id
Description	Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).
Introduced	16.0.R1
Platforms	All

ascii-string *string*

Synopsis	User-defined ASCII string for the remote ID
Context	**configure** service vpls *string* sap *string* dhcp option-82 remote-id ascii-string *string*
Tree	ascii-string

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String Length	1 to 32
Notes	The following elements are part of a choice: **ascii-string**, **hex-string**, **mac**, or **none**.
Introduced	16.0.R1
Platforms	All

hex-string *string*

Synopsis	Option as a hexadecimal string
Context	**configure** service vpls *string* sap *string* dhcp option-82 remote-id hex-string *string*
Tree	hex-string
String Length	1 to 66
Notes	The following elements are part of a choice: **ascii-string**, **hex-string**, **mac**, or **none**.
Introduced	16.0.R1
Platforms	All

mac

Synopsis	Use the MAC address for the remote ID
Context	**configure** service vpls *string* sap *string* dhcp option-82 remote-id mac
Tree	mac
Notes	The following elements are part of a choice: **ascii-string**, **hex-string**, **mac**, or **none**.
Introduced	16.0.R1
Platforms	All

none

Synopsis	Do not include the remote ID
Context	**configure** service vpls *string* sap *string* dhcp option-82 remote-id none
Tree	none
Notes	The following elements are part of a choice: **ascii-string**, **hex-string**, **mac**, or **none**.
Introduced	16.0.R1
Platforms	All

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vendor-specific-option

Synopsis	Enter the **vendor-specific-option** context
Context	**configure** service vpls *string* sap *string* dhcp option-82 vendor-specific-option
Tree	vendor-specific-option
Description	Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.
Introduced	16.0.R1
Platforms	All

client-mac-address *boolean*

Synopsis	Send the MAC address in the VSO
Context	**configure** service vpls *string* sap *string* dhcp option-82 vendor-specific-option client-mac-address *boolean*
Tree	client-mac-address
Default	false
Introduced	16.0.R1
Platforms	All

sap-id *boolean*

Synopsis	Send SAP ID in the sub-option of the DHCP relay packet
Context	**configure** service vpls *string* sap *string* dhcp option-82 vendor-specific-option sap-id *boolean*
Tree	sap-id
Default	false
Introduced	16.0.R1
Platforms	All

service-id *boolean*

Synopsis	Send the service ID in the Vendor Specific Option
Context	**configure** service vpls *string* sap *string* dhcp option-82 vendor-specific-option service-id *boolean*
Tree	service-id
Default	false

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Introduced	16.0.R1
Platforms	All

string *string*

Synopsis	User-defined ASCII string for the VSO
Context	**configure** service vpls *string* sap *string* dhcp option-82 vendor-specific-option string *string*
Tree	string
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

system-id *boolean*

Synopsis	Send the system ID in the VSO
Context	**configure** service vpls *string* sap *string* dhcp option-82 vendor-specific-option system-id *boolean*
Tree	system-id
Default	false
Introduced	16.0.R1
Platforms	All

proxy-server

Synopsis	Enter the **proxy-server** context
Context	**configure** service vpls *string* sap *string* dhcp proxy-server
Tree	proxy-server
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the DHCP proxy server
Context	**configure** service vpls *string* sap *string* dhcp proxy-server admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

emulated-server *string*

Synopsis	IP address used as DHCP server address in SAP context
Context	**configure** service vpls *string* sap *string* dhcp proxy-server emulated-server *string*
Tree	emulated-server
Introduced	16.0.R1
Platforms	All

lease-time

Synopsis	Enter the **lease-time** context
Context	**configure** service vpls *string* sap *string* dhcp proxy-server lease-time
Tree	lease-time
Introduced	16.0.R1
Platforms	All

radius-override *boolean*

Synopsis	Use lease time information provided by RADIUS server
Context	**configure** service vpls *string* sap *string* dhcp proxy-server lease-time radius-override *boolean*
Tree	radius-override
Default	false
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	DHCP lease time
Context	**configure** service vpls *string* sap *string* dhcp proxy-server lease-time value *number*
Tree	value

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Range	300 to 315446399
Units	seconds
Introduced	16.0.R1
Platforms	All

snoop *boolean*

Synopsis	Enable DHCP snooping on the SAP
Context	**configure** service vpls *string* sap *string* dhcp snoop *boolean*
Tree	snoop
Default	false
Introduced	16.0.R1
Platforms	All

dist-cpu-protection *reference*

Synopsis	Distributed CPU protection policy for SAP
Context	**configure** service vpls *string* sap *string* dist-cpu-protection *reference*
Tree	dist-cpu-protection
Reference	**configure** system security dist-cpu-protection policy *string*
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** service vpls *string* sap *string* egress
Tree	egress
Introduced	16.0.R1
Platforms	All

agg-rate

Synopsis	Enter the **agg-rate** context
Context	**configure** service vpls *string* sap *string* egress agg-rate

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Tree	agg-rate
Notes	The following elements are part of a choice: **agg-rate** or **percent-agg-rate**.
Introduced	16.0.R1
Platforms	All

adaptation-rule *keyword*

Synopsis	Adaptation rule to compute the operational PIR value when an aggregate shaper is used
Context	**configure** service vpls *string* sap *string* egress agg-rate adaptation-rule *keyword*
Tree	adaptation-rule
Options	max, min, closest
Default	closest
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

burst-limit *(number | keyword)*

Synopsis	Shaping burst size when an aggregate shaper is used
Context	**configure** service vpls *string* sap *string* egress agg-rate burst-limit *(number | keyword)*
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

limit-unused-bandwidth *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	**configure** service vpls *string* sap *string* egress agg-rate limit-unused-bandwidth *boolean*
Tree	limit-unused-bandwidth
Default	false
Introduced	16.0.R1
Platforms	All

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queue-frame-based-accounting *boolean*

Synopsis	Enable frame based accounting on policers and queues
Context	**configure** service vpls *string* sap *string* egress agg-rate queue-frame-based-accounting *boolean*
Tree	queue-frame-based-accounting
Default	false
Introduced	16.0.R1
Platforms	All

rate *number*

Synopsis	Enforced aggregate rate for all queues
Context	**configure** service vpls *string* sap *string* egress agg-rate rate *number*
Tree	rate
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

dest-mac-rewrite *string*

Synopsis	Destination MAC overwrite for unicast
Context	**configure** service vpls *string* sap *string* egress dest-mac-rewrite *string*
Tree	dest-mac-rewrite
Introduced	16.0.R5
Platforms	All

filter

Synopsis	Enter the **filter** context
Context	**configure** service vpls *string* sap *string* egress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

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ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service vpls *string* sap *string* egress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service vpls *string* sap *string* egress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	All

mac *reference*

Synopsis	MAC filter policy name
Context	**configure** service vpls *string* sap *string* egress filter mac *reference*
Tree	mac
Reference	**configure** filter mac-filter *string*
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** service vpls *string* sap *string* egress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

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policer-control-policy

Synopsis	Enter the **policer-control-policy** context
Context	**configure** service vpls *string* sap *string* egress qos policer-control-policy
Tree	policer-control-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis	Enable the **overrides** context
Context	**configure** service vpls *string* sap *string* egress qos policer-control-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

root

Synopsis	Enter the **root** context
Context	**configure** service vpls *string* sap *string* egress qos policer-control-policy overrides root
Tree	root
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate *(number | keyword)*

Synopsis	Maximum frame-based bandwidth limit
Context	**configure** service vpls *string* sap *string* egress qos policer-control-policy overrides root max-rate *(number | keyword)*
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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priority-mbs-thresholds

Synopsis	Enter the **priority-mbs-thresholds** context
Context	**configure** service vpls *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-thresh-separation *(number | keyword)*

Synopsis	Minimum amount of separation buffer space
Context	**configure** service vpls *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation *(number | keyword)*
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [priority-level] *number*

Synopsis	Enter the **priority** list instance
Context	**configure** service vpls *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*
Tree	priority
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**priority-level**] *number*

Synopsis	Priority level
Context	**configure** service vpls *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*
Tree	priority
Range	1 to 8

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution *(number | keyword)*

Synopsis	Minimum amount of cumulative buffer space allowed
Context	**configure** service vpls *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds priority *number* mbs-contribution *(number | keyword)*
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	**configure** service vpls *string* sap *string* egress qos policer-control-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos policer-control-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

qinq-mark-top-only *boolean*

Synopsis	Mark top Q-tags
Context	**configure** service vpls *string* sap *string* egress qos qinq-mark-top-only *boolean*
Tree	qinq-mark-top-only
Default	false
Introduced	16.0.R1
Platforms	All

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sap-egress

Synopsis	Enter the **sap-egress** context
Context	**configure** service vpls *string* sap *string* egress qos sap-egress
Tree	sap-egress
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the **overrides** context
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

hs-secondary-shaper *string*

Synopsis	HS Secondary Shaper
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides hs-secondary-shaper *string*
Tree	hs-secondary-shaper
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-group [group-id] *reference*

Synopsis	Enter the **hs-wrr-group** list instance
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides hs-wrr-group *reference*
Tree	hs-wrr-group
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

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[**group-id**] *reference*

Synopsis	HS WRR group identifier
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides hs-wrr-group *reference*
Tree	hs-wrr-group
Reference	**configure** qos sap-egress *string* hs-wrr-group *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-class-weight *number*

Synopsis	Class weight override of the WRR group
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides hs-wrr-group *reference* hs-class-weight *number*
Tree	hs-class-weight
Range	1 | 2 | 4 | 8
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

percent-rate *decimal-number*

Synopsis	Percent rate override applied to the HS WRR group
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides hs-wrr-group *reference* percent-rate *decimal-number*
Tree	percent-rate
Range	0.01 to 100.00
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

rate *(number | keyword)*

Synopsis	Scheduling rate override applied to the HS WRR group
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides hs-wrr-group *reference* rate *(number | keyword)*

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Tree	rate
Range	1 to 2000000000
Units	kilobps
Options	max
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policer [policer-id] *reference*

Synopsis	Enter the **policer** list instance
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides policer *reference*
Tree	policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**policer-id**] *reference*

Synopsis	Policer unique ID
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides policer *reference*
Tree	policer
Reference	**configure** qos sap-egress *string* policer *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs *(number | keyword)*

Synopsis	CBS
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides policer *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 268435456
Units	bytes

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Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides policer *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides policer *reference* packet-byte-offset *number*
Tree	packet-byte-offset
Range	-64 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides policer *reference* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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cir *decimal-number*

Synopsis	CIR percent rate
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides policer *reference* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *decimal-number*

Synopsis	PIR percent rate
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides policer *reference* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis	Enter the **rate** context
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides policer *reference* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *(number | keyword)*

Synopsis	CIR rate
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides policer *reference* rate cir *(number | keyword)*
Tree	cir

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Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *(number | keyword)*

Synopsis	PIR rate
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides policer *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides policer *reference* stat-mode *keyword*
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue [queue-id] *reference*

Synopsis	Enter the **queue** list instance
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference*
Tree	queue
Introduced	16.0.R1

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Platforms	All

[**queue-id**] *reference*

Synopsis	Policer unique ID
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference*
Tree	queue
Reference	**configure** qos sap-egress *string* queue *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference* adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference* adaptation-rule cir *keyword*
Tree	cir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value

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Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

avg-frame-overhead *decimal-number*

Synopsis	Average packet-to-frame encapsulation overhead
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference* avg-frame-overhead *decimal-number*
Tree	avg-frame-overhead
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

burst-limit *(number | keyword)*

Synopsis	Explicit shaping burst size for the queue
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference* burst-limit *(number | keyword)*
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

cbs *(number | keyword)*

Synopsis	CBS
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 1048576

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Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the **drop-tail** context
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference* drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the **low** context
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference* drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs *(number | keyword)*

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference* drop-tail low percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

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hs-class-weight *number*

Synopsis	Class weight override for the queue
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference* hs-class-weight *number*
Tree	hs-class-weight
Range	1 | 2 | 4 | 8
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wred-queue

Synopsis	Enter the **hs-wred-queue** context
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference* hs-wred-queue
Tree	hs-wred-queue
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policy *reference*

Synopsis	Slope policy applied to the HSQ queue group queue
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference* hs-wred-queue policy *reference*
Tree	policy
Reference	**configure** qos slope-policy *string*
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-weight *number*

Synopsis	WRR weight to parent with the queue into the scheduler
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference* hs-wrr-weight *number*
Tree	hs-wrr-weight
Range	1 to 127
Default	1

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Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the **monitor-queue-depth** context
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference* monitor-queue-depth
Tree	monitor-queue-depth
Introduced	20.10.R1
Platforms	All

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference* monitor-queue-depth fast-polling *boolean*
Tree	fast-polling
Description	When configured to **true**, this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth.
Default	false
Introduced	20.10.R1
Platforms	All

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violation-threshold *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference* monitor-queue-depth violation-threshold *decimal-number*
Tree	violation-threshold
Description	This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

parent

Synopsis	Enter the **parent** context
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference* parent
Tree	parent
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	PIR parameter that overrides parent for queue group
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference* parent weight *number*
Tree	weight

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Range	0 to 100
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

cir *decimal-number*

Synopsis	CIR percent rate
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	PIR percent rate
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

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rate

Synopsis	Enter the **rate** context
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	CIR rate
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	PIR rate
Context	**configure** service vpls *string* sap *string* egress qos sap-egress overrides queue *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Policy ID to associate with SAP for mirrored service

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Context	**configure** service vpls *string* sap *string* egress qos sap-egress policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-egress *string*
Introduced	16.0.R1
Platforms	All

port-redirect-group

Synopsis	Enter the **port-redirect-group** context
Context	**configure** service vpls *string* sap *string* egress qos sap-egress port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Name of the queue group redirect list policy
Context	**configure** service vpls *string* sap *string* egress qos sap-egress port-redirect-group group-name *reference*
Tree	group-name
Reference	**configure** qos queue-group-templates egress queue-group *string*
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Instance of port queue group
Context	**configure** service vpls *string* sap *string* egress qos sap-egress port-redirect-group instance *number*
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

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scheduler-policy

Synopsis	Enter the **scheduler-policy** context
Context	**configure** service vpls *string* sap *string* egress qos scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the **overrides** context
Context	**configure** service vpls *string* sap *string* egress qos scheduler-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

scheduler [scheduler-name] *string*

Synopsis	Enter the **scheduler** list instance
Context	**configure** service vpls *string* sap *string* egress qos scheduler-policy overrides scheduler *string*
Tree	scheduler
Introduced	16.0.R1
Platforms	All

[**scheduler-name**] *string*

Synopsis	Scheduler name
Context	**configure** service vpls *string* sap *string* egress qos scheduler-policy overrides scheduler *string*
Tree	scheduler
Description	This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.

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If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.

If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

parent

Synopsis	Enter the **parent** context
Context	**configure** service vpls *string* sap *string* egress qos scheduler-policy overrides scheduler *string* parent
Tree	parent
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	**configure** service vpls *string* sap *string* egress qos scheduler-policy overrides scheduler *string* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	**configure** service vpls *string* sap *string* egress qos scheduler-policy overrides scheduler *string* parent weight *number*
Tree	weight
Range	0 to 100

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Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** service vpls *string* sap *string* egress qos scheduler-policy overrides scheduler *string* rate
Tree	rate
Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	CIR at which the queue it to operate
Context	**configure** service vpls *string* sap *string* egress qos scheduler-policy overrides scheduler *string* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	PIR at which the queue is to operate
Context	**configure** service vpls *string* sap *string* egress qos scheduler-policy overrides scheduler *string* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

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policy-name *reference*

Synopsis	Scheduler policy name
Context	**configure** service vpls *string* sap *string* egress qos scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos scheduler-policy *string*
Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the **eth-cfm** context
Context	**configure** service vpls *string* sap *string* eth-cfm
Tree	eth-cfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-fc-stats

Synopsis	Enter the **collect-lmm-fc-stats** context
Context	**configure** service vpls *string* sap *string* eth-cfm collect-lmm-fc-stats
Tree	collect-lmm-fc-stats
Description	Commands in this context configure per forwarding class (FC) LMM information collection. The commands **fc-in-profile** and **fc** in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively. This command and the **collect-lmm-stats** command are mutually exclusive when there is entity resource contention.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc *keyword*

Synopsis	Forwarding class name for profile-unaware counter
Context	**configure** service vpls *string* sap *string* eth-cfm collect-lmm-fc-stats fc *keyword*

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Tree	fc
Description	This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter. An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the **fc-in-profile** command under the **collect-lmm-fc-stats** context. When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc-in-profile *keyword*

Synopsis	Forwarding class name for profile-aware counter
Context	**configure** service vpls *string* sap *string* eth-cfm collect-lmm-fc-stats fc-in-profile *keyword*
Tree	fc-in-profile
Description	This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter. An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the **fc** command under the **collect-lmm-fc-stats** context. When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	**configure** service vpls *string* sap *string* eth-cfm collect-lmm-stats *boolean*
Tree	collect-lmm-stats

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Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*

Synopsis	Enter the **mep** list instance
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string* association *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais

Synopsis	Enable the **ais** context
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais
Tree	ais
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

client-meg-level *number*

Synopsis	Client MEG level for AIS message generation
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais client-meg-level *number*
Tree	client-meg-level

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Range	1 to 7
Max. Instances	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interface-support *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais interface-support *boolean*
Tree	interface-support
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number*

Synopsis	Transmission interval for AIS messages
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais interval *number*
Tree	interval
Range	1 | 60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais low-priority-defect *keyword*
Tree	low-priority-defect
Options	all-def, mac-rem-err-xcon
Default	all-def

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Priority of the AIS messages generated by the node
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais priority *number*
Tree	priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the **alarm-notification** context
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification
Tree	alarm-notification
Description	Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm. Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-alarm-time *number*
Tree	fng-alarm-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-reset-time *number*
Tree	fng-reset-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis	Generate CCM messages
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm *boolean*
Tree	ccm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-ltm-priority *number*
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-padding-size *number*
Tree	ccm-padding-size
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU. This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through **configure eth-cfm domain association ccm-interval)** is less than 1 second.
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cfm-vlan-tag *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* cfm-vlan-tag *string*
Tree	cfm-vlan-tag
String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

csf

Synopsis	Enable the **csf** context
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* csf
Tree	csf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* csf multiplier *decimal-number*
Tree	multiplier
Range	0.0 | 2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

direction *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Direction the MEP faces
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* direction *keyword*
Tree	direction
Options	down, up
Default	down
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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eth-test

Synopsis	Enable the **eth-test** context
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the **oam eth-cfm eth-test** command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test bit-error-threshold *number*
Tree	bit-error-threshold
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis	Enter the **test-pattern** context
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum

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Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern crc-tlv *boolean*
Tree	crc-tlv
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern pattern *keyword*
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fault-propagation *keyword*

Synopsis	Fault propagation for the MEP
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* fault-propagation *keyword*
Tree	fault-propagation
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the **grace** context
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace
Tree	grace

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Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the **eth-ed** context
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed max-rx-defect-window *number*
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed priority *number*
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed rx-eth-ed *boolean*
Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed tx-eth-ed *boolean*
Tree	tx-eth-ed
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis	Enter the **eth-vsm-grace** context
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP

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Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace rx-eth-vsm-grace *boolean*
Tree	rx-eth-vsm-grace
Description	When configured to **true**, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to **false**, the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace tx-eth-vsm-grace *boolean*
Tree	tx-eth-vsm-grace
Description	When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards. The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED). When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lbm-svc-act-responder *boolean*

Synopsis	Process service activation streams in ETH-CFM LBM
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* lbm-svc-act-responder *boolean*
Tree	lbm-svc-act-responder
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* low-priority-defect *keyword*
Tree	low-priority-defect
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MEP
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* mac-address *string*
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* one-way-delay-threshold *number*
Tree	one-way-delay-threshold
Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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primary-vlan *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MEP provisioned using MA primary VLAN ID
Context	**configure** service vpls *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* primary-vlan *boolean*
Tree	primary-vlan
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mip primary-vlan *(number | keyword)*

Synopsis	Enter the **mip** list instance
Context	**configure** service vpls *string* sap *string* eth-cfm mip primary-vlan *(number | keyword)*
Tree	mip
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

primary-vlan *(number | keyword)*

Synopsis	VLAN ID to which the MIP is attached
Context	**configure** service vpls *string* sap *string* eth-cfm mip primary-vlan *(number | keyword)*
Tree	mip
Description	This command provides an option for linking a MIP with a Primary VLAN number or none. When the **none** option is provided, the MIP does not include the primary vlan.
Range	1 to 4094
Options	none
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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cfm-vlan-tag *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	**configure** service vpls *string* sap *string* eth-cfm mip primary-vlan *(number | keyword)* cfm-vlan-tag *string*
Tree	cfm-vlan-tag
Description	This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration.
String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MIP
Context	**configure** service vpls *string* sap *string* eth-cfm mip primary-vlan *(number | keyword)* mac-address *string*
Tree	mac-address
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch-ingress-ctag-levels *number*

Synopsis	Squelch levels using additional VLAN C-Tag space
Context	**configure** service vpls *string* sap *string* eth-cfm squelch-ingress-ctag-levels *number*
Tree	squelch-ingress-ctag-levels
Description	This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding plus an additional VLAN, up to a maximum tag length of two tags. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option. The list of levels must be a complete contiguous list from 0 up to the highest level to be dropped.

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Range	0 to 7
Max. Instances	8
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch-ingress-levels *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded
Context	**configure** service vpls *string* sap *string* eth-cfm squelch-ingress-levels *number*
Tree	squelch-ingress-levels
Description	This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option. The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.
Range	0 to 7
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vmep-filter *boolean*

Synopsis	Suppress eth-cfm PDUs based on level lower than or equal to configured Virtual MEP
Context	**configure** service vpls *string* sap *string* eth-cfm vmep-filter *boolean*
Tree	vmep-filter
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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eth-ring *number*

WARNING:
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Synopsis	Ethernet ring operation
Context	**configure** service vpls *string* sap *string* eth-ring *number*
Tree	eth-ring
Range	1 to 128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

etree-leaf *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable etree leaf access-circuit status
Context	**configure** service vpls *string* sap *string* etree-leaf *boolean*
Tree	etree-leaf
Default	false
Introduced	16.0.R1
Platforms	All

etree-root-leaf-tag

Synopsis	Enable the **etree-root-leaf-tag** context
Context	**configure** service vpls *string* sap *string* etree-root-leaf-tag
Tree	etree-root-leaf-tag
Introduced	16.0.R1
Platforms	All

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leaf *number*

WARNING:
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Synopsis	Leaf tag value
Context	**configure** service vpls *string* sap *string* etree-root-leaf-tag leaf *number*
Tree	leaf
Range	1 to 4094
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

fdb

Synopsis	Enter the **fdb** context
Context	**configure** service vpls *string* sap *string* fdb
Tree	fdb
Introduced	16.0.R1
Platforms	All

auto-learn-mac-protect *boolean*

Synopsis	Enable automatic update of MAC protect list
Context	**configure** service vpls *string* sap *string* fdb auto-learn-mac-protect *boolean*
Tree	auto-learn-mac-protect
Default	false
Introduced	16.0.R1
Platforms	All

auto-learn-mac-protect-exclude-list *reference*

Synopsis	Referenced MAC protect exclusion list
Context	**configure** service vpls *string* sap *string* fdb auto-learn-mac-protect-exclude-list *reference*
Tree	auto-learn-mac-protect-exclude-list

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Description	This command references the name of a MAC protect exclusion list. Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list. An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object.
Reference	**configure** service mac-list *string*
Introduced	20.5.R1
Platforms	All

discard-unknown-source *boolean*

Synopsis	Discard frames with unknown source
Context	**configure** service vpls *string* sap *string* fdb discard-unknown-source *boolean*
Tree	discard-unknown-source
Default	false
Introduced	16.0.R1
Platforms	All

discard-unprotected-dest-mac *boolean*

Synopsis	Discard packet with unprotected destination MAC address
Context	**configure** service vpls *string* sap *string* fdb discard-unprotected-dest-mac *boolean*
Tree	discard-unprotected-dest-mac
Default	false
Introduced	16.0.R1
Platforms	All

limit-mac-move *keyword*

Synopsis	MAC move
Context	**configure** service vpls *string* sap *string* fdb limit-mac-move *keyword*
Tree	limit-mac-move
Options	blockable, non-blockable
Default	blockable
Introduced	16.0.R1

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Platforms	All

mac-learning

Synopsis	Enter the **mac-learning** context
Context	**configure** service vpls *string* sap *string* fdb mac-learning
Tree	mac-learning
Introduced	16.0.R1
Platforms	All

aging *boolean*

Synopsis	Enable aging of MAC addresses
Context	**configure** service vpls *string* sap *string* fdb mac-learning aging *boolean*
Tree	aging
Default	true
Introduced	16.0.R1
Platforms	All

learning *boolean*

Synopsis	Enable learning of new MAC addresses
Context	**configure** service vpls *string* sap *string* fdb mac-learning learning *boolean*
Tree	learning
Default	true
Introduced	16.0.R1
Platforms	All

mac-pinning *boolean*

Synopsis	Enable MAC address pinning on this SAP
Context	**configure** service vpls *string* sap *string* fdb mac-pinning *boolean*
Tree	mac-pinning
Default	false
Introduced	16.0.R1

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Platforms All

maximum-mac-addresses *number*

Synopsis Maximum number of MAC address entries in the FDB

Context **configure** service vpls *string* sap *string* fdb maximum-mac-addresses *number*

Tree maximum-mac-addresses

Description This command specifies the maximum number of FDB entries for both learned and static MAC addresses for this SAP.

When the configured limit is reached, no new addresses are learned from the SAP or spoke SDP until at least one FDB entry is aged out or cleared.

When the configured limit is reached and the **configure service pw-template fdb discard-unknown-source** command is set to **true** for this SAP, packets with unknown source MAC addresses are discarded. If **discard-unknown-source** is set to **false**, the packets are forwarded if their destination MAC addresses are known, or flooded if their destination MAC addresses are unknown.

However, if the **configure service vpls fdb discard-unknown** command is set to **true**, packets with unknown destination MAC addresses are discarded, even if the limit of FDB entries on the specific VPLS instance is not reached.

When unconfigured, the SAP uses the global MAC learning limitations.

Range 1 to 511999

Introduced 16.0.R1

Platforms All

protected-src-mac-violation-action *keyword*

Synopsis Action to take whenever a relearn request for a protected MAC is received

Context **configure** service vpls *string* sap *string* fdb protected-src-mac-violation-action *keyword*

Tree protected-src-mac-violation-action

Options sap-oper-down, alarm-only, discard

Introduced 16.0.R1

Platforms All

host-admin-state *keyword*

Synopsis Administrative state of the hosts

Context **configure** service vpls *string* sap *string* host-admin-state *keyword*

Tree host-admin-state

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Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-lockout-policy *reference*

Synopsis	Host lockout policy
Context	**configure** service vpls *string* sap *string* host-lockout-policy *reference*
Tree	host-lockout-policy
Reference	**configure** subscriber-mgmt host-lockout-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

i-vpls-mac-flush

Synopsis	Enter the **i-vpls-mac-flush** context
Context	**configure** service vpls *string* sap *string* i-vpls-mac-flush
Tree	i-vpls-mac-flush
Introduced	16.0.R1
Platforms	All

bgp-evpn

Synopsis	Enter the **bgp-evpn** context
Context	**configure** service vpls *string* sap *string* i-vpls-mac-flush bgp-evpn
Tree	bgp-evpn
Introduced	16.0.R1
Platforms	All

send-to-bvpls *boolean*

Synopsis	Send B-VPLS EVPN flush
Context	**configure** service vpls *string* sap *string* i-vpls-mac-flush bgp-evpn send-to-bvpls *boolean*

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Tree	send-to-bvpls
Default	true
Introduced	16.0.R1
Platforms	All

igmp-host-tracking

Synopsis	Enter the **igmp-host-tracking** context
Context	**configure** service vpls *string* sap *string* igmp-host-tracking
Tree	igmp-host-tracking
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

expiry-time *number*

Synopsis	Time that the system continues to track inactive hosts
Context	**configure** service vpls *string* sap *string* igmp-host-tracking expiry-time *number*
Tree	expiry-time
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	**configure** service vpls *string* sap *string* igmp-host-tracking import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis	Maximum number of multicast groups to track per group

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Context	**configure** service vpls *string* sap *string* igmp-host-tracking maximum-number-group-sources *number*
Tree	maximum-number-group-sources
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of multicast groups to be tracked
Context	**configure** service vpls *string* sap *string* igmp-host-tracking maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis	Maximum number of multicast sources to be tracked
Context	**configure** service vpls *string* sap *string* igmp-host-tracking maximum-number-sources *number*
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis	Enable IGMP router alert check option
Context	**configure** service vpls *string* sap *string* igmp-host-tracking router-alert-check *boolean*
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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igmp-snooping

Synopsis	Enter the **igmp-snooping** context
Context	**configure** service vpls *string* sap *string* igmp-snooping
Tree	igmp-snooping
Introduced	16.0.R1
Platforms	All

fast-leave *boolean*

Synopsis	Allow IGMP fast leave processing
Context	**configure** service vpls *string* sap *string* igmp-snooping fast-leave *boolean*
Tree	fast-leave
Default	false
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	**configure** service vpls *string* sap *string* igmp-snooping import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	All

maximum-number-group-sources *number*

Synopsis	Maximum group source combinations
Context	**configure** service vpls *string* sap *string* igmp-snooping maximum-number-group-sources *number*
Tree	maximum-number-group-sources
Range	1 to 32000
Introduced	16.0.R1
Platforms	All

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maximum-number-groups *number*

Synopsis	Maximum groups allowed
Context	**configure** service vpls *string* sap *string* igmp-snooping maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

maximum-number-sources *number*

Synopsis	Maximum sources that are allowed per group
Context	**configure** service vpls *string* sap *string* igmp-snooping maximum-number-sources *number*
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

mcac

Synopsis	Enter the **mcac** context
Context	**configure** service vpls *string* sap *string* igmp-snooping mcac
Tree	mcac
Introduced	16.0.R1
Platforms	All

bandwidth

Synopsis	Enter the **bandwidth** context
Context	**configure** service vpls *string* sap *string* igmp-snooping mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	All

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mandatory *(number | keyword)*

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	**configure** service vpls *string* sap *string* igmp-snooping mcac bandwidth mandatory *(number | keyword)*
Tree	mandatory
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

total *(number | keyword)*

Synopsis	Maximum allowed bandwidth
Context	**configure** service vpls *string* sap *string* igmp-snooping mcac bandwidth total *(number | keyword)*
Tree	total
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	**configure** service vpls *string* sap *string* igmp-snooping mcac interface-policy *reference*
Tree	interface-policy
Reference	**configure** mcac interface-policy *string*
Introduced	16.0.R1
Platforms	All

mc-constraints

Synopsis	Enter the **mc-constraints** context

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Context	**configure** service vpls *string* sap *string* igmp-snooping mcac mc-constraints
Tree	mc-constraints
Introduced	16.0.R1
Platforms	All

level [level-id] *number*

Synopsis	Enter the **level** list instance
Context	**configure** service vpls *string* sap *string* igmp-snooping mcac mc-constraints level *number*
Tree	level
Introduced	16.0.R1
Platforms	All

[**level-id**] *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	**configure** service vpls *string* sap *string* igmp-snooping mcac mc-constraints level *number*
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Bandwidth available for this level
Context	**configure** service vpls *string* sap *string* igmp-snooping mcac mc-constraints level *number* bandwidth *number*
Tree	bandwidth
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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number-down [number-lag-port-down] *number*

Synopsis	Enter the **number-down** list instance
Context	**configure** service vpls *string* sap *string* igmp-snooping mcac mc-constraints number-down *number*
Tree	number-down
Introduced	16.0.R1
Platforms	All

[**number-lag-port-down**] *number*

Synopsis	Number of ports that are down in this LAG link
Context	**configure** service vpls *string* sap *string* igmp-snooping mcac mc-constraints number-down *number*
Tree	number-down
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level ID to associate with number of down LAG ports
Context	**configure** service vpls *string* sap *string* igmp-snooping mcac mc-constraints number-down *number* level *number*
Tree	level
Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

use-lag-port-weight *boolean*

Synopsis	Use LAG port weight in calculating MCAC constraints

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Context	**configure** service vpls *string* sap *string* igmp-snooping mcac mc-constraints use-lag-port-weight *boolean*
Tree	use-lag-port-weight
Description	When configured to **true**, port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.
Default	false
Introduced	16.0.R1
Platforms	All

policy *reference*

Synopsis	Multicast CAC policy name
Context	**configure** service vpls *string* sap *string* igmp-snooping mcac policy *reference*
Tree	policy
Description	This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment. Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode. If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect. Hierarchical MCAC (HMCAC) is supported on two levels simultaneously: • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).
Reference	**configure** mcac policy *string*
Introduced	16.0.R1
Platforms	All

mrouter-port *boolean*

Synopsis	Operate port as a multicast router port
Context	**configure** service vpls *string* sap *string* igmp-snooping mrouter-port *boolean*

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Tree	mrouter-port
Default	false
Introduced	16.0.R1
Platforms	All

mvr

Synopsis	Enter the **mvr** context
Context	**configure** service vpls *string* sap *string* igmp-snooping mvr
Tree	mvr
Introduced	16.0.R1
Platforms	All

from-vpls *reference*

Synopsis	MVR VPLS from which the multicast channels are taken
Context	**configure** service vpls *string* sap *string* igmp-snooping mvr from-vpls *reference*
Tree	from-vpls
Reference	**configure** service vpls *string*
Introduced	16.0.R1
Platforms	All

to-sap *string*

Synopsis	Multicast channels copied to SAP
Context	**configure** service vpls *string* sap *string* igmp-snooping mvr to-sap *string*
Tree	to-sap
String Length	1 to 45
Introduced	16.0.R1
Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** service vpls *string* sap *string* igmp-snooping query-interval *number*

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Tree	query-interval
Range	2 to 1024
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	**configure** service vpls *string* sap *string* igmp-snooping query-last-member-interval *number*
Tree	query-last-member-interval
Range	1 to 50
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	**configure** service vpls *string* sap *string* igmp-snooping query-response-interval *number*
Tree	query-response-interval
Range	1 to 1023
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	**configure** service vpls *string* sap *string* igmp-snooping robust-count *number*
Tree	robust-count

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Range	2 to 7
Default	2
Introduced	16.0.R1
Platforms	All

router-alert-check *boolean*

Synopsis	Enable IP router alert check option
Context	**configure** service vpls *string* sap *string* igmp-snooping router-alert-check *boolean*
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	All

send-queries *boolean*

Synopsis	Generate IGMP general queries
Context	**configure** service vpls *string* sap *string* igmp-snooping send-queries *boolean*
Tree	send-queries
Default	false
Introduced	16.0.R1
Platforms	All

static

Synopsis	Enter the **static** context
Context	**configure** service vpls *string* sap *string* igmp-snooping static
Tree	static
Introduced	16.0.R1
Platforms	All

group [group-address] *string*

Synopsis	Enter the **group** list instance
Context	**configure** service vpls *string* sap *string* igmp-snooping static group *string*

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Tree	group
Introduced	16.0.R1
Platforms	All

[**group-address**] *string*

Synopsis	Group address of static IGMP multicast channel
Context	**configure** service vpls *string* sap *string* igmp-snooping static group *string*
Tree	group
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [source-address] *string*

Synopsis	Add a list entry for **source**
Context	**configure** service vpls *string* sap *string* igmp-snooping static group *string* source *string*
Tree	source
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R1
Platforms	All

[**source-address**] *string*

Synopsis	Source IP address of multicast channel sending data
Context	**configure** service vpls *string* sap *string* igmp-snooping static group *string* source *string*
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

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starg

Synopsis	any source address (*,G)
Context	**configure** service vpls *string* sap *string* igmp-snooping static group *string* starg
Tree	starg
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R2
Platforms	All

version *keyword*

Synopsis	IGMP protocol version
Context	**configure** service vpls *string* sap *string* igmp-snooping version *keyword*
Tree	version
Options	1, 2, 3
Default	3
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service vpls *string* sap *string* ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the **filter** context
Context	**configure** service vpls *string* sap *string* ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

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ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service vpls *string* sap *string* ingress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service vpls *string* sap *string* ingress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	All

mac *reference*

Synopsis	MAC filter policy name
Context	**configure** service vpls *string* sap *string* ingress filter mac *reference*
Tree	mac
Reference	**configure** filter mac-filter *string*
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** service vpls *string* sap *string* ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

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match-qinq-dot1p *keyword*

Synopsis	Ingress match QinQ Dot1p
Context	**configure** service vpls *string* sap *string* ingress qos match-qinq-dot1p *keyword*
Tree	match-qinq-dot1p
Options	top, bottom
Introduced	16.0.R1
Platforms	All

policer-control-policy

Synopsis	Enter the **policer-control-policy** context
Context	**configure** service vpls *string* sap *string* ingress qos policer-control-policy
Tree	policer-control-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis	Enable the **overrides** context
Context	**configure** service vpls *string* sap *string* ingress qos policer-control-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

root

Synopsis	Enter the **root** context
Context	**configure** service vpls *string* sap *string* ingress qos policer-control-policy overrides root
Tree	root
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate *(number | keyword)*

Synopsis	Maximum frame-based bandwidth limit

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Context	**configure** service vpls *string* sap *string* ingress qos policer-control-policy overrides root max-rate *(number* | *keyword)*
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis	Enter the **priority-mbs-thresholds** context
Context	**configure** service vpls *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-thresh-separation *(number* | *keyword)*

Synopsis	Minimum amount of separation buffer space
Context	**configure** service vpls *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation *(number* | *keyword)*
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [priority-level] *number*

Synopsis	Enter the **priority** list instance
Context	**configure** service vpls *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*
Tree	priority
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**priority-level**] *number*

Synopsis	Priority level
Context	**configure** service vpls *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution *(number | keyword)*

Synopsis	Minimum amount of cumulative buffer space allowed
Context	**configure** service vpls *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds priority *number* mbs-contribution *(number | keyword)*
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	**configure** service vpls *string* sap *string* ingress qos policer-control-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos policer-control-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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sap-ingress

Synopsis	Enter the **sap-ingress** context
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress
Tree	sap-ingress
Introduced	16.0.R1
Platforms	All

fp-redirect-group

Synopsis	Enter the **fp-redirect-group** context
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress fp-redirect-group
Tree	fp-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Queue group template name created on forwarding plane
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress fp-redirect-group group-name *reference*
Tree	group-name
Reference	**configure** qos queue-group-templates ingress queue-group *string*
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Queue group instance
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress fp-redirect-group instance *number*
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

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overrides

Synopsis	Enter the **overrides** context
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

ip-criteria

Synopsis	Enter the **ip-criteria** context
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides ip-criteria
Tree	ip-criteria
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

activate-entry-tag *number*

Synopsis	Tag ID activated for IPv4 criteria
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides ip-criteria activate-entry-tag *number*
Tree	activate-entry-tag
Range	1 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6-criteria

Synopsis	Enter the **ipv6-criteria** context
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides ipv6-criteria
Tree	ipv6-criteria
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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activate-entry-tag *number*

Synopsis	Tag ID activated for IPv6 criteria
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides ipv6-criteria activate-entry-tag *number*
Tree	activate-entry-tag
Range	1 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policer [policer-id] *reference*

Synopsis	Enter the **policer** list instance
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides policer *reference*
Tree	policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**policer-id**] *reference*

Synopsis	Policer unique ID
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides policer *reference*
Tree	policer
Reference	**configure** qos sap-ingress *string* policer *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs *(number | keyword)*

Synopsis	CBS
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides policer *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 268435456

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Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides policer *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides policer *reference* packet-byte-offset *number*
Tree	packet-byte-offset
Range	-32 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides policer *reference* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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cir *decimal-number*

Synopsis	CIR percent rate
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides policer *reference* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *decimal-number*

Synopsis	PIR percent rate
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides policer *reference* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis	Enter the **rate** context
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides policer *reference* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *(number | keyword)*

Synopsis	CIR rate
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides policer *reference* rate cir *(number | keyword)*
Tree	cir

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Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *(number | keyword)*

Synopsis	PIR rate
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides policer *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides policer *reference* stat-mode *keyword*
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue [queue-id] *reference*

Synopsis	Enter the **queue** list instance
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides queue *reference*
Tree	queue
Introduced	16.0.R1

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Platforms	All

[**queue-id**] *reference*

Synopsis	Policer unique ID
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides queue *reference*
Tree	queue
Reference	**configure** qos sap-ingress *string* queue *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides queue *reference* adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides queue *reference* adaptation-rule cir *keyword*
Tree	cir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value

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Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides queue *reference* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

cbs *(number | keyword)*

Synopsis	CBS
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides queue *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the **drop-tail** context
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides queue *reference* drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the **low** context
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides queue *reference* drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

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percent-reduction-from-mbs *(number | keyword)*

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides queue *reference* drop-tail low percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides queue *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the **monitor-queue-depth** context
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides queue *reference* monitor-queue-depth
Tree	monitor-queue-depth
Introduced	21.7.R1
Platforms	All

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth

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Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides queue *reference* monitor-queue-depth fast-polling *boolean*
Tree	fast-polling
Default	false
Introduced	21.7.R1
Platforms	All

parent

Synopsis	Enter the **parent** context
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides queue *reference* parent
Tree	parent
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides queue *reference* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	PIR parameter that overrides parent for queue group
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides queue *reference* parent weight *number*
Tree	weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

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percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides queue *reference* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

cir *decimal-number*

Synopsis	CIR percent rate
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides queue *reference* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	PIR percent rate
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides queue *reference* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides queue *reference* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.

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Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	CIR rate
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides queue *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	PIR rate
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress overrides queue *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Policy ID
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-ingress *string*
Introduced	16.0.R1
Platforms	All

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queuing-type *keyword*

Synopsis	Queuing type
Context	**configure** service vpls *string* sap *string* ingress qos sap-ingress queuing-type *keyword*
Tree	queuing-type
Options	shared, multipoint-shared
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR

scheduler-policy

Synopsis	Enter the **scheduler-policy** context
Context	**configure** service vpls *string* sap *string* ingress qos scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the **overrides** context
Context	**configure** service vpls *string* sap *string* ingress qos scheduler-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

scheduler [scheduler-name] *string*

Synopsis	Enter the **scheduler** list instance
Context	**configure** service vpls *string* sap *string* ingress qos scheduler-policy overrides scheduler *string*
Tree	scheduler
Introduced	16.0.R1
Platforms	All

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[**scheduler-name**] *string*

Synopsis	Scheduler name
Context	**configure** service vpls *string* sap *string* ingress qos scheduler-policy overrides scheduler *string*
Tree	scheduler
Description	This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands. If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name. If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

parent

Synopsis	Enter the **parent** context
Context	**configure** service vpls *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* parent
Tree	parent
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	**configure** service vpls *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100

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Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	**configure** service vpls *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* parent weight *number*
Tree	weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** service vpls *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* rate
Tree	rate
Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	CIR at which the queue it to operate
Context	**configure** service vpls *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

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pir *(number | keyword)*

Synopsis	PIR at which the queue is to operate
Context	**configure** service vpls *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy name
Context	**configure** service vpls *string* sap *string* ingress qos scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos scheduler-policy *string*
Introduced	16.0.R1
Platforms	All

qtag-manipulation

Synopsis	Enter the **qtag-manipulation** context
Context	**configure** service vpls *string* sap *string* ingress qtag-manipulation
Tree	qtag-manipulation
Introduced	16.0.R1
Platforms	All

c-tag *(number | keyword)*

Synopsis	Inner ingress vlan translation for two service delimiting vlan values
Context	**configure** service vpls *string* sap *string* ingress qtag-manipulation c-tag *(number | keyword)*
Tree	c-tag
Range	0 to 4094

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Options	tag-*
Notes	The following elements are part of a choice: **push-dot1q-vlan** or (**c-tag** and **s-tag**).
Introduced	22.10.R1
Platforms	All

push-dot1q-vlan *(number | keyword)*

Synopsis	VLAN translation information
Context	**configure** service vpls *string* sap *string* ingress qtag-manipulation push-dot1q-vlan *(number | keyword)*
Tree	push-dot1q-vlan
Range	0 to 4094
Options	use-sap-svlan
Notes	The following elements are part of a choice: **push-dot1q-vlan** or (**c-tag** and **s-tag**).
Introduced	16.0.R1
Platforms	All

s-tag *number*

Synopsis	Outer ingress VLAN translation for two service delimiting VLAN values
Context	**configure** service vpls *string* sap *string* ingress qtag-manipulation s-tag *number*
Tree	s-tag
Range	0 to 4094
Notes	The following elements are part of a choice: **push-dot1q-vlan** or (**c-tag** and **s-tag**).
Introduced	22.10.R1
Platforms	All

l2pt

Synopsis	Enter the **l2pt** context
Context	**configure** service vpls *string* sap *string* l2pt
Tree	l2pt
Introduced	16.0.R1
Platforms	All

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force-boundary

Synopsis	Enable the **force-boundary** context
Context	**configure** service vpls *string* sap *string* l2pt force-boundary
Tree	force-boundary
Introduced	16.0.R1
Platforms	All

protocols

Synopsis	Enter the **protocols** context
Context	**configure** service vpls *string* sap *string* l2pt force-boundary protocols
Tree	protocols
Introduced	16.0.R1
Platforms	All

cdp *boolean*

Synopsis	Enable Cisco discovery protocol
Context	**configure** service vpls *string* sap *string* l2pt force-boundary protocols cdp *boolean*
Tree	cdp
Default	false
Introduced	16.0.R1
Platforms	All

dtp *boolean*

Synopsis	Enable dynamic trunking protocol
Context	**configure** service vpls *string* sap *string* l2pt force-boundary protocols dtp *boolean*
Tree	dtp
Default	false
Introduced	16.0.R1
Platforms	All

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pagp *boolean*

Synopsis	Enable port aggregation protocol
Context	**configure** service vpls *string* sap *string* l2pt force-boundary protocols pagp *boolean*
Tree	pagp
Default	false
Introduced	16.0.R1
Platforms	All

stp *boolean*

Synopsis	Enable all spanning tree protocols
Context	**configure** service vpls *string* sap *string* l2pt force-boundary protocols stp *boolean*
Tree	stp
Default	true
Introduced	16.0.R1
Platforms	All

udld *boolean*

Synopsis	Enable unidirectional link detection
Context	**configure** service vpls *string* sap *string* l2pt force-boundary protocols udld *boolean*
Tree	udld
Default	false
Introduced	16.0.R1
Platforms	All

vtp *boolean*

Synopsis	Enable virtual trunk protocol
Context	**configure** service vpls *string* sap *string* l2pt force-boundary protocols vtp *boolean*
Tree	vtp
Default	false
Introduced	16.0.R1
Platforms	All

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termination

Synopsis	Enable the **termination** context
Context	**configure** service vpls *string* sap *string* l2pt termination
Tree	termination
Introduced	16.0.R1
Platforms	All

protocols

Synopsis	Enter the **protocols** context
Context	**configure** service vpls *string* sap *string* l2pt termination protocols
Tree	protocols
Introduced	16.0.R1
Platforms	All

cdp *boolean*

Synopsis	Enable Cisco discovery protocol
Context	**configure** service vpls *string* sap *string* l2pt termination protocols cdp *boolean*
Tree	cdp
Default	false
Introduced	16.0.R1
Platforms	All

dtp *boolean*

Synopsis	Enable dynamic trunking protocol
Context	**configure** service vpls *string* sap *string* l2pt termination protocols dtp *boolean*
Tree	dtp
Default	false
Introduced	16.0.R1
Platforms	All

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pagp *boolean*

Synopsis	Enable port aggregation protocol
Context	**configure** service vpls *string* sap *string* l2pt termination protocols pagp *boolean*
Tree	pagp
Default	false
Introduced	16.0.R1
Platforms	All

stp *boolean*

Synopsis	Enable all spanning tree protocols
Context	**configure** service vpls *string* sap *string* l2pt termination protocols stp *boolean*
Tree	stp
Default	true
Introduced	16.0.R1
Platforms	All

udld *boolean*

Synopsis	Enable unidirectional link detection
Context	**configure** service vpls *string* sap *string* l2pt termination protocols udld *boolean*
Tree	udld
Default	false
Introduced	16.0.R1
Platforms	All

vtp *boolean*

Synopsis	Enable virtual trunk protocol
Context	**configure** service vpls *string* sap *string* l2pt termination protocols vtp *boolean*
Tree	vtp
Default	false
Introduced	16.0.R1
Platforms	All

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l2tpv3-session

Synopsis	Enable the **l2tpv3-session** context
Context	**configure** service vpls *string* sap *string* l2tpv3-session
Tree	l2tpv3-session
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the session for the service
Context	**configure** service vpls *string* sap *string* l2tpv3-session admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

pseudo-wire

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **pseudo-wire** context
Context	**configure** service vpls *string* sap *string* l2tpv3-session pseudo-wire
Tree	pseudo-wire
Introduced	16.0.R4
Platforms	All

ethernet

WARNING:
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Synopsis	Enable the Ethernet PW-type for the L2TPv3 session

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Context	**configure** service vpls *string* sap *string* l2tpv3-session pseudo-wire ethernet
Tree	ethernet
Notes	The following elements are part of a choice: **ethernet** or **ethernet-vlan-id**.
Introduced	16.0.R4
Platforms	All

ethernet-vlan-id *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ethernet-VLAN PW-type ID for the L2TPv3 session
Context	**configure** service vpls *string* sap *string* l2tpv3-session pseudo-wire ethernet-vlan-id *number*
Tree	ethernet-vlan-id
Range	0 to 4095
Notes	The following elements are part of a choice: **ethernet** or **ethernet-vlan-id**.
Introduced	16.0.R4
Platforms	All

router

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **router** context
Context	**configure** service vpls *string* sap *string* l2tpv3-session router
Tree	router
Introduced	16.0.R4
Platforms	All

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group *string*

WARNING:
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Synopsis	Tunnel group name
Context	**configure** service vpls *string* sap *string* l2tpv3-session router group *string*
Tree	group
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

router-instance *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router name used to identify the router instance
Context	**configure** service vpls *string* sap *string* l2tpv3-session router router-instance *string*
Tree	router-instance
String Length	1 to 64
Introduced	16.0.R4
Platforms	All

vc-id *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VC ID for the L2TPv3 session
Context	**configure** service vpls *string* sap *string* l2tpv3-session vc-id *number*
Tree	vc-id
Range	1 to 4294967295
Introduced	16.0.R4
Platforms	All

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lag

Synopsis	Enter the **lag** context
Context	**configure** service vpls *string* sap *string* lag
Tree	lag
Introduced	16.0.R1
Platforms	All

link-map-profile *number*

Synopsis	LAG link map profile for a SAP or network interface
Context	**configure** service vpls *string* sap *string* lag link-map-profile *number*
Tree	link-map-profile
Description	This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration. If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.
Range	1 to 64
Introduced	16.0.R1
Platforms	All

per-link-hash

Synopsis	Enter the **per-link-hash** context
Context	**configure** service vpls *string* sap *string* lag per-link-hash
Tree	per-link-hash
Introduced	16.0.R1
Platforms	All

class *number*

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	**configure** service vpls *string* sap *string* lag per-link-hash class *number*
Tree	class

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Range	1 to 3
Default	1
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	**configure** service vpls *string* sap *string* lag per-link-hash weight *number*
Tree	weight
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	All

managed-vlan-list

Synopsis	Enter the **managed-vlan-list** context
Context	**configure** service vpls *string* sap *string* managed-vlan-list
Tree	managed-vlan-list
Introduced	19.10.R1
Platforms	All

range [vlan-range] *string*

Synopsis	Add a list entry for **range**
Context	**configure** service vpls *string* sap *string* managed-vlan-list range *string*
Tree	range
Introduced	19.10.R1
Platforms	All

[**vlan-range**] *string*

Synopsis	Range of VLANs associated with the M-VPLS SAP
Context	**configure** service vpls *string* sap *string* managed-vlan-list range *string*

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Tree	range
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

mc-ring

Synopsis	Enable the **mc-ring** context
Context	**configure** service vpls *string* sap *string* mc-ring
Tree	mc-ring
Introduced	16.0.R1
Platforms	All

ring-node *string*

Synopsis	Name for the ring node associated with this SAP
Context	**configure** service vpls *string* sap *string* mc-ring ring-node *string*
Tree	ring-node
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mld-snooping

Synopsis	Enter the **mld-snooping** context
Context	**configure** service vpls *string* sap *string* mld-snooping
Tree	mld-snooping
Introduced	16.0.R1
Platforms	All

fast-leave *boolean*

Synopsis	Allow IGMP fast leave processing
Context	**configure** service vpls *string* sap *string* mld-snooping fast-leave *boolean*

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Tree	fast-leave
Default	false
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	**configure** service vpls *string* sap *string* mld-snooping import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	All

maximum-number-groups *number*

Synopsis	Maximum groups allowed
Context	**configure** service vpls *string* sap *string* mld-snooping maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

mrouter-port *boolean*

Synopsis	Operate port as a multicast router port
Context	**configure** service vpls *string* sap *string* mld-snooping mrouter-port *boolean*
Tree	mrouter-port
Default	false
Introduced	16.0.R1
Platforms	All

mvr

Synopsis	Enter the **mvr** context

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Context	**configure** service vpls *string* sap *string* mld-snooping mvr
Tree	mvr
Introduced	16.0.R1
Platforms	All

from-vpls *reference*

Synopsis	MVR VPLS from which the multicast channels are taken
Context	**configure** service vpls *string* sap *string* mld-snooping mvr from-vpls *reference*
Tree	from-vpls
Reference	**configure** service vpls *string*
Introduced	16.0.R1
Platforms	All

to-sap *string*

Synopsis	SAP to which the multicast channels are copied
Context	**configure** service vpls *string* sap *string* mld-snooping mvr to-sap *string*
Tree	to-sap
String Length	1 to 45
Introduced	16.0.R1
Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** service vpls *string* sap *string* mld-snooping query-interval *number*
Tree	query-interval
Range	2 to 1024
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

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query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	**configure** service vpls *string* sap *string* mld-snooping query-last-member-interval *number*
Tree	query-last-member-interval
Range	1 to 50
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	**configure** service vpls *string* sap *string* mld-snooping query-response-interval *number*
Tree	query-response-interval
Range	1 to 1023
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	**configure** service vpls *string* sap *string* mld-snooping robust-count *number*
Tree	robust-count
Range	2 to 7
Default	2
Introduced	16.0.R1
Platforms	All

router-alert-check *boolean*

Synopsis	Enable IP router alert check option

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Context	**configure** service vpls *string* sap *string* mld-snooping router-alert-check *boolean*
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	All

send-queries *boolean*

Synopsis	Generate IGMP general queries
Context	**configure** service vpls *string* sap *string* mld-snooping send-queries *boolean*
Tree	send-queries
Default	false
Introduced	16.0.R1
Platforms	All

static

Synopsis	Enter the **static** context
Context	**configure** service vpls *string* sap *string* mld-snooping static
Tree	static
Introduced	16.0.R1
Platforms	All

group [group-address] *string*

Synopsis	Enter the **group** list instance
Context	**configure** service vpls *string* sap *string* mld-snooping static group *string*
Tree	group
Introduced	16.0.R1
Platforms	All

[**group-address**] *string*

Synopsis	Group address of multicast channel
Context	**configure** service vpls *string* sap *string* mld-snooping static group *string*

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Tree	group
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [source-address] *string*

Synopsis	Add a list entry for **source**
Context	**configure** service vpls *string* sap *string* mld-snooping static group *string* source *string*
Tree	source
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R1
Platforms	All

[**source-address**] *string*

Synopsis	Source IP address
Context	**configure** service vpls *string* sap *string* mld-snooping static group *string* source *string*
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	any source address (*,G)
Context	**configure** service vpls *string* sap *string* mld-snooping static group *string* starg
Tree	starg
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R2
Platforms	All

version *keyword*

Synopsis	Version of MLD running on the SAP or SDP

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Context	**configure** service vpls *string* sap *string* mld-snooping version *keyword*
Tree	version
Options	1, 2
Default	2
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference*

Synopsis	Monitor operational group
Context	**configure** service vpls *string* sap *string* monitor-oper-group *reference*
Tree	monitor-oper-group
Reference	**configure** service oper-group *string*
Notes	The following elements are part of a choice: **monitor-oper-group** or **oper-group**.
Introduced	16.0.R1
Platforms	All

mrp

Synopsis	Enter the **mrp** context
Context	**configure** service vpls *string* sap *string* mrp
Tree	mrp
Introduced	20.10.R1
Platforms	All

join-time *number*

Synopsis	Interval between transmit opportunities
Context	**configure** service vpls *string* sap *string* mrp join-time *number*
Tree	join-time
Range	1 to 10
Default	2
Introduced	20.10.R1
Platforms	All

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leave-all-time *number*

Synopsis	Frequency that LeaveAll PDUs are generated
Context	**configure** service vpls *string* sap *string* mrp leave-all-time *number*
Tree	leave-all-time
Range	60 to 300
Default	100
Introduced	20.10.R1
Platforms	All

leave-time *number*

Synopsis	Time in leave state before transitioning to MT state
Context	**configure** service vpls *string* sap *string* mrp leave-time *number*
Tree	leave-time
Range	30 to 60
Default	30
Introduced	20.10.R1
Platforms	All

periodic-time *number*

Synopsis	Frequency of periodic events generation
Context	**configure** service vpls *string* sap *string* mrp periodic-time *number*
Tree	periodic-time
Range	10 to 100
Default	10
Introduced	20.10.R1
Platforms	All

periodic-timer *boolean*

Synopsis	Enable the periodic transmission timer
Context	**configure** service vpls *string* sap *string* mrp periodic-timer *boolean*
Tree	periodic-timer

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Default	false
Introduced	20.10.R1
Platforms	All

policy *reference*

Synopsis	MMRP policy name
Context	**configure** service vpls *string* sap *string* mrp policy *reference*
Tree	policy
Reference	**configure** service mrp policy *string*
Introduced	20.10.R1
Platforms	All

multi-service-site *reference*

Synopsis	Multi service site name
Context	**configure** service vpls *string* sap *string* multi-service-site *reference*
Tree	multi-service-site
Reference	**configure** service customer *string* multi-service-site *string*
Introduced	16.0.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group
Context	**configure** service vpls *string* sap *string* oper-group *reference*
Tree	oper-group
Reference	**configure** service oper-group *string*
Notes	The following elements are part of a choice: **monitor-oper-group** or **oper-group**.
Introduced	16.0.R1
Platforms	All

pbb

Synopsis	Enter the **pbb** context

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Context	**configure** service vpls *string* sap *string* pbb
Tree	pbb
Introduced	20.10.R1
Platforms	All

fault-propagation

Synopsis	Enter the **fault-propagation** context
Context	**configure** service vpls *string* sap *string* pbb fault-propagation
Tree	fault-propagation
Introduced	20.10.R1
Platforms	All

backbone-mac-address [address] *string*

Synopsis	Add a list entry for **backbone-mac-address**
Context	**configure** service vpls *string* sap *string* pbb fault-propagation backbone-mac-address *string*
Tree	backbone-mac-address
Introduced	20.10.R1
Platforms	All

[**address**] *string*

Synopsis	Backbone MAC address
Context	**configure** service vpls *string* sap *string* pbb fault-propagation backbone-mac-address *string*
Tree	backbone-mac-address
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

backbone-mac-name [name] *reference*

Synopsis	Add a list entry for **backbone-mac-name**

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Context	**configure** service vpls *string* sap *string* pbb fault-propagation backbone-mac-name *reference*
Tree	backbone-mac-name
Introduced	20.10.R1
Platforms	All

[**name**] *reference*

Synopsis	Backbone MAC address name
Context	**configure** service vpls *string* sap *string* pbb fault-propagation backbone-mac-name *reference*
Tree	backbone-mac-name
Reference	**configure** service pbb mac *string*
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

pim-snooping

Synopsis	Enter the **pim-snooping** context
Context	**configure** service vpls *string* sap *string* pim-snooping
Tree	pim-snooping
Introduced	16.0.R1
Platforms	All

maximum-number-groups *number*

Synopsis	Maximum groups for this interface
Context	**configure** service vpls *string* sap *string* pim-snooping maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

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process-cpm-traffic-on-sap-down *boolean*

Synopsis	Process CPM traffic on SAP down event
Context	**configure** service vpls *string* sap *string* process-cpm-traffic-on-sap-down *boolean*
Tree	process-cpm-traffic-on-sap-down
Default	false
Introduced	16.0.R1
Platforms	All

radius-auth-policy *reference*

Synopsis	RADIUS authentication policy
Context	**configure** service vpls *string* sap *string* radius-auth-policy *reference*
Tree	radius-auth-policy
Reference	**configure** subscriber-mgmt radius-authentication-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv-policy-ipv4 *reference*

Synopsis	Subscriber host connectivity verification policy for IPv4
Context	**configure** service vpls *string* sap *string* shcv-policy-ipv4 *reference*
Tree	shcv-policy-ipv4
Reference	**configure** subscriber-mgmt shcv-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

spb

Synopsis	Enable the **spb** context
Context	**configure** service vpls *string* sap *string* spb
Tree	spb
Introduced	21.10.R1
Platforms	All

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admin-state *keyword*

Synopsis	Admin state
Context	**configure** service vpls *string* sap *string* spb admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	All

level [id] *number*

Synopsis	Enter the **level** list instance
Context	**configure** service vpls *string* sap *string* spb level *number*
Tree	level
Introduced	21.10.R1
Platforms	All

[**id**] *number*

Synopsis	Level identifier
Context	**configure** service vpls *string* sap *string* spb level *number*
Tree	level
Range	1
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

hello-interval *number*

Synopsis	Hello interval
Context	**configure** service vpls *string* sap *string* spb level *number* hello-interval *number*
Tree	hello-interval
Range	1 to 20000
Units	seconds
Default	9

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Introduced	21.10.R1
Platforms	All

hello-multiplier *number*

Synopsis	Hello multiplier
Context	**configure** service vpls *string* sap *string* spb level *number* hello-multiplier *number*
Tree	hello-multiplier
Range	2 to 100
Default	3
Introduced	21.10.R1
Platforms	All

metric *number*

Synopsis	Metric
Context	**configure** service vpls *string* sap *string* spb level *number* metric *number*
Tree	metric
Range	0 to 16777215
Default	0
Introduced	21.10.R1
Platforms	All

lsp-pacing-interval *number*

Synopsis	Lsp pacing interval
Context	**configure** service vpls *string* sap *string* spb lsp-pacing-interval *number*
Tree	lsp-pacing-interval
Range	0 to 65535
Units	milliseconds
Default	100
Introduced	21.10.R1
Platforms	All

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retransmit-interval *number*

Synopsis	Retransmit interval
Context	**configure** service vpls *string* sap *string* spb retransmit-interval *number*
Tree	retransmit-interval
Range	1 to 65535
Units	seconds
Default	5
Introduced	21.10.R1
Platforms	All

split-horizon-group *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Split horizon group
Context	**configure** service vpls *string* sap *string* split-horizon-group *reference*
Tree	split-horizon-group
Reference	**configure** service vpls *string* split-horizon-group *string*
Introduced	16.0.R1
Platforms	All

static-host

Synopsis	Enter the **static-host** context
Context	**configure** service vpls *string* sap *string* static-host
Tree	static-host
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4 [ip] *string* mac *string*

Synopsis	Enter the **ipv4** list instance
Context	**configure** service vpls *string* sap *string* static-host ipv4 *string* mac *string*
Tree	ipv4

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**ip**] *string*

Synopsis	IP address
Context	**configure** service vpls *string* sap *string* static-host ipv4 *string* mac *string*
Tree	ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *string*

Synopsis	MAC address
Context	**configure** service vpls *string* sap *string* static-host ipv4 *string* mac *string*
Tree	ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the static host
Context	**configure** service vpls *string* sap *string* static-host ipv4 *string* mac *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-string *string*

Synopsis	ANCP string

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Context	**configure** service vpls *string* sap *string* static-host ipv4 *string* mac *string* ancp-string *string*
Tree	ancp-string
String Length	1 to 63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile

Synopsis	Enter the **app-profile** context
Context	**configure** service vpls *string* sap *string* static-host ipv4 *string* mac *string* app-profile
Tree	app-profile
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

profile *reference*

Synopsis	Application profile used by the static host
Context	**configure** service vpls *string* sap *string* static-host ipv4 *string* mac *string* app-profile profile *reference*
Tree	profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

int-dest-id *string*

Synopsis	Intermediate destination ID
Context	**configure** service vpls *string* sap *string* static-host ipv4 *string* mac *string* int-dest-id *string*
Tree	int-dest-id
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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shcv

Synopsis	Enter the **shcv** context
Context	**configure** service vpls *string* sap *string* static-host ipv4 *string* mac *string* shcv
Tree	shcv
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	SLA profile name
Context	**configure** service vpls *string* sap *string* static-host ipv4 *string* mac *string* sla-profile *reference*
Tree	sla-profile
Reference	**configure** subscriber-mgmt sla-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Sub-profile name
Context	**configure** service vpls *string* sap *string* static-host ipv4 *string* mac *string* sub-profile *reference*
Tree	sub-profile
Reference	**configure** subscriber-mgmt sub-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id

Synopsis	Enter the **subscriber-id** context
Context	**configure** service vpls *string* sap *string* static-host ipv4 *string* mac *string* subscriber-id
Tree	subscriber-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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string *string*

Synopsis	Subscriber identification
Context	**configure** service vpls *string* sap *string* static-host ipv4 *string* mac *string* subscriber-id string *string*
Tree	string
String Length	1 to 64
Notes	The following elements are part of a choice: **string** or **use-sap-id**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-sap-id

Synopsis	Use the SAP id as subscriber ID
Context	**configure** service vpls *string* sap *string* static-host ipv4 *string* mac *string* subscriber-id use-sap-id
Tree	use-sap-id
Notes	The following elements are part of a choice: **string** or **use-sap-id**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

static-isid

Synopsis	Enter the **static-isid** context
Context	**configure** service vpls *string* sap *string* static-isid
Tree	static-isid
Introduced	19.10.R1
Platforms	All

range [range-id] *number*

Synopsis	Enter the **range** list instance
Context	**configure** service vpls *string* sap *string* static-isid range *number*
Tree	range
Introduced	19.10.R1
Platforms	All

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[**range-id**] *number*

Synopsis	Range ID for static ISID
Context	**configure** service vpls *string* sap *string* static-isid range *number*
Tree	range
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

end *number*

Synopsis	Upper bound of the ISID range
Context	**configure** service vpls *string* sap *string* static-isid range *number* end *number*
Tree	end
Range	1 to 16777215
Introduced	19.10.R1
Platforms	All

start *number*

Synopsis	Lower bound of the ISID range
Context	**configure** service vpls *string* sap *string* static-isid range *number* start *number*
Tree	start
Range	1 to 16777215
Introduced	19.10.R1
Platforms	All

stp

Synopsis	Enter the **stp** context
Context	**configure** service vpls *string* sap *string* stp
Tree	stp
Introduced	16.0.R4
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of STP
Context	**configure** service vpls *string* sap *string* stp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R4
Platforms	All

auto-edge *boolean*

Synopsis	Enable automatic detection of edge port characteristics
Context	**configure** service vpls *string* sap *string* stp auto-edge *boolean*
Tree	auto-edge
Default	true
Introduced	16.0.R4
Platforms	All

edge-port *boolean*

Synopsis	Designate SAP or SDP as an edge port
Context	**configure** service vpls *string* sap *string* stp edge-port *boolean*
Tree	edge-port
Default	false
Introduced	16.0.R4
Platforms	All

link-type *keyword*

Synopsis	Configure STP link-type
Context	**configure** service vpls *string* sap *string* stp link-type *keyword*
Tree	link-type
Options	pt-pt, shared
Default	pt-pt
Introduced	16.0.R4

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Platforms	All

mst-instance [mst-inst-number] *number*

Synopsis	Enter the **mst-instance** list instance
Context	**configure** service vpls *string* sap *string* stp mst-instance *number*
Tree	mst-instance
Introduced	19.10.R1
Platforms	All

[**mst-inst-number**] *number*

Synopsis	Multiple Spanning Tree Instance number
Context	**configure** service vpls *string* sap *string* stp mst-instance *number*
Tree	mst-instance
Range	1 to 4094
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

mst-path-cost *number*

Synopsis	MSTI path cost
Context	**configure** service vpls *string* sap *string* stp mst-instance *number* mst-path-cost *number*
Tree	mst-path-cost
Range	1 to 200000000
Default	10
Introduced	19.10.R1
Platforms	All

mst-port-priority *number*

Synopsis	MSTI port priority
Context	**configure** service vpls *string* sap *string* stp mst-instance *number* mst-port-priority *number*

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Tree	mst-port-priority
Range	0 | 16 | 32 | 48 | 64 | 80 | 96 | 112 | 128 | 144 | 160 | 176 | 192 | 208 | 224 | 240
Default	128
Introduced	19.10.R1
Platforms	All

path-cost *number*

Synopsis	Configure path-cost
Context	**configure** service vpls *string* sap *string* stp path-cost *number*
Tree	path-cost
Range	1 to 200000000
Default	10
Introduced	16.0.R4
Platforms	All

port-num *number*

Synopsis	Configure virtual port number
Context	**configure** service vpls *string* sap *string* stp port-num *number*
Tree	port-num
Range	1 to 2047
Introduced	16.0.R4
Platforms	All

priority *number*

Synopsis	Configure STP priority
Context	**configure** service vpls *string* sap *string* stp priority *number*
Tree	priority
Range	0 to 255
Default	128
Introduced	16.0.R4
Platforms	All

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root-guard *boolean*

Synopsis	Enable/disable STP root-guard
Context	**configure** service vpls *string* sap *string* stp root-guard *boolean*
Tree	root-guard
Default	false
Introduced	16.0.R4
Platforms	All

sub-sla-mgmt

Synopsis	Enter the **sub-sla-mgmt** context
Context	**configure** service vpls *string* sap *string* sub-sla-mgmt
Tree	sub-sla-mgmt
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of SAP subscriber management
Context	**configure** service vpls *string* sap *string* sub-sla-mgmt admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

defaults

Synopsis	Enter the **defaults** context
Context	**configure** service vpls *string* sap *string* sub-sla-mgmt defaults
Tree	defaults
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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app-profile *reference*

Synopsis	Default application profile name for this SAP
Context	**configure** service vpls *string* sap *string* sub-sla-mgmt defaults app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

int-dest-id

Synopsis	Enter the **int-dest-id** context
Context	**configure** service vpls *string* sap *string* sub-sla-mgmt defaults int-dest-id
Tree	int-dest-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Use the configured string
Context	**configure** service vpls *string* sap *string* sub-sla-mgmt defaults int-dest-id string *string*
Tree	string
String Length	1 to 32
Notes	The following elements are part of a choice: **string** or **top-q-tag**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

top-q-tag

Synopsis	Use the top Q-tag of this SAP
Context	**configure** service vpls *string* sap *string* sub-sla-mgmt defaults int-dest-id top-q-tag
Tree	top-q-tag
Notes	The following elements are part of a choice: **string** or **top-q-tag**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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sla-profile *reference*

Synopsis	Default SLA profile for hosts on this SAP
Context	**configure** service vpls *string* sap *string* sub-sla-mgmt defaults sla-profile *reference*
Tree	sla-profile
Reference	**configure** subscriber-mgmt sla-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Default subscriber profile for the SAP
Context	**configure** service vpls *string* sap *string* sub-sla-mgmt defaults sub-profile *reference*
Tree	sub-profile
Reference	**configure** subscriber-mgmt sub-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id

Synopsis	Enter the **subscriber-id** context
Context	**configure** service vpls *string* sap *string* sub-sla-mgmt defaults subscriber-id
Tree	subscriber-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-id

Synopsis	Use auto-generated subscriber identification string
Context	**configure** service vpls *string* sap *string* sub-sla-mgmt defaults subscriber-id auto-id
Tree	auto-id
Notes	The following elements are part of a choice: **auto-id**, **sap-id**, or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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sap-id

Synopsis	Use SAP ID as default subscriber identification string
Context	**configure** service vpls *string* sap *string* sub-sla-mgmt defaults subscriber-id sap-id
Tree	sap-id
Notes	The following elements are part of a choice: **auto-id**, **sap-id**, or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Default subscriber identification string for the SAP
Context	**configure** service vpls *string* sap *string* sub-sla-mgmt defaults subscriber-id string *string*
Tree	string
String Length	1 to 64
Notes	The following elements are part of a choice: **auto-id**, **sap-id**, or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-da-hashing *boolean*

Synopsis	Use destination MAC address instead of subscriber ID to select egress LAG link
Context	**configure** service vpls *string* sap *string* sub-sla-mgmt mac-da-hashing *boolean*
Tree	mac-da-hashing
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

single-sub-parameters

Synopsis	Enter the **single-sub-parameters** context
Context	**configure** service vpls *string* sap *string* sub-sla-mgmt single-sub-parameters
Tree	single-sub-parameters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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non-sub-traffic

Synopsis	Enable the **non-sub-traffic** context
Context	**configure** service vpls *string* sap *string* sub-sla-mgmt single-sub-parameters non-sub-traffic
Tree	non-sub-traffic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Application profile name for all non-subscriber traffic
Context	**configure** service vpls *string* sap *string* sub-sla-mgmt single-sub-parameters non-sub-traffic app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	SLA profile applicable for all non-subscriber traffic
Context	**configure** service vpls *string* sap *string* sub-sla-mgmt single-sub-parameters non-sub-traffic sla-profile *reference*
Tree	sla-profile
Reference	**configure** subscriber-mgmt sla-profile *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Subscriber profile all non-subscriber traffic
Context	**configure** service vpls *string* sap *string* sub-sla-mgmt single-sub-parameters non-sub-traffic sub-profile *reference*
Tree	sub-profile

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Reference	**configure** subscriber-mgmt sub-profile *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Subscriber ID applied for all non-subscriber traffic
Context	**configure** service vpls *string* sap *string* sub-sla-mgmt single-sub-parameters non-sub-traffic subscriber-id *string*
Tree	subscriber-id
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

profiled-traffic-only *boolean*

Synopsis	Include all traffic in subscriber profile
Context	**configure** service vpls *string* sap *string* sub-sla-mgmt single-sub-parameters profiled-traffic-only *boolean*
Tree	profiled-traffic-only
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-ident-policy *reference*

Synopsis	Subscriber identification policy used on this SAP
Context	**configure** service vpls *string* sap *string* sub-sla-mgmt sub-ident-policy *reference*
Tree	sub-ident-policy
Reference	**configure** subscriber-mgmt sub-ident-policy *string*
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-limit *(keyword | number)*

Synopsis	Maximum number of subscribers on this SAP
Context	**configure** service vpls *string* sap *string* sub-sla-mgmt subscriber-limit *(keyword | number)*
Tree	subscriber-limit
Range	1 to 131071
Options	no-limit
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

transit-policy

Synopsis	Enable the **transit-policy** context
Context	**configure** service vpls *string* sap *string* transit-policy
Tree	transit-policy
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP transit policy ID
Context	**configure** service vpls *string* sap *string* transit-policy ip *reference*
Tree	ip
Reference	**configure** application-assurance group *number* partition *number* transit-ip-policy *number*
Notes	The following elements are part of a mandatory choice: **ip** or **prefix**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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prefix *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	**configure** service vpls *string* sap *string* transit-policy prefix *reference*
Tree	prefix
Reference	**configure** application-assurance group *number* partition *number* transit-prefix-policy *number*
Notes	The following elements are part of a mandatory choice: **ip** or **prefix**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

segment-routing-v6 [instance] *number*

Synopsis	Enter the **segment-routing-v6** list instance
Context	**configure** service vpls *string* segment-routing-v6 *number*
Tree	segment-routing-v6
Max. Instances	1
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**instance**] *number*

Synopsis	Segment routing v6 instance
Context	**configure** service vpls *string* segment-routing-v6 *number*
Tree	segment-routing-v6
Range	1
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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locator [locator-name] *reference*

Synopsis	Enter the **locator** list instance
Context	**configure** service vpls *string* segment-routing-v6 *number* locator *reference*
Tree	locator
Max. Instances	1
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**locator-name**] *reference*

Synopsis	SRv6 locator name
Context	**configure** service vpls *string* segment-routing-v6 *number* locator *reference*
Tree	locator
Reference	**configure** router *string* segment-routing segment-routing-v6 locator *string*
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function

Synopsis	Enter the **function** context
Context	**configure** service vpls *string* segment-routing-v6 *number* locator *reference* function
Tree	function
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end-dt2m

Synopsis	Enable the **end-dt2m** context
Context	**configure** service vpls *string* segment-routing-v6 *number* locator *reference* function end-dt2m
Tree	end-dt2m
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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value *number*

Synopsis	SRv6 function value
Context	**configure** service vpls *string* segment-routing-v6 *number* locator *reference* function end-dt2m value *number*
Tree	value
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end-dt2u

Synopsis	Enable the **end-dt2u** context
Context	**configure** service vpls *string* segment-routing-v6 *number* locator *reference* function end-dt2u
Tree	end-dt2u
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

Synopsis	SRv6 function value
Context	**configure** service vpls *string* segment-routing-v6 *number* locator *reference* function end-dt2u value *number*
Tree	value
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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micro-segment-locator [locator-name] *reference*

Synopsis	Enter the **micro-segment-locator** list instance
Context	**configure** service vpls *string* segment-routing-v6 *number* micro-segment-locator *reference*
Tree	micro-segment-locator
Max. Instances	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**locator-name**] *reference*

Synopsis	Micro-segment SRv6 locator name
Context	**configure** service vpls *string* segment-routing-v6 *number* micro-segment-locator *reference*
Tree	micro-segment-locator
Description	This command associates a pre-defined micro-segment SRv6 locator (defined in the **configure router segment-routing segment-routing-v6** context) with the SRv6 instance in the service. The same micro-segment locator can be referenced in multiple BGP instances used by IPVPN or EVPN.
Reference	**configure** router *string* segment-routing segment-routing-v6 micro-segment-locator *string*
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function

Synopsis	Enter the **function** context
Context	**configure** service vpls *string* segment-routing-v6 *number* micro-segment-locator *reference* function
Tree	function
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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udt2m

Synopsis	Enable the **udt2m** context
Context	**configure** service vpls *string* segment-routing-v6 *number* micro-segment-locator *reference* function udt2m
Tree	udt2m
Description	Commands in this context configure the SRv6 uDT2M behavior and the function value that is associated to the SRv6 instance in the service. When configured, decapsulation and table lookup for IPv6 prefixes occurs in the VPLS service.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

Synopsis	SRv6 function value
Context	**configure** service vpls *string* segment-routing-v6 *number* micro-segment-locator *reference* function udt2m value *number*
Tree	value
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

udt2u

Synopsis	Enable the **udt2u** context
Context	**configure** service vpls *string* segment-routing-v6 *number* micro-segment-locator *reference* function udt2u
Tree	udt2u
Description	Commands in this context configure the SRv6 uDT2U behavior and the function value that is associated to the SRv6 instance in the service. When configured, decapsulation and table lookup for IPv6 prefixes occurs in the VPLS service.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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value *number*

Synopsis	SRv6 function value
Context	**configure** service vpls *string* segment-routing-v6 *number* micro-segment-locator *reference* function udt2u value *number*
Tree	value
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

service-id *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	**configure** service vpls *string* service-id *number*
Tree	service-id
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

service-mtu *number*

Synopsis	MTU size
Context	**configure** service vpls *string* service-mtu *number*
Tree	service-mtu
Description	This command configures the Maximum Transmission Unit (MTU) value (payload) for the service. The system uses the value to validate the operational state of the SAP and SDP binding within the service. The value overrides the default MTU for the service type. The service MTU and a SAP's service delineation encapsulation overhead (4 bytes for a dot1q tag) are used to derive the required MTU of the physical port or channel on which the SAP was created. If the required payload is larger than the port or channel MTU, the SAP is placed in an inoperative state. If the required MTU is equal to or less than the port or channel MTU, the SAP transitions to the operative state.

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When binding an SDP to a service, the service MTU is compared to the path MTU associated with the SDP. The path MTU can be administratively defined in the context of the SDP. The default or administrative path MTU can be dynamically reduced due to the MTU capabilities discovered by the tunneling mechanism of the SDP or the egress interface MTU capabilities based on the next hop in the tunnel path. If the service MTU is larger than the path MTU, the SDP binding for the service is placed in an inoperative state. If the service MTU is equal to or less than the path MTU, the SDP binding is placed in an operational state.

If a service MTU, port or channel MTU, or path MTU is dynamically or administratively modified, all associated SAP and SDP binding operational states are automatically reevaluated.

Binding operational states are automatically reevaluated.

For I-VPLS and Epipes bound to a B-VPLS, the service MTU must be at least 18 bytes smaller than the B-VPLS service MTU to accommodate the PBB header.

Because this connects a Layer 2 to a Layer 3 service, adjust the service MTU under the Epipe service. The MTU that is advertised from the Epipe side is service MTU minus EtherHeaderSize.

In the **configure service epipe spoke-sdp** context, the **adv-service-mtu** command can be used to override the configured MTU value used in T-LDP signaling to the far-end of an Epipe spoke-sdp. The **adv-service-mtu** command is also used to validate the value signaled by the far-end PE.

Range	1 to 9782
Introduced	16.0.R1
Platforms	All

shcv-policy-ipv4 *reference*

Synopsis	Subscriber host connectivity verification policy for IPv4
Context	**configure** service vpls *string* shcv-policy-ipv4 *reference*
Tree	shcv-policy-ipv4
Reference	**configure** subscriber-mgmt shcv-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

spb

Synopsis	Enable the **spb** context
Context	**configure** service vpls *string* spb
Tree	spb
Introduced	21.10.R1

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Platforms	All

admin-state *keyword*

Synopsis	Administrative state of SPB
Context	**configure** service vpls *string* spb admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	All

fid *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	FID identifier
Context	**configure** service vpls *string* spb fid *number*
Tree	fid
Range	1 to 4095
Default	1
Introduced	21.10.R1
Platforms	All

isis-instance *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	ISIS instance
Context	**configure** service vpls *string* spb isis-instance *number*
Tree	isis-instance
Range	1024 to 2047
Default	1024

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Introduced	21.10.R1
Platforms	All

level [id] *number*

Synopsis	Enter the **level** list instance
Context	**configure** service vpls *string* spb level *number*
Tree	level
Introduced	21.10.R1
Platforms	All

[**id**] *number*

Synopsis	Level identifier
Context	**configure** service vpls *string* spb level *number*
Tree	level
Range	1
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

bridge-priority *number*

Synopsis	SPB Bridge priority
Context	**configure** service vpls *string* spb level *number* bridge-priority *number*
Tree	bridge-priority
Range	0 to 15
Default	8
Introduced	21.10.R1
Platforms	All

ect-high-path-fid [fid] *number*

Synopsis	Add a list entry for **ect-high-path-fid**
Context	**configure** service vpls *string* spb level *number* ect-high-path-fid *number*

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Tree	ect-high-path-fid
Introduced	21.10.R1
Platforms	All

[**fid**] *number*

Synopsis	SPB control vpls FID
Context	**configure** service vpls *string* spb level *number* ect-high-path-fid *number*
Tree	ect-high-path-fid
Range	1 to 4095
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

forwarding-tree

Synopsis	Enter the **forwarding-tree** context
Context	**configure** service vpls *string* spb level *number* forwarding-tree
Tree	forwarding-tree
Introduced	21.10.R1
Platforms	All

topology *keyword*

Synopsis	Topology
Context	**configure** service vpls *string* spb level *number* forwarding-tree topology *keyword*
Tree	topology
Options	spf, st
Default	spf
Introduced	21.10.R1
Platforms	All

lsp-lifetime *number*

Synopsis	Time LSP is considered valid by other routers

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Context	**configure** service vpls *string* spb lsp-lifetime *number*
Tree	lsp-lifetime
Range	350 to 65535
Default	1200
Introduced	21.10.R1
Platforms	All

lsp-refresh-interval

Synopsis	Enter the **lsp-refresh-interval** context
Context	**configure** service vpls *string* spb lsp-refresh-interval
Tree	lsp-refresh-interval
Introduced	21.10.R1
Platforms	All

half-lifetime *boolean*

Synopsis	Refresh LSP interval at half the LSP lifetime
Context	**configure** service vpls *string* spb lsp-refresh-interval half-lifetime *boolean*
Tree	half-lifetime
Default	true
Introduced	21.10.R1
Platforms	All

interval *number*

Synopsis	Specify the interval at which LSPs are refreshed
Context	**configure** service vpls *string* spb lsp-refresh-interval interval *number*
Tree	interval
Range	150 to 65535
Default	600
Introduced	21.10.R1
Platforms	All

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overload

Synopsis	Enable the **overload** context
Context	**configure** service vpls *string* spb overload
Tree	overload
Introduced	21.10.R1
Platforms	All

timeout *number*

Synopsis	Time the router operates in overloaded state
Context	**configure** service vpls *string* spb overload timeout *number*
Tree	timeout
Range	0 | 60 to 1800
Units	seconds
Default	0
Introduced	21.10.R1
Platforms	All

overload-on-boot

Synopsis	Enable the **overload-on-boot** context
Context	**configure** service vpls *string* spb overload-on-boot
Tree	overload-on-boot
Introduced	21.10.R1
Platforms	All

timeout *number*

Synopsis	Time the router operates in overloaded state
Context	**configure** service vpls *string* spb overload-on-boot timeout *number*
Tree	timeout
Range	0 | 60 to 1800
Units	seconds
Default	0
Introduced	21.10.R1

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Platforms	All

timers

Synopsis	Enter the **timers** context
Context	**configure** service vpls *string* spb timers
Tree	timers
Introduced	21.10.R1
Platforms	All

lsp-wait

Synopsis	Enable the **lsp-wait** context
Context	**configure** service vpls *string* spb timers lsp-wait
Tree	lsp-wait
Introduced	21.10.R1
Platforms	All

initial-wait *number*

Synopsis	Initial wait
Context	**configure** service vpls *string* spb timers lsp-wait initial-wait *number*
Tree	initial-wait
Range	10 to 100000
Units	milliseconds
Default	10
Introduced	21.10.R1
Platforms	All

max-wait *number*

Synopsis	Max wait time
Context	**configure** service vpls *string* spb timers lsp-wait max-wait *number*
Tree	max-wait
Range	10 to 120000

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Units	milliseconds
Default	5000
Introduced	21.10.R1
Platforms	All

second-wait *number*

Synopsis	Second wait
Context	**configure** service vpls *string* spb timers lsp-wait second-wait *number*
Tree	second-wait
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	21.10.R1
Platforms	All

spf-wait

Synopsis	Enable the **spf-wait** context
Context	**configure** service vpls *string* spb timers spf-wait
Tree	spf-wait
Introduced	21.10.R1
Platforms	All

initial-wait *number*

Synopsis	Initial wait
Context	**configure** service vpls *string* spb timers spf-wait initial-wait *number*
Tree	initial-wait
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	21.10.R1
Platforms	All

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max-wait *number*

Synopsis	Max wait time
Context	**configure** service vpls *string* spb timers spf-wait max-wait *number*
Tree	max-wait
Range	10 to 120000
Units	milliseconds
Default	10000
Introduced	21.10.R1
Platforms	All

second-wait *number*

Synopsis	Second wait
Context	**configure** service vpls *string* spb timers spf-wait second-wait *number*
Tree	second-wait
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	21.10.R1
Platforms	All

spbm-control-vpls

Synopsis	Enter the **spbm-control-vpls** context
Context	**configure** service vpls *string* spbm-control-vpls
Tree	spbm-control-vpls
Introduced	21.10.R1
Platforms	All

fid *number*

Synopsis	SPB control vpls FID
Context	**configure** service vpls *string* spbm-control-vpls fid *number*
Tree	fid

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Range	1 to 4095
Introduced	21.10.R1
Platforms	All

service-name *string*

Synopsis	SPB control vpls service
Context	**configure** service vpls *string* spbm-control-vpls service-name *string*
Tree	service-name
String Length	1 to 64
Introduced	21.10.R1
Platforms	All

split-horizon-group [shg-name] *string*

Synopsis	Enter the **split-horizon-group** list instance
Context	**configure** service vpls *string* split-horizon-group *string*
Tree	split-horizon-group
Introduced	16.0.R1
Platforms	All

[**shg-name**] *string*

Synopsis	SHG name to which the SDP belongs
Context	**configure** service vpls *string* split-horizon-group *string*
Tree	split-horizon-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vpls *string* split-horizon-group *string* description *string*

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Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

fdb

Synopsis	Enter the **fdb** context
Context	**configure** service vpls *string* split-horizon-group *string* fdb
Tree	fdb
Introduced	16.0.R1
Platforms	All

saps

Synopsis	Enter the **saps** context
Context	**configure** service vpls *string* split-horizon-group *string* fdb saps
Tree	saps
Introduced	16.0.R1
Platforms	All

auto-learn-mac-protect *boolean*

Synopsis	Populate automatically MAC protect list with MAC addresses learned on SDP with split horizon group
Context	**configure** service vpls *string* split-horizon-group *string* fdb saps auto-learn-mac-protect *boolean*
Tree	auto-learn-mac-protect
Default	false
Introduced	16.0.R1
Platforms	All

auto-learn-mac-protect-exclude-list *reference*

Synopsis	Referenced MAC protect exclusion list name

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Context	**configure** service vpls *string* split-horizon-group *string* fdb saps auto-learn-mac-protect-exclude-list *reference*
Tree	auto-learn-mac-protect-exclude-list
Description	This command references the name of a MAC protect exclusion list. Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list. An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object.
Reference	**configure** service mac-list *string*
Introduced	20.5.R1
Platforms	All

discard-unprotected-dest-mac *boolean*

Synopsis	Discard packet with unprotected destination MAC address
Context	**configure** service vpls *string* split-horizon-group *string* fdb saps discard-unprotected-dest-mac *boolean*
Tree	discard-unprotected-dest-mac
Default	false
Introduced	16.0.R1
Platforms	All

protected-src-mac-violation-action *keyword*

Synopsis	Action to take whenever a relearn request for a protected MAC is received
Context	**configure** service vpls *string* split-horizon-group *string* fdb saps protected-src-mac-violation-action *keyword*
Tree	protected-src-mac-violation-action
Options	sap-oper-down, alarm-only, discard
Introduced	16.0.R1
Platforms	All

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residential *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Define as a residential split horizon group
Context	**configure** service vpls *string* split-horizon-group *string* residential *boolean*
Tree	residential
Default	false
Introduced	16.0.R1
Platforms	All

spoke-sdp [sdp-bind-id] *string*

Synopsis	Enter the **spoke-sdp** list instance
Context	**configure** service vpls *string* spoke-sdp *string*
Tree	spoke-sdp
Introduced	16.0.R1
Platforms	All

[**sdp-bind-id**] *string*

Synopsis	SDP binding ID
Context	**configure** service vpls *string* spoke-sdp *string*
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

accounting-policy *reference*

Synopsis	Policy to collect accounting statistics
Context	**configure** service vpls *string* spoke-sdp *string* accounting-policy *reference*
Tree	accounting-policy

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Reference	**configure** log accounting-policy *number*
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the SDP binding to the service
Context	**configure** service vpls *string* spoke-sdp *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

app-profile *reference*

Synopsis	ISA-AA application profile name for this SDP
Context	**configure** service vpls *string* spoke-sdp *string* app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bfd

Synopsis	Enter the **bfd** context
Context	**configure** service vpls *string* spoke-sdp *string* bfd
Tree	bfd
Introduced	21.2.R1
Platforms	All

bfd-liveness

Synopsis	Enable the **bfd-liveness** context
Context	**configure** service vpls *string* spoke-sdp *string* bfd bfd-liveness

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Tree	bfd-liveness
Introduced	21.2.R1
Platforms	All

encap *keyword*

Synopsis	BFD encapsulation used on the SDP binding
Context	**configure** service vpls *string* spoke-sdp *string* bfd bfd-liveness encap *keyword*
Tree	encap
Options	ipv4
Default	ipv4
Introduced	21.2.R1
Platforms	All

bfd-template *reference*

Synopsis	BFD template associated with the SDP binding
Context	**configure** service vpls *string* spoke-sdp *string* bfd bfd-template *reference*
Tree	bfd-template
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the **configure router bfd** context.
Reference	**configure** bfd bfd-template *string*
Introduced	21.2.R1
Platforms	All

failure-action *keyword*

Synopsis	VCCV BFD action taken on the SDP binding
Context	**configure** service vpls *string* spoke-sdp *string* bfd failure-action *keyword*
Tree	failure-action
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the **configure router bfd** context.
Options	none, down

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Default	none
Introduced	21.2.R1
Platforms	All

wait-for-up-timer *number*

Synopsis	Time waited for BFD up status
Context	**configure** service vpls *string* spoke-sdp *string* bfd wait-for-up-timer *number*
Tree	wait-for-up-timer
Description	This command configures the time interval that is used to wait for a BFD session to come up. This command is triggered when a spoke-SDP is first administratively enabled and a VCCV BFD session transitions from up to down. The command is required to allow time for BFD sessions to come up, and for BFD to settle before selecting the active spoke-SDP for use in a redundant set. In the case where a VCCV BFD session is bouncing, the timer prevents excessive flapping of the operational state of a spoke-SDP.
Range	1 to 60
Units	seconds
Introduced	21.2.R1
Platforms	All

block-on-mesh-failure *boolean*

Synopsis	Enable blocking after all SDPs are operationally down
Context	**configure** service vpls *string* spoke-sdp *string* block-on-mesh-failure *boolean*
Tree	block-on-mesh-failure
Default	false
Introduced	16.0.R1
Platforms	All

bpdu-translation *keyword*

Synopsis	BPDU format
Context	**configure** service vpls *string* spoke-sdp *string* bpdu-translation *keyword*
Tree	bpdu-translation
Options	auto, pvst, stp, pvst-rw, auto-rw
Introduced	16.0.R1

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Platforms	All

collect-stats *boolean*

Synopsis	Allow agent to collect accounting statistics
Context	**configure** service vpls *string* spoke-sdp *string* collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

control-word *boolean*

Synopsis	Use the control word as preferred
Context	**configure** service vpls *string* spoke-sdp *string* control-word *boolean*
Tree	control-word
Default	false
Introduced	16.0.R1
Platforms	All

cpu-protection

Synopsis	Enter the **cpu-protection** context
Context	**configure** service vpls *string* spoke-sdp *string* cpu-protection
Tree	cpu-protection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

eth-cfm-monitoring

Synopsis	Enable the **eth-cfm-monitoring** context
Context	**configure** service vpls *string* spoke-sdp *string* cpu-protection eth-cfm-monitoring
Tree	eth-cfm-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

aggregate

Synopsis	Apply rate limit to the sum of the per peer packet rates
Context	**configure** service vpls *string* spoke-sdp *string* cpu-protection eth-cfm-monitoring aggregate
Tree	aggregate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

car

Synopsis	Ignore Ethernet CFM packets when enforcing overall rate
Context	**configure** service vpls *string* spoke-sdp *string* cpu-protection eth-cfm-monitoring car
Tree	car
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	**configure** service vpls *string* spoke-sdp *string* cpu-protection mac-monitoring
Tree	mac-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

policy-id *reference*

Synopsis	CPM protection policy
Context	**configure** service vpls *string* spoke-sdp *string* cpu-protection policy-id *reference*
Tree	policy-id
Reference	**configure** system security cpu-protection policy *number*
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** service vpls *string* spoke-sdp *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dhcp

Synopsis	Enter the **dhcp** context
Context	**configure** service vpls *string* spoke-sdp *string* dhcp
Tree	dhcp
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vpls *string* spoke-sdp *string* dhcp description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

snoop *boolean*

Synopsis	Allow DHCP snooping of DHCP messages on the SAP or SDP
Context	**configure** service vpls *string* spoke-sdp *string* dhcp snoop *boolean*
Tree	snoop
Default	false
Introduced	16.0.R1

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Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** service vpls *string* spoke-sdp *string* egress
Tree	egress
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the **filter** context
Context	**configure** service vpls *string* spoke-sdp *string* egress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service vpls *string* spoke-sdp *string* egress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service vpls *string* spoke-sdp *string* egress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	All

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mac *reference*

Synopsis	MAC filter policy name
Context	**configure** service vpls *string* spoke-sdp *string* egress filter mac *reference*
Tree	mac
Reference	**configure** filter mac-filter *string*
Introduced	16.0.R1
Platforms	All

mfib-allowed-mda-destinations

Synopsis	Enter the **mfib-allowed-mda-destinations** context
Context	**configure** service vpls *string* spoke-sdp *string* egress mfib-allowed-mda-destinations
Tree	mfib-allowed-mda-destinations
Introduced	16.0.R4
Platforms	All

mda [mda-id] *string*

Synopsis	Add a list entry for **mda**
Context	**configure** service vpls *string* spoke-sdp *string* egress mfib-allowed-mda-destinations mda *string*
Tree	mda
Introduced	16.0.R4
Platforms	All

[**mda-id**] *string*

Synopsis	MFIB allowed MDA destination
Context	**configure** service vpls *string* spoke-sdp *string* egress mfib-allowed-mda-destinations mda *string*
Tree	mda
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

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qos

Synopsis	Enter the **qos** context
Context	**configure** service vpls *string* spoke-sdp *string* egress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

network

Synopsis	Enter the **network** context
Context	**configure** service vpls *string* spoke-sdp *string* egress qos network
Tree	network
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Network policy ID
Context	**configure** service vpls *string* spoke-sdp *string* egress qos network policy-name *reference*
Tree	policy-name
Reference	**configure** qos network *string*
Introduced	16.0.R1
Platforms	All

port-redirect-group

Synopsis	Enter the **port-redirect-group** context
Context	**configure** service vpls *string* spoke-sdp *string* egress qos network port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	All

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group-name *reference*

Synopsis	Name of the egress port queue group
Context	**configure** service vpls *string* spoke-sdp *string* egress qos network port-redirect-group group-name *reference*
Tree	group-name
Reference	**configure** qos queue-group-templates egress queue-group *string*
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Queue-group instance ID
Context	**configure** service vpls *string* spoke-sdp *string* egress qos network port-redirect-group instance *number*
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	**configure** service vpls *string* spoke-sdp *string* egress vc-label *number*
Tree	vc-label
Range	16 to 1048575
Introduced	16.0.R1
Platforms	All

endpoint

Synopsis	Enter the **endpoint** context
Context	**configure** service vpls *string* spoke-sdp *string* endpoint

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Tree	endpoint
Introduced	16.0.R1
Platforms	All

name *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of service endpoint to which SDP bind is attached
Context	**configure** service vpls *string* spoke-sdp *string* endpoint name *reference*
Tree	name
Reference	**configure** service vpls *string* endpoint *string*
Introduced	16.0.R1
Platforms	All

precedence *(number | keyword)*

Synopsis	Precedence of this SDP bind when there are multiple SDP binds attached to one service endpoint
Context	**configure** service vpls *string* spoke-sdp *string* endpoint precedence *(number | keyword)*
Tree	precedence
Range	1 to 4
Options	primary
Default	4
Introduced	16.0.R1
Platforms	All

entropy-label

Synopsis	Enable the use of entropy labels for spoke SDPs
Context	**configure** service vpls *string* spoke-sdp *string* entropy-label
Tree	entropy-label
Notes	The following elements are part of a choice: **entropy-label** or **hash-label**.
Introduced	16.0.R1

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Platforms	All

eth-cfm

Synopsis	Enter the **eth-cfm** context
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm
Tree	eth-cfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-fc-stats

Synopsis	Enter the **collect-lmm-fc-stats** context
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm collect-lmm-fc-stats
Tree	collect-lmm-fc-stats
Description	Commands in this context configure per forwarding class (FC) LMM information collection. The commands **fc-in-profile** and **fc** in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively. This command and the **collect-lmm-stats** command are mutually exclusive when there is entity resource contention.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc *keyword*

Synopsis	Forwarding class name for profile-unaware counter
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm collect-lmm-fc-stats fc *keyword*
Tree	fc
Description	This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter. An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the **fc-in-profile** command under the **collect-lmm-fc-stats** context. When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.
Options	be, l2, af, l1, h2, ef, h1, nc

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Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc-in-profile *keyword*

Synopsis	Forwarding class name for profile-aware counter
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm collect-lmm-fc-stats fc-in-profile *keyword*
Tree	fc-in-profile
Description	This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter. An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the **fc** command under the **collect-lmm-fc-stats** context. When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm collect-lmm-stats *boolean*
Tree	collect-lmm-stats
Description	When configured to **true**, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings. The **show eth-cfm collect-lmm-stats** command displays entities that have been enabled to collect transit and receive counters. When configured to **false**, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*

Synopsis	Enter the **mep** list instance
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string* association *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID

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Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais

Synopsis	Enable the **ais** context
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais
Tree	ais
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

client-meg-level *number*

Synopsis	Client MEG level for AIS message generation
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais client-meg-level *number*
Tree	client-meg-level
Range	1 to 7

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Max. Instances	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interface-support *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais interface-support *boolean*
Tree	interface-support
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number*

Synopsis	Transmission interval for AIS messages
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais interval *number*
Tree	interval
Range	1 | 60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais low-priority-defect *keyword*
Tree	low-priority-defect
Options	all-def, mac-rem-err-xcon
Default	all-def
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Priority of the AIS messages generated by the node
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais priority *number*
Tree	priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the **alarm-notification** context
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification
Tree	alarm-notification
Description	Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm. Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-alarm-time *number*
Tree	fng-alarm-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-reset-time *number*
Tree	fng-reset-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis	Generate CCM messages
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm *boolean*
Tree	ccm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-ltm-priority *number*
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets

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Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-padding-size *number*
Tree	ccm-padding-size
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU. This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through **configure eth-cfm domain association ccm-interval)** is less than 1 second.
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cfm-vlan-tag *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* cfm-vlan-tag *string*
Tree	cfm-vlan-tag
String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

csf

Synopsis	Enable the **csf** context
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* csf
Tree	csf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* csf multiplier *decimal-number*

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Tree	multiplier
Range	0.0 | 2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

direction *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Direction the MEP faces
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* direction *keyword*
Tree	direction
Options	down, up
Default	down
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the **eth-test** context
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test
Tree	eth-test

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Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the **oam eth-cfm eth-test** command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test bit-error-threshold *number*
Tree	bit-error-threshold
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis	Enter the **test-pattern** context
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern crc-tlv *boolean*
Tree	crc-tlv
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern pattern *keyword*
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fault-propagation *keyword*

Synopsis	Fault propagation for the MEP
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* fault-propagation *keyword*
Tree	fault-propagation
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the **grace** context
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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eth-ed

Synopsis	Enter the **eth-ed** context
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed max-rx-defect-window *number*
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed priority *number*
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed rx-eth-ed *boolean*
Tree	rx-eth-ed

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Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed tx-eth-ed *boolean*
Tree	tx-eth-ed
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis	Enter the **eth-vsm-grace** context
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace rx-eth-vsm-grace *boolean*
Tree	rx-eth-vsm-grace
Description	When configured to **true**, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to **false**, the router disables the Nokia Grace function.

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Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace tx-eth-vsm-grace *boolean*
Tree	tx-eth-vsm-grace
Description	When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards. The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED). When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lbm-svc-act-responder *boolean*

Synopsis	Process service activation streams in ETH-CFM LBM
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* lbm-svc-act-responder *boolean*
Tree	lbm-svc-act-responder
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm

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Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* low-priority-defect *keyword*
Tree	low-priority-defect
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MEP
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* mac-address *string*
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* one-way-delay-threshold *number*
Tree	one-way-delay-threshold
Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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primary-vlan *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MEP provisioned using MA primary VLAN ID
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* primary-vlan *boolean*
Tree	primary-vlan
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mip primary-vlan *(number | keyword)*

Synopsis	Enter the **mip** list instance
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mip primary-vlan *(number | keyword)*
Tree	mip
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

primary-vlan *(number | keyword)*

Synopsis	VLAN ID to which the MIP is attached
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mip primary-vlan *(number | keyword)*
Tree	mip
Description	This command provides an option for linking a MIP with a Primary VLAN number or none. When the **none** option is provided, the MIP does not include the primary vlan.
Range	1 to 4094
Options	none
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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cfm-vlan-tag *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mip primary-vlan *(number | keyword)* cfm-vlan-tag *string*
Tree	cfm-vlan-tag
Description	This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration.
String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MIP
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm mip primary-vlan *(number | keyword)* mac-address *string*
Tree	mac-address
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch-ingress-ctag-levels *number*

Synopsis	Squelch levels using additional VLAN C-Tag space
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm squelch-ingress-ctag-levels *number*
Tree	squelch-ingress-ctag-levels
Description	This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding plus an additional VLAN, up to a maximum tag length of two tags. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.

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The list of levels must be a complete contiguous list from 0 up to the highest level to be dropped.

Range	0 to 7
Max. Instances	8
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch-ingress-levels *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm squelch-ingress-levels *number*
Tree	squelch-ingress-levels
Description	This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option. The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.
Range	0 to 7
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vmep-filter *boolean*

Synopsis	Suppress eth-cfm PDUs based on level lower than or equal to configured Virtual MEP
Context	**configure** service vpls *string* spoke-sdp *string* eth-cfm vmep-filter *boolean*
Tree	vmep-filter
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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etree-leaf *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable etree leaf access-circuit status
Context	**configure** service vpls *string* spoke-sdp *string* etree-leaf *boolean*
Tree	etree-leaf
Default	false
Introduced	16.0.R1
Platforms	All

etree-root-leaf-tag *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	E-tree root leaf tag status
Context	**configure** service vpls *string* spoke-sdp *string* etree-root-leaf-tag *boolean*
Tree	etree-root-leaf-tag
Default	false
Introduced	16.0.R1
Platforms	All

fdb

Synopsis	Enter the **fdb** context
Context	**configure** service vpls *string* spoke-sdp *string* fdb
Tree	fdb
Introduced	16.0.R1
Platforms	All

auto-learn-mac-protect *boolean*

Synopsis	Populate automatically MAC protect list with source MAC addresses learned on SDP
Context	**configure** service vpls *string* spoke-sdp *string* fdb auto-learn-mac-protect *boolean*

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Tree	auto-learn-mac-protect
Default	false
Introduced	16.0.R1
Platforms	All

auto-learn-mac-protect-exclude-list *reference*

Synopsis	Referenced MAC protect exclusion list name
Context	**configure** service vpls *string* spoke-sdp *string* fdb auto-learn-mac-protect-exclude-list *reference*
Tree	auto-learn-mac-protect-exclude-list
Description	This command references the name of a MAC protect exclusion list. Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list. An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object.
Reference	**configure** service mac-list *string*
Introduced	20.5.R1
Platforms	All

discard-unknown-source *boolean*

Synopsis	Discard packets with unknown destination MAC addresses
Context	**configure** service vpls *string* spoke-sdp *string* fdb discard-unknown-source *boolean*
Tree	discard-unknown-source
Default	false
Introduced	16.0.R1
Platforms	All

limit-mac-move *keyword*

Synopsis	MAC move
Context	**configure** service vpls *string* spoke-sdp *string* fdb limit-mac-move *keyword*
Tree	limit-mac-move
Options	blockable, non-blockable

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Default	blockable
Introduced	16.0.R1
Platforms	All

mac-learning

Synopsis	Enter the **mac-learning** context
Context	**configure** service vpls *string* spoke-sdp *string* fdb mac-learning
Tree	mac-learning
Introduced	16.0.R1
Platforms	All

aging *boolean*

Synopsis	Enable aging of MAC addresses
Context	**configure** service vpls *string* spoke-sdp *string* fdb mac-learning aging *boolean*
Tree	aging
Default	true
Introduced	16.0.R1
Platforms	All

learning *boolean*

Synopsis	Enable learning of new MAC addresses
Context	**configure** service vpls *string* spoke-sdp *string* fdb mac-learning learning *boolean*
Tree	learning
Default	true
Introduced	16.0.R1
Platforms	All

mac-pinning *boolean*

Synopsis	MAC address pinning in active status
Context	**configure** service vpls *string* spoke-sdp *string* fdb mac-pinning *boolean*
Tree	mac-pinning

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Default	false
Introduced	16.0.R1
Platforms	All

maximum-mac-addresses *number*

Synopsis	Maximum number of MAC address entries in the FDB
Context	**configure** service vpls *string* spoke-sdp *string* fdb maximum-mac-addresses *number*
Tree	maximum-mac-addresses
Description	This command specifies the maximum number of FDB entries for both learned and static MAC addresses for this spoke SDP. When the configured limit is reached, no new addresses are learned from the SAP or spoke SDP until at least one FDB entry is aged out or cleared. When the configured limit is reached and the **configure service spoke-sdp fdb discard-unknown-source** command is set to **true** for this spoke SDP, packets with unknown source MAC addresses are discarded. If **discard-unknown-source** is set to **false**, the packets are forwarded if their destination MAC addresses are known, or flooded if their destination MAC addresses are unknown. However, if the **configure service vpls fdb discard-unknown** command is set to **true**, packets with unknown destination MAC addresses are discarded, even if the limit of FDB entries on the specific VPLS instance is not reached. When unconfigured, the spoke SDP uses the global MAC learning limitations.
Range	1 to 511999
Introduced	16.0.R1
Platforms	All

protected-src-mac-violation-action *keyword*

Synopsis	Action when a relearn request for a protected MAC is received on the SDP
Context	**configure** service vpls *string* spoke-sdp *string* fdb protected-src-mac-violation-action *keyword*
Tree	protected-src-mac-violation-action
Options	sdp-bind-oper-down, alarm-only, discard
Introduced	16.0.R1
Platforms	All

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force-vc-forwarding *keyword*

Synopsis	VC forwarding action
Context	**configure** service vpls *string* spoke-sdp *string* force-vc-forwarding *keyword*
Tree	force-vc-forwarding
Options	vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag
Introduced	16.0.R1
Platforms	All

hash-label

Synopsis	Enable the **hash-label** context
Context	**configure** service vpls *string* spoke-sdp *string* hash-label
Tree	hash-label
Description	Commands in this context configure the use of hash labels for egress datapaths. For information about hash-label handling, see the "Hash labels" section of the *7450 ESS, 7750 SR, 7950 XRS, and VSR MPLS Guide*.
Notes	The following elements are part of a choice: **entropy-label** or **hash-label**.
Introduced	16.0.R1
Platforms	All

signal-capability

Synopsis	Signal hash label capability to the remote PE
Context	**configure** service vpls *string* spoke-sdp *string* hash-label signal-capability
Tree	signal-capability
Description	When configured, this command enables the signaling and negotiating of the hash label between the local and remote PE nodes. The signaling process outcome determines whether the local PE inserts the hash label on the user packets. This outcome can override the local PE configuration.
Introduced	16.0.R1
Platforms	All

i-vpls-mac-flush

Synopsis	Enter the **i-vpls-mac-flush** context
Context	**configure** service vpls *string* spoke-sdp *string* i-vpls-mac-flush

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Tree	i-vpls-mac-flush
Introduced	16.0.R1
Platforms	All

bgp-evpn

Synopsis	Enter the **bgp-evpn** context
Context	**configure** service vpls *string* spoke-sdp *string* i-vpls-mac-flush bgp-evpn
Tree	bgp-evpn
Introduced	16.0.R1
Platforms	All

send-to-bvpls *boolean*

Synopsis	Send B-VPLS EVPN flush
Context	**configure** service vpls *string* spoke-sdp *string* i-vpls-mac-flush bgp-evpn send-to-bvpls *boolean*
Tree	send-to-bvpls
Default	true
Introduced	16.0.R1
Platforms	All

igmp-snooping

Synopsis	Enter the **igmp-snooping** context
Context	**configure** service vpls *string* spoke-sdp *string* igmp-snooping
Tree	igmp-snooping
Introduced	16.0.R1
Platforms	All

fast-leave *boolean*

Synopsis	Allow IGMP fast leave processing
Context	**configure** service vpls *string* spoke-sdp *string* igmp-snooping fast-leave *boolean*
Tree	fast-leave
Default	false

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Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	**configure** service vpls *string* spoke-sdp *string* igmp-snooping import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	All

maximum-number-group-sources *number*

Synopsis	Maximum group source combinations
Context	**configure** service vpls *string* spoke-sdp *string* igmp-snooping maximum-number-group-sources *number*
Tree	maximum-number-group-sources
Range	1 to 32000
Introduced	16.0.R1
Platforms	All

maximum-number-groups *number*

Synopsis	Maximum groups allowed
Context	**configure** service vpls *string* spoke-sdp *string* igmp-snooping maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

maximum-number-sources *number*

Synopsis	Maximum sources that are allowed per group

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Context	**configure** service vpls *string* spoke-sdp *string* igmp-snooping maximum-number-sources *number*
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

mcac

Synopsis	Enter the **mcac** context
Context	**configure** service vpls *string* spoke-sdp *string* igmp-snooping mcac
Tree	mcac
Introduced	16.0.R1
Platforms	All

bandwidth

Synopsis	Enter the **bandwidth** context
Context	**configure** service vpls *string* spoke-sdp *string* igmp-snooping mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	All

mandatory *(number | keyword)*

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	**configure** service vpls *string* spoke-sdp *string* igmp-snooping mcac bandwidth mandatory *(number | keyword)*
Tree	mandatory
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

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total *(number | keyword)*

Synopsis	Maximum allowed bandwidth
Context	**configure** service vpls *string* spoke-sdp *string* igmp-snooping mcac bandwidth total *(number | keyword)*
Tree	total
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	**configure** service vpls *string* spoke-sdp *string* igmp-snooping mcac interface-policy *reference*
Tree	interface-policy
Reference	**configure** mcac interface-policy *string*
Introduced	16.0.R1
Platforms	All

policy *reference*

Synopsis	Multicast CAC policy name
Context	**configure** service vpls *string* spoke-sdp *string* igmp-snooping mcac policy *reference*
Tree	policy
Description	This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment. Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode. If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect. Hierarchical MCAC (HMCAC) is supported on two levels simultaneously: • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured

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In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).

Reference	**configure** mcac policy *string*
Introduced	16.0.R1
Platforms	All

mrouter-port *boolean*

Synopsis	Operate port as a multicast router port
Context	**configure** service vpls *string* spoke-sdp *string* igmp-snooping mrouter-port *boolean*
Tree	mrouter-port
Default	false
Introduced	16.0.R1
Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** service vpls *string* spoke-sdp *string* igmp-snooping query-interval *number*
Tree	query-interval
Range	2 to 1024
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	**configure** service vpls *string* spoke-sdp *string* igmp-snooping query-last-member-interval *number*
Tree	query-last-member-interval
Range	1 to 50
Units	deciseconds

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Default	10
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	**configure** service vpls *string* spoke-sdp *string* igmp-snooping query-response-interval *number*
Tree	query-response-interval
Range	1 to 1023
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	**configure** service vpls *string* spoke-sdp *string* igmp-snooping robust-count *number*
Tree	robust-count
Range	2 to 7
Default	2
Introduced	16.0.R1
Platforms	All

router-alert-check *boolean*

Synopsis	Enable IP router alert check option
Context	**configure** service vpls *string* spoke-sdp *string* igmp-snooping router-alert-check *boolean*
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	All

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send-queries *boolean*

Synopsis	Generate IGMP general queries
Context	**configure** service vpls *string* spoke-sdp *string* igmp-snooping send-queries *boolean*
Tree	send-queries
Default	false
Introduced	16.0.R1
Platforms	All

static

Synopsis	Enter the **static** context
Context	**configure** service vpls *string* spoke-sdp *string* igmp-snooping static
Tree	static
Introduced	16.0.R1
Platforms	All

group [group-address] *string*

Synopsis	Enter the **group** list instance
Context	**configure** service vpls *string* spoke-sdp *string* igmp-snooping static group *string*
Tree	group
Introduced	16.0.R1
Platforms	All

[**group-address**] *string*

Synopsis	Group address of static IGMP multicast channel
Context	**configure** service vpls *string* spoke-sdp *string* igmp-snooping static group *string*
Tree	group
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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source [source-address] *string*

Synopsis	Add a list entry for **source**
Context	**configure** service vpls *string* spoke-sdp *string* igmp-snooping static group *string* source *string*
Tree	source
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R1
Platforms	All

[**source-address**] *string*

Synopsis	Source IP address of multicast channel sending data
Context	**configure** service vpls *string* spoke-sdp *string* igmp-snooping static group *string* source *string*
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	any source address (*,G)
Context	**configure** service vpls *string* spoke-sdp *string* igmp-snooping static group *string* starg
Tree	starg
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R2
Platforms	All

version *keyword*

Synopsis	IGMP protocol version
Context	**configure** service vpls *string* spoke-sdp *string* igmp-snooping version *keyword*
Tree	version
Options	1, 2, 3

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Default	3
Introduced	16.0.R1
Platforms	All

ignore-standby-signaling *boolean*

Synopsis	Ignore standby-bit received from TLDP peers when performing internal tasks
Context	**configure** service vpls *string* spoke-sdp *string* ignore-standby-signaling *boolean*
Tree	ignore-standby-signaling
Default	false
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service vpls *string* spoke-sdp *string* ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the **filter** context
Context	**configure** service vpls *string* spoke-sdp *string* ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service vpls *string* spoke-sdp *string* ingress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*

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Introduced	16.0.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service vpls *string* spoke-sdp *string* ingress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	All

mac *reference*

Synopsis	MAC filter policy name
Context	**configure** service vpls *string* spoke-sdp *string* ingress filter mac *reference*
Tree	mac
Reference	**configure** filter mac-filter *string*
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** service vpls *string* spoke-sdp *string* ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

network

Synopsis	Enter the **network** context
Context	**configure** service vpls *string* spoke-sdp *string* ingress qos network
Tree	network
Introduced	16.0.R1

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Platforms	All

fp-redirect-group

Synopsis	Enter the **fp-redirect-group** context
Context	**configure** service vpls *string* spoke-sdp *string* ingress qos network fp-redirect-group
Tree	fp-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Name of the forwarding plane queue group template
Context	**configure** service vpls *string* spoke-sdp *string* ingress qos network fp-redirect-group group-name *reference*
Tree	group-name
Reference	**configure** qos queue-group-templates ingress queue-group *string*
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Instance of FP ingress queue group for the SDP binding
Context	**configure** service vpls *string* spoke-sdp *string* ingress qos network fp-redirect-group instance *number*
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Network policy ID
Context	**configure** service vpls *string* spoke-sdp *string* ingress qos network policy-name *reference*
Tree	policy-name

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Reference	**configure** qos network *string*
Introduced	16.0.R1
Platforms	All

vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
Context	**configure** service vpls *string* spoke-sdp *string* ingress vc-label *number*
Tree	vc-label
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

l2pt

Synopsis	Enter the **l2pt** context
Context	**configure** service vpls *string* spoke-sdp *string* l2pt
Tree	l2pt
Introduced	16.0.R1
Platforms	All

termination

Synopsis	Enable the **termination** context
Context	**configure** service vpls *string* spoke-sdp *string* l2pt termination
Tree	termination
Introduced	16.0.R1
Platforms	All

protocols

Synopsis	Enter the **protocols** context

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Context	**configure** service vpls *string* spoke-sdp *string* l2pt termination protocols
Tree	protocols
Introduced	16.0.R1
Platforms	All

cdp *boolean*

Synopsis	Enable Cisco discovery protocol
Context	**configure** service vpls *string* spoke-sdp *string* l2pt termination protocols cdp *boolean*
Tree	cdp
Default	false
Introduced	16.0.R1
Platforms	All

dtp *boolean*

Synopsis	Enable dynamic trunking protocol
Context	**configure** service vpls *string* spoke-sdp *string* l2pt termination protocols dtp *boolean*
Tree	dtp
Default	false
Introduced	16.0.R1
Platforms	All

pagp *boolean*

Synopsis	Enable port aggregation protocol
Context	**configure** service vpls *string* spoke-sdp *string* l2pt termination protocols pagp *boolean*
Tree	pagp
Default	false
Introduced	16.0.R1
Platforms	All

stp *boolean*

Synopsis	Enable all spanning tree protocols

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Context	**configure** service vpls *string* spoke-sdp *string* l2pt termination protocols stp *boolean*
Tree	stp
Default	true
Introduced	16.0.R1
Platforms	All

udld *boolean*

Synopsis	Enable unidirectional link detection
Context	**configure** service vpls *string* spoke-sdp *string* l2pt termination protocols udld *boolean*
Tree	udld
Default	false
Introduced	16.0.R1
Platforms	All

vtp *boolean*

Synopsis	Enable virtual trunk protocol
Context	**configure** service vpls *string* spoke-sdp *string* l2pt termination protocols vtp *boolean*
Tree	vtp
Default	false
Introduced	16.0.R1
Platforms	All

mld-snooping

Synopsis	Enter the **mld-snooping** context
Context	**configure** service vpls *string* spoke-sdp *string* mld-snooping
Tree	mld-snooping
Introduced	16.0.R1
Platforms	All

fast-leave *boolean*

Synopsis	Allow IGMP fast leave processing

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Context	**configure** service vpls *string* spoke-sdp *string* mld-snooping fast-leave *boolean*
Tree	fast-leave
Default	false
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	**configure** service vpls *string* spoke-sdp *string* mld-snooping import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	All

maximum-number-groups *number*

Synopsis	Maximum groups allowed
Context	**configure** service vpls *string* spoke-sdp *string* mld-snooping maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

mrouter-port *boolean*

Synopsis	Operate port as a multicast router port
Context	**configure** service vpls *string* spoke-sdp *string* mld-snooping mrouter-port *boolean*
Tree	mrouter-port
Default	false
Introduced	16.0.R1
Platforms	All

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query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** service vpls *string* spoke-sdp *string* mld-snooping query-interval *number*
Tree	query-interval
Range	2 to 1024
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	**configure** service vpls *string* spoke-sdp *string* mld-snooping query-last-member-interval *number*
Tree	query-last-member-interval
Range	1 to 50
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	**configure** service vpls *string* spoke-sdp *string* mld-snooping query-response-interval *number*
Tree	query-response-interval
Range	1 to 1023
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

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robust-count *number*

Synopsis	Number of retries after expected message loss
Context	**configure** service vpls *string* spoke-sdp *string* mld-snooping robust-count *number*
Tree	robust-count
Range	2 to 7
Default	2
Introduced	16.0.R1
Platforms	All

router-alert-check *boolean*

Synopsis	Enable IP router alert check option
Context	**configure** service vpls *string* spoke-sdp *string* mld-snooping router-alert-check *boolean*
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	All

send-queries *boolean*

Synopsis	Generate IGMP general queries
Context	**configure** service vpls *string* spoke-sdp *string* mld-snooping send-queries *boolean*
Tree	send-queries
Default	false
Introduced	16.0.R1
Platforms	All

static

Synopsis	Enter the **static** context
Context	**configure** service vpls *string* spoke-sdp *string* mld-snooping static
Tree	static
Introduced	16.0.R1
Platforms	All

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group [group-address] *string*

Synopsis	Enter the **group** list instance
Context	**configure** service vpls *string* spoke-sdp *string* mld-snooping static group *string*
Tree	group
Introduced	16.0.R1
Platforms	All

[**group-address**] *string*

Synopsis	Group address of multicast channel
Context	**configure** service vpls *string* spoke-sdp *string* mld-snooping static group *string*
Tree	group
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [source-address] *string*

Synopsis	Add a list entry for **source**
Context	**configure** service vpls *string* spoke-sdp *string* mld-snooping static group *string* source *string*
Tree	source
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R1
Platforms	All

[**source-address**] *string*

Synopsis	Source IP address
Context	**configure** service vpls *string* spoke-sdp *string* mld-snooping static group *string* source *string*
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2

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Platforms	All

starg

Synopsis	any source address (*,G)
Context	**configure** service vpls *string* spoke-sdp *string* mld-snooping static group *string* starg
Tree	starg
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R2
Platforms	All

version *keyword*

Synopsis	Version of MLD running on the SAP or SDP
Context	**configure** service vpls *string* spoke-sdp *string* mld-snooping version *keyword*
Tree	version
Options	1, 2
Default	2
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference*

Synopsis	Operational group that affects state of the SDP bind
Context	**configure** service vpls *string* spoke-sdp *string* monitor-oper-group *reference*
Tree	monitor-oper-group
Reference	**configure** service oper-group *string*
Notes	The following elements are part of a choice: **monitor-oper-group** or **oper-group**.
Introduced	16.0.R1
Platforms	All

mrp

Synopsis	Enter the **mrp** context
Context	**configure** service vpls *string* spoke-sdp *string* mrp

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Tree	mrp
Introduced	20.10.R1
Platforms	All

join-time *number*

Synopsis	Maximum rate for attribute join messages sent on SDP
Context	**configure** service vpls *string* spoke-sdp *string* mrp join-time *number*
Tree	join-time
Range	1 to 10
Units	deciseconds
Default	2
Introduced	20.10.R1
Platforms	All

leave-all-time *number*

Synopsis	Frequency of LeaveAll PDUs by LeaveAll state machine
Context	**configure** service vpls *string* spoke-sdp *string* mrp leave-all-time *number*
Tree	leave-all-time
Range	60 to 300
Units	deciseconds
Default	100
Introduced	20.10.R1
Platforms	All

leave-time *number*

Synopsis	Time in LV state before transition to MT state
Context	**configure** service vpls *string* spoke-sdp *string* mrp leave-time *number*
Tree	leave-time
Range	30 to 60
Units	deciseconds
Default	30
Introduced	20.10.R1

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Platforms	All

periodic-time *number*

Synopsis	Frequency of periodic events generated by state machine
Context	**configure** service vpls *string* spoke-sdp *string* mrp periodic-time *number*
Tree	periodic-time
Range	10 to 100
Units	deciseconds
Default	10
Introduced	20.10.R1
Platforms	All

periodic-timer *boolean*

Synopsis	Enable the Periodic Transmission Timer
Context	**configure** service vpls *string* spoke-sdp *string* mrp periodic-timer *boolean*
Tree	periodic-timer
Default	false
Introduced	20.10.R1
Platforms	All

policy *reference*

Synopsis	MRP policy to control Group B-MAC attributes
Context	**configure** service vpls *string* spoke-sdp *string* mrp policy *reference*
Tree	policy
Reference	**configure** service mrp policy *string*
Introduced	20.10.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group identifier
Context	**configure** service vpls *string* spoke-sdp *string* oper-group *reference*

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Tree	oper-group
Reference	**configure** service oper-group *string*
Notes	The following elements are part of a choice: **monitor-oper-group** or **oper-group**.
Introduced	16.0.R1
Platforms	All

pbb

Synopsis	Enter the **pbb** context
Context	**configure** service vpls *string* spoke-sdp *string* pbb
Tree	pbb
Introduced	20.10.R1
Platforms	All

fault-propagation

Synopsis	Enter the **fault-propagation** context
Context	**configure** service vpls *string* spoke-sdp *string* pbb fault-propagation
Tree	fault-propagation
Introduced	20.10.R1
Platforms	All

backbone-mac-address [address] *string*

Synopsis	Add a list entry for **backbone-mac-address**
Context	**configure** service vpls *string* spoke-sdp *string* pbb fault-propagation backbone-mac-address *string*
Tree	backbone-mac-address
Introduced	20.10.R1
Platforms	All

[**address**] *string*

Synopsis	Backbone MAC address
Context	**configure** service vpls *string* spoke-sdp *string* pbb fault-propagation backbone-mac-address *string*

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Tree	backbone-mac-address
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

backbone-mac-name [name] *reference*

Synopsis	Add a list entry for **backbone-mac-name**
Context	**configure** service vpls *string* spoke-sdp *string* pbb fault-propagation backbone-mac-name *reference*
Tree	backbone-mac-name
Introduced	20.10.R1
Platforms	All

[**name**] *reference*

Synopsis	Backbone MAC address name
Context	**configure** service vpls *string* spoke-sdp *string* pbb fault-propagation backbone-mac-name *reference*
Tree	backbone-mac-name
Reference	**configure** service pbb mac *string*
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

pim-snooping

Synopsis	Enter the **pim-snooping** context
Context	**configure** service vpls *string* spoke-sdp *string* pim-snooping
Tree	pim-snooping
Introduced	16.0.R1
Platforms	All

maximum-number-groups *number*

Synopsis	Maximum groups for this interface

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Context	**configure** service vpls *string* spoke-sdp *string* pim-snooping maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

pw-status

Synopsis	Enter the **pw-status** context
Context	**configure** service vpls *string* spoke-sdp *string* pw-status
Tree	pw-status
Introduced	16.0.R1
Platforms	All

signaling *boolean*

Synopsis	Enable the use of pseudowire status signaling
Context	**configure** service vpls *string* spoke-sdp *string* pw-status signaling *boolean*
Tree	signaling
Default	true
Introduced	16.0.R1
Platforms	All

spb

Synopsis	Enable the **spb** context
Context	**configure** service vpls *string* spoke-sdp *string* spb
Tree	spb
Introduced	21.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Admin state
Context	**configure** service vpls *string* spoke-sdp *string* spb admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	All

level [id] *number*

Synopsis	Enter the **level** list instance
Context	**configure** service vpls *string* spoke-sdp *string* spb level *number*
Tree	level
Introduced	21.10.R1
Platforms	All

[**id**] *number*

Synopsis	Level identifier
Context	**configure** service vpls *string* spoke-sdp *string* spb level *number*
Tree	level
Range	1
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

hello-interval *number*

Synopsis	Hello interval
Context	**configure** service vpls *string* spoke-sdp *string* spb level *number* hello-interval *number*
Tree	hello-interval
Range	1 to 20000
Units	seconds
Default	9
Introduced	21.10.R1
Platforms	All

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hello-multiplier *number*

Synopsis	Hello multiplier
Context	**configure** service vpls *string* spoke-sdp *string* spb level *number* hello-multiplier *number*
Tree	hello-multiplier
Range	2 to 100
Default	3
Introduced	21.10.R1
Platforms	All

metric *number*

Synopsis	Metric
Context	**configure** service vpls *string* spoke-sdp *string* spb level *number* metric *number*
Tree	metric
Range	0 to 16777215
Default	0
Introduced	21.10.R1
Platforms	All

lsp-pacing-interval *number*

Synopsis	Lsp pacing interval
Context	**configure** service vpls *string* spoke-sdp *string* spb lsp-pacing-interval *number*
Tree	lsp-pacing-interval
Range	0 to 65535
Units	milliseconds
Default	100
Introduced	21.10.R1
Platforms	All

retransmit-interval *number*

Synopsis	Retransmit interval
Context	**configure** service vpls *string* spoke-sdp *string* spb retransmit-interval *number*

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Tree	retransmit-interval
Range	1 to 65535
Units	seconds
Default	5
Introduced	21.10.R1
Platforms	All

split-horizon-group *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the split horizon group where the spoke SDP bind belongs to
Context	**configure** service vpls *string* spoke-sdp *string* split-horizon-group *reference*
Tree	split-horizon-group
Reference	**configure** service vpls *string* split-horizon-group *string*
Introduced	16.0.R1
Platforms	All

static-isid

Synopsis	Enter the **static-isid** context
Context	**configure** service vpls *string* spoke-sdp *string* static-isid
Tree	static-isid
Introduced	19.10.R1
Platforms	All

range [range-id] *number*

Synopsis	Enter the **range** list instance
Context	**configure** service vpls *string* spoke-sdp *string* static-isid range *number*
Tree	range
Introduced	19.10.R1
Platforms	All

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[**range-id**] *number*

Synopsis	Range ID for static ISID
Context	**configure** service vpls *string* spoke-sdp *string* static-isid range *number*
Tree	range
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

end *number*

Synopsis	Upper bound of the ISID range
Context	**configure** service vpls *string* spoke-sdp *string* static-isid range *number* end *number*
Tree	end
Range	1 to 16777215
Introduced	19.10.R1
Platforms	All

start *number*

Synopsis	Lower bound of the ISID range
Context	**configure** service vpls *string* spoke-sdp *string* static-isid range *number* start *number*
Tree	start
Range	1 to 16777215
Introduced	19.10.R1
Platforms	All

stp

Synopsis	Enter the **stp** context
Context	**configure** service vpls *string* spoke-sdp *string* stp
Tree	stp
Introduced	16.0.R4
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of STP
Context	**configure** service vpls *string* spoke-sdp *string* stp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R4
Platforms	All

auto-edge *boolean*

Synopsis	Enable automatic detection of edge port characteristics
Context	**configure** service vpls *string* spoke-sdp *string* stp auto-edge *boolean*
Tree	auto-edge
Default	true
Introduced	16.0.R4
Platforms	All

edge-port *boolean*

Synopsis	Designate SAP or SDP as an edge port
Context	**configure** service vpls *string* spoke-sdp *string* stp edge-port *boolean*
Tree	edge-port
Default	false
Introduced	16.0.R4
Platforms	All

link-type *keyword*

Synopsis	Configure STP link-type
Context	**configure** service vpls *string* spoke-sdp *string* stp link-type *keyword*
Tree	link-type
Options	pt-pt, shared
Default	pt-pt
Introduced	16.0.R4

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Platforms	All

path-cost *number*

Synopsis	Configure path-cost
Context	**configure** service vpls *string* spoke-sdp *string* stp path-cost *number*
Tree	path-cost
Range	1 to 200000000
Default	10
Introduced	16.0.R4
Platforms	All

port-num *number*

Synopsis	Virtual port number
Context	**configure** service vpls *string* spoke-sdp *string* stp port-num *number*
Tree	port-num
Range	1 to 2047
Introduced	16.0.R4
Platforms	All

priority *number*

Synopsis	Configure STP priority
Context	**configure** service vpls *string* spoke-sdp *string* stp priority *number*
Tree	priority
Range	0 to 255
Default	128
Introduced	16.0.R4
Platforms	All

root-guard *boolean*

Synopsis	Enable/disable STP root-guard
Context	**configure** service vpls *string* spoke-sdp *string* stp root-guard *boolean*

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Tree	root-guard
Default	false
Introduced	16.0.R4
Platforms	All

transit-policy

Synopsis	Enable the **transit-policy** context
Context	**configure** service vpls *string* spoke-sdp *string* transit-policy
Tree	transit-policy
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	**configure** service vpls *string* spoke-sdp *string* transit-policy prefix *reference*
Tree	prefix
Reference	**configure** application-assurance group *number* partition *number* transit-prefix-policy *number*
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vc-type *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Type of virtual circuit (VC) associated with the SDP binding; VPLS not supported
Context	**configure** service vpls *string* spoke-sdp *string* vc-type *keyword*
Tree	vc-type

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Options	ether, vlan
Default	ether
Introduced	16.0.R1
Platforms	All

vlan-vc-tag *number*

Synopsis	SDP bind VC tag
Context	**configure** service vpls *string* spoke-sdp *string* vlan-vc-tag *number*
Tree	vlan-vc-tag
Range	0 to 4094
Introduced	16.0.R1
Platforms	All

stp

Synopsis	Enter the **stp** context
Context	**configure** service vpls *string* stp
Tree	stp
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of STP
Context	**configure** service vpls *string* stp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

forward-delay *number*

Synopsis	Configure forward-delay

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Context	**configure** service vpls *string* stp forward-delay *number*
Tree	forward-delay
Range	4 to 30
Default	15
Introduced	16.0.R4
Platforms	All

hello-time *number*

Synopsis	Configure hello-time
Context	**configure** service vpls *string* stp hello-time *number*
Tree	hello-time
Range	1 to 10
Default	2
Introduced	16.0.R4
Platforms	All

hold-count *number*

Synopsis	Configure BPDU transmit hold count
Context	**configure** service vpls *string* stp hold-count *number*
Tree	hold-count
Range	1 to 20
Default	6
Introduced	16.0.R4
Platforms	All

maximum-age *number*

Synopsis	Configure maximum STP information age
Context	**configure** service vpls *string* stp maximum-age *number*
Tree	maximum-age
Range	6 to 40
Default	20
Introduced	16.0.R4

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Platforms	All

mode *keyword*

Synopsis	Configure protocol version
Context	**configure** service vpls *string* stp mode *keyword*
Tree	mode
Options	rstp, comp-dot1w, dot1w, mstp, pmstp
Default	rstp
Introduced	16.0.R4
Platforms	All

mst-instance [mst-inst-number] *number*

Synopsis	Enter the **mst-instance** list instance
Context	**configure** service vpls *string* stp mst-instance *number*
Tree	mst-instance
Introduced	19.10.R1
Platforms	All

[**mst-inst-number**] *number*

Synopsis	Multiple Spanning Tree Instance number
Context	**configure** service vpls *string* stp mst-instance *number*
Tree	mst-instance
Range	1 to 4094
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

mst-priority *number*

Synopsis	Priority of multiple spanning tree instance
Context	**configure** service vpls *string* stp mst-instance *number* mst-priority *number*
Tree	mst-priority

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Range	0 | 4096 | 8192 | 12288 | 16384 | 20480 | 24576 | 28672 | 32768 | 36864 | 40960 | 45056 | 49152 | 53248 | 57344 | 61440
Default	32768
Introduced	19.10.R1
Platforms	All

vlan-range [range] *string*

Synopsis	Add a list entry for **vlan-range**
Context	**configure** service vpls *string* stp mst-instance *number* vlan-range *string*
Tree	vlan-range
Introduced	19.10.R1
Platforms	All

[**range**] *string*

Synopsis	Range of VLANs associated with the M-VPLS SAP
Context	**configure** service vpls *string* stp mst-instance *number* vlan-range *string*
Tree	vlan-range
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

mst-maximum-hops *number*

Synopsis	Maximum number of hops in an MSTP region
Context	**configure** service vpls *string* stp mst-maximum-hops *number*
Tree	mst-maximum-hops
Range	1 to 40
Default	20
Introduced	19.10.R1
Platforms	All

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mst-name *string*

Synopsis	MST region name
Context	**configure** service vpls *string* stp mst-name *string*
Tree	mst-name
String Length	1 to 32
Introduced	19.10.R1
Platforms	All

mst-revision *number*

Synopsis	MST configuration revision
Context	**configure** service vpls *string* stp mst-revision *number*
Tree	mst-revision
Range	0 to 65535
Introduced	19.10.R1
Platforms	All

priority *number*

Synopsis	STP bridge priority
Context	**configure** service vpls *string* stp priority *number*
Tree	priority
Range	0 to 65535
Default	32768
Introduced	16.0.R4
Platforms	All

temp-flooding *number*

Synopsis	Temporary flooding
Context	**configure** service vpls *string* temp-flooding *number*
Tree	temp-flooding
Range	3 to 600
Units	seconds
Introduced	16.0.R1

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Platforms	All

tunnel-elmi *boolean*

Synopsis	Allow E-LMI tunneling
Context	**configure** service vpls *string* tunnel-elmi *boolean*
Tree	tunnel-elmi
Description	When configured to **true**, the router allows E-LMI packets in a VPLS service to be tunneled. The following must also be the case for this command to function: • the **configure port ethernet elmi mode uni-n** command is not configured • the E-LMI packets map to that VPLS service When configured to **false**, tunneling of the E-LMI packets for a VPLS service is disabled.
Default	false
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vpn-id *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPN identifier for the service
Context	**configure** service vpls *string* vpn-id *number*
Tree	vpn-id
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

vxlan

Synopsis	Enter the **vxlan** context
Context	**configure** service vpls *string* vxlan
Tree	vxlan
Introduced	16.0.R1
Platforms	All

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instance [vxlan-instance] *number*

Synopsis	Enter the **instance** list instance
Context	**configure** service vpls *string* vxlan instance *number*
Tree	instance
Introduced	16.0.R1
Platforms	All

[**vxlan-instance**] *number*

Synopsis	VXLAN instance
Context	**configure** service vpls *string* vxlan instance *number*
Tree	instance
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

assisted-replication

Synopsis	Enter the **assisted-replication** context
Context	**configure** service vpls *string* vxlan instance *number* assisted-replication
Tree	assisted-replication
Introduced	16.0.R1
Platforms	All

leaf

Synopsis	Enable the **leaf** context
Context	**configure** service vpls *string* vxlan instance *number* assisted-replication leaf
Tree	leaf
Notes	The following elements are part of a choice: **leaf** or **replicator**.
Introduced	16.0.R1
Platforms	All

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acttime *number*

Synopsis	Time for the leaf to wait before sending traffic to a new replicator
Context	**configure** service vpls *string* vxlan instance *number* assisted-replication leaf acttime *number*
Tree	acttime
Range	1 to 255
Units	seconds
Introduced	16.0.R1
Platforms	All

replicator

Synopsis	AR role as replicator
Context	**configure** service vpls *string* vxlan instance *number* assisted-replication replicator
Tree	replicator
Notes	The following elements are part of a choice: **leaf** or **replicator**.
Introduced	16.0.R1
Platforms	All

egress-vtep [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Add a list entry for **egress-vtep**
Context	**configure** service vpls *string* vxlan instance *number* egress-vtep *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	egress-vtep
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	VTEP IP address used when originating VXLAN packets
Context	**configure** service vpls *string* vxlan instance *number* egress-vtep *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	egress-vtep
Notes	This element is part of a list key.

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Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fdb

Synopsis	Enter the **fdb** context
Context	**configure** service vpls *string* vxlan instance *number* fdb
Tree	fdb
Introduced	16.0.R1
Platforms	All

discard-unknown-source *boolean*

Synopsis	Discard frames with unknown source
Context	**configure** service vpls *string* vxlan instance *number* fdb discard-unknown-source *boolean*
Tree	discard-unknown-source
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-learning

Synopsis	Enter the **mac-learning** context
Context	**configure** service vpls *string* vxlan instance *number* fdb mac-learning
Tree	mac-learning
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

aging *boolean*

Synopsis	Enable/disable aging of MAC addresses
Context	**configure** service vpls *string* vxlan instance *number* fdb mac-learning aging *boolean*
Tree	aging
Default	false
Introduced	16.0.R4

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

learning *boolean*

Synopsis	Enable learning of new MAC addresses
Context	**configure** service vpls *string* vxlan instance *number* fdb mac-learning learning *boolean*
Tree	learning
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

maximum-mac-addresses *number*

Synopsis	Maximum number of MAC entries in the FDB from this vxlan instance
Context	**configure** service vpls *string* vxlan instance *number* fdb maximum-mac-addresses *number*
Tree	maximum-mac-addresses
Range	1 to 511999
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

protected-src-mac-violation-action *keyword*

Synopsis	Action for a relearn request for a protected MAC
Context	**configure** service vpls *string* vxlan instance *number* fdb protected-src-mac-violation-action *keyword*
Tree	protected-src-mac-violation-action
Options	discard
Introduced	16.0.R1
Platforms	All

igmp-snooping

Synopsis	Enter the **igmp-snooping** context
Context	**configure** service vpls *string* vxlan instance *number* igmp-snooping
Tree	igmp-snooping

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Introduced	16.0.R5
Platforms	All

mrouter-port *boolean*

Synopsis	Enable VXLAN binds as multicast router ports
Context	**configure** service vpls *string* vxlan instance *number* igmp-snooping mrouter-port *boolean*
Tree	mrouter-port
Default	false
Introduced	16.0.R5
Platforms	All

mld-snooping

Synopsis	Enter the **mld-snooping** context
Context	**configure** service vpls *string* vxlan instance *number* mld-snooping
Tree	mld-snooping
Introduced	16.0.R5
Platforms	All

mrouter-port *boolean*

Synopsis	Enable VXLAN binds as multicast router ports
Context	**configure** service vpls *string* vxlan instance *number* mld-snooping mrouter-port *boolean*
Tree	mrouter-port
Default	false
Introduced	16.0.R5
Platforms	All

network

Synopsis	Enter the **network** context
Context	**configure** service vpls *string* vxlan instance *number* network
Tree	network
Introduced	16.0.R1

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Platforms	All

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service vpls *string* vxlan instance *number* network ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** service vpls *string* vxlan instance *number* network ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

network

Synopsis	Enter the **network** context
Context	**configure** service vpls *string* vxlan instance *number* network ingress qos network
Tree	network
Introduced	16.0.R1
Platforms	All

fp-redirect-group

Synopsis	Enter the **fp-redirect-group** context
Context	**configure** service vpls *string* vxlan instance *number* network ingress qos network fp-redirect-group
Tree	fp-redirect-group
Introduced	16.0.R1
Platforms	All

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group-name *reference*

Synopsis	Name of the forwarding plane queue group template
Context	**configure** service vpls *string* vxlan instance *number* network ingress qos network fp-redirect-group group-name *reference*
Tree	group-name
Reference	**configure** qos queue-group-templates ingress queue-group *string*
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Instance of the forwarding-plane ingress Queue Group for this SDP binding
Context	**configure** service vpls *string* vxlan instance *number* network ingress qos network fp-redirect-group instance *number*
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Ingress network policy name applied to this SDP binding
Context	**configure** service vpls *string* vxlan instance *number* network ingress qos network policy-name *reference*
Tree	policy-name
Reference	**configure** qos network *string*
Introduced	16.0.R1
Platforms	All

rx-discard-on-ndf *keyword*

Synopsis	Received multicast traffic type discarded on NDF
Context	**configure** service vpls *string* vxlan instance *number* rx-discard-on-ndf *keyword*
Tree	rx-discard-on-ndf
Options	bm, bum, none
Default	bm

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Introduced	16.0.R4
Platforms	All

source-vtep-security *boolean*

Synopsis	Enable/disable source vtep security
Context	**configure** service vpls *string* vxlan instance *number* source-vtep-security *boolean*
Tree	source-vtep-security
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vni *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VNI of the VXLAN
Context	**configure** service vpls *string* vxlan instance *number* vni *number*
Tree	vni
Range	1 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

source-vtep *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Vxlan source virtual tunnel endpoint information
Context	**configure** service vpls *string* vxlan source-vtep *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-vtep
Introduced	16.0.R1
Platforms	All

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wlan-gw

Synopsis	Enter the **wlan-gw** context
Context	**configure** service vpls *string* wlan-gw
Tree	wlan-gw
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of WLAN-GW
Context	**configure** service vpls *string* wlan-gw admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vpls *string* wlan-gw description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	WLAN-GW endpoint within the VPLS service
Context	**configure** service vpls *string* wlan-gw wlan-gw-group *reference*
Tree	wlan-gw-group

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Description	This command specifies a WLAN-GW group to be used as an endpoint within the VPLS. This feature is used in conjunction with the **configure service vprn subscriber-interface group-interface wlan-gw vlan-range dynamic-service** command for a VPRN service and the **configure service ies subscriber-interface group-interface wlan-gw vlan-range dynamic-service** command for an IES service. See "Dynamic VPLS service" in the *7450 ESS, 7750 SR, and VSR Triple Play Service Delivery Architecture Guide* for more information about the dynamic VPLS service feature.
Reference	**configure** isa wlan-gw-group *number*
Introduced	23.3.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

vprn [service-name] *string*

Synopsis	Enter the **vprn** list instance
Context	**configure** service vprn *string*
Tree	vprn
Introduced	16.0.R1
Platforms	All

[**service-name**] *string*

Synopsis	Administrative service name
Context	**configure** service vprn *string*
Tree	vprn
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

aa-interface [interface-name] *string*

Synopsis	Enter the **aa-interface** list instance
Context	**configure** service vprn *string* aa-interface *string*
Tree	aa-interface
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**interface-name**] *string*

Synopsis	Interface name
Context	**configure** service vprn *string* aa-interface *string*
Tree	aa-interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	**configure** service vprn *string* aa-interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* aa-interface *string* description *string*
Tree	description
String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis	IP MTU applied to outgoing packets
Context	**configure** service vprn *string* aa-interface *string* ip-mtu *number*
Tree	ip-mtu
Range	512 to 9786

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Units	bytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service vprn *string* aa-interface *string* ipv4
Tree	ipv4
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

primary

Synopsis	Enable the **primary** context
Context	**configure** service vprn *string* aa-interface *string* ipv4 primary
Tree	primary
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis	Primary IPv4 address assigned to the interface
Context	**configure** service vprn *string* aa-interface *string* ipv4 primary address *string*
Tree	address
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	**configure** service vprn *string* aa-interface *string* ipv4 primary prefix-length *number*
Tree	prefix-length
Range	0 to 32

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Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap [sap-id] *string*

Synopsis	Enter the **sap** list instance
Context	**configure** service vprn *string* aa-interface *string* sap *string*
Tree	sap
Max. Instances	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**sap-id**] *string*

Synopsis	SAP ID
Context	**configure** service vprn *string* aa-interface *string* sap *string*
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the SAP
Context	**configure** service vprn *string* aa-interface *string* sap *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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description *string*

Synopsis	Text description
Context	**configure** service vprn *string* aa-interface *string* sap *string* description *string*
Tree	description
String Length	1 to 160
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the **egress** context
Context	**configure** service vprn *string* aa-interface *string* sap *string* egress
Tree	egress
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis	Enter the **filter** context
Context	**configure** service vprn *string* aa-interface *string* sap *string* egress filter
Tree	filter
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service vprn *string* aa-interface *string* sap *string* egress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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qos

Synopsis	Enter the **qos** context
Context	**configure** service vprn *string* aa-interface *string* sap *string* egress qos
Tree	qos
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap-egress

Synopsis	Enter the **sap-egress** context
Context	**configure** service vprn *string* aa-interface *string* sap *string* egress qos sap-egress
Tree	sap-egress
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	**configure** service vprn *string* aa-interface *string* sap *string* egress qos sap-egress policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-egress *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fwd-wholesale

Synopsis	Enter the **fwd-wholesale** context
Context	**configure** service vprn *string* aa-interface *string* sap *string* fwd-wholesale
Tree	fwd-wholesale
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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pppoe-service *reference*

Synopsis	PPPoE service name
Context	**configure** service vprn *string* aa-interface *string* sap *string* fwd-wholesale pppoe-service *reference*
Tree	pppoe-service
Reference	**configure** service epipe *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service vprn *string* aa-interface *string* sap *string* ingress
Tree	ingress
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the **qos** context
Context	**configure** service vprn *string* aa-interface *string* sap *string* ingress qos
Tree	qos
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap-ingress

Synopsis	Enter the **sap-ingress** context
Context	**configure** service vprn *string* aa-interface *string* sap *string* ingress qos sap-ingress
Tree	sap-ingress
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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overrides

Synopsis	Enter the **overrides** context
Context	**configure** service vprn *string* aa-interface *string* sap *string* ingress qos sap-ingress overrides
Tree	overrides
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Policy ID
Context	**configure** service vprn *string* aa-interface *string* sap *string* ingress qos sap-ingress policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-ingress *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lag

Synopsis	Enter the **lag** context
Context	**configure** service vprn *string* aa-interface *string* sap *string* lag
Tree	lag
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aaa

Synopsis	Enter the **aaa** context
Context	**configure** service vprn *string* aaa
Tree	aaa
Introduced	16.0.R4
Platforms	All

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remote-servers

Synopsis	Enter the **remote-servers** context
Context	**configure** service vprn *string* aaa remote-servers
Tree	remote-servers
Introduced	16.0.R4
Platforms	All

radius

Synopsis	Enable the **radius** context
Context	**configure** service vprn *string* aaa remote-servers radius
Tree	radius
Introduced	16.0.R4
Platforms	All

access-algorithm *keyword*

Synopsis	Algorithm used to access the set of RADIUS servers
Context	**configure** service vprn *string* aaa remote-servers radius access-algorithm *keyword*
Tree	access-algorithm
Options	direct, round-robin
Default	direct
Introduced	16.0.R4
Platforms	All

accounting *boolean*

Synopsis	Enable RADIUS command accounting
Context	**configure** service vprn *string* aaa remote-servers radius accounting *boolean*
Tree	accounting
Default	false
Introduced	16.0.R4
Platforms	All

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accounting-port *number*

Synopsis	Port number on RADIUS server for accounting requests
Context	**configure** service vprn *string* aaa remote-servers radius accounting-port *number*
Tree	accounting-port
Range	1 to 65535
Default	1813
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the authentication server
Context	**configure** service vprn *string* aaa remote-servers radius admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

authorization *boolean*

Synopsis	Enable RADIUS authorization
Context	**configure** service vprn *string* aaa remote-servers radius authorization *boolean*
Tree	authorization
Default	false
Introduced	16.0.R4
Platforms	All

interactive-authentication *boolean*

Synopsis	Enable RADIUS interactive authentication
Context	**configure** service vprn *string* aaa remote-servers radius interactive-authentication *boolean*
Tree	interactive-authentication
Default	false

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Introduced	16.0.R4
Platforms	All

port *number*

Synopsis	UDP port number on which to contact RADIUS server
Context	**configure** service vprn *string* aaa remote-servers radius port *number*
Tree	port
Range	1 to 65535
Default	1812
Introduced	16.0.R4
Platforms	All

server [index] *number*

Synopsis	Enter the **server** list instance
Context	**configure** service vprn *string* aaa remote-servers radius server *number*
Tree	server
Max. Instances	5
Introduced	16.0.R4
Platforms	All

[**index**] *number*

Synopsis	RADIUS server ID
Context	**configure** service vprn *string* aaa remote-servers radius server *number*
Tree	server
Range	1 to 5
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

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address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the RADIUS server
Context	**configure** service vprn *string* aaa remote-servers radius server *number* address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

authenticator *keyword*

Synopsis	Authenticator hash algorithm for the RADIUS server
Context	**configure** service vprn *string* aaa remote-servers radius server *number* authenticator *keyword*
Tree	authenticator
Description	This command specifies the hash algorithm used to authenticate RADIUS Access-Request, Access-Accept, Access-Reject, Access-Challenge, Accounting-Request, and Accounting-Response packets.
Options	md5, sm3
Default	md5
Introduced	22.10.R1
Platforms	All

secret *string*

Synopsis	Secret key to access the RADIUS server
Context	**configure** service vprn *string* aaa remote-servers radius server *number* secret *string*
Tree	secret
String Length	1 to 115
Introduced	16.0.R4
Platforms	All

tls-client-profile *reference*

Synopsis	TLS client profile for the RADIUS server

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Context	**configure** service vprn *string* aaa remote-servers radius server *number* tls-client-profile *reference*
Tree	tls-client-profile
Description	This command specifies the TLS client profile used to encrypt RADIUS communication. When configured, RADIUS messages are sent using TLS.
Reference	**configure** system security tls client-tls-profile *string*
Introduced	21.10.R1
Platforms	All

server-retry *number*

Synopsis	Number of attempts to retry contacting RADIUS server
Context	**configure** service vprn *string* aaa remote-servers radius server-retry *number*
Tree	server-retry
Range	1 to 10
Default	3
Introduced	16.0.R4
Platforms	All

server-timeout *number*

Synopsis	Time to wait for a response from the RADIUS server
Context	**configure** service vprn *string* aaa remote-servers radius server-timeout *number*
Tree	server-timeout
Range	1 to 90
Units	seconds
Default	3
Introduced	16.0.R4
Platforms	All

use-default-template *boolean*

Synopsis	Apply the RADIUS default user template to RADIUS user
Context	**configure** service vprn *string* aaa remote-servers radius use-default-template *boolean*
Tree	use-default-template

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Default	false
Introduced	16.0.R4
Platforms	All

tacplus

Synopsis	Enable the **tacplus** context
Context	**configure** service vprn *string* aaa remote-servers tacplus
Tree	tacplus
Introduced	16.0.R4
Platforms	All

accounting

Synopsis	Enable the **accounting** context
Context	**configure** service vprn *string* aaa remote-servers tacplus accounting
Tree	accounting
Introduced	16.0.R4
Platforms	All

record-type *keyword*

Synopsis	Type of accounting record packet sent to TACACS+ server
Context	**configure** service vprn *string* aaa remote-servers tacplus accounting record-type *keyword*
Tree	record-type
Options	start-stop, stop-only
Default	stop-only
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the TACACS+ protocol
Context	**configure** service vprn *string* aaa remote-servers tacplus admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

authorization

Synopsis	Enable the **authorization** context
Context	**configure** service vprn *string* aaa remote-servers tacplus authorization
Tree	authorization
Introduced	16.0.R4
Platforms	All

request-format

Synopsis	Enter the **request-format** context
Context	**configure** service vprn *string* aaa remote-servers tacplus authorization request-format
Tree	request-format
Description	Commands in this context configure access operations that are sent to the TACACS+ server during authorization.
Introduced	21.10.R3
Platforms	All

access-operation-cmd *keyword*

Synopsis	Access operations sent in authorization requests
Context	**configure** service vprn *string* aaa remote-servers tacplus authorization request-format access-operation-cmd *keyword*
Tree	access-operation-cmd
Description	This command sends an operation argument in authorization requests. In model-driven interfaces, this command configures the system to send the operation in the cmd argument, and the path in the cmd-args argument, in TACACS+ authorization requests. This command does not apply to authorization requests in classic interfaces.
Options	delete
Max. Instances	1

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Introduced	21.10.R3
Platforms	All

use-priv-lvl *boolean*

Synopsis	Allow privilege level mapping
Context	**configure** service vprn *string* aaa remote-servers tacplus authorization use-priv-lvl *boolean*
Tree	use-priv-lvl
Description	When configured to **true**, this command automatically performs a single authorization request to the TACACS+ server for cmd* (all commands) immediately after login, and then uses the local profile associated (via the **priv-lvl-map**) with the priv-lvl returned by the TACACS+ server for all subsequent authorization (except **enable-admin**). After the initial authorization for cmd*, no further authorization requests are sent to the TACACS+ server (except **enable-admin**). When configured to **false**, each command is sent to the TACACS+ server for authorization (this is true regardless of whether the **tacplus use-default-template** setting is enabled).
Default	false
Introduced	16.0.R4
Platforms	All

interactive-authentication *boolean*

Synopsis	Allows TACACS+ interactive authentication
Context	**configure** service vprn *string* aaa remote-servers tacplus interactive-authentication *boolean*
Tree	interactive-authentication
Default	false
Introduced	16.0.R4
Platforms	All

priv-lvl-map

Synopsis	Enter the **priv-lvl-map** context
Context	**configure** service vprn *string* aaa remote-servers tacplus priv-lvl-map
Tree	priv-lvl-map
Introduced	16.0.R4

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Platforms	All

priv-lvl [level] *number*

Synopsis	Enter the **priv-lvl** list instance
Context	**configure** service vprn *string* aaa remote-servers tacplus priv-lvl-map priv-lvl *number*
Tree	priv-lvl
Introduced	16.0.R4
Platforms	All

[**level**] *number*

Synopsis	Privilege level for the mapping
Context	**configure** service vprn *string* aaa remote-servers tacplus priv-lvl-map priv-lvl *number*
Tree	priv-lvl
Range	0 to 15
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

user-profile-name *reference*

Synopsis	User profile for the mapping
Context	**configure** service vprn *string* aaa remote-servers tacplus priv-lvl-map priv-lvl *number* user-profile-name *reference*
Tree	user-profile-name
Reference	**configure** system security aaa local-profiles profile *string*
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

server [index] *number*

Synopsis	Enter the **server** list instance
Context	**configure** service vprn *string* aaa remote-servers tacplus server *number*

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Tree	server
Max. Instances	5
Introduced	16.0.R4
Platforms	All

[**index**] *number*

Synopsis	TACACS+ server ID
Context	**configure** service vprn *string* aaa remote-servers tacplus server *number*
Tree	server
Range	1 to 5
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the TACACS+ server
Context	**configure** service vprn *string* aaa remote-servers tacplus server *number* address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

port *number*

Synopsis	TCP port ID on which to contact TACACS+ server
Context	**configure** service vprn *string* aaa remote-servers tacplus server *number* port *number*
Tree	port
Range	0 | 1 to 65535
Default	49
Introduced	16.0.R4
Platforms	All

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secret *string*

Synopsis	Secret key to access the TACACS+ server
Context	**configure** service vprn *string* aaa remote-servers tacplus server *number* secret *string*
Tree	secret
String Length	1 to 199
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

server-timeout *number*

Synopsis	Time to wait for a response from the TACACS+ server
Context	**configure** service vprn *string* aaa remote-servers tacplus server-timeout *number*
Tree	server-timeout
Range	1 to 90
Units	seconds
Default	3
Introduced	16.0.R4
Platforms	All

use-default-template *boolean*

Synopsis	Apply TACACS+ default user-template to TACACS+ user
Context	**configure** service vprn *string* aaa remote-servers tacplus use-default-template *boolean*
Tree	use-default-template
Default	true
Introduced	16.0.R4
Platforms	All

aarp-interface [interface-name] *string*

Synopsis	Enter the **aarp-interface** list instance
Context	**configure** service vprn *string* aarp-interface *string*
Tree	aarp-interface

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**interface-name**] *string*

Synopsis	Interface name
Context	**configure** service vprn *string* aarp-interface *string*
Tree	aarp-interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	**configure** service vprn *string* aarp-interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* aarp-interface *string* description *string*
Tree	description
String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis	IP MTU applied to outgoing packets

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Context	**configure** service vprn *string* aarp-interface *string* ip-mtu *number*
Tree	ip-mtu
Range	512 to 9786
Units	bytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

spoke-sdp [sdp-bind-id] *string*

Synopsis	Enter the **spoke-sdp** list instance
Context	**configure** service vprn *string* aarp-interface *string* spoke-sdp *string*
Tree	spoke-sdp
Max. Instances	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**sdp-bind-id**] *string*

Synopsis	SDP binding ID
Context	**configure** service vprn *string* aarp-interface *string* spoke-sdp *string*
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aarp

Synopsis	Enable the **aarp** context
Context	**configure** service vprn *string* aarp-interface *string* spoke-sdp *string* aarp
Tree	aarp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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id *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	AARP instance ID
Context	**configure** service vprn *string* aarp-interface *string* spoke-sdp *string* aarp id *reference*
Tree	id
Reference	**configure** application-assurance aarp *number*
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Role of the spoke SDP referenced by the AARP
Context	**configure** service vprn *string* aarp-interface *string* spoke-sdp *string* aarp type *keyword*
Tree	type
Options	subscriber-side-shunt, network-side-shunt
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of this service SDP binding
Context	**configure** service vprn *string* aarp-interface *string* spoke-sdp *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* aarp-interface *string* spoke-sdp *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the **egress** context
Context	**configure** service vprn *string* aarp-interface *string* spoke-sdp *string* egress
Tree	egress
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis	Enter the **filter** context
Context	**configure** service vprn *string* aarp-interface *string* spoke-sdp *string* egress filter
Tree	filter
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip *reference*

Synopsis	IP filter identifier
Context	**configure** service vprn *string* aarp-interface *string* spoke-sdp *string* egress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Static MPLS VC label to send packets to far-end device
Context	**configure** service vprn *string* aarp-interface *string* spoke-sdp *string* egress vc-label *number*
Tree	vc-label
Range	16 to 1048575
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service vprn *string* aarp-interface *string* spoke-sdp *string* ingress
Tree	ingress
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis	Enter the **filter** context
Context	**configure** service vprn *string* aarp-interface *string* spoke-sdp *string* ingress filter
Tree	filter
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip *reference*

Synopsis	IP filter ID
Context	**configure** service vprn *string* aarp-interface *string* spoke-sdp *string* ingress filter ip *reference*

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Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VC ingress value that indicates a specific connection
Context	**configure** service vprn *string* aarp-interface *string* spoke-sdp *string* ingress vc-label *number*
Tree	vc-label
Range	1 to 1048575
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the service
Context	**configure** service vprn *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

aggregates

Synopsis	Enter the **aggregates** context
Context	**configure** service vprn *string* aggregates
Tree	aggregates
Introduced	16.0.R1
Platforms	All

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aggregate [ip-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **aggregate** list instance
Context	**configure** service vprn *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)*
Tree	aggregate
Introduced	16.0.R1
Platforms	All

[**ip-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Destination IP address prefix of the aggregate route
Context	**configure** service vprn *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)*
Tree	aggregate
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

aggregator

Synopsis	Enter the **aggregator** context
Context	**configure** service vprn *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* aggregator
Tree	aggregator
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Aggregator IP address
Context	**configure** service vprn *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* aggregator address *string*
Tree	address
Introduced	16.0.R1
Platforms	All

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as-number *number*

Synopsis	Aggregator AS number
Context	**configure** service vprn *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* aggregator as-number *number*
Tree	as-number
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

as-set *boolean*

Synopsis	Use AS_SET path segment type for the aggregate route
Context	**configure** service vprn *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* as-set *boolean*
Tree	as-set
Description	When configured to **true**, the AS_PATH attribute of the aggregate contains an AS_SET containing all AS numbers from the contributing routes. This can increase the amount of churn due to best-path changes. When configured to **false**, the AS_PATH attribute contains no AS_SET and will be originated by the ESR.
Default	false
Introduced	16.0.R1
Platforms	All

blackhole

Synopsis	Enable the **blackhole** context
Context	**configure** service vprn *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* blackhole
Tree	blackhole
Notes	The following elements are part of a choice: **blackhole** or **indirect**.
Introduced	16.0.R1
Platforms	All

generate-icmp *boolean*

Synopsis	Send ICMP unreachable messages for aggregate routes

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Context	**configure** service vprn *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* blackhole generate-icmp *boolean*
Tree	generate-icmp
Description	When configured to **true**, ICMP unreachable messages are sent when packets match an aggregate route in the FIB with a black-hole next-hop. When configured to **false**, ICMP unreachable messages are not generated.
Default	false
Introduced	16.0.R2
Platforms	All

community *string*

Synopsis	Community name that is added to the aggregate route
Context	**configure** service vprn *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* community *string*
Tree	community
Description	This command associates a BGP community with the aggregate route. The community name can be matched in route policies and is automatically added to BGP routes exported from the aggregate route.
String Length	1 to 72
Max. Instances	12
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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discard-component-communities *boolean*

Synopsis	Advertise aggregate with aggregate route community set
Context	**configure** service vprn *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* discard-component-communities *boolean*
Tree	discard-component-communities
Default	false
Introduced	19.7.R1
Platforms	All

indirect *(ipv4-address-no-zone \| ipv6-address-no-zone)*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Address of the indirect next hop
Context	**configure** service vprn *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	indirect
Description	This command programs aggregate routes into the forwarding table with an indirect next hop. If a packet matches the aggregate route but not a contributing route, it is forwarded toward the indirect next hop rather than being discarded.
Notes	The following elements are part of a choice: **blackhole** or **indirect**.
Introduced	16.0.R1
Platforms	All

local-preference *number*

Synopsis	Local preference used when aggregate route is exported
Context	**configure** service vprn *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* local-preference *number*
Tree	local-preference
Description	This command configures the local preference value to use when the aggregate route is exported rather than using any of the local preference values assigned for any of the contributing routes.
Range	0 to 4294967295
Introduced	16.0.R1

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Platforms All

policy *reference*

Synopsis Policy name for the aggregated route

Context **configure** service vprn *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* policy *reference*

Tree policy

Description This command associates an aggregate route with a policy reference. The aggregated route is activated only when there is at least one eligible active route in the sub-trees below it that is accepted by the policy evaluation. There is no evaluation into any sub-tree that starts with another active aggregate route. Eligible routes exclude host routes and LDP shortcut routes.

If an aggregate route has no policy, or the reference is to an empty policy, this configuration is treated as equivalent to a policy with one rule that accepts all routes.

Reference **configure** policy-options policy-statement *string*

Introduced 20.10.R1

Platforms All

summary-only *boolean*

Synopsis Advertise the aggregate route only

Context **configure** service vprn *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* summary-only *boolean*

Tree summary-only

Description When configured to **true**, the router suppresses the advertisement of more specific component routes for the aggregate.

When configured to **false**, the router advertises both the aggregate route and its contributing routes.

Default false

Introduced 16.0.R1

Platforms All

tunnel-group *number*

Synopsis Tunnel group from which to associate the MC IPSec state

Context **configure** service vprn *string* aggregates aggregate *(ipv4-prefix | ipv6-prefix)* tunnel-group *number*

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Tree	tunnel-group
Description	This command adds the MC-IPsec state of the specific tunnel-group to the aggregate route.
Range	1 to 64
Introduced	20.7.R1
Platforms	All

allow-export-bgp-vpn *boolean*

Synopsis	Include BGP-VPN routes for export
Context	**configure** service vprn *string* allow-export-bgp-vpn *boolean*
Tree	allow-export-bgp-vpn
Default	false
Introduced	16.0.R1
Platforms	All

autonomous-system *number*

Synopsis	AS number advertised to peers for this router
Context	**configure** service vprn *string* autonomous-system *number*
Tree	autonomous-system
Description	This command configures the autonomous system (AS) number for the router. This value must be set before BGP can be activated. If the AS number is changed on a router with an active BGP instance, the new AS number is not used until the BGP instance is restarted.
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

bgp

Synopsis	Enable the **bgp** context
Context	**configure** service vprn *string* bgp
Tree	bgp
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the BGP instance
Context	**configure** service vprn *string* bgp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

advertise-inactive *boolean*

Synopsis	Advertise inactive BGP routes to peers
Context	**configure** service vprn *string* bgp advertise-inactive *boolean*
Tree	advertise-inactive
Description	When configured to **true**, this command allows any inactive BGP route to be advertised, even though it is not the used route. When configured to **false**, the advertisement of inactive BGP routes to other BGP peers is disabled.
Default	false
Introduced	16.0.R1
Platforms	All

advertise-ipv6-next-hops

Synopsis	Enter the **advertise-ipv6-next-hops** context
Context	**configure** service vprn *string* bgp advertise-ipv6-next-hops
Tree	advertise-ipv6-next-hops
Introduced	19.5.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable IPv4 routes to be advertised
Context	**configure** service vprn *string* bgp advertise-ipv6-next-hops ipv4 *boolean*
Tree	ipv4

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Default	false
Introduced	19.5.R1
Platforms	All

aggregator-id-zero *boolean*

Synopsis	Set router ID in the BGP AGGREGATOR attribute to 0
Context	**configure** service vprn *string* bgp aggregator-id-zero *boolean*
Tree	aggregator-id-zero
Description	When configured to **true**, the router ID in the BGP AGGREGATOR path attribute is set to 0 when BGP aggregates routes. This prevents different routers within an AS from creating aggregate routes for the same prefix with different path attributes. When configured to **false**, the AS number and router ID are added to the AGGREGATOR path attribute.
Default	false
Introduced	16.0.R1
Platforms	All

asn-4-byte *boolean*

Synopsis	Advertise support for 4-byte ASNs
Context	**configure** service vprn *string* bgp asn-4-byte *boolean*
Tree	asn-4-byte
Default	true
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	BGP authentication key for all peers
Context	**configure** service vprn *string* bgp authentication-key *string*
Tree	authentication-key
Description	This command configures the authentication key used to protect all sessions. The stored format of the authentication key is based on the **configure system security hash-control management-interface md-cli hash-algorithm** setting.
String Length	1 to 370

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Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	**configure** service vprn *string* bgp authentication-keychain *reference*
Tree	authentication-keychain
Description	This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.
Reference	**configure** system security keychains keychain *string*
Introduced	16.0.R3
Platforms	All

backup-path

Synopsis	Enter the **backup-path** context
Context	**configure** service vprn *string* bgp backup-path
Tree	backup-path
Description	Commands in this context enable the use of a backup path for specified BGP-learned prefixes belonging to the base router. Multiple paths must be received for a prefix in order to take advantage of this feature. When a prefix has a backup path and its primary paths fail, the affected traffic is rapidly diverted to the backup path without waiting for control plane re-convergence to occur. When many prefixes share the same primary paths and in some cases, the same backup path, the time to divert failover traffic to the backup path is independent of the number of prefixes. By default, IPv4 and IPv6 prefixes do not have a backup path installed in the IOM.
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable support for unlabeled unicast IPv4 routes
Context	**configure** service vprn *string* bgp backup-path ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R1

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Platforms	All

ipv6 *boolean*

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	**configure** service vprn *string* bgp backup-path ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	**configure** service vprn *string* bgp backup-path label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Enable support for labeled unicast IPv6 routes
Context	**configure** service vprn *string* bgp backup-path label-ipv6 *boolean*
Tree	label-ipv6
Default	false
Introduced	22.2.R1
Platforms	All

best-path-selection

Synopsis	Enter the **best-path-selection** context
Context	**configure** service vprn *string* bgp best-path-selection
Tree	best-path-selection
Introduced	16.0.R1

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Platforms	All

always-compare-med

Synopsis	Enter the **always-compare-med** context
Context	**configure** service vprn *string* bgp best-path-selection always-compare-med
Tree	always-compare-med
Description	Commands in this context determine how the BGP decision process is affected by the MED path attribute.
Introduced	16.0.R1
Platforms	All

med-value *keyword*

Synopsis	Action for a missing MED attribute
Context	**configure** service vprn *string* bgp best-path-selection always-compare-med med-value *keyword*
Tree	med-value
Options	off, missing-med-zero, missing-med-infinity, on
Default	off
Introduced	16.0.R1
Platforms	All

strict-as *boolean*

Synopsis	Compare MED only for routes from same neighbor AS
Context	**configure** service vprn *string* bgp best-path-selection always-compare-med strict-as *boolean*
Tree	strict-as
Description	When configured to **true**, the route selection process can compare the MED path attribute between routes only if they come from the same neighbor AS. When configured to **false**, the route selection process can compare the MED path attribute between routes even if they come from different neighbor ASs.
Default	true
Introduced	16.0.R1
Platforms	All

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as-path-ignore

Synopsis	Enter the **as-path-ignore** context
Context	**configure** service vprn *string* bgp best-path-selection as-path-ignore
Tree	as-path-ignore
Description	Commands in this context determine whether the AS path length is considered in the selection process for routes of the specified address families.
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Ignore AS path length for unlabeled unicast IPv4 routes
Context	**configure** service vprn *string* bgp best-path-selection as-path-ignore ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Ignore AS path length for unlabeled unicast IPv6 routes
Context	**configure** service vprn *string* bgp best-path-selection as-path-ignore ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Ignore AS path length for labeled-unicast IPv4 routes
Context	**configure** service vprn *string* bgp best-path-selection as-path-ignore label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R1

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Platforms	All

label-ipv6 *boolean*

Synopsis	Ignore AS path length for labeled unicast IPv6 routes
Context	**configure** service vprn *string* bgp best-path-selection as-path-ignore label-ipv6 *boolean*
Tree	label-ipv6
Default	false
Introduced	22.2.R1
Platforms	All

compare-origin-validation-state *boolean*

Synopsis	Allow comparison of origin validation states
Context	**configure** service vprn *string* bgp best-path-selection compare-origin-validation-state *boolean*
Tree	compare-origin-validation-state
Default	false
Introduced	19.7.R1
Platforms	All

d-path-length-ignore *boolean*

Synopsis	Enable D-PATH length ignore
Context	**configure** service vprn *string* bgp best-path-selection d-path-length-ignore *boolean*
Tree	d-path-length-ignore
Description	When configured to **true**, this command, enables the router to ignore the D-PATH domain segment length during best-path selection. At the base router level (or VPRN BGP level for PE-CE routers), this command allows BGP to ignore the D-PATH domain segment length for best-path selection purposes. BGP ignores the D-PATH length when comparing two VPN routes or two IFL routes within the same RD. However, these VPN/IFL routes are processed in the main-BGP instance. At the VPRN router level, this command allows the VPRN RTM to ignore the D-PATH domain segment length for best-path selection purposes (for routes in VPRN). The user can control whether the RTM considers the D-PATH length when comparing two VPN routes with different RDs. Best-path selection for EVPN-IFF routes against other owners (for example, EVPN-IFL or IPVPN) still relies on RTM preference. When EVPN-IFF RTM preference matches the

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RTM preference of another BGP owner, the existing RTM selection applies and D-PATH is not considered, irrespective of the **d-path-length-ignore** configuration.

When configured to **false**, this command disables the ability to ignore the D-PATH domain segment length.

Default false

Introduced 21.10.R1

Platforms All

deterministic-med *boolean*

Synopsis Group paths based on AS before MED attribute comparison

Context **configure** service vprn *string* bgp best-path-selection deterministic-med *boolean*

Tree deterministic-med

Description When configured to **true**, BGP groups paths from the same AS that are equal up to the MED attribute comparison and then compares the best path from each group to select the overall best path. This process ensures that the best-path selection process is deterministic in all cases.

When configured to **false**, paths are not grouped and the overall best-path selection can depend on the order of route arrival.

Default false

Introduced 16.0.R1

Platforms All

ebgp-ibgp-equal

Synopsis Enter the **ebgp-ibgp-equal** context

Context **configure** service vprn *string* bgp best-path-selection ebgp-ibgp-equal

Tree ebgp-ibgp-equal

Description Commands in this context allow BGP to ignore the difference between EBGP and IBGP routes in selecting the best path and eligible multipaths (if multipath and ECMP are enabled) for the specified address families. The result is a form of EIBGP load-balancing in a multipath scenario. This behavior can be applied selectively to certain address families.

By default, the BGP decision process prefers an EBGP learned route over an IBGP learned route.

Introduced 16.0.R1

Platforms All

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ipv4 *boolean*

Synopsis	Consider EBGP and IBGP IPv4 routes equal
Context	**configure** service vprn *string* bgp best-path-selection ebgp-ibgp-equal ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Consider EBGP and IBGP IPv6 routes equal
Context	**configure** service vprn *string* bgp best-path-selection ebgp-ibgp-equal ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Consider EBGP and IBGP label-IPv4 routes equal
Context	**configure** service vprn *string* bgp best-path-selection ebgp-ibgp-equal label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Consider EBGP and IBGP label-IPv6 routes equal
Context	**configure** service vprn *string* bgp best-path-selection ebgp-ibgp-equal label-ipv6 *boolean*
Tree	label-ipv6
Default	false
Introduced	22.2.R1

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Platforms	All

ignore-nh-metric *boolean*

Synopsis	Ignore next-hop distance in best path selection
Context	**configure** service vprn *string* bgp best-path-selection ignore-nh-metric *boolean*
Tree	ignore-nh-metric
Description	When configured to **true**, BGP ignores the resolved distance to the BGP next hop in its route selection process. When configured to **false**, BGP factors the distance to the next hop into its decision process when it compares two BGP routes with the same NLRI learned from base router BGP peers (in the **router** context) or IP prefix learned from VPRN BGP peers (in the **vprn** context).
Default	false
Introduced	16.0.R1
Platforms	All

ignore-router-id

Synopsis	Enable the **ignore-router-id** context
Context	**configure** service vprn *string* bgp best-path-selection ignore-router-id
Tree	ignore-router-id
Description	Commands in this context determine whether the BGP selection process ignores the BGP identifier (router ID) comparison of two EBGP paths from different EBGP peers when determining the best path for the specified address families. By default, BGP selects the path with the lower router ID when it compares two paths from EBGP peers.
Introduced	16.0.R1
Platforms	All

origin-invalid-unusable *boolean*

Synopsis	Ignore routes with invalid origin validation state
Context	**configure** service vprn *string* bgp best-path-selection origin-invalid-unusable *boolean*
Tree	origin-invalid-unusable
Default	false
Introduced	19.7.R1

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Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD
Context	**configure** service vprn *string* bgp bfd-liveness *boolean*
Tree	bfd-liveness
Description	When configured to **true**, BFD is enabled on all BGP sessions, subject to the association of those BGP sessions with IP interfaces that have BFD configurations. When configured to **false**, BFD is not enabled globally for all BGP sessions.
Default	false
Introduced	16.0.R1
Platforms	All

bfd-strict-mode

Synopsis	Enter the **bfd-strict-mode** context
Context	**configure** service vprn *string* bgp bfd-strict-mode
Tree	bfd-strict-mode
Introduced	23.7.R1
Platforms	All

advertise

Synopsis	Enable the **advertise** context
Context	**configure** service vprn *string* bgp bfd-strict-mode advertise
Tree	advertise
Description	Commands in this context configure BGP to advertise the Strict-BFD capability to peers that are within scope of this command and meet the following requirements: • The inherited or configured value for the **bfd-liveness** command that applies to the peer is **true**. • The interface associated with the peer has a valid BFD configuration. When the preceding conditions are satisfied and two peers attempting to form a session both advertise the Strict-BFD capability, the BGP finite state machine in each router transitions the session state to established after the BFD session with the peer enters the up state. When unconfigured, BGP does not advertise the Strict-BFD capability to peers.

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Introduced	23.7.R1
Platforms	All

holdtime *number*

Synopsis	Maximum time BGP waits for the BFD session to come up
Context	**configure** service vprn *string* bgp bfd-strict-mode advertise holdtime *number*
Tree	holdtime
Description	This command configures the maximum time BGP waits for the BFD session to come up, provided that the Strict-BFD procedures apply to a session, and the negotiated BGP hold time is zero (no keepalives). If the negotiated BGP hold time is greater than zero, the advertised hold time is not considered.
Range	1 to 65535
Units	seconds
Default	30
Introduced	23.7.R1
Platforms	All

next-hop-reachability *boolean*

Synopsis	Consider next hop unreachable if BFD session is down
Context	**configure** service vprn *string* bgp bfd-strict-mode next-hop-reachability *boolean*
Tree	next-hop-reachability
Description	When configured to **true**, the router considers next-hop self routes belonging to specific address families received from a peer within scope of this command as having an unresolved next hop, provided that the following requirements are met: • The BFD session to the peer is in a down state. • There is a valid interface BFD configuration that applies to the peer. • There is a valid BFD liveness configuration that applies to the peer. The unresolved state is maintained until the BFD session state changes to up or administratively down, even if there is a resolving route or tunnel that matches the BGP next-hop address. Routes received from one peer with a BGP next-hop address equal to the address of another peer are not affected by the BFD session to the other peer. The behavior of the router when this command is **true** does not depend on whether Strict-BFD is used, as both features are independent. Configuring this command to **true** only affects routes belonging to the following address families:

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- IPv4
- IPv6
- IPv4 VPN
- IPv6 VPN
- labeled unicast IPv4
- labeled unicast IPv6
- EVPN
- IPv4 multicast
- IPv6 multicast
- IPv4 VPN multicast
- IPv6 VPN multicast

When configured to **false**, the router does not consider next-hop self routes belonging to the preceding address families as having an unresolved next hop if the BFD session goes down.

Default	false
Introduced	23.7.R1
Platforms	All

client-reflect *boolean*

Synopsis	Allow client reflection of routes by route reflector
Context	**configure** service vprn *string* bgp client-reflect *boolean*
Tree	client-reflect
Description	When configured to **true**, routes received from neighbors considered to be RR clients are reflected to other peers as expected. When configured to **false**, routes received from neighbors considered to be RR clients are not reflected to other clients.
Default	true
Introduced	16.0.R1
Platforms	All

cluster

Synopsis	Enter the **cluster** context
Context	**configure** service vprn *string* bgp cluster
Tree	cluster
Introduced	16.0.R1

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Platforms	All

cluster-id *string*

Synopsis	Route reflector cluster ID
Context	**configure** service vprn *string* bgp cluster cluster-id *string*
Tree	cluster-id
Description	The command specifies the cluster ID to associate with the routing instance, effectively making all IBGP peers of the routing instance RR clients.
Introduced	16.0.R1
Platforms	All

connect-retry *number*

Synopsis	BGP connect retry timer value
Context	**configure** service vprn *string* bgp connect-retry *number*
Tree	connect-retry
Description	This command configures the BGP connect retry timer. When the timer expires, BGP tries to reconnect to the configured peer.
Range	1 to 65535
Default	120
Introduced	16.0.R1
Platforms	All

convergence

Synopsis	Enter the **convergence** context
Context	**configure** service vprn *string* bgp convergence
Tree	convergence
Introduced	19.7.R1
Platforms	All

family [family-type] *keyword*

Synopsis	Enter the **family** list instance
Context	**configure** service vprn *string* bgp convergence family *keyword*

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Tree	family
Introduced	19.7.R1
Platforms	All

[**family-type**] *keyword*

Synopsis	Address family for which convergence selection applies
Context	**configure** service vprn *string* bgp convergence family *keyword*
Tree	family
Options	ipv4, ipv6
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	All

max-wait-to-advertise *number*

Synopsis	Maximum wait time before advertising routes
Context	**configure** service vprn *string* bgp convergence family *keyword* max-wait-to-advertise *number*
Tree	max-wait-to-advertise
Range	0 to 3600
Default	0
Introduced	19.7.R1
Platforms	All

min-wait-to-advertise *number*

Synopsis	Minimum wait time before advertising routes
Context	**configure** service vprn *string* bgp convergence min-wait-to-advertise *number*
Tree	min-wait-to-advertise
Range	0 to 3600
Default	0
Introduced	19.7.R1
Platforms	All

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damp-peer-oscillations

Synopsis	Enable the **damp-peer-oscillations** context
Context	**configure** service vprn *string* bgp damp-peer-oscillations
Tree	damp-peer-oscillations
Description	Commands in this context support the DampPeerOscillations FSM behavior described in section 8.1 of RFC 4271, *A Border Gateway Protocol 4 (BGP-4)*. When unconfigured, the router does not perform peer oscillation damping and immediately transitions out of the idle state after every reset.
Introduced	16.0.R1
Platforms	All

error-interval *number*

Synopsis	Time after a reset that the session must be error-free
Context	**configure** service vprn *string* bgp damp-peer-oscillations error-interval *number*
Tree	error-interval
Description	This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.
Range	0 to 2048
Default	30
Introduced	16.0.R1
Platforms	All

idle-hold-time

Synopsis	Enter the **idle-hold-time** context
Context	**configure** service vprn *string* bgp damp-peer-oscillations idle-hold-time
Tree	idle-hold-time
Description	Commands in this context configure how long a BGP peer session remains in the idle state after some type of error causes the session to reset. In the idle state, BGP does not initiate or respond to attempts to establish a new session. Repeated errors that occur in a short time period after each session reset cause longer and longer hold times in the idle state.
Introduced	16.0.R1
Platforms	All

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initial-wait *number*

Synopsis	Time session remains in idle state after stabilization
Context	**configure** service vprn *string* bgp damp-peer-oscillations idle-hold-time initial-wait *number*
Tree	initial-wait
Range	0 to 2048
Default	0
Introduced	16.0.R1
Platforms	All

max-wait *number*

Synopsis	Maximum session idle time after repeated instability
Context	**configure** service vprn *string* bgp damp-peer-oscillations idle-hold-time max-wait *number*
Tree	max-wait
Range	1 to 2048
Default	60
Introduced	16.0.R1
Platforms	All

second-wait *number*

Synopsis	Time that doubles after each session failure
Context	**configure** service vprn *string* bgp damp-peer-oscillations idle-hold-time second-wait *number*
Tree	second-wait
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	16.0.R1
Platforms	All

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damping *boolean*

Synopsis	Use BGP route damping to reduce route flap
Context	**configure** service vprn *string* bgp damping *boolean*
Tree	damping
Description	When configured to **true**, this command enables route damping to reduce the number of update messages sent between BGP peers and reduce the load on peers without affecting the route convergence time for stable routes. Route damping is controlled by profiles set in route policies. If no profile is specified in the route policy, the default damping profile is used with the following parameters: • Half-life: 15 minutes • Max-suppress: 60 minutes • Suppress-threshold: 3000 • Reuse-threshold: 750 When configured to **false**, BGP route damping for learned routes is disabled.
Default	false
Introduced	16.0.R1
Platforms	All

default-label-preference

Synopsis	Enter the **default-label-preference** context
Context	**configure** service vprn *string* bgp default-label-preference
Tree	default-label-preference
Introduced	19.5.R1
Platforms	All

ebgp *number*

Synopsis	Default preference for EBGP
Context	**configure** service vprn *string* bgp default-label-preference ebgp *number*
Tree	ebgp
Range	0 to 255
Default	0
Introduced	19.5.R1
Platforms	All

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ibgp *number*

Synopsis	Default preference for IBGP
Context	**configure** service vprn *string* bgp default-label-preference ibgp *number*
Tree	ibgp
Range	0 to 255
Default	0
Introduced	19.5.R1
Platforms	All

default-preference

Synopsis	Enter the **default-preference** context
Context	**configure** service vprn *string* bgp default-preference
Tree	default-preference
Introduced	19.5.R1
Platforms	All

ebgp *number*

Synopsis	Default preference for EBGP
Context	**configure** service vprn *string* bgp default-preference ebgp *number*
Tree	ebgp
Range	0 to 255
Default	0
Introduced	19.5.R1
Platforms	All

ibgp *number*

Synopsis	Default preference for IBGP
Context	**configure** service vprn *string* bgp default-preference ibgp *number*
Tree	ibgp
Range	0 to 255
Default	0

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Introduced	19.5.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* bgp description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

domain-id *string*

Synopsis	Domain ID of received BGP route before readvertisement
Context	**configure** service vprn *string* bgp domain-id *string*
Tree	domain-id
Description	This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in *draft-ietf-bess-evpn-ipvpn-interworking*. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances). Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred). In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N: Seg Len=1 / 65000:1:128 If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows: Seg Len=2 / 65000:2:70 / 65000:1:128 That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.
Introduced	21.10.R1
Platforms	All

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dynamic-neighbor-limit *number*

Synopsis	Max dynamic BGP sessions to accept from remote peers
Context	**configure** service vprn *string* bgp dynamic-neighbor-limit *number*
Tree	dynamic-neighbor-limit
Description	This command configures the maximum number of dynamic BGP sessions to accept from remote peers associated with the entire BGP instance. If accepting a new dynamic session causes the instance limit to be exceeded, the new session attempt is rejected and a Notification message is sent back to the remote peer.
Range	1 to 8192
Introduced	16.0.R1
Platforms	All

ebgp-default-reject-policy

Synopsis	Enter the **ebgp-default-reject-policy** context
Context	**configure** service vprn *string* bgp ebgp-default-reject-policy
Tree	ebgp-default-reject-policy
Introduced	19.5.R1
Platforms	All

export *boolean*

Synopsis	Enable default reject export policy for external peers
Context	**configure** service vprn *string* bgp ebgp-default-reject-policy export *boolean*
Tree	export
Default	true
Introduced	19.5.R1
Platforms	All

import *boolean*

Synopsis	Enable default reject import policy for external peers
Context	**configure** service vprn *string* bgp ebgp-default-reject-policy import *boolean*
Tree	import
Default	true

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Introduced	19.5.R1
Platforms	All

eibgp-loadbalance *boolean*

Synopsis	Use ECMP over BGP VPN and BGP routes
Context	**configure** service vprn *string* bgp eibgp-loadbalance *boolean*
Tree	eibgp-loadbalance
Default	false
Introduced	16.0.R1
Platforms	All

enforce-first-as *boolean*

Synopsis	Enforce the configured peer AS value in received routes
Context	**configure** service vprn *string* bgp enforce-first-as *boolean*
Tree	enforce-first-as
Description	When configured to **true** for an EBGP session, all routes received from an EBGP peer are checked to ensure that the most recent ASN in the AS_PATH attribute of each route matches the configured AS of the session. If there is not a match, the session is reset (if the **update-fault-tolerance** command in the **error-handling** context is set to **false**) or the session is left up but the route is treated as withdrawn (if **update-fault-tolerance** is set to **true**). This command does not flap an established session because it applies only to routes received after the command is issued. When configured to **false**, received routes are not checked for compliance with the rule.
Default	false
Introduced	16.0.R1
Platforms	All

error-handling

Synopsis	Enter the **error-handling** context
Context	**configure** service vprn *string* bgp error-handling
Tree	error-handling
Introduced	16.0.R1
Platforms	All

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update-fault-tolerance *boolean*

Synopsis	Tolerate non-critical errors in UPDATE messages
Context	**configure** service vprn *string* bgp error-handling update-fault-tolerance *boolean*
Tree	update-fault-tolerance
Description	When configured to **true**, non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset. When configured to **false**, most errors trigger a session reset.
Default	false
Introduced	16.0.R1
Platforms	All

export

Synopsis	Enable the **export** context
Context	**configure** service vprn *string* bgp export
Tree	export
Introduced	16.0.R1
Platforms	All

policy *(policy-expr-string | string)*

Synopsis	Export policy name
Context	**configure** service vprn *string* bgp export policy *(policy-expr-string | string)*
Tree	policy
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

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extended-nh-encoding

Synopsis	Enter the **extended-nh-encoding** context
Context	**configure** service vprn *string* bgp extended-nh-encoding
Tree	extended-nh-encoding
Introduced	19.5.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable/disable family type ipv4.
Context	**configure** service vprn *string* bgp extended-nh-encoding ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	19.5.R1
Platforms	All

family

Synopsis	Enter the **family** context
Context	**configure** service vprn *string* bgp family
Tree	family
Description	Commands in this context specify the BGP address families supported by the base router BGP sessions.
Introduced	16.0.R1
Platforms	All

flow-ipv4 *boolean*

Synopsis	Advertise support for the flowspec-IPv4 address family
Context	**configure** service vprn *string* bgp family flow-ipv4 *boolean*
Tree	flow-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

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flow-ipv6 *boolean*

Synopsis	Advertise support for the flowspec-IPv6 address family
Context	**configure** service vprn *string* bgp family flow-ipv6 *boolean*
Tree	flow-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Advertise MP-BGP support for the IPv4 address family
Context	**configure** service vprn *string* bgp family ipv4 *boolean*
Tree	ipv4
Default	true
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the IPv6 address family
Context	**configure** service vprn *string* bgp family ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Advertise support for the label-IPv4 address family
Context	**configure** service vprn *string* bgp family label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

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mcast-ipv4 *boolean*

Synopsis	Advertise support for the MCAST-IPv4 address family
Context	**configure** service vprn *string* bgp family mcast-ipv4 *boolean*
Tree	mcast-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv6 *boolean*

Synopsis	Advertise support for the MCAST-IPv6 address family
Context	**configure** service vprn *string* bgp family mcast-ipv6 *boolean*
Tree	mcast-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

fast-external-failover *boolean*

Synopsis	Drop external BGP session immediately when link fails
Context	**configure** service vprn *string* bgp fast-external-failover *boolean*
Tree	fast-external-failover
Description	When configured to **true**, the router drops an external BGP session to a single-hop neighbor immediately when the local interface goes down. When configured to **false**, the BGP session remains up until the hold time expires.
Default	true
Introduced	16.0.R1
Platforms	All

flowspec

Synopsis	Enter the **flowspec** context
Context	**configure** service vprn *string* bgp flowspec
Tree	flowspec

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Introduced	16.0.R1
Platforms	All

validate-dest-prefix *boolean*

Synopsis	Validate destination prefix in FlowSpec-IPv4/IPv6 route
Context	**configure** service vprn *string* bgp flowspec validate-dest-prefix *boolean*
Tree	validate-dest-prefix
Description	When configured to **true**, this command enables validation of received IPv4 and IPv6 FlowSpec routes that contain a destination-prefix subcomponent. A FlowSpec route with a destination-prefix subcomponent is considered invalid if both of the following are true: • it was originated outside the local AS of the receiving BGP router • the neighbor AS of the FlowSpec route does not match the neighbor AS of the best match BGP (unicast) route for the destination prefix or the neighbor AS of any longer match BGP (unicast) route for the destination prefix An invalid route is retained in the BGP but it is not used for filtering traffic or propagated to other BGP routers. When configured to **false**, destination-prefix validation is disabled.
Default	false
Introduced	16.0.R1
Platforms	All

validate-redirect-ip *boolean*

Synopsis	Validate the redirect-to-IPv4 action in FlowSpec route
Context	**configure** service vprn *string* bgp flowspec validate-redirect-ip *boolean*
Tree	validate-redirect-ip
Description	When configured to **true**, this command enables procedures to validate the redirect-to-IPv4 action attached to FlowSpec-IPv4 routes that are received by the BGP instance. A FlowSpec-IPv4 route is considered invalid and is not installed as a filter rule if the FlowSpec-IPv4 route is deemed to have originated from a different AS than the IP route that resolves the redirection IPv4 address. The originating AS of a FlowSpec route is determined from its AS path. When configured to **false**, the validation check is disabled.
Default	false
Introduced	16.0.R1
Platforms	All

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graceful-restart

Synopsis	Enable the **graceful-restart** context
Context	**configure** service vprn *string* bgp graceful-restart
Tree	graceful-restart
Introduced	16.0.R1
Platforms	All

gr-notification *boolean*

Synopsis	Perform Graceful Restart procedures
Context	**configure** service vprn *string* bgp graceful-restart gr-notification *boolean*
Tree	gr-notification
Description	When configured to **true**, the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error. When configured to **false**, NOTIFICATION messages are not supported.
Default	false
Introduced	16.0.R1
Platforms	All

long-lived

Synopsis	Enable the **long-lived** context
Context	**configure** service vprn *string* bgp graceful-restart long-lived
Tree	long-lived
Introduced	16.0.R1
Platforms	All

advertise-stale-to-all-neighbors *boolean*

Synopsis	Advertise stale routes to all BGP peers
Context	**configure** service vprn *string* bgp graceful-restart long-lived advertise-stale-to-all-neighbors *boolean*
Tree	advertise-stale-to-all-neighbors

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Default	false
Introduced	16.0.R1
Platforms	All

advertised-stale-time *number*

Synopsis	LLGR stale routes time
Context	**configure** service vprn *string* bgp graceful-restart long-lived advertised-stale-time *number*
Tree	advertised-stale-time
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

family [family-type] *keyword*

Synopsis	Enter the **family** list instance
Context	**configure** service vprn *string* bgp graceful-restart long-lived family *keyword*
Tree	family
Introduced	16.0.R1
Platforms	All

[**family-type**] *keyword*

Synopsis	Address family type for LLGR
Context	**configure** service vprn *string* bgp graceful-restart long-lived family *keyword*
Tree	family
Options	ipv4, ipv6, flow-ipv4, flow-ipv6, label-ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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advertised-stale-time *number*

Synopsis	LLGR stale routes time for family override
Context	**configure** service vprn *string* bgp graceful-restart long-lived family *keyword* advertised-stale-time *number*
Tree	advertised-stale-time
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	**configure** service vprn *string* bgp graceful-restart long-lived family *keyword* helper-override-stale-time *number*
Tree	helper-override-stale-time
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

forwarding-bits-set *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family
Context	**configure** service vprn *string* bgp graceful-restart long-lived forwarding-bits-set *keyword*
Tree	forwarding-bits-set
Description	This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family. This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).
Options	none, all, non-fwd
Default	none
Introduced	16.0.R1
Platforms	All

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helper-override-restart-time *number*

Synopsis	Locally-configured override for restart time
Context	**configure** service vprn *string* bgp graceful-restart long-lived helper-override-restart-time *number*
Tree	helper-override-restart-time
Description	This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.
Range	0 to 4095
Introduced	16.0.R1
Platforms	All

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	**configure** service vprn *string* bgp graceful-restart long-lived helper-override-stale-time *number*
Tree	helper-override-stale-time
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

without-no-export *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	**configure** service vprn *string* bgp graceful-restart long-lived without-no-export *boolean*
Tree	without-no-export
Description	When configured to **true**, LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0.

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When configured to **false**, LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.

Default	false
Introduced	16.0.R1
Platforms	All

restart-time *number*

Synopsis	Restart time advertised by GR capability
Context	**configure** service vprn *string* bgp graceful-restart restart-time *number*
Tree	restart-time
Range	0 to 4095
Default	120
Introduced	16.0.R1
Platforms	All

stale-routes-time *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	**configure** service vprn *string* bgp graceful-restart stale-routes-time *number*
Tree	stale-routes-time
Range	1 to 3600
Default	360
Introduced	16.0.R1
Platforms	All

group [group-name] *string*

Synopsis	Enter the **group** list instance
Context	**configure** service vprn *string* bgp group *string*
Tree	group
Introduced	16.0.R1
Platforms	All

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[**group-name**] *string*

Synopsis	BGP peer group name
Context	**configure** service vprn *string* bgp group *string*
Tree	group
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the BGP group
Context	**configure** service vprn *string* bgp group *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

advertise-inactive *boolean*

Synopsis	Advertise an inactive BGP route to peers
Context	**configure** service vprn *string* bgp group *string* advertise-inactive *boolean*
Tree	advertise-inactive
Description	When configured to **true**, this command allows an inactive BGP route to be advertised, even though it is not the most preferred route. The effect of the command on advertised unlabeled, labeled, and multicast IPv4 and IPv6 routes depends on several factors. • If the active route for the IP prefix is a BGP route, that route is advertised. • If the active route is a non-BGP route and there are valid inactive BGP routes to the same destination, the best valid inactive route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session. • If the active route is a non-BGP route and there are no valid BGP routes to the same destination, no route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session. When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

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When this command inherits a value of **false**, the advertisement of inactive BGP routes to other BGP peers is disabled.

Introduced	16.0.R1
Platforms	All

advertise-ipv6-next-hops

Synopsis	Enable the **advertise-ipv6-next-hops** context
Context	**configure** service vprn *string* bgp group *string* advertise-ipv6-next-hops
Tree	advertise-ipv6-next-hops
Introduced	19.5.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable IPv4 routes to be advertised
Context	**configure** service vprn *string* bgp group *string* advertise-ipv6-next-hops ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	19.5.R1
Platforms	All

aggregator-id-zero *boolean*

Synopsis	Set router ID in the BGP AGGREGATOR attribute to zero
Context	**configure** service vprn *string* bgp group *string* aggregator-id-zero *boolean*
Tree	aggregator-id-zero
Introduced	16.0.R1
Platforms	All

as-override *boolean*

Synopsis	Replace the peer's ASN with the local ASN in AS Path
Context	**configure** service vprn *string* bgp group *string* as-override *boolean*
Tree	as-override

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Description	When configured to **true**, the advertising router's local AS replaces all occurrences of the peer AS in the AS_PATH attribute. This command should be used with caution, as it breaks BGP's loop detection mechanism. When configured to **false**, no AS override is performed.
Default	false
Introduced	16.0.R1
Platforms	All

asn-4-byte *boolean*

Synopsis	Advertise the use of 4-byte ASNs
Context	**configure** service vprn *string* bgp group *string* asn-4-byte *boolean*
Tree	asn-4-byte
Description	When this command inherits a value of **true**, the use of 4-byte ASNs is supported. When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **true**. When configured to **false**, this command disables the use of 4-byte ASNs.
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	BGP authentication key for peers in the group
Context	**configure** service vprn *string* bgp group *string* authentication-key *string*
Tree	authentication-key
Description	This command configures the authentication key that must be configured on both peers. The stored format of the authentication key is based on the **configure system security hash-control management-interface md-cli hash-algorithm** setting**.**
String Length	1 to 370
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session

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Context	**configure** service vprn *string* bgp group *string* authentication-keychain *reference*
Tree	authentication-keychain
Description	This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.
Reference	**configure** system security keychains keychain *string*
Introduced	16.0.R3
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD
Context	**configure** service vprn *string* bgp group *string* bfd-liveness *boolean*
Tree	bfd-liveness
Description	When configured to **true**, BFD is enabled on a given protocol interface where the state of the protocol interface is tied to the state of the BFD session between the local node and the remote node. When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**. When this command inherits a value of **false**, BFD is removed from the associated protocol adjacency.
Introduced	16.0.R1
Platforms	All

bfd-strict-mode

Synopsis	Enter the **bfd-strict-mode** context
Context	**configure** service vprn *string* bgp group *string* bfd-strict-mode
Tree	bfd-strict-mode
Introduced	23.7.R1
Platforms	All

advertise

Synopsis	Enable the **advertise** context
Context	**configure** service vprn *string* bgp group *string* bfd-strict-mode advertise
Tree	advertise

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Description Commands in this context configure BGP to advertise the Strict-BFD capability to peers that are within scope of this command and meet the following requirements:

- The inherited or configured value for the **bfd-liveness** command that applies to the peer is **true**.
- The interface associated with the peer has a valid BFD configuration.

When the preceding conditions are satisfied and two peers attempting to form a session both advertise the Strict-BFD capability, the BGP finite state machine in each router transitions the session state to established after the BFD session with the peer enters the up state.

When unconfigured, BGP does not advertise the Strict-BFD capability to peers.

Introduced 23.7.R1

Platforms All

holdtime *number*

Synopsis Maximum time BGP waits for the BFD session to come up

Context **configure** service vprn *string* bgp group *string* bfd-strict-mode advertise holdtime *number*

Tree holdtime

Description This command configures the maximum time BGP waits for the BFD session to come up, provided that the Strict-BFD procedures apply to a session, and the negotiated BGP hold time is zero (no keepalives). If the negotiated BGP hold time is greater than zero, the advertised hold time is not considered.

Range 1 to 65535

Units seconds

Default 30

Introduced 23.7.R1

Platforms All

next-hop-reachability *boolean*

Synopsis Consider next hop unreachable if BFD session is down

Context **configure** service vprn *string* bgp group *string* bfd-strict-mode next-hop-reachability *boolean*

Tree next-hop-reachability

Description When configured to **true**, the router considers next-hop self routes belonging to specific address families received from a peer within scope of this command as having an unresolved next hop, provided that the following requirements are met:

- The BFD session to the peer is in a down state.

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- There is a valid interface BFD configuration that applies to the peer.
- There is a valid BFD liveness configuration that applies to the peer.

The unresolved state is maintained until the BFD session state changes to up or administratively down, even if there is a resolving route or tunnel that matches the BGP next-hop address.

Routes received from one peer with a BGP next-hop address equal to the address of another peer are not affected by the BFD session to the other peer.

The behavior of the router when this command is **true** does not depend on whether Strict-BFD is used, as both features are independent.

Configuring this command to **true** only affects routes belonging to the following address families:

- IPv4
- IPv6
- IPv4 VPN
- IPv6 VPN
- labeled unicast IPv4
- labeled unicast IPv6
- EVPN
- IPv4 multicast
- IPv6 multicast
- IPv4 VPN multicast
- IPv6 VPN multicast

When configured to **false**, the router does not consider next-hop self routes belonging to the preceding address families as having an unresolved next hop if the BFD session goes down.

Introduced 23.7.R1

Platforms All

capability-negotiation *boolean*

Synopsis Enable capability negotiation

Context **configure** service vprn *string* bgp group *string* capability-negotiation *boolean*

Tree capability-negotiation

Description When configured to **true**, this command enables the exchange of capabilities.

When configured to **false** and the peering is flapped, new capabilities are not negotiated and strictly IPv4 exchanges are supported with the peer.

Default true

Introduced 16.0.R1

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Platforms	All

client-reflect *boolean*

Synopsis	Allow cluster RR to advertise routes to its clients
Context	**configure** service vprn *string* bgp group *string* client-reflect *boolean*
Tree	client-reflect
Description	When unconfigured, this command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **true**. When the command inherits a value of **true**, client reflection of routes is enabled. When configured to **false**, this command disables client reflection of routes.
Introduced	16.0.R1
Platforms	All

cluster

Synopsis	Enter the **cluster** context
Context	**configure** service vprn *string* bgp group *string* cluster
Tree	cluster
Introduced	16.0.R1
Platforms	All

cluster-id *string*

Synopsis	Route reflector cluster ID
Context	**configure** service vprn *string* bgp group *string* cluster cluster-id *string*
Tree	cluster-id
Introduced	16.0.R1
Platforms	All

connect-retry *number*

Synopsis	BGP connect retry timer value
Context	**configure** service vprn *string* bgp group *string* connect-retry *number*
Tree	connect-retry
Range	1 to 65535

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Introduced	16.0.R1
Platforms	All

damp-peer-oscillations

Synopsis	Enable the **damp-peer-oscillations** context
Context	**configure** service vprn *string* bgp group *string* damp-peer-oscillations
Tree	damp-peer-oscillations
Description	Commands in this context specify how long a BGP peer session remains in the idle state after an error causes the session to reset. In the idle state, BGP does not initiate or respond to attempts to establish a new session. Repeated errors that occur a short time after each session reset cause longer and longer hold times in the idle state. When unconfigured, command settings are inherited from the global-level configuration.
Introduced	16.0.R1
Platforms	All

error-interval *number*

Synopsis	Time after a reset that the session must be error-free
Context	**configure** service vprn *string* bgp group *string* damp-peer-oscillations error-interval *number*
Tree	error-interval
Description	This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.
Range	0 to 2048
Default	30
Introduced	16.0.R1
Platforms	All

idle-hold-time

Synopsis	Enter the **idle-hold-time** context
Context	**configure** service vprn *string* bgp group *string* damp-peer-oscillations idle-hold-time
Tree	idle-hold-time
Introduced	16.0.R1
Platforms	All

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initial-wait *number*

Synopsis	Time session remains in idle state after stabilization
Context	**configure** service vprn *string* bgp group *string* damp-peer-oscillations idle-hold-time initial-wait *number*
Tree	initial-wait
Range	0 to 2048
Default	0
Introduced	16.0.R1
Platforms	All

max-wait *number*

Synopsis	Maximum session idle time after repeated instability
Context	**configure** service vprn *string* bgp group *string* damp-peer-oscillations idle-hold-time max-wait *number*
Tree	max-wait
Range	1 to 2048
Default	60
Introduced	16.0.R1
Platforms	All

second-wait *number*

Synopsis	Time that doubles after each repeated session failure
Context	**configure** service vprn *string* bgp group *string* damp-peer-oscillations idle-hold-time second-wait *number*
Tree	second-wait
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	16.0.R1
Platforms	All

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damping *boolean*

Synopsis	Use BGP route damping to reduce route flap
Context	**configure** service vprn *string* bgp group *string* damping *boolean*
Tree	damping
Introduced	16.0.R1
Platforms	All

default-label-preference

Synopsis	Enter the **default-label-preference** context
Context	**configure** service vprn *string* bgp group *string* default-label-preference
Tree	default-label-preference
Introduced	19.5.R1
Platforms	All

ebgp *number*

Synopsis	Default preference for EBGP
Context	**configure** service vprn *string* bgp group *string* default-label-preference ebgp *number*
Tree	ebgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

ibgp *number*

Synopsis	Default preference for IBGP
Context	**configure** service vprn *string* bgp group *string* default-label-preference ibgp *number*
Tree	ibgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

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default-preference

Synopsis	Enter the **default-preference** context
Context	**configure** service vprn *string* bgp group *string* default-preference
Tree	default-preference
Introduced	19.5.R1
Platforms	All

ebgp *number*

Synopsis	Default preference for EBGP
Context	**configure** service vprn *string* bgp group *string* default-preference ebgp *number*
Tree	ebgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

ibgp *number*

Synopsis	Default preference for IBGP
Context	**configure** service vprn *string* bgp group *string* default-preference ibgp *number*
Tree	ibgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* bgp group *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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dynamic-neighbor

Synopsis	Enter the **dynamic-neighbor** context
Context	**configure** service vprn *string* bgp group *string* dynamic-neighbor
Tree	dynamic-neighbor
Description	Commands in this context configure dynamic BGP sessions for a peer group.
Introduced	16.0.R1
Platforms	All

interface [interface-name] *reference*

Synopsis	Enter the **interface** list instance
Context	**configure** service vprn *string* bgp group *string* dynamic-neighbor interface *reference*
Tree	interface
Description	Commands in this context configure an unnumbered VPRN access IP interface for dynamic neighbors. If this interface connects to a network with other BGP routers, sessions with the other routers can be set up automatically without explicitly configuring them as BGP neighbors. The interface must be IPv6 enabled, but because the interface is considered unnumbered, it does not require an IPv4 address or a global-unicast IPv6 address. The sessions are set up using IPv6 link-local addresses. The BGP unnumbered feature supports all address families that allow IPv6 link-local BGP next-hop addresses. This includes IPv4 with the use of RFC 8950 extensions. When an interface is added to the list of dynamic-neighbor interfaces, an outgoing connection attempt is initiated toward any directly connected router on the interface that announces itself using an ICMPv6 router advertisement message. The session attempt is unsuccessful if the peer type is not EBGP, the reported AS number of the peer does not match one of the allowed values, or the maximum session limit of the interface would be exceeded.
Introduced	22.10.R1
Platforms	All

[**interface-name**] *reference*

Synopsis	Name of the dynamic neighbor interface
Context	**configure** service vprn *string* bgp group *string* dynamic-neighbor interface *reference*
Tree	interface
Reference	**configure** service vprn *string* interface *string*
Notes	This element is part of a list key.

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Introduced	22.10.R1
Platforms	All

allowed-peer-as *string*

Synopsis	Allowed peer AS value or range of acceptable values
Context	**configure** service vprn *string* bgp group *string* dynamic-neighbor interface *reference* allowed-peer-as *string*
Tree	allowed-peer-as
Description	This command specifies a singular allowed peer AS value or a range of acceptable values in the format *n1*..*n*2. All values greater than or equal to *n1* and less than or equal to *n2*are acceptable. For example, if the acceptable peer AS numbers are 65001 to 65005 (range) and 62100 (singular value), configure this command to use a value of [65001..65005 62100].
Max. Instances	32
Notes	This element is ordered by the user.
Introduced	22.10.R1
Platforms	All

max-sessions *number*

Synopsis	Maximum number of dynamic sessions allowed
Context	**configure** service vprn *string* bgp group *string* dynamic-neighbor interface *reference* max-sessions *number*
Tree	max-sessions
Description	This command specifies the maximum number of dynamic sessions that are allowed to be set up on the interface as a result of accepting sessions from link-local addresses or initiating sessions by receiving IPv6 router advertisements.
Range	1 to 255
Default	1
Introduced	22.10.R1
Platforms	All

match

Synopsis	Enter the **match** context

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Context	**configure** service vprn *string* bgp group *string* dynamic-neighbor match
Tree	match
Introduced	19.5.R1
Platforms	All

prefix [ip-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **prefix** list instance
Context	**configure** service vprn *string* bgp group *string* dynamic-neighbor match prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Introduced	19.5.R1
Platforms	All

[**ip-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Dynamic peer prefix for the group
Context	**configure** service vprn *string* bgp group *string* dynamic-neighbor match prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

allowed-peer-as *string*

Synopsis	Allowed peer AS value or range of acceptable values
Context	**configure** service vprn *string* bgp group *string* dynamic-neighbor match prefix *(ipv4-prefix | ipv6-prefix)* allowed-peer-as *string*
Tree	allowed-peer-as
Description	This command specifies a singular allowed peer AS value or a range of acceptable values in the format *n1*..*n*2. All values greater than or equal to *n1* and less than or equal to *n2*are acceptable. For example, if the acceptable peer AS numbers are 65001 to 65005 (range) and 62100 (singular value), configure this command to use a value of [65001..65005 62100].
Max. Instances	32

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Notes	This element is ordered by the user.
Introduced	19.5.R1
Platforms	All

dynamic-neighbor-limit *number*

Synopsis	Maximum dynamic BGP sessions to accept from remote peer
Context	**configure** service vprn *string* bgp group *string* dynamic-neighbor-limit *number*
Tree	dynamic-neighbor-limit
Description	This command configures the maximum number of dynamic BGP sessions that are accepted from remote peers associated with a specific peer group. If accepting a new dynamic session causes the group limit to be exceeded, the new session attempt is rejected and a Notification message is sent back to the remote peer. When unconfigured, the setting is inherited from the BGP global-level configuration.
Range	1 to 8192
Introduced	16.0.R1
Platforms	All

ebgp-default-reject-policy

Synopsis	Enable the **ebgp-default-reject-policy** context
Context	**configure** service vprn *string* bgp group *string* ebgp-default-reject-policy
Tree	ebgp-default-reject-policy
Introduced	19.5.R1
Platforms	All

export *boolean*

Synopsis	Enable default reject export policy for external peers
Context	**configure** service vprn *string* bgp group *string* ebgp-default-reject-policy export *boolean*
Tree	export
Default	true
Introduced	19.5.R1
Platforms	All

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import *boolean*

Synopsis	Enable default reject import policy for external peers
Context	**configure** service vprn *string* bgp group *string* ebgp-default-reject-policy import *boolean*
Tree	import
Default	true
Introduced	19.5.R1
Platforms	All

enforce-first-as *boolean*

Synopsis	Enforce the configured peer AS value in received routes
Context	**configure** service vprn *string* bgp group *string* enforce-first-as *boolean*
Tree	enforce-first-as
Introduced	16.0.R1
Platforms	All

error-handling

Synopsis	Enter the **error-handling** context
Context	**configure** service vprn *string* bgp group *string* error-handling
Tree	error-handling
Introduced	16.0.R1
Platforms	All

update-fault-tolerance *boolean*

Synopsis	Tolerate non-critical errors in UPDATE messages
Context	**configure** service vprn *string* bgp group *string* error-handling update-fault-tolerance *boolean*
Tree	update-fault-tolerance
Description	When configured to **true**, non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset. When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**. When this command inherits a value of **false**, all errors trigger a session reset.

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Introduced	16.0.R1
Platforms	All

evpn-link-bandwidth

Synopsis	Enter the **evpn-link-bandwidth** context
Context	**configure** service vprn *string* bgp group *string* evpn-link-bandwidth
Tree	evpn-link-bandwidth
Introduced	22.7.R1
Platforms	All

add-to-received-bgp *number*

Synopsis	Weight added to received PE-CE BGP routes
Context	**configure** service vprn *string* bgp group *string* evpn-link-bandwidth add-to-received-bgp *number*
Tree	add-to-received-bgp
Description	This command configures the weight value added to all BGP PE-CE routes for the purpose of weighted ECMP if EVPN-IFL and BGP PE-CE routes are combined into the same ECMP set. For the load-balancing betweeen EVPN-IFL and BGP PE-CE routes the **configure service vprn bgp eibgp-loadbalance** command must already be configured in the system.
Range	1 to 128
Introduced	22.7.R1
Platforms	All

export

Synopsis	Enable the **export** context
Context	**configure** service vprn *string* bgp group *string* export
Tree	export
Introduced	16.0.R1
Platforms	All

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policy *(policy-expr-string | string)*

Synopsis	Export policy name
Context	**configure** service vprn *string* bgp group *string* export policy *(policy-expr-string | string)*
Tree	policy
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

extended-nh-encoding

Synopsis	Enable the **extended-nh-encoding** context
Context	**configure** service vprn *string* bgp group *string* extended-nh-encoding
Tree	extended-nh-encoding
Introduced	19.5.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable/disable family type ipv4.
Context	**configure** service vprn *string* bgp group *string* extended-nh-encoding ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	19.5.R1
Platforms	All

family

Synopsis	Enable the **family** context
Context	**configure** service vprn *string* bgp group *string* family
Tree	family

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Introduced	16.0.R1
Platforms	All

flow-ipv4 *boolean*

Synopsis	Advertise support for the flowspec-IPv4 address family
Context	**configure** service vprn *string* bgp group *string* family flow-ipv4 *boolean*
Tree	flow-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

flow-ipv6 *boolean*

Synopsis	Advertise support for the flowspec-IPv6 address family
Context	**configure** service vprn *string* bgp group *string* family flow-ipv6 *boolean*
Tree	flow-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Add support for the IPv4 address family
Context	**configure** service vprn *string* bgp group *string* family ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the IPv6 address family
Context	**configure** service vprn *string* bgp group *string* family ipv6 *boolean*
Tree	ipv6

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Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Advertise support for the label-IPv4 address family
Context	**configure** service vprn *string* bgp group *string* family label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv4 *boolean*

Synopsis	Advertise support for the MCAST-IPv4 address family
Context	**configure** service vprn *string* bgp group *string* family mcast-ipv4 *boolean*
Tree	mcast-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv6 *boolean*

Synopsis	Advertise support for the MCAST-IPv6 address family
Context	**configure** service vprn *string* bgp group *string* family mcast-ipv6 *boolean*
Tree	mcast-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

fast-external-failover *boolean*

Synopsis	Drop external BGP session immediately when link fails
Context	**configure** service vprn *string* bgp group *string* fast-external-failover *boolean*

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Tree	fast-external-failover
Description	When this command inherits a value of **true**, the router drops an external BGP session on a single-hop route immediately when the local interface goes down. When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **true**. When configured to **false**, the BGP session remains up until the hold time expires.
Introduced	16.0.R1
Platforms	All

graceful-restart

Synopsis	Enable the **graceful-restart** context
Context	**configure** service vprn *string* bgp group *string* graceful-restart
Tree	graceful-restart
Introduced	16.0.R1
Platforms	All

gr-notification *boolean*

Synopsis	Perform graceful restart procedures after NOTIFICATION
Context	**configure** service vprn *string* bgp group *string* graceful-restart gr-notification *boolean*
Tree	gr-notification
Description	When configured to **true**, the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error. When configured to **false**, NOTIFICATION messages are not supported.
Default	false
Introduced	16.0.R1
Platforms	All

long-lived

Synopsis	Enable the **long-lived** context
Context	**configure** service vprn *string* bgp group *string* graceful-restart long-lived
Tree	long-lived
Introduced	16.0.R1

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Platforms	All

advertise-stale-to-all-neighbors *boolean*

Synopsis	Advertise stale routes to all BGP peers
Context	**configure** service vprn *string* bgp group *string* graceful-restart long-lived advertise-stale-to-all-neighbors *boolean*
Tree	advertise-stale-to-all-neighbors
Default	false
Introduced	16.0.R1
Platforms	All

advertised-stale-time *number*

Synopsis	Advertised long-lived stale time for LLGR routes
Context	**configure** service vprn *string* bgp group *string* graceful-restart long-lived advertised-stale-time *number*
Tree	advertised-stale-time
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

family [family-type] *keyword*

Synopsis	Enter the **family** list instance
Context	**configure** service vprn *string* bgp group *string* graceful-restart long-lived family *keyword*
Tree	family
Introduced	16.0.R1
Platforms	All

[**family-type**] *keyword*

Synopsis	Address family type for LLGR
Context	**configure** service vprn *string* bgp group *string* graceful-restart long-lived family *keyword*
Tree	family

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Options	ipv4, ipv6, flow-ipv4, flow-ipv6, label-ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertised-stale-time *number*

Synopsis	LLGR stale routes time for family override
Context	**configure** service vprn *string* bgp group *string* graceful-restart long-lived family *keyword* advertised-stale-time *number*
Tree	advertised-stale-time
Description	This command configures the long-lived stale routes time that is advertised by the router in its LLGR capability. This command applies to all AFI/SAFI in the advertised LLGR capability with a family-specific override.
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	**configure** service vprn *string* bgp group *string* graceful-restart long-lived family *keyword* helper-override-stale-time *number*
Tree	helper-override-stale-time
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This is a family-specific override value.
Range	0 to 16777216
Default	16777216
Introduced	16.0.R1
Platforms	All

forwarding-bits-set *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family

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Context	**configure** service vprn *string* bgp group *string* graceful-restart long-lived forwarding-bits-set *keyword*
Tree	forwarding-bits-set
Description	This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family. This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).
Options	none, all, non-fwd
Default	none
Introduced	16.0.R1
Platforms	All

helper-override-restart-time *number*

Synopsis	Locally-configured override for restart time
Context	**configure** service vprn *string* bgp group *string* graceful-restart long-lived helper-override-restart-time *number*
Tree	helper-override-restart-time
Description	This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.
Range	0 to 4095
Introduced	16.0.R1
Platforms	All

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	**configure** service vprn *string* bgp group *string* graceful-restart long-lived helper-override-stale-time *number*
Tree	helper-override-stale-time
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability.

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This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.

Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

without-no-export *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	**configure** service vprn *string* bgp group *string* graceful-restart long-lived without-no-export *boolean*
Tree	without-no-export
Description	When configured to **true**, LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0. When configured to **false**, LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.
Default	false
Introduced	16.0.R1
Platforms	All

restart-time *number*

Synopsis	Restart time advertised by GR capability
Context	**configure** service vprn *string* bgp group *string* graceful-restart restart-time *number*
Tree	restart-time
Range	0 to 4095
Default	300
Introduced	16.0.R1
Platforms	All

stale-routes-time *number*

Synopsis	Maximum time to maintain routes after graceful restart

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Context	**configure** service vprn *string* bgp group *string* graceful-restart stale-routes-time *number*
Tree	stale-routes-time
Range	1 to 3600
Default	360
Introduced	16.0.R1
Platforms	All

hold-time

Synopsis	Enter the **hold-time** context
Context	**configure** service vprn *string* bgp group *string* hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	All

minimum-hold-time *number*

Synopsis	Minimum hold time between successive messages
Context	**configure** service vprn *string* bgp group *string* hold-time minimum-hold-time *number*
Tree	minimum-hold-time
Description	This command specifies the minimum hold time that is accepted for the session. If a peer proposes a hold time lower than this value, the session attempt is rejected. When unconfigured, the command value is inherited from the BGP global-level setting.
Range	0 | 3 to 65536
Default	0
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Maximum time BGP waits between successive messages
Context	**configure** service vprn *string* bgp group *string* hold-time seconds *number*
Tree	seconds
Description	This command configures the maximum time BGP waits between successive messages (either keepalive or update) from its peer before closing the connection.

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Although the implementation allows setting the keepalive timer at the BGP group level times separately, the configured keepalive timer is overridden by this value under the following circumstances.

- If the specified hold time is less than the configured keepalive time, the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed.
- If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. The connection with the peer is up permanently and no keepalive packets are sent to the peer.

When unconfigured, the command setting is inherited from the BGP global-level configuration.

Range	0 | 3 to 65535
Introduced	16.0.R1
Platforms	All

import

Synopsis	Enable the **import** context
Context	**configure** service vprn *string* bgp group *string* import
Tree	import
Introduced	16.0.R1
Platforms	All

policy *(policy-expr-string | string)*

Synopsis	Route policy name
Context	**configure** service vprn *string* bgp group *string* import policy *(policy-expr-string | string)*
Tree	policy
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

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initial-send-delay-zero *boolean*

Synopsis	Send BGP updates as soon as the session comes up
Context	**configure** service vprn *string* bgp group *string* initial-send-delay-zero *boolean*
Tree	initial-send-delay-zero
Description	When configured to **true**, BGP updates are sent as soon as the session comes up. When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**. When this command inherits a value of **false**, BGP waits to send UPDATE messages for the minimum route advertisement time after a session is established.
Introduced	16.0.R1
Platforms	All

keepalive *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	**configure** service vprn *string* bgp group *string* keepalive *number*
Tree	keepalive
Description	This command configures the BGP keepalive timer value. A keepalive message is sent every time this timer expires. This value is generally one-third of the hold time interval configured in the **hold-time seconds** context. Although the implementation allows this keepalive value and the hold time interval to be independently set, under the following circumstances, the configured keepalive value is overridden by the hold time interval value: • If the specified keepalive value is greater than the configured hold time, the specified keepalive value is ignored and the timer value is set to one third of the current hold time value. • If the specified hold time interval is less than the configured keepalive value, the keepalive value is reset to one third of the specified hold time interval. • If the hold time interval is set to zero, the configured keepalive value is ignored. This means that the connection with the peer is up permanently and no keepalive packets are sent to the peer. When unconfigured, the command inherits the BGP global-level setting.
Range	0 to 21845
Introduced	16.0.R1
Platforms	All

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label-preference *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	**configure** service vprn *string* bgp group *string* label-preference *number*
Tree	label-preference
Range	1 to 255
Introduced	16.0.R1
Platforms	All

link-bandwidth

Synopsis	Enter the **link-bandwidth** context
Context	**configure** service vprn *string* bgp group *string* link-bandwidth
Tree	link-bandwidth
Description	Commands in this context specify the handling of the Link Bandwidth Extended Community attached to specific BGP routes. When all used multipaths of an IP prefix correspond to BGP routes with a Link Bandwidth EC, the datapath is programmed to use weighted ECMP across the BGP next hops in proportion to the bandwidth values.
Introduced	16.0.R3
Platforms	All

accept-from-ebgp

Synopsis	Enter the **accept-from-ebgp** context
Context	**configure** service vprn *string* bgp group *string* link-bandwidth accept-from-ebgp
Tree	accept-from-ebgp
Introduced	16.0.R4
Platforms	All

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	**configure** service vprn *string* bgp group *string* link-bandwidth accept-from-ebgp ipv4 *boolean*
Tree	ipv4
Default	false

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Introduced	16.0.R4
Platforms	All

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	**configure** service vprn *string* bgp group *string* link-bandwidth accept-from-ebgp ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	**configure** service vprn *string* bgp group *string* link-bandwidth accept-from-ebgp label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

add-to-received-ebgp

Synopsis	Enter the **add-to-received-ebgp** context
Context	**configure** service vprn *string* bgp group *string* link-bandwidth add-to-received-ebgp
Tree	add-to-received-ebgp
Introduced	16.0.R3
Platforms	All

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	**configure** service vprn *string* bgp group *string* link-bandwidth add-to-received-ebgp ipv4 *boolean*

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Tree	ipv4
Default	false
Introduced	16.0.R3
Platforms	All

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	**configure** service vprn *string* bgp group *string* link-bandwidth add-to-received-ebgp ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R3
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	**configure** service vprn *string* bgp group *string* link-bandwidth add-to-received-ebgp label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R3
Platforms	All

aggregate-used-paths

Synopsis	Enter the **aggregate-used-paths** context
Context	**configure** service vprn *string* bgp group *string* link-bandwidth aggregate-used-paths
Tree	aggregate-used-paths
Introduced	16.0.R4
Platforms	All

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes

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Context	**configure** service vprn *string* bgp group *string* link-bandwidth aggregate-used-paths ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R4
Platforms	All

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	**configure** service vprn *string* bgp group *string* link-bandwidth aggregate-used-paths ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	**configure** service vprn *string* bgp group *string* link-bandwidth aggregate-used-paths label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

send-to-ebgp

Synopsis	Enter the **send-to-ebgp** context
Context	**configure** service vprn *string* bgp group *string* link-bandwidth send-to-ebgp
Tree	send-to-ebgp
Introduced	16.0.R4
Platforms	All

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ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	**configure** service vprn *string* bgp group *string* link-bandwidth send-to-ebgp ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R4
Platforms	All

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	**configure** service vprn *string* bgp group *string* link-bandwidth send-to-ebgp ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	**configure** service vprn *string* bgp group *string* link-bandwidth send-to-ebgp label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

local-address *(ipv4-address-no-zone | ipv6-address-no-zone | interface-name)*

Synopsis	Local IP address used when communicating with BGP peers
Context	**configure** service vprn *string* bgp group *string* local-address *(ipv4-address-no-zone | ipv6-address-no-zone | interface-name)*
Tree	local-address
String Length	1 to 32

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Introduced	16.0.R1
Platforms	All

local-as

Synopsis	Enter the **local-as** context
Context	**configure** service vprn *string* bgp group *string* local-as
Tree	local-as
Introduced	16.0.R1
Platforms	All

as-number *number*

Synopsis	Local (or virtual) BGP AS number
Context	**configure** service vprn *string* bgp group *string* local-as as-number *number*
Tree	as-number
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

prepend-global-as *boolean*

Synopsis	Prepend global ASN when advertising routes to BGP peer
Context	**configure** service vprn *string* bgp group *string* local-as prepend-global-as *boolean*
Tree	prepend-global-as
Description	When configured to **true**, the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer. When configured to **false**, the global ASN is not included in the AS_PATH attribute.
Default	true
Introduced	16.0.R1
Platforms	All

private *boolean*

Synopsis	Hide the local ASN in sent paths learned from peering

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Context	**configure** service vprn *string* bgp group *string* local-as private *boolean*
Tree	private
Description	When configured to **true**, the local AS number is only advertised to peers that use the local ASN for establishing BGP peering sessions. When configured to **false**, the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.
Default	false
Introduced	16.0.R1
Platforms	All

local-preference *number*

Synopsis	Default local preference if not in incoming routes
Context	**configure** service vprn *string* bgp group *string* local-preference *number*
Tree	local-preference
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

loop-detect *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	**configure** service vprn *string* bgp group *string* loop-detect *keyword*
Tree	loop-detect
Options	drop-peer, ignore-loop, off, discard-route
Introduced	16.0.R1
Platforms	All

loop-detect-threshold *number*

Synopsis	Threshold for the global ASN in a received AS path
Context	**configure** service vprn *string* bgp group *string* loop-detect-threshold *number*
Tree	loop-detect-threshold
Range	0 to 15
Introduced	16.0.R6

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Platforms	All

med-out *(number | keyword)*

Synopsis	Default MED attribute value to advertise to peers
Context	**configure** service vprn *string* bgp group *string* med-out *(number | keyword)*
Tree	med-out
Max. Range	0 to 4294967295
Options	igp-cost
Introduced	16.0.R1
Platforms	All

min-route-advertisement *number*

Synopsis	Minimum time before a prefix can be advertised to peer
Context	**configure** service vprn *string* bgp group *string* min-route-advertisement *number*
Tree	min-route-advertisement
Range	1 to 255
Introduced	16.0.R1
Platforms	All

monitor

Synopsis	Enable the **monitor** context
Context	**configure** service vprn *string* bgp group *string* monitor
Tree	monitor
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BMP monitoring
Context	**configure** service vprn *string* bgp group *string* monitor admin-state *keyword*
Tree	admin-state
Options	enable, disable

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Default	disable
Introduced	16.0.R1
Platforms	All

all-stations *boolean*

Synopsis	Send BMP messages to all configured stations
Context	**configure** service vprn *string* bgp group *string* monitor all-stations *boolean*
Tree	all-stations
Description	When configured to **true**, this command specifies that BMP messages are to be sent to all configured BMP monitoring stations. When configured to **false**, the command is not used to indicate the stations which can receive BMP messages. The **station** command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.
Default	false
Introduced	16.0.R1
Platforms	All

route-monitoring

Synopsis	Enter the **route-monitoring** context
Context	**configure** service vprn *string* bgp group *string* monitor route-monitoring
Tree	route-monitoring
Introduced	16.0.R1
Platforms	All

post-policy *boolean*

Synopsis	Allow post-policy route-monitoring messages to be sent
Context	**configure** service vprn *string* bgp group *string* monitor route-monitoring post-policy *boolean*
Tree	post-policy
Default	false
Introduced	16.0.R1
Platforms	All

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pre-policy *boolean*

Synopsis	Allow pre-policy route-monitoring messages to be sent
Context	**configure** service vprn *string* bgp group *string* monitor route-monitoring pre-policy *boolean*
Tree	pre-policy
Default	false
Introduced	16.0.R1
Platforms	All

station [station-name] *reference*

Synopsis	Add a list entry for **station**
Context	**configure** service vprn *string* bgp group *string* monitor station *reference*
Tree	station
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[**station-name**] *reference*

Synopsis	BMP monitoring station
Context	**configure** service vprn *string* bgp group *string* monitor station *reference*
Tree	station
Reference	**configure** bmp station *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

multihop *number*

Synopsis	TTL in IP packet headers for EBGP peers multi-hops away
Context	**configure** service vprn *string* bgp group *string* multihop *number*
Tree	multihop
Range	1 to 255

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Introduced	16.0.R1
Platforms	All

multipath-eligible *boolean*

Synopsis	Allow routes from group peers in multipath eligibility
Context	**configure** service vprn *string* bgp group *string* multipath-eligible *boolean*
Tree	multipath-eligible
Default	false
Introduced	19.5.R1
Platforms	All

next-hop-self *boolean*

Synopsis	Advertise routes with local address as next-hop address
Context	**configure** service vprn *string* bgp group *string* next-hop-self *boolean*
Tree	next-hop-self
Default	false
Introduced	16.0.R1
Platforms	All

origin-validation

Synopsis	Enter the **origin-validation** context
Context	**configure** service vprn *string* bgp group *string* origin-validation
Tree	origin-validation
Introduced	19.7.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable support for unlabeled unicast IPv4 routes
Context	**configure** service vprn *string* bgp group *string* origin-validation ipv4 *boolean*
Tree	ipv4
Default	false

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Introduced	19.7.R1
Platforms	All

ipv6 *boolean*

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	**configure** service vprn *string* bgp group *string* origin-validation ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	19.7.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	**configure** service vprn *string* bgp group *string* origin-validation label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	19.7.R1
Platforms	All

passive *boolean*

Synopsis	Enable passive mode for BGP communication
Context	**configure** service vprn *string* bgp group *string* passive *boolean*
Tree	passive
Default	false
Introduced	16.0.R1
Platforms	All

path-mtu-discovery *boolean*

Synopsis	Enable Path MTU Discovery
Context	**configure** service vprn *string* bgp group *string* path-mtu-discovery *boolean*
Tree	path-mtu-discovery

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Description When configured to **true**, Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.

When set to **true**, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.

When configured to **false** and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.

Introduced 16.0.R1

Platforms All

peer-as *number*

Synopsis Peer AS number

Context **configure** service vprn *string* bgp group *string* peer-as *number*

Tree peer-as

Range 1 to 4294967295

Introduced 16.0.R1

Platforms All

peer-ip-tracking *boolean*

Synopsis Enable BGP peer tracking

Context **configure** service vprn *string* bgp group *string* peer-ip-tracking *boolean*

Tree peer-ip-tracking

Description When configured to **true**, this command enables BGP peer tracking.

Peer tracking should be used with caution. Peer tracking can tear a session down even if the loss of connectivity turns out to be short-lived (for example, while the IGP protocol is re-converging). Next-hop tracking, which is always enabled, handles temporary connectivity issues more effectively.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, peer tracking is disabled.

Introduced 16.0.R1

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Platforms	All

preference *number*

Synopsis	Route preference for routes learned from all peers
Context	**configure** service vprn *string* bgp group *string* preference *number*
Tree	preference
Range	1 to 255
Introduced	16.0.R1
Platforms	All

prefix-limit [family] *keyword*

Synopsis	Enter the **prefix-limit** list instance
Context	**configure** service vprn *string* bgp group *string* prefix-limit *keyword*
Tree	prefix-limit
Description	Commands in this context limit the number of BGP routes per address family received from a BGP peer and define the actions when crossing the configured maximum.
Introduced	16.0.R1
Platforms	All

[**family**] *keyword*

Synopsis	Address family to which the limit applies
Context	**configure** service vprn *string* bgp group *string* prefix-limit *keyword*
Tree	prefix-limit
Options	ipv4, ipv6, mcast-ipv4, flow-ipv4, flow-ipv6, mcast-ipv6, label-ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

hold-excess *number*

Synopsis	Percentage of maximum routes to install in route table
Context	**configure** service vprn *string* bgp group *string* prefix-limit *keyword* hold-excess *number*

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Tree	hold-excess
Description	This command specifies the percentage of maximum routes that are allowed to be installed in the route table for the configured address family. If a peer within scope of the configuration exceeds the limit, the overflow routes are held in the BGP RIB as inactive routes and are ineligible for forwarding and advertisement to other peers. If the **post-import** command is configured to **true**, only routes not rejected by import policies count toward the limit. A BGP route in an overflow state is reconsidered for activation and reinstallation when an UPDATE message is received for the route. This command is mutually exclusive with the **idle-timeou**t and l**og-only** commands.
Range	1 to 100
Introduced	23.7.R1
Platforms	All

idle-timeout *number*

Synopsis	Time BGP peering remains idle before reconnecting
Context	**configure** service vprn *string* bgp group *string* prefix-limit *keyword* idle-timeout *number*
Tree	idle-timeout
Description	This command configures the time in minutes before a BGP peer is automatically re-established after reaching the prefix limit. When unconfigured, the BGP peer stays down until the operator performs a reset. This command and **log-only** cannot be configured simultaneously.
Range	1 to 1024
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Send warning message at threshold instead of take-down
Context	**configure** service vprn *string* bgp group *string* prefix-limit *keyword* log-only *boolean*
Tree	log-only
Description	When configured to **true**, the router disables the BGP session from being taken down upon reaching the prefix limit. Instead, only a warning message is sent when the limit is reached. A warning message is also sent when the configured threshold percentage of the limit is reached. This command and **idle-timeout** cannot be configured simultaneously. When configured to **false**, the router generates a log event and takes the BGP session down upon reaching the prefix limit.

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Default	false
Introduced	16.0.R1
Platforms	All

maximum *number*

Synopsis	Maximum number of routes to be learned from a peer
Context	**configure** service vprn *string* bgp group *string* prefix-limit *keyword* maximum *number*
Tree	maximum
Description	This command configures the maximum number of BGP routes of the specified address family that can be received from a peer before administrative action is taken. When **log-only** is unconfigured, the BGP session is taken down whenever the limit of any family is exceeded even if the limits of the other family has not been exceeded.
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R2
Platforms	All

post-import *boolean*

Synopsis	Apply limit only to routes accepted by import policies
Context	**configure** service vprn *string* bgp group *string* prefix-limit *keyword* post-import *boolean*
Tree	post-import
Description	When configured to **true**, the system limits the number of routes that are accepted by import policies. Routes rejected by import policies are not counted against the configured limit. When configured to **false**, the system limits the number of routes to all routes received from the peer.
Default	false
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Percentage threshold that triggers a warning message
Context	**configure** service vprn *string* bgp group *string* prefix-limit *keyword* threshold *number*

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Tree	threshold
Range	1 to 100
Default	90
Introduced	16.0.R1
Platforms	All

remove-private

Synopsis	Enable the **remove-private** context
Context	**configure** service vprn *string* bgp group *string* remove-private
Tree	remove-private
Introduced	16.0.R1
Platforms	All

limited *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	**configure** service vprn *string* bgp group *string* remove-private limited *boolean*
Tree	limited
Default	false
Introduced	16.0.R1
Platforms	All

replace *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	**configure** service vprn *string* bgp group *string* remove-private replace *boolean*
Tree	replace
Default	false
Introduced	19.10.R1
Platforms	All

skip-peer-as *boolean*

Synopsis	Keep private ASN if it is the same as the BGP peer ASN

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Context	**configure** service vprn *string* bgp group *string* remove-private skip-peer-as *boolean*
Tree	skip-peer-as
Default	false
Introduced	16.0.R1
Platforms	All

send-communities

Synopsis	Enter the **send-communities** context
Context	**configure** service vprn *string* bgp group *string* send-communities
Tree	send-communities
Introduced	16.0.R1
Platforms	All

extended *boolean*

Synopsis	Advertise the Extended Communities attribute to peers
Context	**configure** service vprn *string* bgp group *string* send-communities extended *boolean*
Tree	extended
Description	When unconfigured, this command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **true**. When this command inherits a value of **true**, BGP extended communities are sent to peers in the Extended Communities attribute. When configured to **false**, all extended communities are removed from all routes advertised to BGP peers.
Introduced	16.0.R1
Platforms	All

large *boolean*

Synopsis	Advertise the Large Communities attribute to peers
Context	**configure** service vprn *string* bgp group *string* send-communities large *boolean*
Tree	large
Description	When unconfigured, this command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **true**. When this command inherits a value of **true**, BGP large communities are sent to peers in the Large Communities attribute.

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When configured to **false**, all large communities are removed from all routes advertised to BGP peers.

Introduced 16.0.R1

Platforms All

standard *boolean*

Synopsis Advertise the Communities attribute to peers

Context **configure** service vprn *string* bgp group *string* send-communities standard *boolean*

Tree standard

Description When unconfigured, this command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **true**.

When this command inherits a value of **true**, BGP standard communities are sent to peers in the Communities attribute.

When configured to **false**, all standard communities are removed from all routes advertised to BGP peers.

Introduced 16.0.R1

Platforms All

send-default

Synopsis Enable the **send-default** context

Context **configure** service vprn *string* bgp group *string* send-default

Tree send-default

Introduced 19.7.R1

Platforms All

export-policy *reference*

Synopsis Export policy name

Context **configure** service vprn *string* bgp group *string* send-default export-policy *reference*

Tree export-policy

Reference **configure** policy-options policy-statement *string*

Introduced 19.7.R1

Platforms All

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ipv4 *boolean*

Synopsis	Generate and advertise an IPv4 default route (0/0)
Context	**configure** service vprn *string* bgp group *string* send-default ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	19.7.R1
Platforms	All

ipv6 *boolean*

Synopsis	Generate and advertise an IPv6 default route (::/0)
Context	**configure** service vprn *string* bgp group *string* send-default ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	19.7.R1
Platforms	All

split-horizon *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	**configure** service vprn *string* bgp group *string* split-horizon *boolean*
Tree	split-horizon
Description	When configured to **true**, this command enables the use of split-horizon. This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP. Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary. When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**. When this command inherits a value of **false**, the use of split-horizon is disabled.
Introduced	16.0.R1
Platforms	All

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static-group *boolean*

Synopsis	Use group for static peers
Context	**configure** service vprn *string* bgp group *string* static-group *boolean*
Tree	static-group
Default	true
Introduced	16.0.R1
Platforms	All

tcp-mss *(number | keyword)*

Synopsis	TCP maximum segment size override
Context	**configure** service vprn *string* bgp group *string* tcp-mss *(number | keyword)*
Tree	tcp-mss
Description	This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command). The configured value controls two properties of the TCP connection as follows: TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router. TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.
Range	384 to 9746
Options	ip-stack
Introduced	21.2.R1
Platforms	All

third-party-nexthop *boolean*

Synopsis	Apply third-party next-hop processing to EBGP peers
Context	**configure** service vprn *string* bgp group *string* third-party-nexthop *boolean*
Tree	third-party-nexthop
Description	When configured to **true**, this command enables the router to send third-party next hop to EBGP peers in the same subnet as the source peer. The address family of the transport must match the address family of the route. When an IPv4 or IPv6 route is received from one EBGP peer and advertised to another EBGP peer in the same IP subnet, the BGP next hop is left unchanged.

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When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, third-party next-hop processing is disabled and the next hop carries the IP address of the interface used to establish the TCP connection to the peer.

Introduced 16.0.R1

Platforms All

ttl-security *number*

Synopsis Minimum TTL value for an incoming BGP packet

Context **configure** service vprn *string* bgp group *string* ttl-security *number*

Tree ttl-security

Description This command configures the minimum TTL value that BGP accepst from an incoming packet. A packet with a TTL value less than the minimum configured TTL value is discarded.

Range 1 to 255

Introduced 16.0.R1

Platforms All

type *keyword*

Synopsis BGP peer type

Context **configure** service vprn *string* bgp group *string* type *keyword*

Tree type

Options no-type, internal, external

Default no-type

Introduced 16.0.R1

Platforms All

hold-time

Synopsis Enter the **hold-time** context

Context **configure** service vprn *string* bgp hold-time

Tree hold-time

Introduced 16.0.R1

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Platforms	All

minimum-hold-time *number*

Synopsis	Minimum hold time between successive messages
Context	**configure** service vprn *string* bgp hold-time minimum-hold-time *number*
Tree	minimum-hold-time
Description	This command specifies the minimum hold time that is accepted for the session. If a peer proposes a hold time lower than this value, the session attempt is rejected.
Range	0 | 3 to 65535
Default	0
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Maximum time BGP waits between successive messages
Context	**configure** service vprn *string* bgp hold-time seconds *number*
Tree	seconds
Description	This command configures the maximum time BGP waits between successive messages (either keepalive or update) from its peer before closing the connection. Although the implementation allows setting the keepalive timer at the BGP global level times separately, the configured keepalive timer is overridden by this value under the following circumstances. • If the specified hold time is less than the configured keepalive time, the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed. • If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. The connection with the peer is up permanently and no keepalive packets are sent to the peer.
Range	0 | 3 to 65535
Default	90
Introduced	16.0.R1
Platforms	All

ibgp-multipath *boolean*

Synopsis	Enable IBGP multipath load balancing

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Context	**configure** service vprn *string* bgp ibgp-multipath *boolean*
Tree	ibgp-multipath
Description	When configured to **true**, this command enables IBGP multipath load balancing when adding BGP routes to the route table if the route resolving the BGP next hop offers multiple next hops. When configured to **false**, this command disables IBGP multipath load balancing.
Default	false
Introduced	16.0.R1
Platforms	All

import

Synopsis	Enable the **import** context
Context	**configure** service vprn *string* bgp import
Tree	import
Introduced	16.0.R1
Platforms	All

policy *(policy-expr-string | string)*

Synopsis	Import policy name
Context	**configure** service vprn *string* bgp import policy *(policy-expr-string | string)*
Tree	policy
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

initial-send-delay-zero *boolean*

Synopsis	Send BGP updates as soon as session comes up
Context	**configure** service vprn *string* bgp initial-send-delay-zero *boolean*

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Tree	initial-send-delay-zero
Default	false
Introduced	16.0.R1
Platforms	All

keepalive *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	**configure** service vprn *string* bgp keepalive *number*
Tree	keepalive
Range	0 to 21845
Default	30
Introduced	16.0.R1
Platforms	All

label-preference *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	**configure** service vprn *string* bgp label-preference *number*
Tree	label-preference
Range	1 to 255
Default	170
Introduced	16.0.R1
Platforms	All

local-as

Synopsis	Enter the **local-as** context
Context	**configure** service vprn *string* bgp local-as
Tree	local-as
Introduced	16.0.R1
Platforms	All

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as-number *number*

Synopsis	Local (or virtual) BGP AS number
Context	**configure** service vprn *string* bgp local-as as-number *number*
Tree	as-number
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

prepend-global-as *boolean*

Synopsis	Prepend global AS when advertising routes to BGP peer
Context	**configure** service vprn *string* bgp local-as prepend-global-as *boolean*
Tree	prepend-global-as
Description	When configured to **true**, the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer. When configured to **false**, the global ASN is hidden in paths announced to the EBGP peer.
Default	true
Introduced	16.0.R1
Platforms	All

private *boolean*

Synopsis	Hide the local ASN in sent paths learned from peering
Context	**configure** service vprn *string* bgp local-as private *boolean*
Tree	private
Description	When configured to **true**, the local ASN is hidden in paths learned from the peering. When configured to **false**, the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.
Default	false
Introduced	16.0.R1
Platforms	All

local-preference *number*

Synopsis	Default local preference if not in incoming routes

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Context	**configure** service vprn *string* bgp local-preference *number*
Tree	local-preference
Max. Range	0 to 4294967295
Default	100
Introduced	16.0.R1
Platforms	All

loop-detect *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	**configure** service vprn *string* bgp loop-detect *keyword*
Tree	loop-detect
Options	drop-peer, ignore-loop, off, discard-route
Default	ignore-loop
Introduced	16.0.R1
Platforms	All

loop-detect-threshold *number*

Synopsis	Threshold for the global ASN in a received AS path
Context	**configure** service vprn *string* bgp loop-detect-threshold *number*
Tree	loop-detect-threshold
Range	0 to 15
Default	0
Introduced	16.0.R6
Platforms	All

med-out *(number | keyword)*

Synopsis	Default MED attribute value to advertise to peers
Context	**configure** service vprn *string* bgp med-out *(number | keyword)*
Tree	med-out
Max. Range	0 to 4294967295
Options	igp-cost
Introduced	16.0.R1

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Platforms	All

min-route-advertisement *number*

Synopsis	Minimum time before a prefix can be advertised to peer
Context	**configure** service vprn *string* bgp min-route-advertisement *number*
Tree	min-route-advertisement
Range	1 to 255
Default	30
Introduced	16.0.R1
Platforms	All

monitor

Synopsis	Enable the **monitor** context
Context	**configure** service vprn *string* bgp monitor
Tree	monitor
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BMP monitoring
Context	**configure** service vprn *string* bgp monitor admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

all-stations *boolean*

Synopsis	Send BMP messages to all configured stations
Context	**configure** service vprn *string* bgp monitor all-stations *boolean*
Tree	all-stations

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Description	When configured to **true**, this command specifies that BMP messages are to be sent to all configured BMP monitoring stations. When configured to **false**, the command is not used to indicate the stations which can receive BMP messages. The **station** command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.
Default	false
Introduced	16.0.R1
Platforms	All

route-monitoring

Synopsis	Enter the **route-monitoring** context
Context	**configure** service vprn *string* bgp monitor route-monitoring
Tree	route-monitoring
Introduced	16.0.R1
Platforms	All

post-policy *boolean*

Synopsis	Allow post-policy route-monitoring messages to be sent
Context	**configure** service vprn *string* bgp monitor route-monitoring post-policy *boolean*
Tree	post-policy
Default	false
Introduced	16.0.R1
Platforms	All

pre-policy *boolean*

Synopsis	Allow pre-policy route-monitoring messages to be sent
Context	**configure** service vprn *string* bgp monitor route-monitoring pre-policy *boolean*
Tree	pre-policy
Default	false
Introduced	16.0.R1
Platforms	All

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station [station-name] *reference*

Synopsis	Add a list entry for **station**
Context	**configure** service vprn *string* bgp monitor station *reference*
Tree	station
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[**station-name**] *reference*

Synopsis	BMP monitoring station
Context	**configure** service vprn *string* bgp monitor station *reference*
Tree	station
Reference	**configure** bmp station *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

multihop *number*

Synopsis	TTL in IP packet headers for EBGP peers multi-hops away
Context	**configure** service vprn *string* bgp multihop *number*
Tree	multihop
Description	This command configures the Time to Live (TTL) value entered in the IP header of packets sent to an EBGP peer multiple hops away. This command applies only to EBGP.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

multipath

Synopsis	Enter the **multipath** context
Context	**configure** service vprn *string* bgp multipath
Tree	multipath

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Introduced	16.0.R1
Platforms	All

ebgp *number*

Synopsis	Maximum multipaths per prefix for EBGP learned routes
Context	**configure** service vprn *string* bgp multipath ebgp *number*
Tree	ebgp
Range	1 to 64
Introduced	16.0.R1
Platforms	All

family [family-type] *keyword*

Synopsis	Enter the **family** list instance
Context	**configure** service vprn *string* bgp multipath family *keyword*
Tree	family
Description	Commands in this context set ECMP multipath parameters that apply only to the specified label unicast address family. When multipath is enabled, traffic to the destination is load-shared across a set of paths (BGP routes) that the BGP decision process considers equal to the best path. The distribution of traffic over the multiple paths may or may not be equal. The distribution is based on weights derived from the Link Bandwidth Extended Community. For more information about the criteria a non-best route must meet to qualify as a multipath, see “BGP route installation in the route table” in the *7450 ESS 7750 SR 7950 XRS VSR Unicast Routing Protocols User Guide*.
Introduced	19.5.R1
Platforms	All

[**family-type**] *keyword*

Synopsis	Address family type for the multipath selection
Context	**configure** service vprn *string* bgp multipath family *keyword*
Tree	family
Options	ipv4, ipv6, label-ipv4, label-ipv6
Notes	This element is part of a list key.
Introduced	19.5.R1

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Platforms All

ebgp *number*

Synopsis Maximum multipaths when best path is EBGP learned route

Context **configure** service vprn *string* bgp multipath family *keyword* ebgp *number*

Tree ebgp

Description This command configures the maximum number of multipaths per prefix or NLRI when the best path is an EBGP learned route. The limit configured using this command overrides the limit configured in the **max-paths** command. If the best path is an EBGP learned route, and this command is set to 1, multipaths are disabled.

Range 1 to 64

Introduced 19.5.R1

Platforms All

ibgp *number*

Synopsis Maximum multipaths when best path is IBGP learned route

Context **configure** service vprn *string* bgp multipath family *keyword* ibgp *number*

Tree ibgp

Description This command configures the maximum number of multipaths per prefix or NLRI when the best path is an IBGP learned route. The limit configured using this command overrides the limit configured in the **max-paths** command. If the best path is an IBGP learned route and this command is set to 1, multipaths are disabled.

Range 1 to 64

Introduced 19.5.R1

Platforms All

max-paths *number*

Synopsis Maximum number of multipaths per prefix or NLRI

Context **configure** service vprn *string* bgp multipath family *keyword* max-paths *number*

Tree max-paths

Description This command configures the maximum number of multipaths per prefix or NLRI for the IP family option specified using the **family** command.

Consider the following when configuring this command:

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- If the best path is an EBGP-learned route and the **ebgp** command is configured, the limit configured in the **ebgp** command overrides the limit configured in this command.
- If the best path is an IBGP-learned route and the **ibgp** command is configured, the limit configured in the **ibgp** command overrides the limit configured in this command.
- If the best path is an EBGP-learned route and the **ebgp** command is not configured, and this command is configured to 1, multipaths are disabled.
- If the best path is an IBGP-learned route and the **ibgp** command is not configured, and this command is configured to 1, multipaths are disabled.

Range	1 to 64
Introduced	19.5.R1
Platforms	All

restrict *keyword*

Synopsis	AS path restriction for the non-best path
Context	**configure** service vprn *string* bgp multipath family *keyword* restrict *keyword*
Tree	restrict
Options	same-as-path-length, same-neighbor-as, exact-as-path
Default	same-as-path-length
Introduced	19.5.R1
Platforms	All

unequal-cost *boolean*

Synopsis	Ignore differences in the next-hop cost for multipath
Context	**configure** service vprn *string* bgp multipath family *keyword* unequal-cost *boolean*
Tree	unequal-cost
Description	When configured to **true**, BGP ignores differences in the next-hop cost when determining eligible multipaths.
Default	false
Introduced	19.5.R1
Platforms	All

ibgp *number*

Synopsis	Maximum multipaths per prefix for IBGP learned routes

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Context	**configure** service vprn *string* bgp multipath ibgp *number*
Tree	ibgp
Range	1 to 64
Introduced	16.0.R1
Platforms	All

max-paths *number*

Synopsis	Maximum multipaths per prefix
Context	**configure** service vprn *string* bgp multipath max-paths *number*
Tree	max-paths
Range	1 to 64
Default	1
Introduced	16.0.R1
Platforms	All

restrict *keyword*

Synopsis	AS path restriction for the non-best path
Context	**configure** service vprn *string* bgp multipath restrict *keyword*
Tree	restrict
Options	same-as-path-length, same-neighbor-as, exact-as-path
Default	same-as-path-length
Introduced	16.0.R1
Platforms	All

unequal-cost *boolean*

Synopsis	Ignore differences in the next-hop cost for multipath
Context	**configure** service vprn *string* bgp multipath unequal-cost *boolean*
Tree	unequal-cost
Default	false
Introduced	19.5.R1
Platforms	All

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neighbor [ip-address] *(ipv4-address-with-zone | ipv6-address-with-zone)*

Synopsis	Enter the **neighbor** list instance
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)*
Tree	neighbor
Introduced	16.0.R1
Platforms	All

[**ip-address**] *(ipv4-address-with-zone | ipv6-address-with-zone)*

Synopsis	IP address of the BGP peer router
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)*
Tree	neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the BGP neighbor
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

advertise-inactive *boolean*

Synopsis	Advertise an inactive BGP route to peers
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* advertise-inactive *boolean*
Tree	advertise-inactive

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Description When configured to **true**, this command allows an inactive BGP route to be advertised, even though it is not the most preferred route. The effect of the command on advertised unlabeled, labeled, and multicast IPv4 and IPv6 routes depends on several factors.

- If the active route for the IP prefix is a BGP route, that route is advertised.
- If the active route is a non-BGP route and there are valid inactive BGP routes to the same destination, the best valid inactive route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.
- If the active route is a non-BGP route and there are no valid BGP routes to the same destination, no route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the advertisement of inactive BGP routes to other BGP peers is disabled.

Introduced 16.0.R1

Platforms All

advertise-ipv6-next-hops

Synopsis Enable the **advertise-ipv6-next-hops** context

Context **configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* advertise-ipv6-next-hops

Tree advertise-ipv6-next-hops

Introduced 19.5.R1

Platforms All

ipv4 *boolean*

Synopsis Enable IPv4 routes to be advertised

Context **configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* advertise-ipv6-next-hops ipv4 *boolean*

Tree ipv4

Default false

Introduced 19.5.R1

Platforms All

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aggregator-id-zero *boolean*

Synopsis	Set router ID in the BGP AGGREGATOR attribute to zero
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* aggregator-id-zero *boolean*
Tree	aggregator-id-zero
Introduced	16.0.R1
Platforms	All

as-override *boolean*

Synopsis	Replace the peer ASN with the local ASN in AS Path
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* as-override *boolean*
Tree	as-override
Description	When configured to **true**, the advertising router's local AS replaces all occurrences of the peer AS in the AS_PATH attribute. This command should be used with caution, as it breaks BGP's loop detection mechanism. When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). This command cannot be explicitly configured to **false**. When the command inherits a value of **false**, no AS override is performed.
Introduced	16.0.R1
Platforms	All

asn-4-byte *boolean*

Synopsis	Advertise the use of 4-byte ASNs
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* asn-4-byte *boolean*
Tree	asn-4-byte
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	BGP authentication key

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Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* authentication-key *string*
Tree	authentication-key
String Length	1 to 370
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* authentication-keychain *reference*
Tree	authentication-keychain
Description	This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.
Reference	**configure** system security keychains keychain *string*
Introduced	16.0.R3
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* bfd-liveness *boolean*
Tree	bfd-liveness
Description	When configured to **true**, BFD is enabled on a given protocol interface where the state of the protocol interface is tied to the state of the BFD session between the local node and the remote node. When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**. When this command inherits a value of **false**, BFD is removed from the associated protocol adjacency.
Introduced	16.0.R1
Platforms	All

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bfd-strict-mode

Synopsis	Enter the **bfd-strict-mode** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* bfd-strict-mode
Tree	bfd-strict-mode
Introduced	23.7.R1
Platforms	All

advertise

Synopsis	Enable the **advertise** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* bfd-strict-mode advertise
Tree	advertise
Description	Commands in this context configure BGP to advertise the Strict-BFD capability to peers that are within scope of this command and meet the following requirements: • The inherited or configured value for the **bfd-liveness** command that applies to the peer is **true**. • The interface associated with the peer has a valid BFD configuration. When the preceding conditions are satisfied and two peers attempting to form a session both advertise the Strict-BFD capability, the BGP finite state machine in each router transitions the session state to established after the BFD session with the peer enters the up state. When unconfigured, BGP does not advertise the Strict-BFD capability to peers.
Introduced	23.7.R1
Platforms	All

holdtime *number*

Synopsis	Maximum time BGP waits for the BFD session to come up
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* bfd-strict-mode advertise holdtime *number*
Tree	holdtime
Description	This command configures the maximum time BGP waits for the BFD session to come up, provided that the Strict-BFD procedures apply to a session, and the negotiated BGP hold time is zero (no keepalives). If the negotiated BGP hold time is greater than zero, the advertised hold time is not considered.
Range	1 to 65535

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Units	seconds
Default	30
Introduced	23.7.R1
Platforms	All

next-hop-reachability *boolean*

Synopsis	Consider next hop unreachable if BFD session is down
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* bfd-strict-mode next-hop-reachability *boolean*
Tree	next-hop-reachability

Description

When configured to **true**, the router considers next-hop self routes belonging to specific address families received from a peer within scope of this command as having an unresolved next hop, provided that the following requirements are met:

- The BFD session to the peer is in a down state.
- There is a valid interface BFD configuration that applies to the peer.
- There is a valid BFD liveness configuration that applies to the peer.

The unresolved state is maintained until the BFD session state changes to up or administratively down, even if there is a resolving route or tunnel that matches the BGP next-hop address.

Routes received from one peer with a BGP next-hop address equal to the address of another peer are not affected by the BFD session to the other peer.The behavior of the router when this command is **true** does not depend on whether Strict-BFD is used, as both features are independent.

Configuring this command to **true** only affects routes belonging to the following address families:

- IPv4
- IPv6
- IPv4 VPN
- IPv6 VPN
- labeled unicast IPv4
- labeled unicast IPv6
- EVPN
- IPv4 multicast
- IPv6 multicast
- IPv4 VPN multicast
- IPv6 VPN multicast

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When configured to **false**, the router does not consider next-hop self routes belonging to the preceding address families as having an unresolved next hop if the BFD session goes down.

Introduced 23.7.R1

Platforms All

capability-negotiation *boolean*

Synopsis Enable capability negotiation

Context **configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* capability-negotiation *boolean*

Tree capability-negotiation

Introduced 16.0.R1

Platforms All

client-reflect *boolean*

Synopsis Allow cluster RR to advertise routes to its clients

Context **configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* client-reflect *boolean*

Tree client-reflect

Introduced 16.0.R1

Platforms All

cluster

Synopsis Enter the **cluster** context

Context **configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* cluster

Tree cluster

Introduced 16.0.R1

Platforms All

cluster-id *string*

Synopsis Route reflector cluster ID

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Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* cluster cluster-id *string*
Tree	cluster-id
Introduced	16.0.R1
Platforms	All

connect-retry *number*

Synopsis	BGP connect retry timer value
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* connect-retry *number*
Tree	connect-retry
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

damp-peer-oscillations

Synopsis	Enable the **damp-peer-oscillations** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* damp-peer-oscillations
Tree	damp-peer-oscillations
Introduced	16.0.R1
Platforms	All

error-interval *number*

Synopsis	Time after a reset that the session must be error-free
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* damp-peer-oscillations error-interval *number*
Tree	error-interval
Description	This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.
Range	0 to 2048
Default	30
Introduced	16.0.R1

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Platforms	All

idle-hold-time

Synopsis	Enter the **idle-hold-time** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* damp-peer-oscillations idle-hold-time
Tree	idle-hold-time
Introduced	16.0.R1
Platforms	All

initial-wait *number*

Synopsis	Time session remains in idle state after stabilization
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* damp-peer-oscillations idle-hold-time initial-wait *number*
Tree	initial-wait
Range	0 to 2048
Default	0
Introduced	16.0.R1
Platforms	All

max-wait *number*

Synopsis	Maximum session idle time after repeated instability
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* damp-peer-oscillations idle-hold-time max-wait *number*
Tree	max-wait
Range	1 to 2048
Default	60
Introduced	16.0.R1
Platforms	All

second-wait *number*

Synopsis	Time that doubles after each repeated session failure

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Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* damp-peer-oscillations idle-hold-time second-wait *number*
Tree	second-wait
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	16.0.R1
Platforms	All

damping *boolean*

Synopsis	Use BGP route damping to reduce route flap
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* damping *boolean*
Tree	damping
Introduced	16.0.R1
Platforms	All

default-label-preference

Synopsis	Enter the **default-label-preference** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* default-label-preference
Tree	default-label-preference
Introduced	19.5.R1
Platforms	All

ebgp *number*

Synopsis	Default preference for EBGP
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* default-label-preference ebgp *number*
Tree	ebgp
Range	0 to 255
Introduced	19.5.R1

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Platforms	All

ibgp *number*

Synopsis	Default preference for IBGP
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* default-label-preference ibgp *number*
Tree	ibgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

default-preference

Synopsis	Enter the **default-preference** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* default-preference
Tree	default-preference
Introduced	19.5.R1
Platforms	All

ebgp *number*

Synopsis	Default preference for EBGP
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* default-preference ebgp *number*
Tree	ebgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

ibgp *number*

Synopsis	Default preference for IBGP
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* default-preference ibgp *number*
Tree	ibgp

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Range	0 to 255
Introduced	19.5.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

ebgp-default-reject-policy

Synopsis	Enable the **ebgp-default-reject-policy** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* ebgp-default-reject-policy
Tree	ebgp-default-reject-policy
Introduced	19.5.R1
Platforms	All

export *boolean*

Synopsis	Enable default reject export policy for external peers
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* ebgp-default-reject-policy export *boolean*
Tree	export
Default	true
Introduced	19.5.R1
Platforms	All

import *boolean*

Synopsis	Enable default reject import policy for external peers

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Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* ebgp-default-reject-policy import *boolean*
Tree	import
Default	true
Introduced	19.5.R1
Platforms	All

enforce-first-as *boolean*

Synopsis	Enforce the configured peer AS value in received routes
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* enforce-first-as *boolean*
Tree	enforce-first-as
Description	When configured to **true** for an EBGP session, all routes received from an EBGP peer are checked to ensure that the most recent ASN in the AS_PATH attribute of each route matches the configured AS of the session. If there is not a match, the session is reset (if the **update-fault-tolerance** command in the **error-handling** context is set to **false**) or the session is left up but the route is treated as withdrawn (if **update-fault-tolerance** is set to **true**). This command does not flap an established session because it applies only to routes received after the command is issued. When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**. When this command inherits a value of **false**, received routes are not checked for compliance with the rule.
Introduced	16.0.R1
Platforms	All

error-handling

Synopsis	Enter the **error-handling** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* error-handling
Tree	error-handling
Introduced	16.0.R1
Platforms	All

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update-fault-tolerance *boolean*

Synopsis	Tolerate non-critical errors in UPDATE messages
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* error-handling update-fault-tolerance *boolean*
Tree	update-fault-tolerance
Description	When configured to **true**, non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset. When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**. When this command inherits a value of **false**, all errors trigger a session reset.
Introduced	16.0.R1
Platforms	All

evpn-link-bandwidth

Synopsis	Enter the **evpn-link-bandwidth** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* evpn-link-bandwidth
Tree	evpn-link-bandwidth
Introduced	22.7.R1
Platforms	All

add-to-received-bgp *number*

Synopsis	Weight added to received PE-CE BGP routes
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* evpn-link-bandwidth add-to-received-bgp *number*
Tree	add-to-received-bgp
Description	This command configures the weight value added to all BGP PE-CE routes for the purpose of weighted ECMP if EVPN-IFL and BGP PE-CE routes are combined into the same ECMP set. For the load-balancing betweeen EVPN-IFL and BGP PE-CE routes the **configure service vprn bgp eibgp-loadbalance** command must already be configured in the system.
Range	1 to 128
Introduced	22.7.R1
Platforms	All

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export

Synopsis	Enable the **export** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone* | *ipv6-address-with-zone)* export
Tree	export
Introduced	16.0.R1
Platforms	All

policy *(policy-expr-string* | *string)*

Synopsis	Export policy name
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone* | *ipv6-address-with-zone)* export policy *(policy-expr-string* | *string)*
Tree	policy
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

extended-nh-encoding

Synopsis	Enable the **extended-nh-encoding** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone* | *ipv6-address-with-zone)* extended-nh-encoding
Tree	extended-nh-encoding
Introduced	19.5.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable/disable family type ipv4.

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Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* extended-nh-encoding ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	19.5.R1
Platforms	All

family

Synopsis	Enable the **family** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family
Tree	family
Introduced	16.0.R1
Platforms	All

flow-ipv4 *boolean*

Synopsis	Advertise support for the flowspec-IPv4 address family
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family flow-ipv4 *boolean*
Tree	flow-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

flow-ipv6 *boolean*

Synopsis	Advertise support for the flowspec-IPv6 address family
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family flow-ipv6 *boolean*
Tree	flow-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

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ipv4 *boolean*

Synopsis	Add support for the IPv4 address family
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the IPv6 address family
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Advertise support for the label-IPv4 address family
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv4 *boolean*

Synopsis	Advertise support for the MCAST-IPv4 address family
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family mcast-ipv4 *boolean*
Tree	mcast-ipv4
Default	false

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Introduced	16.0.R1
Platforms	All

mcast-ipv6 *boolean*

Synopsis	Advertise support for the MCAST-IPv6 address family
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* family mcast-ipv6 *boolean*
Tree	mcast-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

fast-external-failover *boolean*

Synopsis	Drop external BGP session immediately when link fails
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* fast-external-failover *boolean*
Tree	fast-external-failover
Description	When this command inherits a value of **true**, the router drops an external BGP session on a single-hop route immediately when the local interface goes down. When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **true**. When configured to **false**, the BGP session remains up until the hold time expires.
Introduced	16.0.R1
Platforms	All

graceful-restart

Synopsis	Enable the **graceful-restart** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* graceful-restart
Tree	graceful-restart
Introduced	16.0.R1
Platforms	All

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gr-notification *boolean*

Synopsis	Perform graceful restart procedures after NOTIFICATION
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* graceful-restart gr-notification *boolean*
Tree	gr-notification
Description	When configured to **true**, the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error. When configured to **false**, NOTIFICATION messages are not supported.
Default	false
Introduced	16.0.R1
Platforms	All

long-lived

Synopsis	Enable the **long-lived** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* graceful-restart long-lived
Tree	long-lived
Introduced	16.0.R1
Platforms	All

advertise-stale-to-all-neighbors *boolean*

Synopsis	Advertise stale routes to all BGP peers
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* graceful-restart long-lived advertise-stale-to-all-neighbors *boolean*
Tree	advertise-stale-to-all-neighbors
Default	false
Introduced	16.0.R1
Platforms	All

advertised-stale-time *number*

Synopsis	Advertised long-lived stale time for LLGR routes

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Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone* | *ipv6-address-with-zone)* graceful-restart long-lived advertised-stale-time *number*
Tree	advertised-stale-time
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

family [family-type] *keyword*

Synopsis	Enter the **family** list instance
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone* | *ipv6-address-with-zone)* graceful-restart long-lived family *keyword*
Tree	family
Introduced	16.0.R1
Platforms	All

[**family-type**] *keyword*

Synopsis	Address family type for LLGR
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone* | *ipv6-address-with-zone)* graceful-restart long-lived family *keyword*
Tree	family
Options	ipv4, ipv6, flow-ipv4, flow-ipv6, label-ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertised-stale-time *number*

Synopsis	LLGR stale routes time for family override
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone* | *ipv6-address-with-zone)* graceful-restart long-lived family *keyword* advertised-stale-time *number*
Tree	advertised-stale-time
Description	This command configures the long-lived stale routes time that is advertised by the router in its LLGR capability.

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This command applies to all AFI/SAFI in the advertised LLGR capability with a family-specific override.

Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* graceful-restart long-lived family *keyword* helper-override-stale-time *number*
Tree	helper-override-stale-time
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This is a family-specific override value.
Range	0 to 16777216
Default	16777216
Introduced	16.0.R1
Platforms	All

forwarding-bits-set *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* graceful-restart long-lived forwarding-bits-set *keyword*
Tree	forwarding-bits-set
Description	This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family. This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).
Options	none, all, non-fwd
Default	none
Introduced	16.0.R1

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Platforms	All

helper-override-restart-time *number*

Synopsis	Locally-configured override for restart time
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* graceful-restart long-lived helper-override-restart-time *number*
Tree	helper-override-restart-time
Description	This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.
Range	0 to 4095
Introduced	16.0.R1
Platforms	All

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* graceful-restart long-lived helper-override-stale-time *number*
Tree	helper-override-stale-time
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

without-no-export *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* graceful-restart long-lived without-no-export *boolean*
Tree	without-no-export

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Description	When configured to **true**, LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0. When configured to **false**, LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.
Default	false
Introduced	16.0.R1
Platforms	All

restart-time *number*

Synopsis	Restart time advertised by GR capability
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* graceful-restart restart-time *number*
Tree	restart-time
Range	0 to 4095
Default	300
Introduced	16.0.R1
Platforms	All

stale-routes-time *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* graceful-restart stale-routes-time *number*
Tree	stale-routes-time
Range	1 to 3600
Default	360
Introduced	16.0.R1
Platforms	All

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group *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Neighbor to group
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* group *reference*
Tree	group
Reference	**configure** service vprn *string* bgp group *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

hold-time

Synopsis	Enter the **hold-time** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	All

minimum-hold-time *number*

Synopsis	Minimum time BGP waits between successive messages
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* hold-time minimum-hold-time *number*
Tree	minimum-hold-time
Range	0 | 3 to 65536
Default	0
Introduced	16.0.R1
Platforms	All

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seconds *number*

Synopsis	Maximum hold time between successive messages
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* hold-time seconds *number*
Tree	seconds
Description	The BGP hold time specifies the maximum time BGP waits between successive messages (either keepalive or update) from its peer, before closing the connection. Even though the implementation allows setting the keepalive timer at the BGP neighbor level times separately, the configured keepalive timer is overridden by this value under the following circumstances: • If the specified hold time is less than the configured keepalive time, then the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed. • If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. This means that the connection with the peer is up permanently and no keepalive packets are sent to the peer. When unconfigured, the command setting is inherited from the BGP group-level configuration.
Range	0 | 3 to 65535
Introduced	16.0.R1
Platforms	All

import

Synopsis	Enable the **import** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* import
Tree	import
Introduced	16.0.R1
Platforms	All

policy *(policy-expr-string | string)*

Synopsis	Route policy name
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* import policy *(policy-expr-string | string)*
Tree	policy
String Length	1 to 255

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Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

initial-send-delay-zero *boolean*

Synopsis	Send BGP updates as soon as the session comes up
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* initial-send-delay-zero *boolean*
Tree	initial-send-delay-zero
Description	When configured to **true**, BGP updates are sent as soon as the session comes up. When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**. When this command inherits a value of **false**, BGP waits to send UPDATE messages for the minimum route advertisement time after a session is established.
Introduced	16.0.R1
Platforms	All

keepalive *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* keepalive *number*
Tree	keepalive
Range	0 to 21845
Introduced	16.0.R1
Platforms	All

label-preference *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* label-preference *number*

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Tree	label-preference
Range	1 to 255
Introduced	16.0.R1
Platforms	All

link-bandwidth

Synopsis	Enter the **link-bandwidth** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth
Tree	link-bandwidth
Introduced	16.0.R3
Platforms	All

accept-from-ebgp

Synopsis	Enable the **accept-from-ebgp** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth accept-from-ebgp
Tree	accept-from-ebgp
Introduced	16.0.R4
Platforms	All

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth accept-from-ebgp ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R4
Platforms	All

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes

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Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth accept-from-ebgp ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth accept-from-ebgp label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

add-to-received-ebgp

Synopsis	Enable the **add-to-received-ebgp** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth add-to-received-ebgp
Tree	add-to-received-ebgp
Introduced	16.0.R3
Platforms	All

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth add-to-received-ebgp ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R3
Platforms	All

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ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth add-to-received-ebgp ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R3
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth add-to-received-ebgp label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R3
Platforms	All

aggregate-used-paths

Synopsis	Enable the **aggregate-used-paths** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth aggregate-used-paths
Tree	aggregate-used-paths
Introduced	16.0.R4
Platforms	All

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth aggregate-used-paths ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R4

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Platforms	All

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth aggregate-used-paths ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth aggregate-used-paths label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

send-to-ebgp

Synopsis	Enable the **send-to-ebgp** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth send-to-ebgp
Tree	send-to-ebgp
Introduced	16.0.R4
Platforms	All

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth send-to-ebgp ipv4 *boolean*
Tree	ipv4

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Default	false
Introduced	16.0.R4
Platforms	All

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth send-to-ebgp ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* link-bandwidth send-to-ebgp label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

local-address *(ipv4-address-no-zone | ipv6-address-no-zone | interface-name)*

Synopsis	Local IP address used when communicating with BGP peers
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* local-address *(ipv4-address-no-zone | ipv6-address-no-zone | interface-name)*
Tree	local-address
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

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local-as

Synopsis	Enter the **local-as** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* local-as
Tree	local-as
Introduced	16.0.R1
Platforms	All

as-number *number*

Synopsis	Local (or virtual) BGP AS number
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* local-as as-number *number*
Tree	as-number
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

prepend-global-as *boolean*

Synopsis	Prepend global ASN when advertising routes to BGP peer
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* local-as prepend-global-as *boolean*
Tree	prepend-global-as
Description	When configured to **true**, the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer. When configured to **false**, the global ASN is not included in the AS_PATH attribute.
Default	true
Introduced	16.0.R1
Platforms	All

private *boolean*

Synopsis	Hide the local ASN in sent paths learned from peering
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* local-as private *boolean*

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Tree	private
Description	When configured to **true**, the local AS number is only advertised to peers that use the local ASN for establishing BGP peering sessions. When configured to **false**, the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.
Default	false
Introduced	16.0.R1
Platforms	All

local-preference *number*

Synopsis	Default local preference if not in incoming routes
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* local-preference *number*
Tree	local-preference
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

loop-detect *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* loop-detect *keyword*
Tree	loop-detect
Options	drop-peer, ignore-loop, off, discard-route
Introduced	16.0.R1
Platforms	All

loop-detect-threshold *number*

Synopsis	Threshold for the global ASN in a received AS path
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* loop-detect-threshold *number*
Tree	loop-detect-threshold
Range	0 to 15
Introduced	16.0.R6

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Platforms	All

med-out *(number | keyword)*

Synopsis	Default MED attribute value to advertise to peers
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* med-out *(number | keyword)*
Tree	med-out
Max. Range	0 to 4294967295
Options	igp-cost
Introduced	16.0.R1
Platforms	All

min-route-advertisement *number*

Synopsis	Minimum interval between successive prefix updates
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* min-route-advertisement *number*
Tree	min-route-advertisement
Range	1 to 255
Introduced	16.0.R1
Platforms	All

monitor

Synopsis	Enable the **monitor** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* monitor
Tree	monitor
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BMP monitoring
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* monitor admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

all-stations *boolean*

Synopsis	Send BMP messages to all configured stations
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* monitor all-stations *boolean*
Tree	all-stations
Description	When configured to **true**, this command specifies that BMP messages are to be sent to all configured BMP monitoring stations. When configured to **false**, the command is not used to indicate the stations which can receive BMP messages. The **station** command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.
Default	false
Introduced	16.0.R1
Platforms	All

route-monitoring

Synopsis	Enter the **route-monitoring** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* monitor route-monitoring
Tree	route-monitoring
Introduced	16.0.R1
Platforms	All

post-policy *boolean*

Synopsis	Allow post-policy route-monitoring messages to be sent
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* monitor route-monitoring post-policy *boolean*
Tree	post-policy
Default	false

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Introduced	16.0.R1
Platforms	All

pre-policy *boolean*

Synopsis	Allow pre-policy route-monitoring messages to be sent
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* monitor route-monitoring pre-policy *boolean*
Tree	pre-policy
Default	false
Introduced	16.0.R1
Platforms	All

station [station-name] *reference*

Synopsis	Add a list entry for **station**
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* monitor station *reference*
Tree	station
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[**station-name**] *reference*

Synopsis	BMP monitoring station
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* monitor station *reference*
Tree	station
Reference	**configure** bmp station *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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multihop *number*

Synopsis	TTL in IP packet headers for EBGP peers multi-hops away
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* multihop *number*
Tree	multihop
Range	1 to 255
Introduced	16.0.R1
Platforms	All

multipath-eligible *boolean*

Synopsis	Allow routes from this peer in multipath eligibility
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* multipath-eligible *boolean*
Tree	multipath-eligible
Introduced	19.5.R1
Platforms	All

next-hop-self *boolean*

Synopsis	Advertise routes with local address as next-hop address
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* next-hop-self *boolean*
Tree	next-hop-self
Description	When configured to **true**, this command configures BGP to advertise routes to members of a group using a local address of the BGP instance as the BGP next-hop address. Note that this command is set without exception, regardless of the route source (EBGP or IBGP) or its family. When used with VPN-IPv4 and VPN-IPv6 routes, the **configure router bgp rr-vpn-forwarding** command should also be configured. When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**. When this command inherits a value of **false**, protocol standard behavior is applied to determine whether to set **next-hop-self** in advertised routes.
Introduced	16.0.R1
Platforms	All

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origin-validation

Synopsis	Enable the **origin-validation** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* origin-validation
Tree	origin-validation
Introduced	19.7.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable support for unlabeled unicast IPv4 routes
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* origin-validation ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	19.7.R1
Platforms	All

ipv6 *boolean*

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* origin-validation ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	19.7.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* origin-validation label-ipv4 *boolean*
Tree	label-ipv4
Default	false
Introduced	19.7.R1

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Platforms All

passive *boolean*

Synopsis Use passive mode for BGP communication

Context **configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* passive *boolean*

Tree passive

Introduced 16.0.R1

Platforms All

path-mtu-discovery *boolean*

Synopsis Enable path MTU discovery

Context **configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* path-mtu-discovery *boolean*

Tree path-mtu-discovery

Description When configured to **true**, Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.

When set to **true**, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.

When PMTUD is configured to **false** and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.

Introduced 16.0.R1

Platforms All

peer-as *number*

Synopsis Peer AS number

Context **configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* peer-as *number*

Tree peer-as

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Description This command configures the autonomous system number for the peer. The peer AS number must be configured for each configured peer.

For EBGP peers, the peer AS number configured must be different from the autonomous system number configured for this router under the global level since the peer will be in a different autonomous system than this router.

For IBGP peers, the peer AS number must be the same as the autonomous system number of this router configured under the global level.

Range 1 to 4294967295

Introduced 16.0.R1

Platforms All

peer-creation-type *keyword*

Synopsis Peer creation type

Context **configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* peer-creation-type *keyword*

Tree peer-creation-type

Options static, dynamic, dynamic-if-remote, dynamic-if-local

Default static

Introduced 16.0.R1

Platforms All

peer-ip-tracking *boolean*

Synopsis Enable BGP peer tracking

Context **configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* peer-ip-tracking *boolean*

Tree peer-ip-tracking

Description When configured to **true**, this command enables BGP peer tracking.

Peer tracking should be used with caution. Peer tracking can tear a session down even if the loss of connectivity turns out to be short-lived (for example, while the IGP protocol is re-converging). Next-hop tracking, which is always enabled, handles temporary connectivity issues more effectively.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, peer tracking is disabled.

Introduced 16.0.R1

Platforms All

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preference *number*

Synopsis	Route preference for routes learned from all peers
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* preference *number*
Tree	preference
Description	This command configures the route preference for routes learned from the configured peers. The lower the preference value, the higher the chance of the route being the active route. The router assigns BGP routes the highest default preference as compared to routes that are direct, static or learned via MPLS or OSPF. When unconfigured, the command setting is inherited from the group-level configuration.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

prefix-limit [family] *keyword*

Synopsis	Enter the **prefix-limit** list instance
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* prefix-limit *keyword*
Tree	prefix-limit
Introduced	16.0.R1
Platforms	All

[**family**] *keyword*

Synopsis	Address family to which the limit applies
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* prefix-limit *keyword*
Tree	prefix-limit
Options	ipv4, ipv6, mcast-ipv4, flow-ipv4, flow-ipv6, mcast-ipv6, label-ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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hold-excess *number*

Synopsis	Percentage of maximum routes to install in route table
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* prefix-limit *keyword* hold-excess *number*
Tree	hold-excess
Description	This command specifies the percentage of maximum routes that are allowed to be installed in the route table for the configured address family. If a peer within scope of the configuration exceeds the limit, the overflow routes are held in the BGP RIB as inactive routes and are ineligible for forwarding and advertisement to other peers. If the **post-import** command is configured to **true**, only routes not rejected by import policies count toward the limit. A BGP route in an overflow state is reconsidered for activation and reinstallation when an UPDATE message is received for the route. This command is mutually exclusive with the **idle-timeout** and **log-only** commands.
Range	1 to 100
Introduced	23.7.R1
Platforms	All

idle-timeout *number*

Synopsis	Time which BGP peering remains idle before reconnecting
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* prefix-limit *keyword* idle-timeout *number*
Tree	idle-timeout
Description	This command defines the idle time after an administrative take-down before BGP re-establishes a session and reconnects to a peer. When unconfigured, the command inherits the value from the group-level configuration.
Range	1 to 1024
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Send warning message at threshold instead of take-down
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* prefix-limit *keyword* log-only *boolean*
Tree	log-only
Default	false

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Introduced	16.0.R1
Platforms	All

maximum *number*

Synopsis	Maximum number of routes to be learned from a peer
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* prefix-limit *keyword* maximum *number*
Tree	maximum
Description	This command configures the maximum number of BGP routes than can be received from a peer before administrative action is taken.
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R2
Platforms	All

post-import *boolean*

Synopsis	Apply limit only to routes accepted by import policies
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* prefix-limit *keyword* post-import *boolean*
Tree	post-import
Default	false
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Percentage threshold that triggers a warning message
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* prefix-limit *keyword* threshold *number*
Tree	threshold
Range	1 to 100
Default	90
Introduced	16.0.R1
Platforms	All

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remove-private

Synopsis	Enable the **remove-private** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* remove-private
Tree	remove-private
Introduced	16.0.R1
Platforms	All

limited *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* remove-private limited *boolean*
Tree	limited
Default	false
Introduced	16.0.R1
Platforms	All

replace *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* remove-private replace *boolean*
Tree	replace
Default	false
Introduced	19.10.R1
Platforms	All

skip-peer-as *boolean*

Synopsis	Keep private ASN if it is the same as the BGP peer ASN
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* remove-private skip-peer-as *boolean*
Tree	skip-peer-as
Default	false

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Introduced	16.0.R1
Platforms	All

send-communities

Synopsis	Enter the **send-communities** context
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* send-communities
Tree	send-communities
Introduced	16.0.R1
Platforms	All

extended *boolean*

Synopsis	Advertise the Extended Communities attribute to peers
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* send-communities extended *boolean*
Tree	extended
Description	When unconfigured, this command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **true**. When this command inherits a value of **true**, BGP extended communities are sent to peers in the Extended Communities attribute. When configured to **false**, all extended communities are removed from all routes advertised to BGP peers.
Introduced	16.0.R1
Platforms	All

large *boolean*

Synopsis	Advertise the Large Communities attribute to peers
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* send-communities large *boolean*
Tree	large
Description	When unconfigured, this command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **true**. When this command inherits a value of **true**, BGP large communities are sent to peers in the Large Communities attribute.

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When configured to **false**, all large communities are removed from all routes advertised to BGP peers.

Introduced 16.0.R1

Platforms All

standard *boolean*

Synopsis Advertise the Communities attribute to peers

Context **configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* send-communities standard *boolean*

Tree standard

Description When unconfigured, this command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **true**.

When this command inherits a value of **true**, BGP standard communities are sent to peers in the Communities attribute.

When configured to **false**, all standard communities are removed from all routes advertised to BGP peers.

Introduced 16.0.R1

Platforms All

send-default

Synopsis Enable the **send-default** context

Context **configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* send-default

Tree send-default

Introduced 19.7.R1

Platforms All

export-policy *reference*

Synopsis Export policy name

Context **configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* send-default export-policy *reference*

Tree export-policy

Reference **configure** policy-options policy-statement *string*

Introduced 19.7.R1

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Platforms	All

ipv4 *boolean*

Synopsis	Enable IPv4 family type
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* send-default ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	19.7.R1
Platforms	All

ipv6 *boolean*

Synopsis	Enable IPv6 family type
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* send-default ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	19.7.R1
Platforms	All

split-horizon *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* split-horizon *boolean*
Tree	split-horizon
Description	When configured to **true**, this command enables the use of split-horizon. This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP. Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary. When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**. When this command inherits a value of **false**, the use of split-horizon is disabled.

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Introduced	16.0.R1
Platforms	All

tcp-mss *(number | keyword)*

Synopsis	TCP maximum segment size override
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* tcp-mss *(number | keyword)*
Tree	tcp-mss
Description	This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command). The configured value controls two properties of the TCP connection as follows: TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router. TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.
Range	384 to 9746
Options	ip-stack
Introduced	21.2.R1
Platforms	All

third-party-nexthop *boolean*

Synopsis	Apply third-party next-hop processing to EBGP peers
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* third-party-nexthop *boolean*
Tree	third-party-nexthop
Introduced	16.0.R1
Platforms	All

ttl-security *number*

Synopsis	Minimum TTL value for an incoming BGP packet
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* ttl-security *number*

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Tree	ttl-security
Description	This command configures the minimum TTL value that BGP will accept from an incoming packet. A packet with a TTL value less than the minimum configured TTL value is discarded. When unconfigured, the command inherits the value of the group-level setting.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	BGP peer type
Context	**configure** service vprn *string* bgp neighbor *(ipv4-address-with-zone | ipv6-address-with-zone)* type *keyword*
Tree	type
Options	no-type, internal, external
Introduced	16.0.R1
Platforms	All

next-hop-resolution

Synopsis	Enter the **next-hop-resolution** context
Context	**configure** service vprn *string* bgp next-hop-resolution
Tree	next-hop-resolution
Introduced	16.0.R1
Platforms	All

policy *reference*

Synopsis	Policy that filters routes for BGP next-hop resolution
Context	**configure** service vprn *string* bgp next-hop-resolution policy *reference*
Tree	policy
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	All

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use-bgp-routes *boolean*

Synopsis	Use BGP routes to resolve BGP next hops
Context	**configure** service vprn *string* bgp next-hop-resolution use-bgp-routes *boolean*
Tree	use-bgp-routes
Description	When configured to **true**, BGP routes resolve BGP next hops. When this command is enabled, any unlabeled IPv4 or IPv6 BGP route received from a VPRN BGP peer becomes resolvable by up to four other BGP routes in order to resolve the route to a VPRN IP interface. A VPRN BGP route is not resolvable by another VPRN BGP route or by a BGP-VPN route. This command also allows unlabeled IPv4 or IPv6 BGP routes leaked from the GRT with unresolved next hops (in the GRT) to be resolvable by BGP-VPN routes (of the VPRN). When configured to **false**, BGP next hops are not resolved.
Default	false
Introduced	19.10.R1
Platforms	All

use-leaked-routes

Synopsis	Enter the **use-leaked-routes** context
Context	**configure** service vprn *string* bgp next-hop-resolution use-leaked-routes
Tree	use-leaked-routes
Introduced	23.7.R1
Platforms	All

static *boolean*

Synopsis	Use leaked static routes to resolve BGP next hop
Context	**configure** service vprn *string* bgp next-hop-resolution use-leaked-routes static *boolean*
Tree	static
Description	When configured to **true**, the router allows any non-leaked unlabeled unicast IPv4 or IPv6 route in the BGP RIB to be resolved by a leaked static route with direct next hops. A BGP route resolved this way cannot resolve other routes (including BGP routes) and cannot be redistributed into non-BGP protocols, such as IGP. When configured to **false**, the router prevents the use of leaked static routes to resolve BGP routes.
Default	false
Introduced	23.7.R1

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Platforms All

path-mtu-discovery *boolean*

Synopsis Enable Path MTU Discovery

Context **configure** service vprn *string* bgp path-mtu-discovery *boolean*

Tree path-mtu-discovery

Description When configured to **true**, Path MTU Discovery (PMTUD) is activated toward an IPv4 BGP neighbor. The Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, the device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value to accomodate the IP MTU constraint.

When configured to **false**, PMTUD is disabled and there is no TCP MSS configuration to associate with a BGP neighbor (in either the BGP configuration or the first-hop IP interface configuration). The router advertises a TCP MSS option of only 1024 bytes, limiting the received TCP segments to that size.

Default false

Introduced 16.0.R1

Platforms All

peer-ip-tracking *boolean*

Synopsis Enable BGP peer tracking

Context **configure** service vprn *string* bgp peer-ip-tracking *boolean*

Tree peer-ip-tracking

Default false

Introduced 16.0.R1

Platforms All

peer-tracking-policy *reference*

Synopsis Policy for BGP peer tracking on router instance

Context **configure** service vprn *string* bgp peer-tracking-policy *reference*

Tree peer-tracking-policy

Description This command specifies the name of a policy statement to use with the BGP peer-tracking function on BGP sessions where peer tracking is enabled.

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When unconfigured, the default peer-tracking policy allows any type of route to match the neighbor IP address except aggregate routes and LDP shortcut routes.

Peer tracking should be used with caution. The peer-tracking policy should only permit one of direct-interface or direct routes to be advertised to a BGP peer. Advertising both routes causes the best route to oscillate.

Reference **configure** policy-options policy-statement *string*

Introduced 16.0.R1

Platforms All

preference *number*

Synopsis Route preference for routes learned from all peers

Context **configure** service vprn *string* bgp preference *number*

Tree preference

Description This command configures the route preference for routes learned from the configured peers.

The lower the preference value, the higher the chance of the route being the active route. The router assigns BGP routes the highest default preference as compared to routes that are direct, static or learned via MPLS or OSPF.

Range 1 to 255

Default 170

Introduced 16.0.R1

Platforms All

rapid-withdrawal *boolean*

Synopsis Send BGP withdrawal UPDATE messages immediately

Context **configure** service vprn *string* bgp rapid-withdrawal *boolean*

Tree rapid-withdrawal

Description When configured to **true**, UPDATE messages containing withdrawn NLRI are sent immediately to a peer without waiting for the MRAI timer to expire. UPDATE messages containing reachable NLRI continue to wait for the MRAI timer to expire, or for a rapid update trigger.

When configured to **false**, withdrawal processing continues with the normal behavior.

Default false

Introduced 16.0.R1

Platforms All

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remove-private

Synopsis	Enable the **remove-private** context
Context	**configure** service vprn *string* bgp remove-private
Tree	remove-private
Introduced	16.0.R1
Platforms	All

limited *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	**configure** service vprn *string* bgp remove-private limited *boolean*
Tree	limited
Default	false
Introduced	16.0.R1
Platforms	All

replace *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	**configure** service vprn *string* bgp remove-private replace *boolean*
Tree	replace
Default	false
Introduced	19.10.R1
Platforms	All

skip-peer-as *boolean*

Synopsis	Keep private ASN if AS-PATH contains eBGP peer's ASN
Context	**configure** service vprn *string* bgp remove-private skip-peer-as *boolean*
Tree	skip-peer-as
Default	false
Introduced	16.0.R1
Platforms	All

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rib-management

Synopsis	Enter the **rib-management** context
Context	**configure** service vprn *string* bgp rib-management
Tree	rib-management
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service vprn *string* bgp rib-management ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

leak-import

Synopsis	Enter the **leak-import** context
Context	**configure** service vprn *string* bgp rib-management ipv4 leak-import
Tree	leak-import
Introduced	16.0.R1
Platforms	All

policy *(policy-expr-string | string)*

Synopsis	Leak import policy name
Context	**configure** service vprn *string* bgp rib-management ipv4 leak-import policy *(policy-expr-string | string)*
Tree	policy
Description	This command specifies one or more leak import policies. Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length	1 to 255

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Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

route-table-import

Synopsis	Enter the **route-table-import** context
Context	**configure** service vprn *string* bgp rib-management ipv4 route-table-import
Tree	route-table-import
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	**configure** service vprn *string* bgp rib-management ipv4 route-table-import policy-name *reference*
Tree	policy-name
Description	This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs. When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used. Aggregate routes are always imported into each RIB, independent of the specified policy. Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes. When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	All

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ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** service vprn *string* bgp rib-management ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

leak-import

Synopsis	Enter the **leak-import** context
Context	**configure** service vprn *string* bgp rib-management ipv6 leak-import
Tree	leak-import
Introduced	16.0.R1
Platforms	All

policy *(policy-expr-string | string)*

Synopsis	Leak import policy name
Context	**configure** service vprn *string* bgp rib-management ipv6 leak-import policy *(policy-expr-string | string)*
Tree	policy
Description	This command specifies one or more leak import policies. Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length	1 to 255
Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

route-table-import

Synopsis	Enter the **route-table-import** context
Context	**configure** service vprn *string* bgp rib-management ipv6 route-table-import

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Tree	route-table-import
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	**configure** service vprn *string* bgp rib-management ipv6 route-table-import policy-name *reference*
Tree	policy-name
Description	This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs. When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used. Aggregate routes are always imported into each RIB, independent of the specified policy. Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes. When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	All

label-ipv4

Synopsis	Enter the **label-ipv4** context
Context	**configure** service vprn *string* bgp rib-management label-ipv4
Tree	label-ipv4
Introduced	16.0.R1
Platforms	All

leak-import

Synopsis	Enter the **leak-import** context

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Context	**configure** service vprn *string* bgp rib-management label-ipv4 leak-import
Tree	leak-import
Introduced	16.0.R1
Platforms	All

policy *(policy-expr-string | string)*

Synopsis	Leak import policy name
Context	**configure** service vprn *string* bgp rib-management label-ipv4 leak-import policy *(policy-expr-string | string)*
Tree	policy
Description	This command specifies one or more leak import policies. Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length	1 to 255
Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

route-table-import

Synopsis	Enter the **route-table-import** context
Context	**configure** service vprn *string* bgp rib-management label-ipv4 route-table-import
Tree	route-table-import
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	**configure** service vprn *string* bgp rib-management label-ipv4 route-table-import policy-name *reference*
Tree	policy-name

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Description	This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs. When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used. Aggregate routes are always imported into each RIB, independent of the specified policy. Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes. When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	All

label-ipv6

Synopsis	Enter the **label-ipv6** context
Context	**configure** service vprn *string* bgp rib-management label-ipv6
Tree	label-ipv6
Introduced	22.2.R1
Platforms	All

leak-import

Synopsis	Enter the **leak-import** context
Context	**configure** service vprn *string* bgp rib-management label-ipv6 leak-import
Tree	leak-import
Introduced	22.2.R1
Platforms	All

policy *(policy-expr-string | string)*

Synopsis	Leak import policy name
Context	**configure** service vprn *string* bgp rib-management label-ipv6 leak-import policy *(policy-expr-string | string)*

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Tree	policy
Description	This command specifies one or more leak import policies. Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length	1 to 255
Max. Instances	15
Notes	This element is ordered by the user.
Introduced	22.2.R1
Platforms	All

router-id *string*

Synopsis	Router ID for the BGP instance in the AS
Context	**configure** service vprn *string* bgp router-id *string*
Tree	router-id
Description	This command specifies the router ID to be used with the BGP instance. Changing the BGP router ID on an active BGP instance causes the BGP instance to restart with the new router ID. When an SR OS is configured with an IPv6-only BOF and no IPv4 system interface address, explicitly-defined IPv4 router IDs are required for BGP as there is no mechanism to derive the router ID from an IPv6 system interface address.
Introduced	16.0.R1
Platforms	All

send-communities

Synopsis	Enter the **send-communities** context
Context	**configure** service vprn *string* bgp send-communities
Tree	send-communities
Introduced	16.0.R1
Platforms	All

extended *boolean*

Synopsis	Advertise the Extended Communities attribute to peers

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Context	**configure** service vprn *string* bgp send-communities extended *boolean*
Tree	extended
Default	true
Introduced	16.0.R1
Platforms	All

large *boolean*

Synopsis	Advertise the Large Communities attribute to peers
Context	**configure** service vprn *string* bgp send-communities large *boolean*
Tree	large
Default	true
Introduced	16.0.R1
Platforms	All

standard *boolean*

Synopsis	Advertise the Communities attribute to peers
Context	**configure** service vprn *string* bgp send-communities standard *boolean*
Tree	standard
Default	true
Introduced	16.0.R1
Platforms	All

send-default

Synopsis	Enter the **send-default** context
Context	**configure** service vprn *string* bgp send-default
Tree	send-default
Introduced	19.7.R1
Platforms	All

export-policy *reference*

Synopsis	Export policy name

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Context	**configure** service vprn *string* bgp send-default export-policy *reference*
Tree	export-policy
Reference	**configure** policy-options policy-statement *string*
Introduced	19.7.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable IPv4 family type
Context	**configure** service vprn *string* bgp send-default ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	19.7.R1
Platforms	All

ipv6 *boolean*

Synopsis	Enable IPv6 family type
Context	**configure** service vprn *string* bgp send-default ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	19.7.R1
Platforms	All

split-horizon *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	**configure** service vprn *string* bgp split-horizon *boolean*
Tree	split-horizon
Description	When configured to **true**, this command enables the use of split-horizon. This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP. Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary. When configured to **false**, the use of split-horizon is disabled.

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Default	false
Introduced	16.0.R1
Platforms	All

tcp-mss *number*

Synopsis	TCP maximum segment size override
Context	**configure** service vprn *string* bgp tcp-mss *number*
Tree	tcp-mss
Description	This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command). The configured value controls two properties of the TCP connection as follows: TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router. TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.
Range	384 to 9746
Introduced	21.2.R1
Platforms	All

third-party-nexthop *boolean*

Synopsis	Apply third-party next-hop processing to EBGP peers
Context	**configure** service vprn *string* bgp third-party-nexthop *boolean*
Tree	third-party-nexthop
Description	When configured to **true**, this command enables the router to send third-party next hop to EBGP peers in the same subnet as the source peer. The address family of the transport must match the address family of the route. When an IPv4 or IPv6 route is received from one EBGP peer and advertised to another EBGP peer in the same IP subnet, the BGP next hop is left unchanged. When configured to **false**, third-party next-hop processing is disabled and the next hop carries the IP address of the interface used to establish the TCP connection to the peer.
Default	false
Introduced	16.0.R1
Platforms	All

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bgp-evpn

Synopsis	Enter the **bgp-evpn** context
Context	**configure** service vprn *string* bgp-evpn
Tree	bgp-evpn
Introduced	20.10.R1
Platforms	All

mpls [bgp-instance] *number*

Synopsis	Enter the **mpls** list instance
Context	**configure** service vprn *string* bgp-evpn mpls *number*
Tree	mpls
Introduced	20.10.R1
Platforms	All

[**bgp-instance**] *number*

Synopsis	BGP instance ID
Context	**configure** service vprn *string* bgp-evpn mpls *number*
Tree	mpls
Range	1
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BGP-EVPN MPLS
Context	**configure** service vprn *string* bgp-evpn mpls *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	All

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auto-bind-tunnel

Synopsis	Enter the **auto-bind-tunnel** context
Context	**configure** service vprn *string* bgp-evpn mpls *number* auto-bind-tunnel
Tree	auto-bind-tunnel
Description	Commands in this context configure the automatic binding parameters of a BGP-EVPN service using tunnels to MP-BGP peers.
Introduced	20.10.R1
Platforms	All

allow-flex-algo-fallback *boolean*

Synopsis	Enable flexible algorithm fallback
Context	**configure** service vprn *string* bgp-evpn mpls *number* auto-bind-tunnel allow-flex-algo-fallback *boolean*
Tree	allow-flex-algo-fallback
Description	When configured to **true**, a BGP router with a Flex-Algorithm action configured (via the **configure policy-options policy-statement entry action flex-algo** command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available**.** When configured to **false**, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.
Default	false
Introduced	20.10.R3
Platforms	All

ecmp *number*

Synopsis	Maximum ECMP routes allowed
Context	**configure** service vprn *string* bgp-evpn mpls *number* auto-bind-tunnel ecmp *number*
Tree	ecmp
Range	1 to 32
Default	1
Introduced	20.10.R1
Platforms	All

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enforce-strict-tunnel-tagging *boolean*

Synopsis	Allow enforcement of strict tunnel tagging
Context	**configure** service vprn *string* bgp-evpn mpls *number* auto-bind-tunnel enforce-strict-tunnel-tagging *boolean*
Tree	enforce-strict-tunnel-tagging
Default	false
Introduced	20.10.R1
Platforms	All

resolution *keyword*

Synopsis	Resolution method for tunnel selection
Context	**configure** service vprn *string* bgp-evpn mpls *number* auto-bind-tunnel resolution *keyword*
Tree	resolution
Options	none, filter, any
Default	none
Introduced	20.10.R1
Platforms	All

resolution-filter

Synopsis	Enter the **resolution-filter** context
Context	**configure** service vprn *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter
Tree	resolution-filter
Description	Commands in this context configure the subset of tunnel types that can be used in the resolution of BGP-EVPN routes within the automatic binding of the BGP-EVPN MPLS service to tunnels to MP-BGP peers.
Introduced	20.10.R1
Platforms	All

bgp *boolean*

Synopsis	Use BGP tunneling for next-hop resolution
Context	**configure** service vprn *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter bgp *boolean*

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Tree	bgp
Description	When configured to **true**, BGP searches the BGP LSP for the address of the BGP next hop. When configured to **false**, BGP tunneling is not used and inter-area or inter-as prefixes are not resolved.
Default	false
Introduced	20.10.R1
Platforms	All

ldp *boolean*

Synopsis	Use LDP tunneling for next-hop resolution
Context	**configure** service vprn *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter ldp *boolean*
Tree	ldp
Description	When configured to **true**, BGP searches for an LDP LSP with a FEC prefix corresponding to the address of the BGP next hop. When configured to **false**, LDP tunneling is not used for next-hop resolution.
Default	false
Introduced	20.10.R1
Platforms	All

mpls-fwd-policy *boolean*

Synopsis	Use MPLS forwarding policy for next-hop resolution
Context	**configure** service vprn *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter mpls-fwd-policy *boolean*
Tree	mpls-fwd-policy
Description	When configured to **true**, BGP uses the MPLS forwarding policy to determine the address of the BGP next hop. When configured to **false**, the MPLS forwarding policy is not used for next-hop resolution.
Default	false
Introduced	20.10.R1
Platforms	All

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rib-api *boolean*

Synopsis	Use RIB API gRPC service for next-hop resolution
Context	**configure** service vprn *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter rib-api *boolean*
Tree	rib-api
Description	When configured to **true**, BGP uses tunnels programmed using the RIB API gRPC service to resolve the next hops of routes imported into the EVPN service. When configured to **false**, the RIB API service tunnels are not used for next-hop resolution.
Default	false
Introduced	20.10.R1
Platforms	All

rsvp *boolean*

Synopsis	Use RSVP tunneling for next-hop resolution
Context	**configure** service vprn *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter rsvp *boolean*
Tree	rsvp
Description	When configured to **true**, BGP searches the best metric RSVP LSP to determine the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface used by the BGP instance on the remote node. The LSP metric is provided by MPLS in the tunnel table. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID. When configured to **false**, the RSVP LSP is not used for next-hop resolution.
Default	false
Introduced	20.10.R1
Platforms	All

sr-isis *boolean*

Synopsis	Use IS-IS SR tunneling for next-hop resolution
Context	**configure** service vprn *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter sr-isis *boolean*
Tree	sr-isis
Description	When configured to **true**, BGP uses an IS-IS tunnel type to determine the address of the BGP next hop.

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The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered IS-IS instance.

When configured to **false**, IS-IS tunneling is not used for next-hop resolution.

Default	false
Introduced	20.10.R1
Platforms	All

sr-ospf *boolean*

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	**configure** service vprn *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter sr-ospf *boolean*
Tree	sr-ospf
Description	When configured to **true**, BGP uses an OSPF tunnel type to determine the address of the BGP next hop. The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OPSF instance. When configured to **false**, OSPF tunneling is not used for next-hop resolution.
Default	false
Introduced	20.10.R1
Platforms	All

sr-ospf3 *boolean*

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
Context	**configure** service vprn *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter sr-ospf3 *boolean*
Tree	sr-ospf3
Description	When configured to **true**, BGP uses an OSPF3 tunnel type to determine the address of the BGP next hop. The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OPSF3 instance. When configured to **false**, OSPF3 tunneling is not used for next-hop resolution.
Default	false
Introduced	20.10.R1
Platforms	All

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sr-policy *boolean*

Synopsis	Use SR policies for next-hop resolution
Context	**configure** service vprn *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter sr-policy *boolean*
Tree	sr-policy
Description	When configured to **true**, this command instructs BGP to use an SR policy to determine the address of the BGP next hop.The SR policy search criteria includes a non-null endpoint and color value that matches the BGP next hop and color extended community value, respectively, of the EVPN route. When configured to **false**, SR policies are not used for next-hop resolution.
Default	false
Introduced	20.10.R1
Platforms	All

sr-te *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	**configure** service vprn *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter sr-te *boolean*
Tree	sr-te
Description	When configured to **true**, BGP uses an SR-TE tunnel type to determine the address of the BGP next hop. The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered tunnel ID. When configured to **false**, SR-TE tunneling is not used for next-hop resolution.
Default	false
Introduced	20.10.R1
Platforms	All

udp *boolean*

Synopsis	Use MPLS over UDP tunneling for next-hop resolution
Context	**configure** service vprn *string* bgp-evpn mpls *number* auto-bind-tunnel resolution-filter udp *boolean*
Tree	udp
Description	When configured to **true**, BGP uses an MPLS over UDP tunnel type to determine the address of the BGP next hop.

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When configured to **false**, MPLS over UDP tunneling is not used for next-hop resolution.

Default	false
Introduced	20.10.R1
Platforms	All

default-route-tag *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default route tag
Context	**configure** service vprn *string* bgp-evpn mpls *number* default-route-tag *string*
Tree	default-route-tag
Description	This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed. When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority. The following are examples of the conflict priority handling: • If a service is configured with both **default-route-tag** *X* and **proxy-arp evpn-route-tag** *Y*, the EVPN uses route tag *Y* when sending EVPN proxy-arp routes to the BGP RIB for advertisement. • If a given IP-prefix route is tagged in the route-table with tag *A* and the R-VPLS, in which the route is advertised, uses *B* as the **default-route-tag**, then EVPN keeps tag *A* when sending the route to the BGP RIB. The **default-route-tag** configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.
Introduced	20.10.R1
Platforms	All

domain-id *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Domain ID of received BGP route before readvertisement
Context	**configure** service vprn *string* bgp-evpn mpls *number* domain-id *string*

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Tree domain-id

Description This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in *draft-ietf-bess-evpn-ipvpn-interworking*. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).

Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).

In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:

Seg Len=1 / 65000:1:128

If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:

Seg Len=2 / 65000:2:70 / 65000:1:128

That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.

Introduced 21.10.R1

Platforms All

dynamic-egress-label-limit *boolean*

Synopsis Enables dynamic egress label limit

Context **configure** service vprn *string* bgp-evpn mpls *number* dynamic-egress-label-limit *boolean*

Tree dynamic-egress-label-limit

Description When configured to **true**, this command relaxes the egress MPLS label limit check when resolving BGP next hops in the tunnel table.

For VPRN services, the OAM label is never computed and, therefore, one more egress label is allowed.

For EVPN (Epipe and VPLS) services, the system only computes the control word and ESI label if they are used. For the control word, the system reduces the egress label limit by one label if the control word is configured in the service. When configured, the ESI label is not counted for Epipes or VPLS services without an ES.

When configured to **false** this command, for EVPN, Epipe, and VPLS services, always accounts for the ESI label and control word.

Default false

Introduced 22.2.R1

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Platforms	All

evi *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	EVPN instance ID
Context	**configure** service vprn *string* bgp-evpn mpls *number* evi *number*
Tree	evi
Description	This command configures the EVI that identifies the BGP EVPN instance in a VPRN (for the EVPN-IFL model) that is associated with the Layer 3 Ethernet segment. This configuration is required on the PEs attached to the Ethernet segment and on the remote PEs that need to create ES destinations to the MH Layer 3 Ethernet segment.
Range	1 to 16777215
Introduced	22.10.R1
Platforms	All

evpn-link-bandwidth

Synopsis	Enter the **evpn-link-bandwidth** context
Context	**configure** service vprn *string* bgp-evpn mpls *number* evpn-link-bandwidth
Tree	evpn-link-bandwidth
Introduced	22.7.R1
Platforms	All

advertise

Synopsis	Enable the **advertise** context
Context	**configure** service vprn *string* bgp-evpn mpls *number* evpn-link-bandwidth advertise
Tree	advertise
Introduced	22.7.R1
Platforms	All

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max-dynamic-weight *number*

Synopsis	Maximum dynamic weight of the route
Context	**configure** service vprn *string* bgp-evpn mpls *number* evpn-link-bandwidth advertise max-dynamic-weight *number*
Tree	max-dynamic-weight
Description	This command configures the maximum weight advertised in the EVPN link bandwidth extended community for the advertised EVPN IP-Prefix routes for the service. If weight dynamic is configured, the actual advertised weight is the minimum of the number of BGP PE-CE paths for the prefix and the configured maximum weight.
Range	1 to 128
Default	128
Introduced	22.7.R1
Platforms	All

weight *(number | keyword)*

Synopsis	Weight of the route
Context	**configure** service vprn *string* bgp-evpn mpls *number* evpn-link-bandwidth advertise weight *(number | keyword)*
Tree	weight
Description	This command configures the weight advertised in the EVPN link bandwidth extended community for the advertised EVPN IP-Prefix routes for the service. If set to **dynamic**, the weight is dynamically set based on the number of BGP PE-CE paths for the IP-Prefix that is advertised in an EVPN IP-Prefix route.
Range	1 to 128
Options	dynamic
Default	dynamic
Introduced	22.7.R1
Platforms	All

weighted-ecmp *boolean*

Synopsis	Enable weighted ECMP
Context	**configure** service vprn *string* bgp-evpn mpls *number* evpn-link-bandwidth weighted-ecmp *boolean*
Tree	weighted-ecmp

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Description	When configured to **true**, the router supports the processing of the EVPN link bandwidth extended community when installing an ECMP set for an EVPN IP-Prefix route in the VPRN route table. Flows to an IP Prefix received with a weight and a zero ESI value are sprayed according to the weight. If the EVPN IP-Prefix route received with the weight has a non-zero ESI, the weight is divided into the number of PEs attached to the Ethernet Segment (and rounded up if the result is not an integer). The command also enables the weighted ECMP functionality for BGP CEs that are configured with an **evpn-link-bandwidth add-to-received-bgp** weight. When configured to **false**, the router disables the processing of the EVPN link bandwidth extended community.
Default	false
Introduced	22.7.R1
Platforms	All

route-distinguisher *(string | keyword)*

Synopsis	Route distinguisher
Context	**configure** service vprn *string* bgp-evpn mpls *number* route-distinguisher *(string | keyword)*
Tree	route-distinguisher
Description	This command specifies a unique route distinguisher (RD) to be associated with each routing instance to identify which VPN the route belongs to.
Options	auto-rd
Introduced	20.10.R1
Platforms	All

send-tunnel-encap

Synopsis	Enter the **send-tunnel-encap** context
Context	**configure** service vprn *string* bgp-evpn mpls *number* send-tunnel-encap
Tree	send-tunnel-encap
Introduced	20.10.R1
Platforms	All

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mpls *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable MPLS encapsulation
Context	**configure** service vprn *string* bgp-evpn mpls *number* send-tunnel-encap mpls *boolean*
Tree	mpls
Default	true
Introduced	20.10.R1
Platforms	All

mpls-over-udp *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable MPLS over UDP encapsulation
Context	**configure** service vprn *string* bgp-evpn mpls *number* send-tunnel-encap mpls-over-udp *boolean*
Tree	mpls-over-udp
Default	false
Introduced	20.10.R1
Platforms	All

vrf-export

Synopsis	Enable the **vrf-export** context
Context	**configure** service vprn *string* bgp-evpn mpls *number* vrf-export
Tree	vrf-export
Introduced	20.10.R1
Platforms	All

policy *(policy-expr-string | string)*

Synopsis	Policy name

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Context	**configure** service vprn *string* bgp-evpn mpls *number* vrf-export policy *(policy-expr-string | string)*
Tree	policy
Description	This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP). Each referenced object is either a policy logical expression or the name of a single policy. Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route. Only the first policy can have the maximum length and the rest can be up to 64 characters. Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	20.10.R1
Platforms	All

vrf-import

Synopsis	Enable the **vrf-import** context
Context	**configure** service vprn *string* bgp-evpn mpls *number* vrf-import
Tree	vrf-import
Introduced	20.10.R1
Platforms	All

policy *(policy-expr-string | string)*

Synopsis	Policy name
Context	**configure** service vprn *string* bgp-evpn mpls *number* vrf-import policy *(policy-expr-string | string)*
Tree	policy

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Description	This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP). Each referenced object is either a policy logical expression or the name of a single policy. Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route. Only the first policy can have the maximum length and the rest can be up to 64 characters. Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	20.10.R1
Platforms	All

vrf-target

Synopsis	Enter the **vrf-target** context
Context	**configure** service vprn *string* bgp-evpn mpls *number* vrf-target
Tree	vrf-target
Description	Commands in this context configure the route target that is added to advertised routes or compared against received routes from other VRFs on the same or remote PE routers (via MP-BGP). BGP-VPN and EVPN-IFL routes imported using a VRF target configuration use the BGP preference value of 170 when imported from remote PE routers, or retain the protocol preference value of the exported route when imported from other VRFs in the same router. Configured VRF import or export policies override the VRF target policy.
Introduced	20.10.R1
Platforms	All

community *string*

Synopsis	Extended BGP community

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Context	**configure** service vprn *string* bgp-evpn mpls *number* vrf-target community *string*
Tree	community
Description	This command configures an extended BGP community in the form type:x:y. Type can only be target and x and y are 16-bit integers.
String Length	10 to 28
Notes	The following elements are part of a choice: **community** or (**export-community** and **import-community**).
Introduced	20.10.R1
Platforms	All

export-community *string*

Synopsis	Communities sent to remote PE neighbors
Context	**configure** service vprn *string* bgp-evpn mpls *number* vrf-target export-community *string*
Tree	export-community
String Length	10 to 28
Notes	The following elements are part of a choice: **community** or (**export-community** and **import-community**).
Introduced	20.10.R1
Platforms	All

import-community *string*

Synopsis	Communities accepted from remote PE neighbors
Context	**configure** service vprn *string* bgp-evpn mpls *number* vrf-target import-community *string*
Tree	import-community
String Length	10 to 28
Notes	The following elements are part of a choice: **community** or (**export-community** and **import-community**).
Introduced	20.10.R1
Platforms	All

segment-routing-v6 [bgp-instance] *number*

Synopsis	Enter the **segment-routing-v6** list instance
Context	**configure** service vprn *string* bgp-evpn segment-routing-v6 *number*

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Tree	segment-routing-v6
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**bgp-instance**] *number*

Synopsis	BGP instance
Context	**configure** service vprn *string* bgp-evpn segment-routing-v6 *number*
Tree	segment-routing-v6
Range	1
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis	Administrative state of segment routing over IPv6
Context	**configure** service vprn *string* bgp-evpn segment-routing-v6 *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

default-route-tag *string*

Synopsis	Default route tag
Context	**configure** service vprn *string* bgp-evpn segment-routing-v6 *number* default-route-tag *string*
Tree	default-route-tag
Description	This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed. When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.

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The following are examples of the conflict priority handling:

- If a service is configured with both **default-route-tag** *X* and **proxy-arp evpn-route-tag** *Y*, the EVPN uses route tag *Y* when sending EVPN proxy-arp routes to the BGP RIB for advertisement.
- If a given IP-prefix route is tagged in the route-table with tag *A* and the R-VPLS, in which the route is advertised, uses *B* as the **default-route-tag**, then EVPN keeps tag *A* when sending the route to the BGP RIB.

The **default-route-tag** configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.

Introduced 22.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

domain-id *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Domain ID of received BGP route before readvertisement

Context **configure** service vprn *string* bgp-evpn segment-routing-v6 *number* domain-id *string*

Tree domain-id

Description This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in *draft-ietf-bess-evpn-ipvpn-interworking*. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).

Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).

In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:

Seg Len=1 / 65000:1:128

If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:

Seg Len=2 / 65000:2:70 / 65000:1:128

That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.

Introduced 22.5.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

evi *number*

WARNING:
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Synopsis	EVI information
Context	**configure** service vprn *string* bgp-evpn segment-routing-v6 *number* evi *number*
Tree	evi
Description	This command configures the EVI that identifies the BGP EVPN instance in a VPRN (for the EVPN-IFL model) or an R-VPLS (for the EVPN-IFF model) that is associated with the Layer 3 Ethernet segment. This configuration is required on the PEs attached to the Ethernet segment and on the remote PEs that need to create ES destinations to the MH Layer 3 Ethernet segment.
Range	1 to 16777215
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

evpn-link-bandwidth

Synopsis	Enter the **evpn-link-bandwidth** context
Context	**configure** service vprn *string* bgp-evpn segment-routing-v6 *number* evpn-link-bandwidth
Tree	evpn-link-bandwidth
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

advertise

Synopsis	Enable the **advertise** context
Context	**configure** service vprn *string* bgp-evpn segment-routing-v6 *number* evpn-link-bandwidth advertise
Tree	advertise
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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max-dynamic-weight *number*

Synopsis	Maximum dynamic weight of the route
Context	**configure** service vprn *string* bgp-evpn segment-routing-v6 *number* evpn-link-bandwidth advertise max-dynamic-weight *number*
Tree	max-dynamic-weight
Description	This command configures the maximum weight advertised in the EVPN link bandwidth extended community for the advertised EVPN IP-Prefix routes for the service. The actual advertised weight is the minimum of the number of BGP PE-CE paths for the prefix and the configured maximum weight.
Range	1 to 128
Default	128
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

weight *(number | keyword)*

Synopsis	Weight of the route
Context	**configure** service vprn *string* bgp-evpn segment-routing-v6 *number* evpn-link-bandwidth advertise weight *(number | keyword)*
Tree	weight
Description	This command configures the weight advertised in the EVPN link bandwidth extended community for the advertised EVPN IP-Prefix routes for the service.
Range	1 to 128
Options	dynamic
Default	dynamic
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

weighted-ecmp *boolean*

Synopsis	Enable weighted ECMP
Context	**configure** service vprn *string* bgp-evpn segment-routing-v6 *number* evpn-link-bandwidth weighted-ecmp *boolean*
Tree	weighted-ecmp
Description	When configured to **true**, the router supports the processing of the EVPN link bandwidth extended community when installing an ECMP set for an EVPN IP-Prefix route in the VPRN route table.

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Flows to an IP Prefix received with a weight and a zero ESI value are sprayed according to the weight. If the EVPN IP-Prefix route received with the weight has a non-zero ESI, the weight is divided into the number of PEs attached to the Ethernet Segment (and rounded up if the result is not an integer).

The command also enables the weighted ECMP functionality for BGP CEs that are configured with an **evpn-link-bandwidth add-to-received-bgp** weight.

When configured to **false**, the router disables the processing of the EVPN link bandwidth extended community.

Default	false
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

resolution *keyword*

Synopsis	Resolution options for routes
Context	**configure** service vprn *string* bgp-evpn segment-routing-v6 *number* resolution *keyword*
Tree	resolution
Options	route-table, tunnel-table, fallback-tunnel-to-route-table
Default	route-table
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

route-distinguisher *(string | keyword)*

Synopsis	Route distinguisher
Context	**configure** service vprn *string* bgp-evpn segment-routing-v6 *number* route-distinguisher *(string | keyword)*
Tree	route-distinguisher
Description	This command specifies a unique route distinguisher (RD) to be associated with each routing instance to identify the VPN to which the route belongs. Alternatively, the system can automatically generate an RD based on the BGP automatic RD range configured at the **configure service system** level.
Options	auto-rd
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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source-address *string*

Synopsis	Source IPv6 address
Context	**configure** service vprn *string* bgp-evpn segment-routing-v6 *number* source-address *string*
Tree	source-address
Description	When configured, this command specifies the source IPv6 address used in the SA field of the outer IPv6 header of the SRv6 encapsulated packet. When not configured, the source IPv6 address is inherited from the configuration of the global default address in the **router "base" segment-routing segment-routing-v6 source-address** context. A source IPv6 address must be configured in this context or in the base router context. The system does not check if the address entered is a valid local address.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

srv6

Synopsis	Enter the **srv6** context
Context	**configure** service vprn *string* bgp-evpn segment-routing-v6 *number* srv6
Tree	srv6
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

default-locator *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Default route locator
Context	**configure** service vprn *string* bgp-evpn segment-routing-v6 *number* srv6 default-locator *string*
Tree	default-locator
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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instance *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Segment Routing IPv6 instance
Context	**configure** service vprn *string* bgp-evpn segment-routing-v6 *number* srv6 instance *reference*
Tree	instance
Reference	**configure** service vprn *string* segment-routing-v6 *number*
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

vrf-export

Synopsis	Enable the **vrf-export** context
Context	**configure** service vprn *string* bgp-evpn segment-routing-v6 *number* vrf-export
Tree	vrf-export
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

policy *(policy-expr-string | string)*

Synopsis	Policy name
Context	**configure** service vprn *string* bgp-evpn segment-routing-v6 *number* vrf-export policy *(policy-expr-string | string)*
Tree	policy
Description	This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP). Each referenced object is either a policy logical expression or the name of a single policy. Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route. Only the first policy can have the maximum length and the rest can be up to 64 characters. Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.

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String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

vrf-import

Synopsis	Enable the **vrf-import** context
Context	**configure** service vprn *string* bgp-evpn segment-routing-v6 *number* vrf-import
Tree	vrf-import
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

policy *(policy-expr-string | string)*

Synopsis	Policy name
Context	**configure** service vprn *string* bgp-evpn segment-routing-v6 *number* vrf-import policy *(policy-expr-string | string)*
Tree	policy
Description	This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP). Each referenced object is either a policy logical expression or the name of a single policy. Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route. Only the first policy can have the maximum length and the rest can be up to 64 characters. Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.
String Length	1 to 255
Max. Instances	15

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Min. Instances	1
Notes	This element is ordered by the user.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

vrf-target

Synopsis	Enter the **vrf-target** context
Context	**configure** service vprn *string* bgp-evpn segment-routing-v6 *number* vrf-target
Tree	vrf-target
Description	Commands in this context configure the route target that is added to advertised routes or compared against received routes from other VRFs on the same or remote PE routers (via MP-BGP). BGP-VPN and EVPN-IFL routes imported using a VRF target configuration use the BGP preference value of 170 when imported from remote PE routers, or retain the protocol preference value of the exported route when imported from other VRFs in the same router. Configured VRF import or export policies override the VRF target policy.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

community *string*

Synopsis	Extended BGP community
Context	**configure** service vprn *string* bgp-evpn segment-routing-v6 *number* vrf-target community *string*
Tree	community
Description	This command configures an extended BGP community in the form type:x:y. Type can only be target and x and y are 16-bit integers.
String Length	10 to 28
Notes	The following elements are part of a choice: **community** or (**export-community** and **import-community**).
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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export-community *string*

Synopsis	Communities sent to remote PE neighbors
Context	**configure** service vprn *string* bgp-evpn segment-routing-v6 *number* vrf-target export-community *string*
Tree	export-community
String Length	10 to 28
Notes	The following elements are part of a choice: **community** or (**export-community** and **import-community**).
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

import-community *string*

Synopsis	Communities accepted from remote PE neighbors
Context	**configure** service vprn *string* bgp-evpn segment-routing-v6 *number* vrf-target import-community *string*
Tree	import-community
String Length	10 to 28
Notes	The following elements are part of a choice: **community** or (**export-community** and **import-community**).
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

bgp-ipvpn

Synopsis	Enter the **bgp-ipvpn** context
Context	**configure** service vprn *string* bgp-ipvpn
Tree	bgp-ipvpn
Introduced	21.2.R1
Platforms	All

mpls

Synopsis	Enter the **mpls** context
Context	**configure** service vprn *string* bgp-ipvpn mpls
Tree	mpls

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Introduced	21.2.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BGP-IPVPN MPLS
Context	**configure** service vprn *string* bgp-ipvpn mpls admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.2.R1
Platforms	All

auto-bind-tunnel

Synopsis	Enter the **auto-bind-tunnel** context
Context	**configure** service vprn *string* bgp-ipvpn mpls auto-bind-tunnel
Tree	auto-bind-tunnel
Description	Commands in this context configure the automatic binding parameters of a BGP-IPVPN service using tunnels to MP-BGP peers.
Introduced	21.2.R1
Platforms	All

allow-flex-algo-fallback *boolean*

Synopsis	Enable flexible algorithm fallback
Context	**configure** service vprn *string* bgp-ipvpn mpls auto-bind-tunnel allow-flex-algo-fallback *boolean*
Tree	allow-flex-algo-fallback
Description	When configured to **true**, a BGP router with a Flex-Algorithm action configured (via the **configure policy-options policy-statement entry action flex-algo** command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available**.** When configured to **false**, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.
Default	false
Introduced	21.2.R1

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Platforms	All

ecmp *number*

Synopsis	Maximum ECMP routes allowed
Context	**configure** service vprn *string* bgp-ipvpn mpls auto-bind-tunnel ecmp *number*
Tree	ecmp
Description	This command configures the maximum number of tunnels that can be used as ECMP next hops for the VPRN. This value overrides the ECMP value configured at the **configure service vprn** context level.
Range	1 to 32
Default	1
Introduced	21.2.R1
Platforms	All

enforce-strict-tunnel-tagging *boolean*

Synopsis	Allow enforcement of strict tunnel tagging
Context	**configure** service vprn *string* bgp-ipvpn mpls auto-bind-tunnel enforce-strict-tunnel-tagging *boolean*
Tree	enforce-strict-tunnel-tagging
Description	When configured to **true**, the system must only consider LSPs marked with an administrative tag for next-hop resolution. When configured to **false**, tagged RSVP and SR-TE LSPs are considered first. The system then uses untagged LSPs of other types.
Default	false
Introduced	21.2.R1
Platforms	All

resolution *keyword*

Synopsis	Resolution method for tunnel selection
Context	**configure** service vprn *string* bgp-ipvpn mpls auto-bind-tunnel resolution *keyword*
Tree	resolution
Options	none, filter, any
Default	none

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Introduced	21.2.R1
Platforms	All

resolution-filter

Synopsis	Enter the **resolution-filter** context
Context	**configure** service vprn *string* bgp-ipvpn mpls auto-bind-tunnel resolution-filter
Tree	resolution-filter
Description	Commands in this context configure the subset of tunnel types that can be used in the resolution of BGP-IPVPN routes within the automatic binding of the BGP-IPVPN MPLS service to tunnels to MP-BGP peers.
Introduced	21.2.R1
Platforms	All

bgp *boolean*

Synopsis	Use BGP tunneling for next-hop resolution
Context	**configure** service vprn *string* bgp-ipvpn mpls auto-bind-tunnel resolution-filter bgp *boolean*
Tree	bgp
Description	When configured to **true**, BGP searches the BGP LSP for the address of the BGP next hop. When configured to **false**, BGP tunneling is not used and inter-area or inter-as prefixes are not resolved.
Default	true
Introduced	21.2.R1
Platforms	All

gre *boolean*

Synopsis	Use GRE tunneling for next-hop resolution
Context	**configure** service vprn *string* bgp-ipvpn mpls auto-bind-tunnel resolution-filter gre *boolean*
Tree	gre
Description	When configured to **true**, this command enables setting the tunnel type for the auto bind tunnel.
Default	false

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Introduced	21.2.R1
Platforms	All

ldp *boolean*

Synopsis	Use LDP tunneling for next-hop resolution
Context	**configure** service vprn *string* bgp-ipvpn mpls auto-bind-tunnel resolution-filter ldp *boolean*
Tree	ldp
Description	When configured to **true**, BGP searches for an LDP LSP with a FEC prefix corresponding to the address of the BGP next hop. When configured to **false**, LDP tunneling is not used for next-hop resolution.
Default	false
Introduced	21.2.R1
Platforms	All

mpls-fwd-policy *boolean*

Synopsis	Use MPLS forwarding policy for next-hop resolution
Context	**configure** service vprn *string* bgp-ipvpn mpls auto-bind-tunnel resolution-filter mpls-fwd-policy *boolean*
Tree	mpls-fwd-policy
Description	When configured to **true**, BGP uses the MPLS forwarding policy to determine the address of the BGP next hop. When configured to **false**, the MPLS forwarding policy is not used for next-hop resolution.
Default	false
Introduced	21.2.R1
Platforms	All

rib-api *boolean*

Synopsis	Use RIB API gRPC service for next-hop resolution
Context	**configure** service vprn *string* bgp-ipvpn mpls auto-bind-tunnel resolution-filter rib-api *boolean*
Tree	rib-api

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Description	When configured to **true**, BGP uses tunnels programmed using the RIB API gRPC service to resolve the next hops of routes imported into the EVPN service. When configured to **false**, the RIB API service tunnels are not used for next-hop resolution.
Default	false
Introduced	21.2.R1
Platforms	All

rsvp *boolean*

Synopsis	Use RSVP tunneling for next-hop resolution
Context	**configure** service vprn *string* bgp-ipvpn mpls auto-bind-tunnel resolution-filter rsvp *boolean*
Tree	rsvp
Description	When configured to **true**, BGP searches the best metric RSVP LSP to determine the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface used by the BGP instance on the remote node. The LSP metric is provided by MPLS in the tunnel table. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID. When configured to **false**, the RSVP LSP is not used for next-hop resolution.
Default	false
Introduced	21.2.R1
Platforms	All

sr-isis *boolean*

Synopsis	Use IS-IS SR tunneling for next-hop resolution
Context	**configure** service vprn *string* bgp-ipvpn mpls auto-bind-tunnel resolution-filter sr-isis *boolean*
Tree	sr-isis
Description	When configured to **true**, BGP uses an IS-IS tunnel type to determine the address of the BGP next hop. The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered IS-IS instance. When configured to **false**, IS-IS tunneling is not used for next-hop resolution.
Default	false
Introduced	21.2.R1
Platforms	All

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sr-ospf *boolean*

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	**configure** service vprn *string* bgp-ipvpn mpls auto-bind-tunnel resolution-filter sr-ospf *boolean*
Tree	sr-ospf
Description	When configured to **true**, BGP uses an OSPF tunnel type to determine the address of the BGP next hop. The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OSPF instance. When configured to **false**, OSPF tunneling is not used for next-hop resolution.
Default	false
Introduced	21.2.R1
Platforms	All

sr-ospf3 *boolean*

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
Context	**configure** service vprn *string* bgp-ipvpn mpls auto-bind-tunnel resolution-filter sr-ospf3 *boolean*
Tree	sr-ospf3
Description	When configured to **true**, BGP uses an OSPFv3 tunnel type to determine the address of the BGP next hop. The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OSPFv3 instance. When configured to **false**, OSPFv3 tunneling is not used for next-hop resolution.
Default	false
Introduced	21.2.R1
Platforms	All

sr-policy *boolean*

Synopsis	Use SR policies for next-hop resolution
Context	**configure** service vprn *string* bgp-ipvpn mpls auto-bind-tunnel resolution-filter sr-policy *boolean*
Tree	sr-policy
Description	When configured to **true**, SR policies are used to determine the address of the BGP next hop.

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The SR policy search criteria includes a non-null endpoint and color value that matches the BGP next hop and color extended community value, respectively, of the EVPN route.

When configured to **false**, SR policies are not used for next-hop resolution.

Default	false
Introduced	21.2.R1
Platforms	All

sr-te *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	**configure** service vprn *string* bgp-ipvpn mpls auto-bind-tunnel resolution-filter sr-te *boolean*
Tree	sr-te
Description	When configured to **true**, BGP uses an SR-TE tunnel type to determine the address of the BGP next hop. The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered tunnel ID. When configured to **false**, SR-TE tunneling is not used for next-hop resolution.
Default	false
Introduced	21.2.R1
Platforms	All

udp *boolean*

Synopsis	Use MPLS over UDP tunneling for next-hop resolution
Context	**configure** service vprn *string* bgp-ipvpn mpls auto-bind-tunnel resolution-filter udp *boolean*
Tree	udp
Description	When configured to **true**, BGP uses an MPLS over UDP tunnel type to determine the address of the BGP next hop. When configured to **false**, MPLS over UDP tunneling is not used for next-hop resolution.
Default	false
Introduced	21.2.R1
Platforms	All

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weighted-ecmp *boolean*

Synopsis	Allow weighted load-balancing
Context	**configure** service vprn *string* bgp-ipvpn mpls auto-bind-tunnel weighted-ecmp *boolean*
Tree	weighted-ecmp
Description	When configured to **true**, this command enables weighted ECMP for packets using tunnels that a VPRN automatically binds to. Packets are sprayed across LSPs in the ECMP according to the outcome of the hash algorithm and the configured load balancing weight of each LSP. When configured to **false**, this command disables weighted ECMP for next-hop tunnel selection.
Default	false
Introduced	21.2.R1
Platforms	All

domain-id *string*

Synopsis	Domain ID of received BGP route before readvertisement
Context	**configure** service vprn *string* bgp-ipvpn mpls domain-id *string*
Tree	domain-id
Description	This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in *draft-ietf-bess-evpn-ipvpn-interworking*. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances). Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred). In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N: Seg Len=1 / 65000:1:128 If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows: Seg Len=2 / 65000:2:70 / 65000:1:128 That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.
Introduced	21.10.R1
Platforms	All

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dynamic-egress-label-limit *boolean*

Synopsis	Enables dynamic egress label limit
Context	**configure** service vprn *string* bgp-ipvpn mpls dynamic-egress-label-limit *boolean*
Tree	dynamic-egress-label-limit
Description	When configured to **true**, this command relaxes the egress MPLS label limit check when resolving BGP next hops in the tunnel table. For VPRN services, the OAM label is never computed and, therefore, one more egress label is allowed. For EVPN (Epipe and VPLS) services, the system only computes the control word and ESI label if they are used. For the control word, the system reduces the egress label limit by one label if the control word is configured in the service. When configured, the ESI label is not counted for Epipes or VPLS services without an ES. When configured to **false** this command, for EVPN, Epipe, and VPLS services, always accounts for the ESI label and control word.
Default	false
Introduced	22.2.R1
Platforms	All

route-distinguisher *(string | keyword)*

Synopsis	Route distinguisher
Context	**configure** service vprn *string* bgp-ipvpn mpls route-distinguisher *(string | keyword)*
Tree	route-distinguisher
Description	This command specifies a unique route distinguisher (RD) to be associated with each routing instance to identify which VPN the route belongs to.
Options	auto-rd
Introduced	21.2.R1
Platforms	All

vrf-export

Synopsis	Enable the **vrf-export** context
Context	**configure** service vprn *string* bgp-ipvpn mpls vrf-export
Tree	vrf-export
Introduced	21.2.R1
Platforms	All

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policy *(policy-expr-string | string)*

Synopsis	Policy name
Context	**configure** service vprn *string* bgp-ipvpn mpls vrf-export policy *(policy-expr-string | string)*
Tree	policy
Description	This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP). Each referenced object is either a policy logical expression or the name of a single policy. Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route. Only the first policy can have the maximum length and the rest can be up to 64 characters. Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	21.2.R1
Platforms	All

vrf-import

Synopsis	Enable the **vrf-import** context
Context	**configure** service vprn *string* bgp-ipvpn mpls vrf-import
Tree	vrf-import
Introduced	21.2.R1
Platforms	All

policy *(policy-expr-string | string)*

Synopsis	Policy name

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Context	**configure** service vprn *string* bgp-ipvpn mpls vrf-import policy *(policy-expr-string | string)*
Tree	policy
Description	This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP). Each referenced object is either a policy logical expression or the name of a single policy. Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route. Only the first policy can have the maximum length and the rest can be up to 64 characters. Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	21.2.R1
Platforms	All

vrf-target

Synopsis	Enter the **vrf-target** context
Context	**configure** service vprn *string* bgp-ipvpn mpls vrf-target
Tree	vrf-target
Description	Commands in this context configure the route target that is added to advertised routes or compared against received routes from other VRFs on the same or remote PE routers (via MP-BGP). BGP-VPN and EVPN-IFL routes imported using a VRF target configuration use the BGP preference value of 170 when imported from remote PE routers, or retain the protocol preference value of the exported route when imported from other VRFs in the same router. Configured VRF import or export policies override the VRF target policy.
Introduced	21.2.R1
Platforms	All

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community *string*

Synopsis	Extended BGP community
Context	**configure** service vprn *string* bgp-ipvpn mpls vrf-target community *string*
Tree	community
Description	This command configures an extended BGP community in the form type:x:y. Type can only be target and x and y are 16-bit integers.
String Length	10 to 28
Notes	The following elements are part of a choice: **community** or (**export-community** and **import-community**).
Introduced	21.2.R1
Platforms	All

export-community *string*

Synopsis	Communities sent to remote PE neighbors
Context	**configure** service vprn *string* bgp-ipvpn mpls vrf-target export-community *string*
Tree	export-community
String Length	10 to 28
Notes	The following elements are part of a choice: **community** or (**export-community** and **import-community**).
Introduced	21.2.R1
Platforms	All

import-community *string*

Synopsis	Communities accepted from remote PE neighbors
Context	**configure** service vprn *string* bgp-ipvpn mpls vrf-target import-community *string*
Tree	import-community
String Length	10 to 28
Notes	The following elements are part of a choice: **community** or (**export-community** and **import-community**).
Introduced	21.2.R1
Platforms	All

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segment-routing-v6 [bgp-instance] *number*

Synopsis	Enter the **segment-routing-v6** list instance
Context	**configure** service vprn *string* bgp-ipvpn segment-routing-v6 *number*
Tree	segment-routing-v6
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**bgp-instance**] *number*

Synopsis	BGP instance
Context	**configure** service vprn *string* bgp-ipvpn segment-routing-v6 *number*
Tree	segment-routing-v6
Range	1
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis	Administrative state of segment routing over IPv6
Context	**configure** service vprn *string* bgp-ipvpn segment-routing-v6 *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

default-route-tag *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default route tag

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Context **configure** service vprn *string* bgp-ipvpn segment-routing-v6 *number* default-route-tag *string*

Tree default-route-tag

Description This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.

When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.

The following are examples of the conflict priority handling:

- If a service is configured with both **default-route-tag** *X* and **proxy-arp evpn-route-tag** *Y*, the EVPN uses route tag *Y* when sending EVPN proxy-arp routes to the BGP RIB for advertisement.
- If a given IP-prefix route is tagged in the route-table with tag *A* and the R-VPLS, in which the route is advertised, uses *B* as the **default-route-tag**, then EVPN keeps tag *A* when sending the route to the BGP RIB.

The **default-route-tag** configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

domain-id *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Domain ID of received BGP route before readvertisement

Context **configure** service vprn *string* bgp-ipvpn segment-routing-v6 *number* domain-id *string*

Tree domain-id

Description This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in *draft-ietf-bess-evpn-ipvpn-interworking*. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).

Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).

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In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:

Seg Len=1 / 65000:1:128

If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:

Seg Len=2 / 65000:2:70 / 65000:1:128

That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

resolution *keyword*

Synopsis Resolution options for routes

Context **configure** service vprn *string* bgp-ipvpn segment-routing-v6 *number* resolution *keyword*

Tree resolution

Options route-table, tunnel-table, fallback-tunnel-to-route-table

Default route-table

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

route-distinguisher *(string | keyword)*

Synopsis Route distinguisher

Context **configure** service vprn *string* bgp-ipvpn segment-routing-v6 *number* route-distinguisher *(string | keyword)*

Tree route-distinguisher

Description This command specifies a unique route distinguisher (RD) to be associated with each routing instance to identify the VPN to which the route belongs.

Alternatively, the system can automatically generate an RD based on the BGP automatic RD range configured at the **configure service system** level.

Options auto-rd

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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source-address *string*

Synopsis	Source IPv6 address
Context	**configure** service vprn *string* bgp-ipvpn segment-routing-v6 *number* source-address *string*
Tree	source-address
Description	When configured, this command specifies the source IPv6 address used in the SA field of the outer IPv6 header of the SRv6 encapsulated packet. When not configured, the source IPv6 address is inherited from the configuration of the global default address in the **router "base" segment-routing segment-routing-v6 source-address** context. A source IPv6 address must be configured in this context or in the base router context. The system does not check if the address entered is a valid local address.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

srv6

Synopsis	Enter the **srv6** context
Context	**configure** service vprn *string* bgp-ipvpn segment-routing-v6 *number* srv6
Tree	srv6
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

default-locator *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Default route locator
Context	**configure** service vprn *string* bgp-ipvpn segment-routing-v6 *number* srv6 default-locator *string*
Tree	default-locator
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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instance *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Segment Routing IPv6 instance
Context	**configure** service vprn *string* bgp-ipvpn segment-routing-v6 *number* srv6 instance *reference*
Tree	instance
Reference	**configure** service vprn *string* segment-routing-v6 *number*
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

vrf-export

Synopsis	Enable the **vrf-export** context
Context	**configure** service vprn *string* bgp-ipvpn segment-routing-v6 *number* vrf-export
Tree	vrf-export
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

policy *(policy-expr-string | string)*

Synopsis	Policy name
Context	**configure** service vprn *string* bgp-ipvpn segment-routing-v6 *number* vrf-export policy *(policy-expr-string | string)*
Tree	policy
Description	This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP). Each referenced object is either a policy logical expression or the name of a single policy. Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route. Only the first policy can have the maximum length and the rest can be up to 64 characters. Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.

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String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

vrf-import

Synopsis	Enable the **vrf-import** context
Context	**configure** service vprn *string* bgp-ipvpn segment-routing-v6 *number* vrf-import
Tree	vrf-import
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

policy *(policy-expr-string | string)*

Synopsis	Policy name
Context	**configure** service vprn *string* bgp-ipvpn segment-routing-v6 *number* vrf-import policy *(policy-expr-string | string)*
Tree	policy
Description	This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP). Each referenced object is either a policy logical expression or the name of a single policy. Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route. Only the first policy can have the maximum length and the rest can be up to 64 characters. Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.
String Length	1 to 255
Max. Instances	15

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Min. Instances	1
Notes	This element is ordered by the user.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

vrf-target

Synopsis	Enter the **vrf-target** context
Context	**configure** service vprn *string* bgp-ipvpn segment-routing-v6 *number* vrf-target
Tree	vrf-target
Description	Commands in this context configure the route target that is added to advertised routes or compared against received routes from other VRFs on the same or remote PE routers (via MP-BGP). BGP-VPN and EVPN-IFL routes imported using a VRF target configuration use the BGP preference value of 170 when imported from remote PE routers, or retain the protocol preference value of the exported route when imported from other VRFs in the same router. Configured VRF import or export policies override the VRF target policy.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

community *string*

Synopsis	Extended BGP community
Context	**configure** service vprn *string* bgp-ipvpn segment-routing-v6 *number* vrf-target community *string*
Tree	community
Description	This command configures an extended BGP community in the form type:x:y. Type can only be target and x and y are 16-bit integers.
String Length	10 to 28
Notes	The following elements are part of a choice: **community** or (**export-community** and **import-community**).
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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export-community *string*

Synopsis	Communities sent to remote PE neighbors
Context	**configure** service vprn *string* bgp-ipvpn segment-routing-v6 *number* vrf-target export-community *string*
Tree	export-community
String Length	10 to 28
Notes	The following elements are part of a choice: **community** or (**export-community** and **import-community**).
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

import-community *string*

Synopsis	Communities accepted from remote PE neighbors
Context	**configure** service vprn *string* bgp-ipvpn segment-routing-v6 *number* vrf-target import-community *string*
Tree	import-community
String Length	10 to 28
Notes	The following elements are part of a choice: **community** or (**export-community** and **import-community**).
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

bgp-shared-queue

Synopsis	Enable the **bgp-shared-queue** context
Context	**configure** service vprn *string* bgp-shared-queue
Tree	bgp-shared-queue
Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	Committed information rate for shared queue
Context	**configure** service vprn *string* bgp-shared-queue cir *(number | keyword)*
Tree	cir

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Range	0 to 100000000
Units	kilobps
Options	max
Default	4000
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	Peak information rate for shared queue
Context	**configure** service vprn *string* bgp-shared-queue pir *(number | keyword)*
Tree	pir
Range	1 to 100000000
Units	kilobps
Options	max
Default	4000
Introduced	16.0.R1
Platforms	All

bgp-vpn-backup

Synopsis	Enter the **bgp-vpn-backup** context
Context	**configure** service vprn *string* bgp-vpn-backup
Tree	bgp-vpn-backup
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Allow BGP-VPN to be used as backup for IPv4 prefixes
Context	**configure** service vprn *string* bgp-vpn-backup ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

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ipv6 *boolean*

Synopsis	Allow BGP-VPN to be used as backup for IPv6 prefixes
Context	**configure** service vprn *string* bgp-vpn-backup ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

carrier-carrier-vpn *boolean*

Synopsis	Allow VPRN service to support a Carrier Supporting Carrier model
Context	**configure** service vprn *string* carrier-carrier-vpn *boolean*
Tree	carrier-carrier-vpn
Default	false
Introduced	16.0.R1
Platforms	All

class-forwarding *boolean*

Synopsis	Allow packet forwarding based on forwarding class
Context	**configure** service vprn *string* class-forwarding *boolean*
Tree	class-forwarding
Default	false
Introduced	19.10.R1
Platforms	All

confederation

Synopsis	Enter the **confederation** context
Context	**configure** service vprn *string* confederation
Tree	confederation
Introduced	16.0.R1
Platforms	All

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confed-as-num *number*

Synopsis	Confederation number within an autonomous system
Context	**configure** service vprn *string* confederation confed-as-num *number*
Tree	confed-as-num
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

members [as-number] *number*

Synopsis	Add a list entry for **members**
Context	**configure** service vprn *string* confederation members *number*
Tree	members
Max. Instances	256
Introduced	16.0.R1
Platforms	All

[**as-number**] *number*

Synopsis	Confederation AS number
Context	**configure** service vprn *string* confederation members *number*
Tree	members
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

customer *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service customer ID

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Context	**configure** service vprn *string* customer *reference*
Tree	customer
Reference	**configure** service customer *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

d-path-length-ignore *boolean*

Synopsis	Enable D-PATH length ignore
Context	**configure** service vprn *string* d-path-length-ignore *boolean*
Tree	d-path-length-ignore
Description	When configured to **true**, the VPRN RTM ignores the D-PATH domain segment length for best path selection purposes (for routes in the VPRN). This allows the user to control whether the RTM considers the D-PATH length when comparing two VPN routes with different RDs. When configured to **false**, the router does not ignore the D-PATH domain segment length.
Default	false
Introduced	21.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dhcp-server

Synopsis	Enter the **dhcp-server** context
Context	**configure** service vprn *string* dhcp-server
Tree	dhcp-server

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Introduced	16.0.R1
Platforms	All

dhcpv4 [name] *string*

Synopsis	Enter the **dhcpv4** list instance
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string*
Tree	dhcpv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	DHCP server name
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string*
Tree	dhcpv4
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCP server
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* description *string*

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Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the **failover** context
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* failover
Tree	failover
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* failover admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* failover ignore-mclt-on-takeover *boolean*
Tree	ignore-mclt-on-takeover
Description	When configured to **true**, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire. When configured to **false**, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-client-lead-time *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* failover maximum-client-lead-time *number*
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

partner-down-delay *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* failover partner-down-delay *number*
Tree	partner-down-delay
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399

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Units	seconds
Default	86399
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer [address] *reference*

Synopsis	Enter the **peer** list instance
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* failover peer *reference*
Tree	peer
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**address**] *reference*

Synopsis	IP address of the failover peer
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* failover peer *reference*
Tree	peer
Reference	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* failover peer *reference* sync-tag *string*
Tree	sync-tag
String Length	1 to 32

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

startup-wait-time *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* failover startup-wait-time *number*
Tree	startup-wait-time
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

force-renews *boolean*

Synopsis	Send FORCERENEW messages to force renewals of leases
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* force-renews *boolean*
Tree	force-renews
Description	When configured to **true**, FORCERENEW messages are enabled for DHCP.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-hold

Synopsis	Enter the **lease-hold** context

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Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* lease-hold
Tree	lease-hold
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

additional-scenarios

Synopsis	Enter the **additional-scenarios** context
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* lease-hold additional-scenarios
Tree	additional-scenarios
Description	Commands in this context configure additional types of leases or triggers that cause the system to hold up leases.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

internal-lease-ipsec *boolean*

Synopsis	Apply the lease hold timer to local IPsec clients
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* lease-hold additional-scenarios internal-lease-ipsec *boolean*
Tree	internal-lease-ipsec
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

solicited-release *boolean*

Synopsis	Apply lease hold timer for solicited releases
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* lease-hold additional-scenarios solicited-release *boolean*
Tree	solicited-release
Description	This command enables the server to hold up a lease even for a solicited release, for example, when the server receives a normal DHCP release message.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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time *number*

Synopsis	Lease hold time
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* lease-hold time *number*
Tree	time
Range	1 to 631152000
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool [pool-name] *string*

Synopsis	Enter the **pool** list instance
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string*
Tree	pool
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**pool-name**] *string*

Synopsis	DHCP server pool name
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string*
Tree	pool
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the **failover** context
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* failover
Tree	failover
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* failover admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* failover ignore-mclt-on-takeover *boolean*
Tree	ignore-mclt-on-takeover
Description	When configured to **true**, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire. When configured to **false**, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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maximum-client-lead-time *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* failover maximum-client-lead-time *number*
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

partner-down-delay *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* failover partner-down-delay *number*
Tree	partner-down-delay
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Units	seconds
Default	86399

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer [address] *reference*

Synopsis	Enter the **peer** list instance
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* failover peer *reference*
Tree	peer
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**address**] *reference*

Synopsis	IP address of the failover peer
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* failover peer *reference*
Tree	peer
Reference	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* failover peer *reference* sync-tag *string*
Tree	sync-tag
String Length	1 to 32

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

startup-wait-time *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* failover startup-wait-time *number*
Tree	startup-wait-time
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-lease-time *number*

Synopsis	Maximum lease time
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* max-lease-time *number*
Tree	max-lease-time
Range	10 to 315446399
Units	seconds
Default	864000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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min-lease-time *number*

Synopsis	Minimum lease time
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* min-lease-time *number*
Tree	min-lease-time
Range	10 to 315446399
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

minimum-free

Synopsis	Enter the **minimum-free** context
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* minimum-free
Tree	minimum-free
Description	Commands in this context specify the minimum number of free addresses in this pool.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

absolute *number*

Synopsis	Minimum number of free addresses in this pool or subnet
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* minimum-free absolute *number*
Tree	absolute
Range	0 to 255
Default	1
Notes	The following elements are part of a choice: **absolute** or **percent**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event-when-depleted *boolean*

Synopsis	Generate notification when addresses are depleted

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Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* minimum-free event-when-depleted *boolean*
Tree	event-when-depleted
Description	When configured to **true**, a system-generated event is generated when all available addresses in the pool or subnet of a local DHCP server are depleted. When configured to **false**, no action is taken when all available addresses in the pool or subnet of a local DHCP server are depleted.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

percent *number*

Synopsis	Minimum free addresses as a percentage
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* minimum-free percent *number*
Tree	percent
Range	0 to 100
Default	1
Notes	The following elements are part of a choice: **absolute** or **percent**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nak-non-matching-subnet *boolean*

Synopsis	Send NAK if no match for request address pool range
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* nak-non-matching-subnet *boolean*
Tree	nak-non-matching-subnet
Description	When configured to **true**, a NAK response when the local DHCPv4 server receives a DHCP request with option 50 (the client is trying to request a previously allocated message). If the address-allocation algorithm uses a pool that does not contain the requested address, the system returns the DHCP NAK. When configured to **false** or unconfigured, the system drops the DHCP packet.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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offer-time *number*

Synopsis	Time interval during which a DHCP offer remains valid
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* offer-time *number*
Tree	offer-time
Range	10 to 600
Units	seconds
Default	60
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the **options** context
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* options
Tree	options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [number] *(number | keyword)*

Synopsis	Enter the **option** list instance
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* options option *(number | keyword)*
Tree	option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**number**] *(number | keyword)*

Synopsis	DHCP option to send identification strings to client
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* options option *(number | keyword)*
Tree	option
Range	1 to 254

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Options	subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* options option *(number | keyword)* ascii-string *string*
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option as time duration
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* options option *(number | keyword)* duration *number*
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option.
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* options option *(number | keyword)* empty
Tree	empty

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Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* options option *(number | keyword)* hex-string *string*
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4-address *string*

Synopsis	DHCP option as a list of IPv4 addresses
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* options option *(number | keyword)* ipv4-address *string*
Tree	ipv4-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**. This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

netbios-node-type *keyword*

Synopsis	DHCP option as NetBIOS node type
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* options option *(number | keyword)* netbios-node-type *keyword*
Tree	netbios-node-type

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Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subnet [ipv4-prefix] *string*

Synopsis	Enter the **subnet** list instance
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* subnet *string*
Tree	subnet
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**ipv4-prefix**] *string*

Synopsis	IPv4 prefix for the subnet
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* subnet *string*
Tree	subnet
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address-range [start] *string* end *string*

Synopsis	Enter the **address-range** list instance
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* address-range *string* end *string*
Tree	address-range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**start**] *string*

Synopsis	Lower bound of the IP address range

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Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* address-range *string* end *string*
Tree	address-range
Description	This command specifies the start of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *string*

Synopsis	Upper bound of the IP address range
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* address-range *string* end *string*
Tree	address-range
Description	This command specifies the end of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover-control-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Failover control type for this range
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* address-range *string* end *string* failover-control-type *keyword*
Tree	failover-control-type
Options	local, remote, access-driven
Default	local
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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drain *boolean*

Synopsis	Prevent new lease assignment from this subnet
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* drain *boolean*
Tree	drain
Description	When configured to **true**, new leases cannot be assigned and existing leases are kept up until they are released. When configured to **false**, the subnet is active and new leases can be assigned.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

exclude-addresses [start] *string* end *string*

Synopsis	Add a list entry for **exclude-addresses**
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* exclude-addresses *string* end *string*
Tree	exclude-addresses
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**start**] *string*

Synopsis	Lower bound of the IP address range
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* exclude-addresses *string* end *string*
Tree	exclude-addresses
Description	This command specifies the start of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *string*

Synopsis	Upper bound of the IP address range

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Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* exclude-addresses *string* end *string*
Tree	exclude-addresses
Description	This command specifies the end of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-declined *number*

Synopsis	Maximum number of declined addresses allowed
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* maximum-declined *number*
Tree	maximum-declined
Max. Range	0 to 4294967295
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

minimum-free

Synopsis	Enter the **minimum-free** context
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* minimum-free
Tree	minimum-free
Description	Commands in this context specify the minimum number of free addresses in this pool.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

absolute *number*

Synopsis	Minimum number of free addresses in this pool or subnet
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* minimum-free absolute *number*
Tree	absolute

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Range	0 to 255
Default	1
Notes	The following elements are part of a choice: **absolute** or **percent**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event-when-depleted *boolean*

Synopsis	Generate notification when addresses are depleted
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* minimum-free event-when-depleted *boolean*
Tree	event-when-depleted
Description	When configured to **true**, a system-generated event is generated when all available addresses in the pool or subnet of a local DHCP server are depleted. When configured to **false**, no action is taken when all available addresses in the pool or subnet of a local DHCP server are depleted.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

percent *number*

Synopsis	Minimum free addresses as a percentage
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* minimum-free percent *number*
Tree	percent
Range	0 to 100
Default	1
Notes	The following elements are part of a choice: **absolute** or **percent**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the **options** context
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* options

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Tree	options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [number] *(number | keyword)*

Synopsis	Enter the **option** list instance
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* options option *(number | keyword)*
Tree	option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**number**] *(number | keyword)*

Synopsis	DHCP option to send identification strings to client
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* options option *(number | keyword)*
Tree	option
Range	1 to 254
Options	subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* options option *(number | keyword)* ascii-string *string*
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option as time duration
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* options option *(number | keyword)* duration *number*
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* options option *(number | keyword)* empty
Tree	empty
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* options option *(number | keyword)* hex-string *string*
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4-address *string*

Synopsis	DHCP option as a list of IPv4 addresses
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* options option *(number | keyword)* ipv4-address *string*
Tree	ipv4-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**. This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

netbios-node-type *keyword*

Synopsis	DHCP option as NetBIOS node type
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool *string* subnet *string* options option *(number | keyword)* netbios-node-type *keyword*
Tree	netbios-node-type
Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool-selection

Synopsis	Enter the **pool-selection** context
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool-selection
Tree	pool-selection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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use-gi-address

Synopsis	Enable the **use-gi-address** context
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool-selection use-gi-address
Tree	use-gi-address
Description	Commands in this context configure gateway interface (GI) address matching. When configured, the pool can be used for address matching even if a subnet is not found. If the local user database name is not used, addresses are provided only by GI. If a user must be blocked from getting an address, the server maps to a local user database and configures the user with no address. A pool can include multiple subnets. Since the GI is shared by multiple subnets in a subscriber interface, the pool can provide IP addresses from any of the subnets included when the GI is matched to one of its subnets. This allows a pool to be created that represents a sub-net.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scope *keyword*

Synopsis	GI address-matching scope
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool-selection use-gi-address scope *keyword*
Tree	scope
Options	subnet, pool
Default	subnet
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-pool-from-client

Synopsis	Enable the **use-pool-from-client** context
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool-selection use-pool-from-client
Tree	use-pool-from-client
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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delimiter *string*

Synopsis	Delimiter to combine primary and secondary pool names
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* pool-selection use-pool-from-client delimiter *string*
Tree	delimiter
Description	This command configures a single ASCII character that separates the pool names in DHCP vendor-specific option 82, which identifies the address pool to be used for this client.
String Length	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

Synopsis	Local user database for authentication
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* user-db *reference*
Tree	user-db
Reference	**configure** subscriber-mgmt local-user-db *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-identification *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	User identification method for the DHCP server
Context	**configure** service vprn *string* dhcp-server dhcpv4 *string* user-identification *keyword*
Tree	user-identification
Options	mac-circuit-id, duid, interface-id, interface-id-link-local, client-id, mac, circuit-id, remote-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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dhcpv6 [name] *string*

Synopsis	Enter the **dhcpv6** list instance
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string*
Tree	dhcpv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	DHCP server name
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string*
Tree	dhcpv6
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCP server
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-provisioned *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Auto-provision the pools of this server
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* auto-provisioned *boolean*
Tree	auto-provisioned

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Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

defaults

Synopsis	Enter the **defaults** context
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* defaults
Tree	defaults
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the **options** context
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* defaults options
Tree	options
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [number] *(number | keyword)*

Synopsis	Enter the **option** list instance
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* defaults options option *(number | keyword)*
Tree	option
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**number**] *(number | keyword)*

Synopsis	DHCP option to send as identification string
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* defaults options option *(number | keyword)*
Tree	option
Range	1 to 65535

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Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* defaults options option *(number | keyword)* ascii-string *string*
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-string *string*

Synopsis	DHCP option specified as a domain name
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* defaults options option *(number | keyword)* domain-string *string*
Tree	domain-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option specified as time
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* defaults options option *(number | keyword)* duration *number*
Tree	duration
Range	10 to 315446399

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Units	seconds
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* defaults options option *(number | keyword)* empty
Tree	empty
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* defaults options option *(number | keyword)* hex-string *string*
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* defaults options option *(number | keyword)* ipv6-address *string*
Tree	ipv6-address
Max. Instances	4

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Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**. This element is ordered by the user.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime *number*

Synopsis	Time this lease remains preferred
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* defaults preferred-lifetime *number*
Tree	preferred-lifetime
Description	This command configures the preferred lifetime of the IPv6 lease address or prefix. When the preferred lifetime expires, any derived addresses are deprecated. The preferred lifetime must be less than or equal to the valid lifetime. Each address or prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address/prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).
Range	300 to 315446399
Units	seconds
Default	3600
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rebind-time *number*

Synopsis	Rebind time for the lease
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* defaults rebind-time *number*
Tree	rebind-time
Description	This command configures the rebind time, known as T2, at which the client contacts the addressing authority to extend the lifetimes of its leases. The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew or reply message exchange to extend the lifetimes of any addresses in the IA.

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The client includes an IA option with all addresses or prefixes currently assigned to the IA in its renew message.

Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured rebind timer value should always be less than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.

Range	0 to 1209600
Units	seconds
Default	2880
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

renew-time *number*

Synopsis	Renew time for the lease
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* defaults renew-time *number*
Tree	renew-time
Description	This command configures the renew time, known as T1, at which the client makes a transition to the lease-renewal state. The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew/reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses/prefixes currently assigned to the IA in its renew message. Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured renew timer value should always be shorter than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.
Range	0 to 604800
Units	seconds
Default	1800
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *number*

Synopsis	Time for the lease to remain valid

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Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* defaults valid-lifetime *number*
Tree	valid-lifetime
Description	This command configures a valid lifetime for a DHCPv6 lease address or prefix. The valid lifetime is the length of time an address and prefix remains in the valid state. The valid lifetime must be greater than or equal to the preferred lifetime. When the valid lifetime expires, the address and prefix becomes invalid and must not be used in communications. RFC 2461 recommends a default value of 30 days. Each address and prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address and prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).
Range	300 to 315446399
Units	seconds
Default	86400
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the **failover** context
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* failover
Tree	failover
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* failover admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* failover ignore-mclt-on-takeover *boolean*
Tree	ignore-mclt-on-takeover
Description	When configured to **true**, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire. When configured to **false**, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-client-lead-time *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* failover maximum-client-lead-time *number*
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial

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	lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

partner-down-delay *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* failover partner-down-delay *number*
Tree	partner-down-delay
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Units	seconds
Default	86399
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer [address] *reference*

Synopsis	Enter the **peer** list instance
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* failover peer *reference*
Tree	peer
Max. Instances	1
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**address**] *reference*

Synopsis	IP address of the failover peer
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* failover peer *reference*
Tree	peer
Reference	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* failover peer *reference* sync-tag *string*
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

startup-wait-time *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* failover startup-wait-time *number*

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Tree	startup-wait-time
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-rapid-commit *boolean*

Synopsis	Ignore Rapid Commit option
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* ignore-rapid-commit *boolean*
Tree	ignore-rapid-commit
Description	When configured to **true**, the server ignores the Rapid Commit option sent by the client and uses the regular message exchange.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-id-mapping *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Map hosts within interface-to-prefix combinations
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* interface-id-mapping *boolean*
Tree	interface-id-mapping
Description	When configured to **true**, this command specifies an interface-mapping method that uses a combination of unique /64 prefixes and interface IDs. A /64 prefix is allocated to each interface ID, and all clients with the same interface ID are assigned an address from the prefix. This method is used for bridging clients in the same local loop and SAP, so that sharing the prefix allows communication to stay local. For SLAAC-based assignment, downstream neighbor discovery is automatically enabled to resolve the assigned address.
Default	false

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-hold

Synopsis	Enter the **lease-hold** context
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* lease-hold
Tree	lease-hold
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

additional-scenarios

Synopsis	Enter the **additional-scenarios** context
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* lease-hold additional-scenarios
Tree	additional-scenarios
Description	Commands in this context configure additional types of leases or triggers that cause the system to hold up leases.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

internal-lease-ipsec *boolean*

Synopsis	Apply the lease hold timer to local IPsec clients
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* lease-hold additional-scenarios internal-lease-ipsec *boolean*
Tree	internal-lease-ipsec
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

solicited-release *boolean*

Synopsis	Apply lease hold timer for solicited releases
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* lease-hold additional-scenarios solicited-release *boolean*

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Tree	solicited-release
Description	This command enables the server to hold up a lease even for a solicited release, for example, when the server receives a normal DHCP release message.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis	Lease hold time
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* lease-hold time *number*
Tree	time
Range	1 to 631152000
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-query *boolean*

Synopsis	Handle and reply to lease query messages
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* lease-query *boolean*
Tree	lease-query
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool [pool-name] *string*

Synopsis	Enter the **pool** list instance
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string*
Tree	pool
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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[**pool-name**] *string*

Synopsis	DHCP server pool name
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string*
Tree	pool
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delegated-prefix

Synopsis	Enter the **delegated-prefix** context
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* delegated-prefix
Tree	delegated-prefix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

length *number*

Synopsis	Prefix length for pool if unspecified by client
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* delegated-prefix length *number*
Tree	length
Range	48 to 127
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum *number*

Synopsis	Maximum delegated prefix length for this pool
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* delegated-prefix maximum *number*
Tree	maximum
Range	48 to 127

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Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

minimum *number*

Synopsis	Minimum delegated prefix length for this pool
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* delegated-prefix minimum *number*
Tree	minimum
Range	48 to 127
Default	48
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

exclude-prefix [ipv6-prefix] *string*

Synopsis	Add a list entry for **exclude-prefix**
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* exclude-prefix *string*
Tree	exclude-prefix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**ipv6-prefix**] *string*

Synopsis	IPv6 prefix to be excluded from available pool prefixes
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* exclude-prefix *string*

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Tree	exclude-prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the **failover** context
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* failover
Tree	failover
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* failover admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* failover ignore-mclt-on-takeover *boolean*
Tree	ignore-mclt-on-takeover
Description	When configured to **true**, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire. When configured to **false**, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.
Default	false

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-client-lead-time *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* failover maximum-client-lead-time *number*
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

partner-down-delay *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* failover partner-down-delay *number*
Tree	partner-down-delay
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.

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Range	0 to 86399
Units	seconds
Default	86399
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer [address] *reference*

Synopsis	Enter the **peer** list instance
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* failover peer *reference*
Tree	peer
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**address**] *reference*

Synopsis	IP address of the failover peer
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* failover peer *reference*
Tree	peer
Reference	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs

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Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* failover peer *reference* sync-tag *string*
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

startup-wait-time *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* failover startup-wait-time *number*
Tree	startup-wait-time
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the **options** context
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* options
Tree	options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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option [number] *(number | keyword)*

Synopsis	Enter the **option** list instance
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* options option *(number | keyword)*
Tree	option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**number**] *(number | keyword)*

Synopsis	DHCP option to send as identification string
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* options option *(number | keyword)*
Tree	option
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* options option *(number | keyword)* ascii-string *string*
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-string *string*

Synopsis	DHCP option specified as a domain name

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Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* options option *(number* | *keyword)* domain-string *string*
Tree	domain-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option specified as time
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* options option *(number* | *keyword)* duration *number*
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* options option *(number* | *keyword)* empty
Tree	empty
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string

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Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* options option *(number* | *keyword)* hex-string *string*
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* options option *(number* | *keyword)* ipv6-address *string*
Tree	ipv6-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**. This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix [ipv6-prefix] *string*

Synopsis	Enter the **prefix** list instance
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix *string*
Tree	prefix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**ipv6-prefix**] *string*

Synopsis	IPv6 prefix to be excluded from available pool prefixes
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix *string*
Tree	prefix

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drain *boolean*

Synopsis	No new leases can be assigned
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* drain *boolean*
Tree	drain
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover-control-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Failover control type for this range
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* failover-control-type *keyword*
Tree	failover-control-type
Options	local, remote, access-driven
Default	local
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the **options** context
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* options
Tree	options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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option [number] *(number | keyword)*

Synopsis	Enter the **option** list instance
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* options option *(number | keyword)*
Tree	option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**number**] *(number | keyword)*

Synopsis	DHCP option to send as identification string
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* options option *(number | keyword)*
Tree	option
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* options option *(number | keyword)* ascii-string *string*
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-string *string*

Synopsis	DHCP option specified as a domain name

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Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* options option *(number | keyword)* domain-string *string*
Tree	domain-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option specified as time
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* options option *(number | keyword)* duration *number*
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* options option *(number | keyword)* empty
Tree	empty
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string

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Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* options option *(number | keyword)* hex-string *string*
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* options option *(number | keyword)* ipv6-address *string*
Tree	ipv6-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**. This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime *number*

Synopsis	Time this lease remains preferred
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* preferred-lifetime *number*
Tree	preferred-lifetime
Description	This command configures the preferred lifetime of the IPv6 lease address or prefix. When the preferred lifetime expires, any derived addresses are deprecated. The preferred lifetime must be less than or equal to the valid lifetime. Each address or prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address/prefix without interruption. The lifetimes are transmitted from the

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	addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).
Range	300 to 315446399
Units	seconds
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length-threshold [prefix-length] *number*

Synopsis	Enter the **prefix-length-threshold** list instance
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* prefix-length-threshold *number*
Tree	prefix-length-threshold
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**prefix-length**] *number*

Synopsis	Delegated prefix length for pool thresholds
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* prefix-length-threshold *number*
Tree	prefix-length-threshold
Range	1 to 128
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

absolute *number*

Synopsis	Minimum number of free prefixes for this prefix length
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* prefix-length-threshold *number* absolute *number*
Tree	absolute
Range	1 to 4294967295

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Notes	The following elements are part of a choice: **absolute** or **percent**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event-when-depleted *boolean*

Synopsis	Generate a notification when this pool is depleted
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* prefix-length-threshold *number* event-when-depleted *boolean*
Tree	event-when-depleted
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

percent *number*

Synopsis	Minimum percentage of free prefixes for prefix length
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* prefix-length-threshold *number* percent *number*
Tree	percent
Range	1 to 100
Notes	The following elements are part of a choice: **absolute** or **percent**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-type

Synopsis	Enter the **prefix-type** context
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* prefix-type
Tree	prefix-type
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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pd *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allocate IA-PD prefixes from this prefix pool
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* prefix-type pd *boolean*
Tree	pd
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-host *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allocate IA-NA or SLAAC prefixes from this prefix pool
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* prefix-type wan-host *boolean*
Tree	wan-host
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rebind-time *number*

Synopsis	Rebind time for the lease
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* rebind-time *number*
Tree	rebind-time
Description	This command configures the rebind time, known as T2, at which the client contacts the addressing authority to extend the lifetimes of its leases. The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew or reply message exchange to extend the lifetimes of any addresses in the IA.

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The client includes an IA option with all addresses or prefixes currently assigned to the IA in its renew message.

Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured rebind timer value should always be less than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.

Range	0 to 1209600
Units	seconds
Default	2880
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

renew-time *number*

Synopsis	Renew time for the lease
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* renew-time *number*
Tree	renew-time
Description	This command configures the renew time, known as T1, at which the client makes a transition to the lease-renewal state. The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew/reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses/prefixes currently assigned to the IA in its renew message. Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured renew timer value should always be shorter than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.
Range	0 to 604800
Units	seconds
Default	1800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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valid-lifetime *number*

Synopsis	Time for the lease to remain valid
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix *string* valid-lifetime *number*
Tree	valid-lifetime
Description	This command configures a valid lifetime for a DHCPv6 lease address or prefix. The valid lifetime is the length of time an address and prefix remains in the valid state. The valid lifetime must be greater than or equal to the preferred lifetime. When the valid lifetime expires, the address and prefix becomes invalid and must not be used in communications. RFC 2461 recommends a default value of 30 days. Each address and prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address and prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).
Range	300 to 315446399
Units	seconds
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length-threshold [prefix-length] *number*

Synopsis	Enter the **prefix-length-threshold** list instance
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix-length-threshold *number*
Tree	prefix-length-threshold
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**prefix-length**] *number*

Synopsis	Delegated prefix length for pool thresholds

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Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix-length-threshold *number*
Tree	prefix-length-threshold
Range	1 to 128
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event-when-depleted *boolean*

Synopsis	Generate a notification when this pool is depleted
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix-length-threshold *number* event-when-depleted *boolean*
Tree	event-when-depleted
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

minimum-free-percent *number*

Synopsis	Percentage of free prefixes for this prefix length
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool *string* prefix-length-threshold *number* minimum-free-percent *number*
Tree	minimum-free-percent
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool-selection

Synopsis	Enter the **pool-selection** context
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool-selection
Tree	pool-selection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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use-link-address

Synopsis	Enable the **use-link-address** context
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool-selection use-link-address
Tree	use-link-address
Description	This command configures the local pool selection for DHCPv6 address or prefix assignment to use the link address. When configured, the selected pool contains a prefix covering the link address.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scope *keyword*

Synopsis	Scope of the IP address selection
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool-selection use-link-address scope *keyword*
Tree	scope
Options	subnet, pool
Default	subnet
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-pool-from-client

Synopsis	Enable the **use-pool-from-client** context
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool-selection use-pool-from-client
Tree	use-pool-from-client
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delimiter *string*

Synopsis	Delimiter to combine primary and secondary pool names
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* pool-selection use-pool-from-client delimiter *string*
Tree	delimiter

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Description	This command configures a single ASCII character that separates the pool names in DHCP vendor-specific option 82, which identifies the address pool to be used for this client.
String Length	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server-id

Synopsis	Enter the **server-id** context
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* server-id
Tree	server-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-enterprise

Synopsis	Enter the **duid-enterprise** context
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* server-id duid-enterprise
Tree	duid-enterprise
Notes	The following elements are part of a choice: **duid-enterprise** or **duid-link-local**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DUID enterprise server ID specified as an ASCII string
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* server-id duid-enterprise ascii-string *string*
Tree	ascii-string
String Length	1 to 58
Notes	The following elements are part of a choice: **ascii-string** or **hex-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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hex-string *string*

Synopsis	DUID enterprise server ID specified as a hex string
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* server-id duid-enterprise hex-string *string*
Tree	hex-string
String Length	1 to 118
Notes	The following elements are part of a choice: **ascii-string** or **hex-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-link-local

Synopsis	Derive DUID server ID from a system link-layer address
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* server-id duid-link-local
Tree	duid-link-local
Notes	The following elements are part of a choice: **duid-enterprise** or **duid-link-local**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-identification *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	User identification method for the DHCP server
Context	**configure** service vprn *string* dhcp-server dhcpv6 *string* user-identification *keyword*
Tree	user-identification
Options	mac-circuit-id, duid, interface-id, interface-id-link-local, client-id, mac, circuit-id, remote-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dns

Synopsis	Enable the **dns** context
Context	**configure** service vprn *string* dns

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Tree	dns
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of DNS
Context	**configure** service vprn *string* dns admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

default-domain *string*

Synopsis	Domain name added in DNS retries
Context	**configure** service vprn *string* dns default-domain *string*
Tree	default-domain
Description	This command configures the DNS domain name to be added in DNS retries when a DNS query is not replied or an empty DNS reply is received. The name can contain only alphabetical characters (A-Z), numeric characters (0-9), the minus sign (-), and the period (.).
String Length	1 to 255
Introduced	20.2.R1
Platforms	All

ipv4-source-address *(keyword | ipv4-unicast-address)*

Synopsis	Source address to contact an IPv4 DNS server
Context	**configure** service vprn *string* dns ipv4-source-address *(keyword | ipv4-unicast-address)*
Tree	ipv4-source-address
Options	use-interface-ip
Default	use-interface-ip
Introduced	16.0.R1

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Platforms	All

ipv6-source-address *(keyword | ipv6-unicast-address)*

Synopsis	Source address to contact an IPv6 DNS server
Context	**configure** service vprn *string* dns ipv6-source-address *(keyword | ipv6-unicast-address)*
Tree	ipv6-source-address
Options	use-interface-ip
Default	use-interface-ip
Introduced	16.0.R1
Platforms	All

server *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	DNS server used for DNS name resolution
Context	**configure** service vprn *string* dns server *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	server
Max. Instances	3
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

ecmp *number*

Synopsis	Maximum equal-cost routes for routing table instance
Context	**configure** service vprn *string* ecmp *number*
Tree	ecmp
Description	This command configures ECMP and defines the number of routes for path sharing. ECMP can be used only for routes learned with the same preference and the same protocol. If available ECMP routes at the best preference exceed the maximum ECMP routes allowed, the system selects the route using the following criteria: **1.** The system selects the lowest next hop router ID. **2.** If the next hop goes to the same neighbor, the system selects the next hop with the lowest interface index.

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Range	1 to 64
Default	1
Introduced	16.0.R1
Platforms	All

ecmp-unequal-cost *boolean*

Synopsis	Enable ECMP unequal cost capability
Context	**configure** service vprn *string* ecmp-unequal-cost *boolean*
Tree	ecmp-unequal-cost
Default	false
Introduced	19.7.R1
Platforms	All

entropy-label *boolean*

Synopsis	Use entropy label
Context	**configure** service vprn *string* entropy-label *boolean*
Tree	entropy-label
Description	When configured to **true**, this command enables the use of entropy labels. The entropy label and indicator (EL/ELI) are inserted on relevant packets. Applicable packets are those for which at least one LSP in the stack at the far end has advertised the entropy-label capability. These LSPs are in LDP or RSVP tunnels used by an IGP or BGP shortcut. If the tunnel is of type RSVP, the entropy-label capability must also be enabled under the **configure router mpls** or **configure router mpls lsp** context. This command also results in other traffic that is forwarded over an LDP or RSVP LSP for which this router is the LER, and for which there is no explicit service endpoint on this router, to have the EL/ELI enabled, subject to the LSP far-end advertising entropy-label-capability. An example of such traffic includes packets arriving on a stitched LDP LSP forwarded over an RSVP LSP. The entropy label and the hash label features are mutually exclusive. The entropy label cannot be configured on a spoke SDP or service where the hash label feature has already been configured. When configured to **false**, the use of entropy labels is disabled.
Default	false
Introduced	16.0.R1
Platforms	All

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eth-cfm

Synopsis	Enter the **eth-cfm** context
Context	**configure** service vprn *string* eth-cfm
Tree	eth-cfm
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

export-inactive-bgp *boolean*

Synopsis	Export preferred BGP route even if inactive
Context	**configure** service vprn *string* export-inactive-bgp *boolean*
Tree	export-inactive-bgp
Description	When configured to **true**, the preferred BGP route learned by a VPRN is exported as the VPN-IP route even if it is inactive in the route table because a preferred BGP VPRN route from another PE is present. This overrides the default state in which the VPRN cannot export an inactive BGP route. For the BGP route to be exported, the VRF export policy must accept it. This command applies to both MPLS VPN and SRv6 VPN routes. In SRv6 VPN routes the advertised instruction is an End.DT, while in MPLS VPN routes the advertised label is a per-next-hop label.This “best-external” type of route advertisement is useful in active/standby multi-homing scenarios because it ensures that all PEs know about the backup path provided by the standby PE. When configured to **false**, the preferred BGP route is not exported if it is inactive.
Default	false
Introduced	16.0.R1
Platforms	All

export-inactive-bgp-enhanced *boolean*

Synopsis	Export best BGP route when better non-BGP route present
Context	**configure** service vprn *string* export-inactive-bgp-enhanced *boolean*
Tree	export-inactive-bgp-enhanced
Description	When configured to **true**, the router allows a BGP route that is inactive (because a better non-BGP route for the same prefix is present) to be exportable as a VPN-IP route. A BGP route learned from a VPRN BGP peer is exportable as a VPN-IP route, only if it is the best route for the prefix and is installed in the route table of the VPRN. If the **export-inactive-bgp** command is **true** in the VPRN configuration, this rule is relaxed, and the best inactive VPRN BGP route is exportable as a VPN-IP route, provided that the active installed route for the prefix is an imported VPN-IP route.

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The rule described in the preceding paragraph can be relaxed even further by configuring this command to **true**. When this command is **true**, the best inactive VPRN BGP route (best amongst all routes received from all CEs) is exportable as a VPN-IP route, regardless of the route type of the active installed route.

The configuration of this command overrides the **export-inactive-bgp** command. If this command is **true**, the **export-inactive-bgp** command does not need to be **true**.

When configured to **false**, the router disables allowing an inactive BGP route in the presence of a better non-BGP route to be exportable as a VPN-IP route.

Default	false
Introduced	23.7.R1
Platforms	All

fib-priority *keyword*

Synopsis	FIB priority for VPRN BGP routes
Context	**configure** service vprn *string* fib-priority *keyword*
Tree	fib-priority
Options	standard, high
Default	standard
Introduced	16.0.R1
Platforms	All

firewall

Synopsis	Enter the **firewall** context
Context	**configure** service vprn *string* firewall
Tree	firewall
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

domain [name] *string*

Synopsis	Enter the **domain** list instance
Context	**configure** service vprn *string* firewall domain *string*
Tree	domain
Max. Instances	1024

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Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Firewall domain name
Context	**configure** service vprn *string* firewall domain *string*
Tree	domain
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the firewall domain
Context	**configure** service vprn *string* firewall domain *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcpv6-server

Synopsis	Enter the **dhcpv6-server** context
Context	**configure** service vprn *string* firewall domain *string* dhcpv6-server
Tree	dhcpv6-server
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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name *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DHCPv6 server name
Context	**configure** service vprn *string* firewall domain *string* dhcpv6-server name *string*
Tree	name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router name
Context	**configure** service vprn *string* firewall domain *string* dhcpv6-server router-instance *string*
Tree	router-instance
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group for this domain
Context	**configure** service vprn *string* firewall domain *string* nat-group *reference*
Tree	nat-group
Reference	**configure** isa nat-group *number*
Notes	The following elements are part of a mandatory choice: **nat-group** or **wlan-gw-group**.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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prefix [ip-prefix] *string*

Synopsis	Enter the **prefix** list instance
Context	**configure** service vprn *string* firewall domain *string* prefix *string*
Tree	prefix
Max. Instances	4096
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**ip-prefix**] *string*

Synopsis	IP prefix and prefix length for the domain firewall
Context	**configure** service vprn *string* firewall domain *string* prefix *string*
Tree	prefix
Description	This command configures a prefix for which firewall functionality applies within the domain. Prefixes cannot be shared or duplicated across multiple domains in the same routing context. A domain can contain multiple prefixes.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* firewall domain *string* prefix *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

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Synopsis	WLAN GW group used for NAT
Context	**configure** service vprn *string* firewall domain *string* wlan-gw-group *reference*
Tree	wlan-gw-group
Reference	**configure** isa wlan-gw-group *number*
Notes	The following elements are part of a mandatory choice: **nat-group** or **wlan-gw-group**.
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

flowspec

Synopsis	Enter the **flowspec** context
Context	**configure** service vprn *string* flowspec
Tree	flowspec
Introduced	16.0.R1
Platforms	All

filter-cam-type *keyword*

Synopsis	Filter policy type for FlowSpec embedding
Context	**configure** service vprn *string* flowspec filter-cam-type *keyword*
Tree	filter-cam-type
Description	This command specifies the filter type that is required to embed FlowSpec entries. The filter type defines the match criteria that are available in the filter policy.
Options	normal, packet-length
Default	normal
Introduced	20.7.R1
Platforms	All

ip-filter-max-size *number*

Synopsis	Maximum number of flowspec rule entries in IPv4 filter
Context	**configure** service vprn *string* flowspec ip-filter-max-size *number*
Tree	ip-filter-max-size
Description	This command configures the maximum number of IPv4 flowspec routes, or rules, that can be entered in the auto-created embedded filter, fSpec-X. Flowspec filter entries

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embedded in a filter policy in this routing instance will use filter entries from the range between the embedding offset and (offset + ip-filter-max-size – 1).

The sum of the maximum-size value and the highest offset in any IPv4 filter that embeds IPv4 flowspec rules from this routing instance (excluding filters that embed at offset 262143) must not exceed 262143.

The maximum size can be adjusted up or down at any time. If the current number of IPv4 flowspec rules is greater than the new maximum, the extra rules are removed immediately but retained in the BGP RIB. If the limit is increased, new rules are programmed only as they are received in new BGP updates.

Range	0 to 262143
Default	512
Introduced	16.0.R1
Platforms	All

ipv6-filter-max-size *number*

Synopsis	Maximum number of flowspec rule entries in IPv6 filter
Context	**configure** service vprn *string* flowspec ipv6-filter-max-size *number*
Tree	ipv6-filter-max-size
Description	This command configures the maximum number of IPv6 flowspec routes or rules that can be embedded into an ingress IPv6 filter policy for a specified routing instance. Flowspec filter entries embedded in a filter policy in this routing instance will use filter entries from the range between the embedding offset and (offset + ip-filter-max-size – 1). The sum of the maximum-size value and the highest offset in any IPv6 filter that embeds IPv6 flowspec rules from this routing instance (excluding filters that embed at offset 262143) must not exceed 262143. The maximum size can be adjusted up or down at any time. If the current number of IPv6 flowspec rules is greater than the new maximum, the extra rules are removed immediately but retained in the BGP RIB. If the limit is increased, new rules are programmed only as they are received in new BGP updates.
Range	0 to 262143
Default	512
Introduced	16.0.R1
Platforms	All

grt-leaking

Synopsis	Enter the **grt-leaking** context
Context	**configure** service vprn *string* grt-leaking

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Tree	grt-leaking
Introduced	16.0.R1
Platforms	All

allow-local-management *boolean*

Synopsis	Enable management traffic
Context	**configure** service vprn *string* grt-leaking allow-local-management *boolean*
Tree	allow-local-management
Description	When configured to **true**, this command enables the support of specific management protocols over VPRN interfaces that terminate on Base routing context IPv4 and IPv6 interface addresses, including Base loopback and system addresses. This command does not control the support for management protocols terminating on VPRN interfaces directly.
Default	false
Introduced	16.0.R1
Platforms	All

export-grt

Synopsis	Enter the **export-grt** context
Context	**configure** service vprn *string* grt-leaking export-grt
Tree	export-grt
Introduced	16.0.R1
Platforms	All

policy-name *(policy-expr-string | string)*

Synopsis	Route policy name or policy logical expression
Context	**configure** service vprn *string* grt-leaking export-grt policy-name *(policy-expr-string | string)*
Tree	policy-name
String Length	1 to 255
Max. Instances	5
Notes	This element is ordered by the user.

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Introduced	16.0.R1
Platforms	All

export-limit *number*

Synopsis	Maximum number of routes exported from VRF to GRT
Context	**configure** service vprn *string* grt-leaking export-limit *number*
Tree	export-limit
Range	0 to 1000
Default	5
Introduced	16.0.R1
Platforms	All

export-v6-limit *number*

Synopsis	Maximum number of IPv6 routes exported from VPRN to GRT
Context	**configure** service vprn *string* grt-leaking export-v6-limit *number*
Tree	export-v6-limit
Range	0 to 1000
Default	5
Introduced	16.0.R1
Platforms	All

grt-lookup *boolean*

Synopsis	Enable global route table lookup
Context	**configure** service vprn *string* grt-leaking grt-lookup *boolean*
Tree	grt-lookup
Default	false
Introduced	16.0.R1
Platforms	All

import-grt

Synopsis	Enter the **import-grt** context

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Context	**configure** service vprn *string* grt-leaking import-grt
Tree	import-grt
Introduced	16.0.R4
Platforms	All

policy-name *(policy-expr-string | string)*

Synopsis	Route policy name or policy logical expression
Context	**configure** service vprn *string* grt-leaking import-grt policy-name *(policy-expr-string | string)*
Tree	policy-name
String Length	1 to 255
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

gsmp

Synopsis	Enter the **gsmp** context
Context	**configure** service vprn *string* gsmp
Tree	gsmp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of GSMP
Context	**configure** service vprn *string* gsmp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

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group [name] *string*

Synopsis	Enter the **group** list instance
Context	**configure** service vprn *string* gsmp group *string*
Tree	group
Max. Instances	1024
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	GSMP group name
Context	**configure** service vprn *string* gsmp group *string*
Tree	group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the GSMP group
Context	**configure** service vprn *string* gsmp group *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

ancp

Synopsis	Enter the **ancp** context
Context	**configure** service vprn *string* gsmp group *string* ancp
Tree	ancp

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Introduced	16.0.R1
Platforms	All

dynamic-topology-discovery *boolean*

Synopsis	Enable the ANCP dynamic topology discovery capability
Context	**configure** service vprn *string* gsmp group *string* ancp dynamic-topology-discovery *boolean*
Tree	dynamic-topology-discovery
Default	true
Introduced	16.0.R1
Platforms	All

oam *boolean*

Synopsis	Enable GSMP ANCP OAM capability at startup of GSMP connection
Context	**configure** service vprn *string* gsmp group *string* ancp oam *boolean*
Tree	oam
Default	false
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* gsmp group *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

hold-multiplier *number*

Synopsis	Hold-multiplier for the GSMP connections in this group
Context	**configure** service vprn *string* gsmp group *string* hold-multiplier *number*
Tree	hold-multiplier

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Range	1 to 100
Default	3
Introduced	16.0.R1
Platforms	All

idle-filter *boolean*

Synopsis	Filter ANCP messages from IDLE DSL lines
Context	**configure** service vprn *string* gsmp group *string* idle-filter *boolean*
Tree	idle-filter
Default	false
Introduced	16.0.R1
Platforms	All

keepalive *number*

Synopsis	Keepalive value for the GSMP connections in this group
Context	**configure** service vprn *string* gsmp group *string* keepalive *number*
Tree	keepalive
Range	1 to 25
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

neighbor [remote-address] *string*

Synopsis	Enter the **neighbor** list instance
Context	**configure** service vprn *string* gsmp group *string* neighbor *string*
Tree	neighbor
Introduced	16.0.R1
Platforms	All

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[**remote-address**] *string*

Synopsis	GSMP neighbor remote IP address
Context	**configure** service vprn *string* gsmp group *string* neighbor *string*
Tree	neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the GSMP neighbor
Context	**configure** service vprn *string* gsmp group *string* neighbor *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* gsmp group *string* neighbor *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

local-address *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Restrict connections to this local address only within the service running ANCP
Context	**configure** service vprn *string* gsmp group *string* neighbor *string* local-address *string*
Tree	local-address

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Introduced	16.0.R1
Platforms	All

priority-marking

WARNING:
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Synopsis	Enter the **priority-marking** context
Context	**configure** service vprn *string* gsmp group *string* neighbor *string* priority-marking
Tree	priority-marking
Introduced	16.0.R1
Platforms	All

dscp *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DSCP that is used while remarking the in profile packets
Context	**configure** service vprn *string* gsmp group *string* neighbor *string* priority-marking dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	The following elements are part of a choice: **dscp** or **prec**.
Introduced	16.0.R1
Platforms	All

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prec *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Precedence priority marking
Context	**configure** service vprn *string* gsmp group *string* neighbor *string* priority-marking prec *number*
Tree	prec
Range	0 to 7
Notes	The following elements are part of a choice: **dscp** or **prec**.
Introduced	16.0.R1
Platforms	All

persistency *boolean*

Synopsis	Store DSL line information when the GSMP connection terminates
Context	**configure** service vprn *string* gsmp group *string* persistency *boolean*
Tree	persistency
Default	false
Introduced	16.0.R1
Platforms	All

gtp

Synopsis	Enter the **gtp** context
Context	**configure** service vprn *string* gtp
Tree	gtp
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

s11

Synopsis	Enter the **s11** context
Context	**configure** service vprn *string* gtp s11
Tree	s11

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Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface [interface-name] *reference*

Synopsis	Enter the **interface** list instance
Context	**configure** service vprn *string* gtp s11 interface *reference*
Tree	interface
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**interface-name**] *reference*

Synopsis	Interface name
Context	**configure** service vprn *string* gtp s11 interface *reference*
Tree	interface
Reference	**configure** service vprn *string* interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

apn-policy *reference*

Synopsis	Access Point Name (APN) policy for the S11 interface
Context	**configure** service vprn *string* gtp s11 interface *reference* apn-policy *reference*
Tree	apn-policy
Reference	**configure** subscriber-mgmt gtp apn-policy *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile-map

Synopsis	Enter the **peer-profile-map** context
Context	**configure** service vprn *string* gtp s11 peer-profile-map
Tree	peer-profile-map

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Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix [peer-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **prefix** list instance
Context	**configure** service vprn *string* gtp s11 peer-profile-map prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**peer-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP prefix and prefix length of the subnet
Context	**configure** service vprn *string* gtp s11 peer-profile-map prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile *reference*

Synopsis	Peer profile used for peers in this prefix
Context	**configure** service vprn *string* gtp s11 peer-profile-map prefix *(ipv4-prefix | ipv6-prefix)* peer-profile *reference*
Tree	peer-profile
Reference	**configure** subscriber-mgmt gtp peer-profile *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

upf-data-endpoint

Synopsis	Enable the **upf-data-endpoint** context
Context	**configure** service vprn *string* gtp upf-data-endpoint

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Tree	upf-data-endpoint
Description	Commands in this context configure a GTP-U service endpoint used by BNG CUPS FWA sessions.
Introduced	21.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

fpe *reference*

Synopsis	FPE used to encapsulate and decapsulate GTP-U traffic
Context	**configure** service vprn *string* gtp upf-data-endpoint fpe *reference*
Tree	fpe
Reference	**configure** fwd-path-ext fpe *number*
Notes	This element is mandatory.
Introduced	21.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface *reference*

Synopsis	Interface on which the GTP-U packets terminate
Context	**configure** service vprn *string* gtp upf-data-endpoint interface *reference*
Tree	interface
Reference	**configure** service vprn *string* interface *string*
Notes	This element is mandatory.
Introduced	21.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

uplink

Synopsis	Enable the **uplink** context
Context	**configure** service vprn *string* gtp uplink
Tree	uplink
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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apn *string*

Synopsis	Network Identifier part of APN
Context	**configure** service vprn *string* gtp uplink apn *string*
Tree	apn
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

pdn-type *keyword*

Synopsis	Default 3GPP PDN in GTP
Context	**configure** service vprn *string* gtp uplink pdn-type *keyword*
Tree	pdn-type
Options	ipv4, ipv6, ipv4v6
Default	ipv4
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile-map

Synopsis	Enter the **peer-profile-map** context
Context	**configure** service vprn *string* gtp uplink peer-profile-map
Tree	peer-profile-map
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix [peer-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **prefix** list instance
Context	**configure** service vprn *string* gtp uplink peer-profile-map prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**peer-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP prefix and prefix length of the subnet
Context	**configure** service vprn *string* gtp uplink peer-profile-map prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile *reference*

Synopsis	Peer profile name
Context	**configure** service vprn *string* gtp uplink peer-profile-map prefix *(ipv4-prefix | ipv6-prefix)* peer-profile *reference*
Tree	peer-profile
Reference	**configure** subscriber-mgmt gtp peer-profile *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

hash-label *boolean*

Synopsis	Include hash label
Context	**configure** service vprn *string* hash-label *boolean*
Tree	hash-label
Default	false
Introduced	16.0.R1
Platforms	All

igmp

Synopsis	Enable the **igmp** context
Context	**configure** service vprn *string* igmp
Tree	igmp
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of IGMP
Context	**configure** service vprn *string* igmp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

forwarding-group-interface forwarding-service *string* group-interface-name *reference*

Synopsis	Enter the **forwarding-group-interface** list instance
Context	**configure** service vprn *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference*
Tree	forwarding-group-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

forwarding-service *string*

Synopsis	Forwarding service for a subscriber interface in a retailer context
Context	**configure** service vprn *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference*
Tree	forwarding-group-interface
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface-name *reference*

Synopsis	Group interface name
Context	**configure** service vprn *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference*
Tree	forwarding-group-interface

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Reference	**configure** service vprn *string* subscriber-interface *string* group-interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of IGMP
Context	**configure** service vprn *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	**configure** service vprn *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* import-policy *reference*
Tree	import-policy
Description	This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option. When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	**configure** service vprn *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* maximum-number-group-sources *number*

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Tree	maximum-number-group-sources
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	**configure** service vprn *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	**configure** service vprn *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* maximum-number-sources *number*
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mcac

Synopsis	Enter the **mcac** context
Context	**configure** service vprn *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* mcac
Tree	mcac
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bandwidth

Synopsis	Enter the **bandwidth** context
Context	**configure** service vprn *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mandatory *(number | keyword)*

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	**configure** service vprn *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* mcac bandwidth mandatory *(number | keyword)*
Tree	mandatory
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

total *(number | keyword)*

Synopsis	Maximum allowed bandwidth
Context	**configure** service vprn *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* mcac bandwidth total *(number | keyword)*
Tree	total
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	**configure** service vprn *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* mcac interface-policy *reference*
Tree	interface-policy
Reference	**configure** mcac interface-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	Multicast CAC policy name
Context	**configure** service vprn *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* mcac policy *reference*
Tree	policy
Description	This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment. Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode. If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect. Hierarchical MCAC (HMCAC) is supported on two levels simultaneously: • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).
Reference	**configure** mcac policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** service vprn *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* query-interval *number*

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Tree	query-interval
Range	2 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	**configure** service vprn *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* query-last-member-interval *number*
Tree	query-last-member-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	**configure** service vprn *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* query-response-interval *number*
Tree	query-response-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-source-address *string*

Synopsis	Source address for IGMP queries
Context	**configure** service vprn *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* query-source-address *string*
Tree	query-source-address
Description	This command configures the query source IP address for the group interface. This IP address overrides the source IP address configured at the router level.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	**configure** service vprn *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* router-alert-check *boolean*
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-hosts-only *boolean*

Synopsis	Allow IGMP traffic from known hosts only
Context	**configure** service vprn *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* sub-hosts-only *boolean*
Tree	sub-hosts-only
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subnet-check *boolean*

Synopsis	Allow subnet checking
Context	**configure** service vprn *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* subnet-check *boolean*
Tree	subnet-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis	IGMP protocol version
Context	**configure** service vprn *string* igmp forwarding-group-interface forwarding-service *string* group-interface-name *reference* version *keyword*
Tree	version
Options	1, 2, 3

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Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-if-query-source-address *string*

Synopsis	Default query-source address for all group interfaces
Context	**configure** service vprn *string* igmp group-if-query-source-address *string*
Tree	group-if-query-source-address
Introduced	16.0.R1
Platforms	All

group-interface [group-interface-name] *reference*

Synopsis	Enter the **group-interface** list instance
Context	**configure** service vprn *string* igmp group-interface *reference*
Tree	group-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**group-interface-name**] *reference*

Synopsis	Group interface name
Context	**configure** service vprn *string* igmp group-interface *reference*
Tree	group-interface
Reference	**configure** service vprn *string* subscriber-interface *string* group-interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of IGMP
Context	**configure** service vprn *string* igmp group-interface *reference* admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	**configure** service vprn *string* igmp group-interface *reference* import-policy *reference*
Tree	import-policy
Description	This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option. When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	**configure** service vprn *string* igmp group-interface *reference* maximum-number-group-sources *number*
Tree	maximum-number-group-sources
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface

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Context	**configure** service vprn *string* igmp group-interface *reference* maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	**configure** service vprn *string* igmp group-interface *reference* maximum-number-sources *number*
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mcac

Synopsis	Enter the **mcac** context
Context	**configure** service vprn *string* igmp group-interface *reference* mcac
Tree	mcac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bandwidth

Synopsis	Enter the **bandwidth** context
Context	**configure** service vprn *string* igmp group-interface *reference* mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mandatory *(number | keyword)*

Synopsis	Pre-reserved bandwidth for all mandatory channels

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Context	**configure** service vprn *string* igmp group-interface *reference* mcac bandwidth mandatory *(number | keyword)*
Tree	mandatory
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

total *(number | keyword)*

Synopsis	Maximum allowed bandwidth
Context	**configure** service vprn *string* igmp group-interface *reference* mcac bandwidth total *(number | keyword)*
Tree	total
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	**configure** service vprn *string* igmp group-interface *reference* mcac interface-policy *reference*
Tree	interface-policy
Reference	**configure** mcac interface-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	Multicast CAC policy name
Context	**configure** service vprn *string* igmp group-interface *reference* mcac policy *reference*
Tree	policy

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Description	This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment. Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode. If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect. Hierarchical MCAC (HMCAC) is supported on two levels simultaneously: • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).
Reference	**configure** mcac policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** service vprn *string* igmp group-interface *reference* query-interval *number*
Tree	query-interval
Range	2 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	**configure** service vprn *string* igmp group-interface *reference* query-last-member-interval *number*
Tree	query-last-member-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	**configure** service vprn *string* igmp group-interface *reference* query-response-interval *number*
Tree	query-response-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-source-address *string*

Synopsis	Source address for IGMP queries
Context	**configure** service vprn *string* igmp group-interface *reference* query-source-address *string*
Tree	query-source-address
Description	This command configures the query source IP address for the group interface. This IP address overrides the source IP address configured at the router level.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	**configure** service vprn *string* igmp group-interface *reference* router-alert-check *boolean*
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-hosts-only *boolean*

Synopsis	Allow IGMP traffic from known hosts only
Context	**configure** service vprn *string* igmp group-interface *reference* sub-hosts-only *boolean*
Tree	sub-hosts-only
Default	true
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subnet-check *boolean*

Synopsis	Allow subnet checking
Context	**configure** service vprn *string* igmp group-interface *reference* subnet-check *boolean*
Tree	subnet-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis	IGMP protocol version
Context	**configure** service vprn *string* igmp group-interface *reference* version *keyword*
Tree	version
Options	1, 2, 3
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface [ip-interface-name] *string*

Synopsis	Enter the **interface** list instance
Context	**configure** service vprn *string* igmp interface *string*
Tree	interface
Introduced	16.0.R1
Platforms	All

[**ip-interface-name**] *string*

Synopsis	IP interface name
Context	**configure** service vprn *string* igmp interface *string*
Tree	interface
String Length	1 to 32

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Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of IGMP
Context	**configure** service vprn *string* igmp interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	**configure** service vprn *string* igmp interface *string* import-policy *reference*
Tree	import-policy
Description	This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option. When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	All

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	**configure** service vprn *string* igmp interface *string* maximum-number-group-sources *number*
Tree	maximum-number-group-sources
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on

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this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.

Range	1 to 32000
Introduced	16.0.R1
Platforms	All

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	**configure** service vprn *string* igmp interface *string* maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	**configure** service vprn *string* igmp interface *string* maximum-number-sources *number*
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

mcac

Synopsis	Enter the **mcac** context
Context	**configure** service vprn *string* igmp interface *string* mcac
Tree	mcac
Introduced	16.0.R1
Platforms	All

bandwidth

Synopsis	Enter the **bandwidth** context

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Context	**configure** service vprn *string* igmp interface *string* mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	All

mandatory *(number | keyword)*

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	**configure** service vprn *string* igmp interface *string* mcac bandwidth mandatory *(number | keyword)*
Tree	mandatory
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

total *(number | keyword)*

Synopsis	Maximum allowed bandwidth
Context	**configure** service vprn *string* igmp interface *string* mcac bandwidth total *(number | keyword)*
Tree	total
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	**configure** service vprn *string* igmp interface *string* mcac interface-policy *reference*
Tree	interface-policy
Reference	**configure** mcac interface-policy *string*

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Introduced	16.0.R1
Platforms	All

mc-constraints

Synopsis	Enter the **mc-constraints** context
Context	**configure** service vprn *string* igmp interface *string* mcac mc-constraints
Tree	mc-constraints
Introduced	16.0.R1
Platforms	All

level [level-id] *number*

Synopsis	Enter the **level** list instance
Context	**configure** service vprn *string* igmp interface *string* mcac mc-constraints level *number*
Tree	level
Introduced	16.0.R1
Platforms	All

[**level-id**] *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	**configure** service vprn *string* igmp interface *string* mcac mc-constraints level *number*
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Bandwidth available for this level
Context	**configure** service vprn *string* igmp interface *string* mcac mc-constraints level *number* bandwidth *number*
Tree	bandwidth

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Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

number-down [number-lag-port-down] *number*

Synopsis	Enter the **number-down** list instance
Context	**configure** service vprn *string* igmp interface *string* mcac mc-constraints number-down *number*
Tree	number-down
Introduced	16.0.R1
Platforms	All

[**number-lag-port-down**] *number*

Synopsis	Number of ports that are down in this LAG link
Context	**configure** service vprn *string* igmp interface *string* mcac mc-constraints number-down *number*
Tree	number-down
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level ID to associate with number of down LAG ports
Context	**configure** service vprn *string* igmp interface *string* mcac mc-constraints number-down *number* level *number*
Tree	level
Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.

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Introduced	16.0.R1
Platforms	All

use-lag-port-weight *boolean*

Synopsis	Use LAG port weight in calculating MCAC constraints
Context	**configure** service vprn *string* igmp interface *string* mcac mc-constraints use-lag-port-weight *boolean*
Tree	use-lag-port-weight
Description	When configured to **true**, port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.
Default	false
Introduced	16.0.R1
Platforms	All

policy *reference*

Synopsis	Multicast CAC policy name
Context	**configure** service vprn *string* igmp interface *string* mcac policy *reference*
Tree	policy
Description	This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment. Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode. If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect. Hierarchical MCAC (HMCAC) is supported on two levels simultaneously: • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).
Reference	**configure** mcac policy *string*
Introduced	16.0.R1

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Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** service vprn *string* igmp interface *string* query-interval *number*
Tree	query-interval
Range	2 to 1024
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	**configure** service vprn *string* igmp interface *string* query-last-member-interval *number*
Tree	query-last-member-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	**configure** service vprn *string* igmp interface *string* query-response-interval *number*
Tree	query-response-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	All

redundant-mcast *boolean*

Synopsis	Use interface as a redundant-pair member for multicast
Context	**configure** service vprn *string* igmp interface *string* redundant-mcast *boolean*
Tree	redundant-mcast
Default	false

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Introduced	16.0.R1
Platforms	All

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	**configure** service vprn *string* igmp interface *string* router-alert-check *boolean*
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	All

ssm-translate

Synopsis	Enter the **ssm-translate** context
Context	**configure** service vprn *string* igmp interface *string* ssm-translate
Tree	ssm-translate
Introduced	16.0.R1
Platforms	All

group-range start *string* end *string*

Synopsis	Enter the **group-range** list instance
Context	**configure** service vprn *string* igmp interface *string* ssm-translate group-range start *string* end *string*
Tree	group-range
Introduced	16.0.R1
Platforms	All

start *string*

Synopsis	Lower bound of the IP address group range
Context	**configure** service vprn *string* igmp interface *string* ssm-translate group-range start *string* end *string*
Tree	group-range
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	All

end *string*

Synopsis	Upper bound of the IP address group range
Context	**configure** service vprn *string* igmp interface *string* ssm-translate group-range start *string* end *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [source-address] *string*

Synopsis	Add a list entry for **source**
Context	**configure** service vprn *string* igmp interface *string* ssm-translate group-range start *string* end *string* source *string*
Tree	source
Min. Instances	1
Introduced	16.0.R1
Platforms	All

[**source-address**] *string*

Synopsis	Source IP address of multicast channel sending data
Context	**configure** service vprn *string* igmp interface *string* ssm-translate group-range start *string* end *string* source *string*
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

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static

Synopsis	Enter the **static** context
Context	**configure** service vprn *string* igmp interface *string* static
Tree	static
Introduced	16.0.R1
Platforms	All

group [group-address] *string*

Synopsis	Enter the **group** list instance
Context	**configure** service vprn *string* igmp interface *string* static group *string*
Tree	group
Introduced	16.0.R1
Platforms	All

[**group-address**] *string*

Synopsis	Group address of static IGMP multicast channel
Context	**configure** service vprn *string* igmp interface *string* static group *string*
Tree	group
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [source-address] *string*

Synopsis	Add a list entry for **source**
Context	**configure** service vprn *string* igmp interface *string* static group *string* source *string*
Tree	source
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R1
Platforms	All

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[**source-address**] *string*

Synopsis	Source IP address of multicast channel sending data
Context	**configure** service vprn *string* igmp interface *string* static group *string* source *string*
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	any source address (*,G)
Context	**configure** service vprn *string* igmp interface *string* static group *string* starg
Tree	starg
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R2
Platforms	All

group-range start *string* end *string* step *string*

Synopsis	Enter the **group-range** list instance
Context	**configure** service vprn *string* igmp interface *string* static group-range start *string* end *string* step *string*
Tree	group-range
Introduced	16.0.R1
Platforms	All

start *string*

Synopsis	IP address for the start of the static group range
Context	**configure** service vprn *string* igmp interface *string* static group-range start *string* end *string* step *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

end *string*

Synopsis	IP address for the end of the static group range
Context	**configure** service vprn *string* igmp interface *string* static group-range start *string* end *string* step *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

step *string*

Synopsis	Step interval in the group-range address
Context	**configure** service vprn *string* igmp interface *string* static group-range start *string* end *string* step *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [source-address] *string*

Synopsis	Add a list entry for **source**
Context	**configure** service vprn *string* igmp interface *string* static group-range start *string* end *string* step *string* source *string*
Tree	source
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R1
Platforms	All

[**source-address**] *string*

Synopsis	Source IP address of multicast channel sending data

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Context	**configure** service vprn *string* igmp interface *string* static group-range start *string* end *string* step *string* source *string*
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	any source address (*,G)
Context	**configure** service vprn *string* igmp interface *string* static group-range start *string* end *string* step *string* starg
Tree	starg
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R2
Platforms	All

subnet-check *boolean*

Synopsis	Allow subnet checking
Context	**configure** service vprn *string* igmp interface *string* subnet-check *boolean*
Tree	subnet-check
Default	true
Introduced	16.0.R1
Platforms	All

version *keyword*

Synopsis	IGMP protocol version
Context	**configure** service vprn *string* igmp interface *string* version *keyword*
Tree	version
Options	1, 2, 3
Default	3
Introduced	16.0.R1
Platforms	All

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query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** service vprn *string* igmp query-interval *number*
Tree	query-interval
Description	This command configures the timing of the host-query messages that solicit group membership information. The messages are sent to the all-systems multicast group address, 224.0.0.1.
Range	2 to 1024
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	**configure** service vprn *string* igmp query-last-member-interval *number*
Tree	query-last-member-interval
Description	This command configures the timing of the query-message interval, defining the interval for leave-group messages among others. The lower the interval that is configured, the faster the detection of the loss of the last member of a group.
Range	1 to 1023
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	**configure** service vprn *string* igmp query-response-interval *number*
Tree	query-response-interval
Range	1 to 1023
Units	seconds
Default	10

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Introduced	16.0.R1
Platforms	All

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	**configure** service vprn *string* igmp robust-count *number*
Tree	robust-count
Description	This command configures the level of expected packet loss on a subnet. If a subnet anticipates losses, this value can be increased.
Range	2 to 10
Default	2
Introduced	16.0.R1
Platforms	All

ssm-translate

Synopsis	Enter the **ssm-translate** context
Context	**configure** service vprn *string* igmp ssm-translate
Tree	ssm-translate
Introduced	16.0.R1
Platforms	All

group-range start *string* end *string*

Synopsis	Enter the **group-range** list instance
Context	**configure** service vprn *string* igmp ssm-translate group-range start *string* end *string*
Tree	group-range
Introduced	16.0.R1
Platforms	All

start *string*

Synopsis	Lower bound of the IP address group range
Context	**configure** service vprn *string* igmp ssm-translate group-range start *string* end *string*

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Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *string*

Synopsis	Upper bound of the IP address group range
Context	**configure** service vprn *string* igmp ssm-translate group-range start *string* end *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [source-address] *string*

Synopsis	Add a list entry for **source**
Context	**configure** service vprn *string* igmp ssm-translate group-range start *string* end *string* source *string*
Tree	source
Min. Instances	1
Introduced	16.0.R1
Platforms	All

[**source-address**] *string*

Synopsis	Source IP address of multicast channel sending data
Context	**configure** service vprn *string* igmp ssm-translate group-range start *string* end *string* source *string*
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

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igmp-host-tracking

Synopsis	Enter the **igmp-host-tracking** context
Context	**configure** service vprn *string* igmp-host-tracking
Tree	igmp-host-tracking
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of IGMP host tracking
Context	**configure** service vprn *string* igmp-host-tracking admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

expiry-time *number*

Synopsis	Time that the system continues to track inactive hosts
Context	**configure** service vprn *string* igmp-host-tracking expiry-time *number*
Tree	expiry-time
Range	1 to 65535
Units	seconds
Default	260
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-nh-metric *boolean*

Synopsis	Ignore next hop metric
Context	**configure** service vprn *string* ignore-nh-metric *boolean*
Tree	ignore-nh-metric
Default	false
Introduced	16.0.R1

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Platforms	All

interface [interface-name] *string*

Synopsis	Enter the **interface** list instance
Context	**configure** service vprn *string* interface *string*
Tree	interface
Introduced	16.0.R1
Platforms	All

[**interface-name**] *string*

Synopsis	Interface name
Context	**configure** service vprn *string* interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	**configure** service vprn *string* interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

cflowd-parameters

Synopsis	Enter the **cflowd-parameters** context
Context	**configure** service vprn *string* interface *string* cflowd-parameters
Tree	cflowd-parameters

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Introduced	16.0.R1
Platforms	All

sampling [sampling-type] *keyword*

Synopsis	Enter the **sampling** list instance
Context	**configure** service vprn *string* interface *string* cflowd-parameters sampling *keyword*
Tree	sampling
Introduced	16.0.R1
Platforms	All

[**sampling-type**] *keyword*

Synopsis	Traffic sampling type
Context	**configure** service vprn *string* interface *string* cflowd-parameters sampling *keyword*
Tree	sampling
Description	This command configures the type of traffic to be sampled on the associated IP interface.
Options	unicast, multicast, both
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

direction *keyword*

Synopsis	Direction of traffic for cflowd sampling
Context	**configure** service vprn *string* interface *string* cflowd-parameters sampling *keyword* direction *keyword*
Tree	direction
Description	This command configures the direction in which sampling occurs on the associated IP interfaces.
Options	ingress-only, egress-only, both
Default	ingress-only
Introduced	16.0.R1
Platforms	All

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sample-profile *(keyword | number)*

Synopsis	Sample profile ID
Context	**configure** service vprn *string* interface *string* cflowd-parameters sampling *keyword* sample-profile *(keyword | number)*
Tree	sample-profile
Description	This command defines the sampling rate profile associated with this interface.
Max. Range	0 to 4294967295
Options	1
Introduced	19.5.R1
Platforms	All

type *keyword*

Synopsis	Type of cflowd analysis
Context	**configure** service vprn *string* interface *string* cflowd-parameters sampling *keyword* type *keyword*
Tree	type
Description	This command configures the cflowd sampling type on the associated IP interface.
Options	acl, interface
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

cpu-protection *reference*

Synopsis	CPU protection policy
Context	**configure** service vprn *string* interface *string* cpu-protection *reference*
Tree	cpu-protection
Reference	**configure** system security cpu-protection policy *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

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description *string*

Synopsis	Text description
Context	**configure** service vprn *string* interface *string* description *string*
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

dynamic-tunnel-redundant-nexthop *string*

Synopsis	Redundant next-hop address for the dynamic IPsec tunnel
Context	**configure** service vprn *string* interface *string* dynamic-tunnel-redundant-nexthop *string*
Tree	dynamic-tunnel-redundant-nexthop
Description	This command specifies the redundant next-hop address on a public or private IPsec interface (with public or private tunnel SAP) for a dynamic IPsec tunnel. The next-hop address is used by a standby node to shunt traffic to a master if it receives the address. The next-hop address is resolved in the routing table of a corresponding service.
Notes	The following elements are part of a choice: **multi-chassis-shunting-profile** or (**dynamic-tunnel-redundant-nexthop** and **static-tunnel-redundant-nexthop**).
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-time

Synopsis	Enter the **hold-time** context
Context	**configure** service vprn *string* interface *string* hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service vprn *string* interface *string* hold-time ipv4
Tree	ipv4
Introduced	16.0.R1

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Platforms	All

down

Synopsis	Enter the **down** context
Context	**configure** service vprn *string* interface *string* hold-time ipv4 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the **init-only** command.
Introduced	16.0.R1
Platforms	All

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	**configure** service vprn *string* interface *string* hold-time ipv4 down init-only *boolean*
Tree	init-only
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Down hold time for the IP interface
Context	**configure** service vprn *string* interface *string* hold-time ipv4 down seconds *number*
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

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up

Synopsis	Enter the **up** context
Context	**configure** service vprn *string* interface *string* hold-time ipv4 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Up hold time for the IP interface
Context	**configure** service vprn *string* interface *string* hold-time ipv4 up seconds *number*
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** service vprn *string* interface *string* hold-time ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

down

Synopsis	Enter the **down** context
Context	**configure** service vprn *string* interface *string* hold-time ipv6 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system

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	attempts to bring the associated IP interface up, unless an operator configures the **init-only** command.
Introduced	16.0.R1
Platforms	All

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	**configure** service vprn *string* interface *string* hold-time ipv6 down init-only *boolean*
Tree	init-only
Description	When configured to **true**, the system applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Down hold time for the IP interface
Context	**configure** service vprn *string* interface *string* hold-time ipv6 down seconds *number*
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

up

Synopsis	Enter the **up** context
Context	**configure** service vprn *string* interface *string* hold-time ipv6 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	All

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seconds *number*

Synopsis	Up hold time for the IP interface
Context	**configure** service vprn *string* interface *string* hold-time ipv6 up seconds *number*
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

if-attribute

Synopsis	Enter the **if-attribute** context
Context	**configure** service vprn *string* interface *string* if-attribute
Tree	if-attribute
Introduced	16.0.R1
Platforms	All

admin-group *reference*

Synopsis	Administrative group name for the interface
Context	**configure** service vprn *string* interface *string* if-attribute admin-group *reference*
Tree	admin-group
Reference	**configure** routing-options if-attribute admin-group *string*
Max. Instances	32
Introduced	16.0.R1
Platforms	All

srlg-group [name] *reference*

Synopsis	Add a list entry for **srlg-group**
Context	**configure** service vprn *string* interface *string* if-attribute srlg-group *reference*
Tree	srlg-group
Introduced	16.0.R1

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Platforms	All

[**name**] *reference*

Synopsis	SRLG name
Context	**configure** service vprn *string* interface *string* if-attribute srlg-group *reference*
Tree	srlg-group
Reference	**configure** routing-options if-attribute srlg-group *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service vprn *string* interface *string* ingress
Tree	ingress
Introduced	19.7.R1
Platforms	All

destination-class-lookup *boolean*

Synopsis	Enable BGP destination class lookup
Context	**configure** service vprn *string* interface *string* ingress destination-class-lookup *boolean*
Tree	destination-class-lookup
Description	When configured to **true**, the router performs a destination class lookup. This command is supported on FP3-based cards and later and is used in combination with the **destination-class** match criterion for an IP filter policy to filter egress traffic based on BGP destination classes. When configured to **false**, destination class lookup is not enabled.
Default	false
Introduced	20.7.R1
Platforms	All

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policy-accounting *reference*

Synopsis	Ingress policy accounting template name
Context	**configure** service vprn *string* interface *string* ingress policy-accounting *reference*
Tree	policy-accounting
Reference	**configure** routing-options policy-accounting policy-acct-template *string*
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

ingress-stats *boolean*

Synopsis	Collect ingress statistics
Context	**configure** service vprn *string* interface *string* ingress-stats *boolean*
Tree	ingress-stats
Default	false
Introduced	16.0.R1
Platforms	All

ip-mtu *number*

Synopsis	IP MTU applied to outgoing packets
Context	**configure** service vprn *string* interface *string* ip-mtu *number*
Tree	ip-mtu
Range	512 to 9786
Units	bytes
Introduced	16.0.R1
Platforms	All

ipsec

Synopsis	Enable the **ipsec** context
Context	**configure** service vprn *string* interface *string* ipsec
Tree	ipsec
Introduced	22.7.R1
Platforms	VSR

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admin-state *keyword*

Synopsis	Administrative state of IPsec secured interface
Context	**configure** service vprn *string* interface *string* ipsec admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	22.7.R1
Platforms	VSR

ip-exception *reference*

Synopsis	IP exception filter
Context	**configure** service vprn *string* interface *string* ipsec ip-exception *reference*
Tree	ip-exception
Description	This command configures the IP exception filter for the secured interface. All ingress traffic matching the specified filter bypasses IPsec processing.
Reference	**configure** filter ip-exception *string*
Introduced	22.7.R1
Platforms	VSR

ipsec-tunnel [name] *string*

Synopsis	Enter the **ipsec-tunnel** list instance
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string*
Tree	ipsec-tunnel
Description	Commands in this context configure IPsec tunnels used to secure traffic forwarded over the interface.
Introduced	22.7.R1
Platforms	VSR

[**name**] *string*

Synopsis	IPsec tunnel name
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string*

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Tree	ipsec-tunnel
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

admin-state *keyword*

Synopsis	Administrative state of the IPsec tunnel
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	22.7.R1
Platforms	VSR

bfd

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **bfd** context
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* bfd
Tree	bfd
Introduced	22.7.R1
Platforms	VSR

bfd-designate *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Designate IPsec tunnel to carry BFD traffic

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Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* bfd bfd-designate *boolean*
Tree	bfd-designate
Default	false
Introduced	22.7.R1
Platforms	VSR

bfd-liveness

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **bfd-liveness** context
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* bfd bfd-liveness
Tree	bfd-liveness
Description	Commands in this context configure a BFD session to provide a heart-beat mechanism for a specified IPsec tunnel. There can be only one BFD session assigned to any given IPsec tunnel, but there can be multiple IPsec tunnels using the same BFD session. BFD controls the state of the association tunnel. If the BFD session goes down, the system brings down the associated non-designated IPsec tunnel.
Introduced	22.7.R1
Platforms	VSR

dest-ip *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination address used for the BFD session
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* bfd bfd-liveness dest-ip *string*
Tree	dest-ip
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

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interface *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the interface used by the BFD session
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* bfd bfd-liveness interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

service-name *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* bfd bfd-liveness service-name *string*
Tree	service-name
Description	This command configures the name of the service where BFD traffic is forwarded to.
String Length	1 to 64
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

clear-df-bit *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reset the DF bit to 0 in all payload IP packets

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Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* clear-df-bit *boolean*
Tree	clear-df-bit
Description	When configured to **true**, the DF bit is set to 0 in all payload IP packets associated with the IPsec tunnel, before any potential fragmentation occurs.
Default	false
Introduced	22.7.R1
Platforms	VSR

copy-traffic-class-upon-decapsulation *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable traffic class copy upon decapsulation
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* copy-traffic-class-upon-decapsulation *boolean*
Tree	copy-traffic-class-upon-decapsulation
Description	When configured to **true**, the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private).
Default	false
Introduced	22.7.R1
Platforms	VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* description *string*
Tree	description
String Length	1 to 80
Introduced	22.7.R1
Platforms	VSR

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encapsulated-ip-mtu *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum size of the encapsulated tunnel packet
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* encapsulated-ip-mtu *number*
Tree	encapsulated-ip-mtu
Description	This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

icmp-generation

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **icmp-generation** context
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* icmp-generation
Tree	icmp-generation
Description	Commands in this context configure settings for ICMPv4 message generation.
Introduced	22.7.R1
Platforms	VSR

frag-required

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **frag-required** context

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Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* icmp-generation frag-required
Tree	frag-required
Description	Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Introduced	22.7.R1
Platforms	VSR

admin-state *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending ICMP messages
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* icmp-generation frag-required admin-state *keyword*
Tree	admin-state
Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Options	enable, disable
Default	enable
Introduced	22.7.R1
Platforms	VSR

interval *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending ICMP messages
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* icmp-generation frag-required interval *number*
Tree	interval

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Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Units	seconds
Default	10
Introduced	22.7.R1
Platforms	VSR

message-count *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMP messages that can be sent
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* icmp-generation frag-required message-count *number*
Tree	message-count
Description	This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	22.7.R1
Platforms	VSR

icmp6-generation

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **icmp6-generation** context
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* icmp6-generation
Tree	icmp6-generation
Description	Commands in this context configure settings for ICMPv6 message generation.
Introduced	22.7.R1

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Platforms	VSR

packet-too-big

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **packet-too-big** context
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* icmp6-generation packet-too-big
Tree	packet-too-big
Description	Commands in this context configure the parameters to send ICMPv6 PTB (Packet Too Big) messages on the private side. The system sends PTB messages if a received IPv6 packet on the private side is greater than 1280 bytes and it exceeds the private MTU of the tunnel. The private MTU for the tunnel is configured via the **configure router interface ipsec ipsec-tunnel ip-mtu** command for the interface.
Introduced	22.7.R1
Platforms	VSR

admin-state *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of Packet Too Big message sends
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* icmp6-generation packet-too-big admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	22.7.R1
Platforms	VSR

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interval *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending Packet Too Big messages
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* icmp6-generation packet-too-big interval *number*
Tree	interval
Range	1 to 60
Units	seconds
Default	10
Introduced	22.7.R1
Platforms	VSR

message-count *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMPv6 PTB messages that can be sent
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* icmp6-generation packet-too-big message-count *number*
Tree	message-count
Description	This command configures the maximum number of PTB messages that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	22.7.R1
Platforms	VSR

ip-mtu *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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Synopsis	Private MTU of the IPsec tunnel
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* ip-mtu *number*
Tree	ip-mtu
Description	This command specifies the private MTU of the IPsec tunnel. The private MTU is used to determine the need for fragmentation before encapsulation of the payload packet.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

key-exchange

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **key-exchange** context
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* key-exchange
Tree	key-exchange
Introduced	22.7.R1
Platforms	VSR

dynamic

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **dynamic** context
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic
Tree	dynamic
Notes	The following elements are part of a choice: **dynamic** or **manual**.
Introduced	22.7.R1
Platforms	VSR

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auto-establish *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Attempt to establish a phase 1 exchange automatically
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic auto-establish *boolean*
Tree	auto-establish
Default	false
Introduced	22.7.R1
Platforms	VSR

cert

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **cert** context
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic cert
Tree	cert
Description	Commands in this context configure the attributes of the dynamic keying certificate.
Introduced	22.7.R1
Platforms	VSR

cert-profile *reference*

Synopsis	Certificate profile name
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic cert cert-profile *reference*
Tree	cert-profile
Reference	**configure** ipsec cert-profile *string*
Introduced	22.7.R1
Platforms	VSR

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status-verify

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **status-verify** context
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic cert status-verify
Tree	status-verify
Description	Commands in this context configure attributes of Certificate Status Verification (CSV).
Introduced	22.7.R1
Platforms	VSR

default-result *keyword*

Synopsis	Default result for Certificate Status Verification
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic cert status-verify default-result *keyword*
Tree	default-result
Description	This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.
Options	revoked, good
Default	revoked
Introduced	22.7.R1
Platforms	VSR

primary *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic cert status-verify primary *keyword*
Tree	primary
Description	This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.
Options	crl, ocsp
Default	crl

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Introduced	22.7.R1
Platforms	VSR

secondary *keyword*

Synopsis	Secondary method used to verify certificate revocation
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic cert status-verify secondary *keyword*
Tree	secondary
Description	This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.
Options	none, crl, ocsp
Default	none
Introduced	22.7.R1
Platforms	VSR

trust-anchor-profile *reference*

Synopsis	Trust anchor profile name
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic cert trust-anchor-profile *reference*
Tree	trust-anchor-profile
Reference	**configure** ipsec trust-anchor-profile *string*
Introduced	22.7.R1
Platforms	VSR

id

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **id** context
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic id
Tree	id
Description	Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation.

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The default behavior depends on the local authentication method as follows:

- Psk: local tunnel IP address
- Cert-auth: subject of the local certificate

Introduced	22.7.R1
Platforms	VSR

fqdn *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN used as the local ID IKE type
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic id fqdn *string*
Tree	fqdn
String Length	1 to 255
Notes	The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.
Introduced	22.7.R1
Platforms	VSR

ipv4 *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 as the local ID type
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic id ipv4 *string*
Tree	ipv4
Notes	The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.
Introduced	22.7.R1
Platforms	VSR

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ipv6 *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 used as the local IKE ID type
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic id ipv6 *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ipv6
Notes	The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.
Introduced	22.7.R1
Platforms	VSR

ike-policy *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IKE policy ID
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic ike-policy *reference*
Tree	ike-policy
Description	This command specifies the ID of the IKE policy used for IKE negotiation. The **ipsec-transport-mode-profile** configuration only supports IKEv2.
Reference	**configure** ipsec ike-policy *number*
Introduced	22.7.R1
Platforms	VSR

ipsec-transform *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec transform IDs used by the dynamic key
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic ipsec-transform *reference*

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Tree	ipsec-transform
Description	This command specifies IPsec transform IDs used for CHILD_SA negotiation.
Reference	**configure** ipsec ipsec-transform *number*
Max. Instances	4
Introduced	22.7.R1
Platforms	VSR

pre-shared-key *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pre-shared key for authentication
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* key-exchange dynamic pre-shared-key *string*
Tree	pre-shared-key
String Length	1 to 115
Introduced	22.7.R1
Platforms	VSR

manual

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **manual** context
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* key-exchange manual
Tree	manual
Description	Commands in this context configure settings for manually configured security associations for the IPsec tunnel.
Notes	The following elements are part of a choice: **dynamic** or **manual**.
Introduced	22.7.R1
Platforms	VSR

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keys [security-association] *number* direction *keyword*

Synopsis	Enter the **keys** list instance
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword*
Tree	keys
Description	Commands in this context configure the security association list for the tunnel.
Introduced	22.7.R1
Platforms	VSR

[**security-association**] *number*

Synopsis	SA entry ID
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword*
Tree	keys
Range	1 to 16
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

direction *keyword*

Synopsis	Direction of the IPsec tunnel
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword*
Tree	keys
Options	inbound, outbound
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

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authentication-key *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the authentication algorithm
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword* authentication-key *string*
Tree	authentication-key
String Length	1 to 130
Introduced	22.7.R1
Platforms	VSR

encryption-key *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the encryption algorithm
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword* encryption-key *string*
Tree	encryption-key
String Length	1 to 66
Introduced	22.7.R1
Platforms	VSR

ipsec-transform *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Transform entry used by manual SAs
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword* ipsec-transform *reference*
Tree	ipsec-transform
Reference	**configure** ipsec ipsec-transform *number*

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Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

spi *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SPI of inbound and outbound packets
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword* spi *number*
Tree	spi
Description	This command specifies the Security Parameter Index (SPI) used to look up the instruction to verify and decrypt the incoming IPsec packets when the direction is inbound. When the direction is outbound, the SPI is used in the encoding of the outgoing packets. The remote node can use the SPI to look up the instruction to verify and decrypt the packet.
Range	256 to 16383
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

local-gateway-address-override *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPsec tunnel endpoint address
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* local-gateway-address-override *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	local-gateway-address-override
Description	This command configures the local IPsec tunnel endpoint address. This overrides the default endpoint address, which is the interface address.
Introduced	22.7.R1

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Platforms	VSR

max-history-key-records

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **max-history-key-records** context
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* max-history-key-records
Tree	max-history-key-records
Description	Commands in this context configure the settings for recording historical IPsec keys.
Introduced	22.7.R1
Platforms	VSR

esp *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of recent records
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* max-history-key-records esp *number*
Tree	esp
Range	1 to 48
Introduced	22.7.R1
Platforms	VSR

ike *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of historical IKE key records

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Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* max-history-key-records ike *number*
Tree	ike
Range	1 to 3
Introduced	22.7.R1
Platforms	VSR

pmtu-discovery-aging *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Aging out time of the learned path MTU
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* pmtu-discovery-aging *number*
Tree	pmtu-discovery-aging
Description	This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation.
Range	900 to 3600
Units	seconds
Default	900
Introduced	22.7.R1
Platforms	VSR

private-sap *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Private SAP ID
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* private-sap *number*
Tree	private-sap

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Range	0 to 4094
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

private-service *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Private service name
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* private-service *string*
Tree	private-service
Description	This command configures the private service name. If unconfigured, the private service is the service where the secured interface resides.
String Length	1 to 64
Introduced	22.7.R1
Platforms	VSR

private-tcp-mss-adjust *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) adjustment
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* private-tcp-mss-adjust *number*
Tree	private-tcp-mss-adjust
Description	This command specifies the TCP MSS to adjust for the tunnel on the private side. When configured, the system may use the value to update the MSS option in the received TCP SYN packet on the private side.

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Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

propagate-pmtu-v4 *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* propagate-pmtu-v4 *boolean*
Tree	propagate-pmtu-v4
Description	When configured to **true**, the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).
Default	true
Introduced	22.7.R1
Platforms	VSR

propagate-pmtu-v6 *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv6 hosts
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* propagate-pmtu-v6 *boolean*
Tree	propagate-pmtu-v6
Description	When configured to **true**, the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).
Default	true
Introduced	22.7.R1
Platforms	VSR

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public-tcp-mss-adjust *(number | keyword)*

WARNING:
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Synopsis	TCP maximum segment size (MSS) on the public network
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* public-tcp-mss-adjust *(number | keyword)*
Tree	public-tcp-mss-adjust
Description	This command configures the MSS for the TCP traffic in an IPsec tunnel that is sent from the public network to the private network. The system may use this value to adjust or insert the MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Options	auto
Introduced	22.7.R1
Platforms	VSR

remote-gateway-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote IPsec tunnel endpoint address
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* remote-gateway-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	remote-gateway-address
Introduced	22.7.R1
Platforms	VSR

replay-window *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Anti-replay window size

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Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* replay-window *number*
Tree	replay-window
Description	This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.
Range	32 | 64 | 128 | 256 | 512
Units	packets
Introduced	22.7.R1
Platforms	VSR

security-policy

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **security-policy** context
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* security-policy
Tree	security-policy
Description	Commands in this context specify a security policy used by the tunnel.
Introduced	22.7.R1
Platforms	VSR

id *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Security policy ID for use by the tunnel
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* security-policy id *number*
Tree	id
Max. Range	0 to 4294967295
Introduced	22.7.R1
Platforms	VSR

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strict-match *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable strict match of the security policy entry
Context	**configure** service vprn *string* interface *string* ipsec ipsec-tunnel *string* security-policy strict-match *boolean*
Tree	strict-match
Description	When configured to **true**, this command enables strict match of the security policy entry. When a CREATE_CHILD exchange request is received for a static IPsec tunnel, and this request is not a rekey request, ISA matches the received TSi and TSr with the configured security policy. This can be a match only when a received TS (in TSi or TSr) address range matches exactly with the subnet in a security policy entry. If there is no match, the setup fails, and TS_UNACCEPTABLE is sent. If there is a match, but there is an existing CHILD_SA for the matched security policy, the setup fails, and NO_PROPOSAL_CHOSEN is sent. If there is a match, and there is not a CHILD_SA for the matched entry, the subnet is sent in the matched security policy entry as TSi and TSr, and the CHILD_SA is created.
Default	false
Introduced	22.7.R1
Platforms	VSR

ipv6-exception *reference*

Synopsis	IPv6 filter exception used to bypass encryption
Context	**configure** service vprn *string* interface *string* ipsec ipv6-exception *reference*
Tree	ipv6-exception
Description	This command specifies the IPv6 filter exception for an IPsec-secured IPv6 interface. When an IPv6 filter exception is added, clear text packets that match the exception criteria in the IPv6 filter exception can ingress the interface, even when IPsec is enabled on the interface.
Reference	**configure** filter ipv6-exception *string*
Introduced	22.7.R1
Platforms	VSR

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public-sap *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Public SAP ID
Context	**configure** service vprn *string* interface *string* ipsec public-sap *number*
Tree	public-sap
Range	0 to 4094
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

tunnel-group *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tunnel group ID
Context	**configure** service vprn *string* interface *string* ipsec tunnel-group *reference*
Tree	tunnel-group
Reference	**configure** isa tunnel-group *number*
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service vprn *string* interface *string* ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

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addresses

Synopsis	Enter the **addresses** context
Context	**configure** service vprn *string* interface *string* ipv4 addresses
Tree	addresses
Introduced	16.0.R1
Platforms	All

address [ipv4-address] *string*

Synopsis	Enter the **address** list instance
Context	**configure** service vprn *string* interface *string* ipv4 addresses address *string*
Tree	address
Introduced	16.0.R1
Platforms	All

[ipv4-address] *string*

Synopsis	IPv4 address for the interface
Context	**configure** service vprn *string* interface *string* ipv4 addresses address *string*
Tree	address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	**configure** service vprn *string* interface *string* ipv4 addresses address *string* prefix-length *number*
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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allow-directed-broadcasts *boolean*

Synopsis	Forward directed broadcasts
Context	**configure** service vprn *string* interface *string* ipv4 allow-directed-broadcasts *boolean*
Tree	allow-directed-broadcasts
Default	false
Introduced	16.0.R1
Platforms	All

bfd

Synopsis	Enter the **bfd** context
Context	**configure** service vprn *string* interface *string* ipv4 bfd
Tree	bfd
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	**configure** service vprn *string* interface *string* ipv4 bfd admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	**configure** service vprn *string* interface *string* ipv4 bfd echo-receive *number*
Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	16.0.R1

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Platforms	All

multiplier *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	**configure** service vprn *string* interface *string* ipv4 bfd multiplier *number*
Tree	multiplier
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	16.0.R1
Platforms	All

receive *number*

Synopsis	BFD receive interval over this interface
Context	**configure** service vprn *string* interface *string* ipv4 bfd receive *number*
Tree	receive
Description	This command specifies the receive interval for the BFD session. On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

transmit-interval *number*

Synopsis	BFD transmit interval over this interface
Context	**configure** service vprn *string* interface *string* ipv4 bfd transmit-interval *number*
Tree	transmit-interval
Description	This command configures the transmit intervals.

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On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Local termination point for the BFD session
Context	**configure** service vprn *string* interface *string* ipv4 bfd type *keyword*
Tree	type
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: • **auto** (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the **cpm-np**. • **cpm-np** – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems. • **fp** – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.
Options	cpm-np, auto, fp
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dhcp

Synopsis	Enter the **dhcp** context
Context	**configure** service vprn *string* interface *string* ipv4 dhcp
Tree	dhcp
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of DHCP
Context	**configure** service vprn *string* interface *string* ipv4 dhcp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* interface *string* ipv4 dhcp description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

gi-address *string*

Synopsis	GI address for the DHCP relay
Context	**configure** service vprn *string* interface *string* ipv4 dhcp gi-address *string*
Tree	gi-address
Description	This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay. By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.
Introduced	16.0.R1
Platforms	All

lease-populate

Synopsis	Enter the **lease-populate** context
Context	**configure** service vprn *string* interface *string* ipv4 dhcp lease-populate

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Tree	lease-populate
Introduced	16.0.R1
Platforms	All

max-leases *number*

Synopsis	Maximum number of DHCPv4 leases allowed
Context	**configure** service vprn *string* interface *string* ipv4 dhcp lease-populate max-leases *number*
Tree	max-leases
Range	0 to 511999
Introduced	16.0.R1
Platforms	All

option-82

Synopsis	Enter the **option-82** context
Context	**configure** service vprn *string* interface *string* ipv4 dhcp option-82
Tree	option-82
Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	16.0.R1
Platforms	All

action *keyword*

Synopsis	Action to take with received DHCP Option 82
Context	**configure** service vprn *string* interface *string* ipv4 dhcp option-82 action *keyword*
Tree	action
Options	replace, drop, keep
Default	keep
Introduced	16.0.R1
Platforms	All

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circuit-id

Synopsis	Enter the **circuit-id** context
Context	**configure** service vprn *string* interface *string* ipv4 dhcp option-82 circuit-id
Tree	circuit-id
Introduced	16.0.R1
Platforms	All

ascii-tuple

Synopsis	Use the ASCII-encoded tuple for the circuit ID
Context	**configure** service vprn *string* interface *string* ipv4 dhcp option-82 circuit-id ascii-tuple
Tree	ascii-tuple
Notes	The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	All

ifindex

Synopsis	Use the interface index for the circuit ID
Context	**configure** service vprn *string* interface *string* ipv4 dhcp option-82 circuit-id ifindex
Tree	ifindex
Notes	The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	All

none

Synopsis	Do not include the circuit ID
Context	**configure** service vprn *string* interface *string* ipv4 dhcp option-82 circuit-id none
Tree	none
Notes	The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.
Introduced	16.0.R1

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Platforms	All

sap-id

Synopsis	Use the SAP ID
Context	**configure** service vprn *string* interface *string* ipv4 dhcp option-82 circuit-id sap-id
Tree	sap-id
Notes	The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	All

vlan-ascii-tuple

Synopsis	Include the VLAN ID and dot1p bits in the ASCII tuple
Context	**configure** service vprn *string* interface *string* ipv4 dhcp option-82 circuit-id vlan-ascii-tuple
Tree	vlan-ascii-tuple
Description	When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet. When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty.
Notes	The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	All

remote-id

Synopsis	Enter the **remote-id** context
Context	**configure** service vprn *string* interface *string* ipv4 dhcp option-82 remote-id
Tree	remote-id
Description	Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).
Introduced	16.0.R1
Platforms	All

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ascii-string *string*

Synopsis	User-defined ASCII string for the remote ID
Context	**configure** service vprn *string* interface *string* ipv4 dhcp option-82 remote-id ascii-string *string*
Tree	ascii-string
String Length	1 to 32
Notes	The following elements are part of a choice: **ascii-string**, **mac**, or **none**.
Introduced	16.0.R1
Platforms	All

mac

Synopsis	Use the MAC address for the remote ID
Context	**configure** service vprn *string* interface *string* ipv4 dhcp option-82 remote-id mac
Tree	mac
Notes	The following elements are part of a choice: **ascii-string**, **mac**, or **none**.
Introduced	16.0.R1
Platforms	All

none

Synopsis	Do not include the remote ID
Context	**configure** service vprn *string* interface *string* ipv4 dhcp option-82 remote-id none
Tree	none
Notes	The following elements are part of a choice: **ascii-string**, **mac**, or **none**.
Introduced	16.0.R1
Platforms	All

vendor-specific-option

Synopsis	Enter the **vendor-specific-option** context
Context	**configure** service vprn *string* interface *string* ipv4 dhcp option-82 vendor-specific-option
Tree	vendor-specific-option

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Description	Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.
Introduced	16.0.R1
Platforms	All

client-mac-address *boolean*

Synopsis	Send the MAC address in the VSO
Context	**configure** service vprn *string* interface *string* ipv4 dhcp option-82 vendor-specific-option client-mac-address *boolean*
Tree	client-mac-address
Default	false
Introduced	16.0.R1
Platforms	All

pool-name *boolean*

Synopsis	Send the pool name in the VSO
Context	**configure** service vprn *string* interface *string* ipv4 dhcp option-82 vendor-specific-option pool-name *boolean*
Tree	pool-name
Default	false
Introduced	16.0.R1
Platforms	All

sap-id *boolean*

Synopsis	Send SAP ID in the sub-option of the DHCP relay packet
Context	**configure** service vprn *string* interface *string* ipv4 dhcp option-82 vendor-specific-option sap-id *boolean*
Tree	sap-id
Default	false
Introduced	16.0.R1
Platforms	All

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service-id *boolean*

Synopsis	Send the service ID in the Vendor Specific Option
Context	**configure** service vprn *string* interface *string* ipv4 dhcp option-82 vendor-specific-option service-id *boolean*
Tree	service-id
Default	false
Introduced	16.0.R1
Platforms	All

string *string*

Synopsis	User-defined ASCII string for the VSO
Context	**configure** service vprn *string* interface *string* ipv4 dhcp option-82 vendor-specific-option string *string*
Tree	string
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

system-id *boolean*

Synopsis	Send the system ID in the VSO
Context	**configure** service vprn *string* interface *string* ipv4 dhcp option-82 vendor-specific-option system-id *boolean*
Tree	system-id
Default	false
Introduced	16.0.R1
Platforms	All

proxy-server

Synopsis	Enter the **proxy-server** context
Context	**configure** service vprn *string* interface *string* ipv4 dhcp proxy-server
Tree	proxy-server
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the DHCP proxy server
Context	**configure** service vprn *string* interface *string* ipv4 dhcp proxy-server admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

emulated-server *string*

Synopsis	IP address used as the DHCP server address for the SAP
Context	**configure** service vprn *string* interface *string* ipv4 dhcp proxy-server emulated-server *string*
Tree	emulated-server
Description	This command configures the IP address which will be used as the DHCP server address in the context of the SAP. Typically, the configured address should be in the context of the subnet represented by the service.
Introduced	16.0.R1
Platforms	All

lease-time

Synopsis	Enter the **lease-time** context
Context	**configure** service vprn *string* interface *string* ipv4 dhcp proxy-server lease-time
Tree	lease-time
Introduced	16.0.R1
Platforms	All

radius-override *boolean*

Synopsis	Use lease time information provided by RADIUS server
Context	**configure** service vprn *string* interface *string* ipv4 dhcp proxy-server lease-time radius-override *boolean*
Tree	radius-override

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Default	false
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	DHCP lease time
Context	**configure** service vprn *string* interface *string* ipv4 dhcp proxy-server lease-time value *number*
Tree	value
Range	300 to 315446399
Units	seconds
Introduced	16.0.R1
Platforms	All

python-policy *reference*

Synopsis	Python policy
Context	**configure** service vprn *string* interface *string* ipv4 dhcp python-policy *reference*
Tree	python-policy
Reference	**configure** python python-policy *string*
Introduced	16.0.R1
Platforms	All

relay-plain-bootp *boolean*

Synopsis	Enable relaying of plain BOOTP packets
Context	**configure** service vprn *string* interface *string* ipv4 dhcp relay-plain-bootp *boolean*
Tree	relay-plain-bootp
Default	false
Introduced	16.0.R1
Platforms	All

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relay-proxy

Synopsis	Enable the **relay-proxy** context
Context	**configure** service vprn *string* interface *string* ipv4 dhcp relay-proxy
Tree	relay-proxy
Introduced	16.0.R1
Platforms	All

release-update-src-ip *boolean*

Synopsis	Update the source IP address of a DHCP RELEASE message
Context	**configure** service vprn *string* interface *string* ipv4 dhcp relay-proxy release-update-src-ip *boolean*
Tree	release-update-src-ip
Default	false
Introduced	16.0.R1
Platforms	All

siaddr-override *string*

Synopsis	DHCP server IP address for address hiding function
Context	**configure** service vprn *string* interface *string* ipv4 dhcp relay-proxy siaddr-override *string*
Tree	siaddr-override
Introduced	16.0.R1
Platforms	All

release-include-gi-address *boolean*

Synopsis	Include gateway IP address in DHCP Release messages
Context	**configure** service vprn *string* interface *string* ipv4 dhcp release-include-gi-address *boolean*
Tree	release-include-gi-address
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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server *string*

Synopsis	IP addresses for DHCP server requests
Context	**configure** service vprn *string* interface *string* ipv4 dhcp server *string*
Tree	server
Description	This command configures a list of servers that this interface forwards requests to. The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list.
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

src-ip-addr *keyword*

Synopsis	Type of source address to use for DHCP relay
Context	**configure** service vprn *string* interface *string* ipv4 dhcp src-ip-addr *keyword*
Tree	src-ip-addr
Options	auto, gi-address
Default	auto
Introduced	16.0.R1
Platforms	All

trusted *boolean*

Synopsis	Relay untrusted packets
Context	**configure** service vprn *string* interface *string* ipv4 dhcp trusted *boolean*
Tree	trusted
Description	When configured to **true**, the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request. A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit.

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This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.

Default	false
Introduced	16.0.R1
Platforms	All

use-arp *boolean*

Synopsis	Use ARP to determine the destination hardware address
Context	**configure** service vprn *string* interface *string* ipv4 dhcp use-arp *boolean*
Tree	use-arp
Default	false
Introduced	16.0.R1
Platforms	All

icmp

Synopsis	Enter the **icmp** context
Context	**configure** service vprn *string* interface *string* ipv4 icmp
Tree	icmp
Introduced	16.0.R1
Platforms	All

mask-reply *boolean*

Synopsis	Allow responses to ICMP mask requests on the interface
Context	**configure** service vprn *string* interface *string* ipv4 icmp mask-reply *boolean*
Tree	mask-reply
Default	true
Introduced	16.0.R1
Platforms	All

param-problem

Synopsis	Enter the **param-problem** context

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Context	**configure** service vprn *string* interface *string* ipv4 icmp param-problem
Tree	param-problem
Description	Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sent Parameter Problem messages
Context	**configure** service vprn *string* interface *string* ipv4 icmp param-problem admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum number of Parameter Problem messages to send
Context	**configure** service vprn *string* interface *string* ipv4 icmp param-problem number *number*
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit number of Parameter Problem messages
Context	**configure** service vprn *string* interface *string* ipv4 icmp param-problem seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds

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Default	10
Introduced	16.0.R1
Platforms	All

redirects

Synopsis	Enter the **redirects** context
Context	**configure** service vprn *string* interface *string* ipv4 icmp redirects
Tree	redirects
Description	Commands in this context configure the settings for ICMP redirect messages generated by the interface. The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sending ICMP redirect messages
Context	**configure** service vprn *string* interface *string* ipv4 icmp redirects admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum number of ICMP redirect messages to send
Context	**configure** service vprn *string* interface *string* ipv4 icmp redirects number *number*
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

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seconds *number*

Synopsis	Time used to limit the number of ICMP redirect messages
Context	**configure** service vprn *string* interface *string* ipv4 icmp redirects seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

ttl-expired

Synopsis	Enter the **ttl-expired** context
Context	**configure** service vprn *string* interface *string* ipv4 icmp ttl-expired
Tree	ttl-expired
Description	Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sending TTL expired messages
Context	**configure** service vprn *string* interface *string* ipv4 icmp ttl-expired admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum number of TTL expired messages to send
Context	**configure** service vprn *string* interface *string* ipv4 icmp ttl-expired number *number*

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Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit the number of TTL expired messages
Context	**configure** service vprn *string* interface *string* ipv4 icmp ttl-expired seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

unreachables

Synopsis	Enter the **unreachables** context
Context	**configure** service vprn *string* interface *string* ipv4 icmp unreachables
Tree	unreachables
Description	Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sending unreachable messages
Context	**configure** service vprn *string* interface *string* ipv4 icmp unreachables admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable

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Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum number of unreachable messages to send
Context	**configure** service vprn *string* interface *string* ipv4 icmp unreachables number *number*
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time to limit the number of ICMP unreachable messages
Context	**configure** service vprn *string* interface *string* ipv4 icmp unreachables seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

ip-helper-address *string*

Synopsis	Gateway address
Context	**configure** service vprn *string* interface *string* ipv4 ip-helper-address *string*
Tree	ip-helper-address
Introduced	16.0.R1
Platforms	All

local-dhcp-server *reference*

Synopsis	DHCP server for the interface

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Context	**configure** service vprn *string* interface *string* ipv4 local-dhcp-server *reference*
Tree	local-dhcp-server
Reference	**configure** service vprn *string* dhcp-server dhcpv4 *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-discovery

Synopsis	Enter the **neighbor-discovery** context
Context	**configure** service vprn *string* interface *string* ipv4 neighbor-discovery
Tree	neighbor-discovery
Introduced	16.0.R1
Platforms	All

host-route

Synopsis	Enter the **host-route** context
Context	**configure** service vprn *string* interface *string* ipv4 neighbor-discovery host-route
Tree	host-route
Introduced	19.10.R1
Platforms	All

populate [route-type] *keyword*

Synopsis	Enter the **populate** list instance
Context	**configure** service vprn *string* interface *string* ipv4 neighbor-discovery host-route populate *keyword*
Tree	populate
Introduced	19.10.R1
Platforms	All

[**route-type**] *keyword*

Synopsis	Type of ARP or ND entries that generate host routes
Context	**configure** service vprn *string* interface *string* ipv4 neighbor-discovery host-route populate *keyword*

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Tree	populate
Options	static, dynamic, evpn
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

route-tag *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	**configure** service vprn *string* interface *string* ipv4 neighbor-discovery host-route populate *keyword* route-tag *number*
Tree	route-tag
Description	This command specifies the route tag that is added in the route table for ARP or ND host routes. This tag can be matched on BGP VRF export and BGP peer export policies.
Range	1 to 255
Introduced	19.10.R1
Platforms	All

learn-unsolicited *boolean*

Synopsis	Learn new entries from any received NA message
Context	**configure** service vprn *string* interface *string* ipv4 neighbor-discovery learn-unsolicited *boolean*
Tree	learn-unsolicited
Description	When configured to **true**, the router can learn neighbor entries from received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited (S) flag set. The command can be enabled for global addresses, link-local addresses, or for both. When configured to **false**, the router follows standard behavior for learning neighbor entries. • If an unsolicited NA (regardless of the S flag) is received from a neighbor that is not yet in the Neighbor Discovery (ND) cache, the NA is ignored. • If an NS, RS, RA, or Redirect message with a Link Layer Address (MAC) is received from a neighbor that is not yet in the ND cache, a new neighbor entry is created in the cache to store the received Link Layer MAC. The neighbor is put in the STALE state.

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Default	false
Introduced	16.0.R1
Platforms	All

limit

Synopsis	Enter the **limit** context
Context	**configure** service vprn *string* interface *string* ipv4 neighbor-discovery limit
Tree	limit
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Generate log entries only if limit is reached
Context	**configure** service vprn *string* interface *string* ipv4 neighbor-discovery limit log-only *boolean*
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

max-entries *number*

Synopsis	Maximum number of entries learned on an IP interface
Context	**configure** service vprn *string* interface *string* ipv4 neighbor-discovery limit max-entries *number*
Tree	max-entries
Range	0 to 524288
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Threshold value that triggers a warning message

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Context	**configure** service vprn *string* interface *string* ipv4 neighbor-discovery limit threshold *number*
Tree	threshold
Range	1 to 100
Units	percent
Default	90
Introduced	16.0.R1
Platforms	All

local-proxy-arp *boolean*

Synopsis	Enable local proxy ARP on interface
Context	**configure** service vprn *string* interface *string* ipv4 neighbor-discovery local-proxy-arp *boolean*
Tree	local-proxy-arp
Description	When configured to **true**, the router enables local proxy ARP on the interface. When configured to **false**, the router does not respond to ARP requests for addresses on the same subnet.
Introduced	16.0.R1
Platforms	All

populate *boolean*

Synopsis	Allow static and dynamic hosts to be populated in system ARP cache
Context	**configure** service vprn *string* interface *string* ipv4 neighbor-discovery populate *boolean*
Tree	populate
Default	false
Introduced	16.0.R1
Platforms	All

proactive-refresh *boolean*

Synopsis	Send a single refresh message before entry timeout
Context	**configure** service vprn *string* interface *string* ipv4 neighbor-discovery proactive-refresh *boolean*
Tree	proactive-refresh

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Description	When configured to **true**, the router always sends a refresh message 30 seconds before the timeout of the entry (a single refresh message with no retries). When configured to **false**, the router marks an entry as stale 30 seconds before age-out, and the router only sends an ARP request to refresh the entry if the IOM receives traffic that uses it. Then, the IOM asks the ARP application to send a refresh message. With ARP proactive refresh enabled, the ARP module sends a refresh message regardless of the IOM receiving traffic.
Default	false
Introduced	16.0.R1
Platforms	All

proxy-arp-policy *reference*

Synopsis	Proxy ARP policy name
Context	**configure** service vprn *string* interface *string* ipv4 neighbor-discovery proxy-arp-policy *reference*
Tree	proxy-arp-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

remote-proxy-arp *boolean*

Synopsis	Enable remote proxy ARP on the interface
Context	**configure** service vprn *string* interface *string* ipv4 neighbor-discovery remote-proxy-arp *boolean*
Tree	remote-proxy-arp
Default	false
Introduced	16.0.R1
Platforms	All

retry-timer *number*

Synopsis	ARP retry interval

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Context	**configure** service vprn *string* interface *string* ipv4 neighbor-discovery retry-timer *number*
Tree	retry-timer
Range	1 to 300
Units	deciseconds
Default	50
Introduced	16.0.R1
Platforms	All

static-neighbor [ipv4-address] *string*

Synopsis	Enter the **static-neighbor** list instance
Context	**configure** service vprn *string* interface *string* ipv4 neighbor-discovery static-neighbor *string*
Tree	static-neighbor
Introduced	16.0.R1
Platforms	All

[**ipv4-address**] *string*

Synopsis	IPv4 address that corresponds to the physical address
Context	**configure** service vprn *string* interface *string* ipv4 neighbor-discovery static-neighbor *string*
Tree	static-neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

mac-address *string*

Synopsis	MAC address for the static neighbor
Context	**configure** service vprn *string* interface *string* ipv4 neighbor-discovery static-neighbor *string* mac-address *string*
Tree	mac-address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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static-neighbor-unnumbered

Synopsis	Enable the **static-neighbor-unnumbered** context
Context	**configure** service vprn *string* interface *string* ipv4 neighbor-discovery static-neighbor-unnumbered
Tree	static-neighbor-unnumbered
Introduced	16.0.R1
Platforms	All

mac-address *string*

Synopsis	MAC address for the static neighbor
Context	**configure** service vprn *string* interface *string* ipv4 neighbor-discovery static-neighbor-unnumbered mac-address *string*
Tree	mac-address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout for an ARP entry learned on the interface
Context	**configure** service vprn *string* interface *string* ipv4 neighbor-discovery timeout *number*
Tree	timeout
Description	This command configures the minimum time an ARP entry learned on the IP interface is stored in the ARP table. ARP entries are automatically refreshed when an ARP request or gratuitous ARP is seen by an IP host. Otherwise, the ARP entry is aged from the ARP table.
Range	0 to 65535
Units	seconds
Default	14400
Introduced	16.0.R1
Platforms	All

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primary

Synopsis	Enable the **primary** context
Context	**configure** service vprn *string* interface *string* ipv4 primary
Tree	primary
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Primary IPv4 address assigned to the interface
Context	**configure** service vprn *string* interface *string* ipv4 primary address *string*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

broadcast *keyword*

Synopsis	Broadcast address format
Context	**configure** service vprn *string* interface *string* ipv4 primary broadcast *keyword*
Tree	broadcast
Options	all-ones, host-ones
Default	host-ones
Introduced	16.0.R1
Platforms	All

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	**configure** service vprn *string* interface *string* ipv4 primary prefix-length *number*
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1

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Platforms	All

track-srrp *number*

Synopsis	SRRP instance whose state is tracked on the IP address
Context	**configure** service vprn *string* interface *string* ipv4 primary track-srrp *number*
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

qos-route-lookup *keyword*

Synopsis	QoS Route lookup
Context	**configure** service vprn *string* interface *string* ipv4 qos-route-lookup *keyword*
Tree	qos-route-lookup
Options	destination, source
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

secondary [address] *string*

Synopsis	Enter the **secondary** list instance
Context	**configure** service vprn *string* interface *string* ipv4 secondary *string*
Tree	secondary
Introduced	16.0.R1
Platforms	All

[**address**] *string*

Synopsis	Secondary IPv4 address assigned to the interface
Context	**configure** service vprn *string* interface *string* ipv4 secondary *string*
Tree	secondary
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

broadcast *keyword*

Synopsis	Broadcast address format
Context	**configure** service vprn *string* interface *string* ipv4 secondary *string* broadcast *keyword*
Tree	broadcast
Options	all-ones, host-ones
Default	host-ones
Introduced	16.0.R1
Platforms	All

igp-inhibit *boolean*

Synopsis	Disable the running IGP from recognizing secondary IP
Context	**configure** service vprn *string* interface *string* ipv4 secondary *string* igp-inhibit *boolean*
Tree	igp-inhibit
Description	When configured to **true**, the running IGP does not recognize the secondary IP address as a local interface.
Default	false
Introduced	16.0.R1
Platforms	All

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	**configure** service vprn *string* interface *string* ipv4 secondary *string* prefix-length *number*
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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track-srrp *number*

Synopsis	SRRP instance whose state is tracked on the IP address
Context	**configure** service vprn *string* interface *string* ipv4 secondary *string* track-srrp *number*
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

tcp-mss *number*

Synopsis	TCP maximum segment size for the interface
Context	**configure** service vprn *string* interface *string* ipv4 tcp-mss *number*
Tree	tcp-mss
Range	384 to 9746
Introduced	16.0.R1
Platforms	All

unnumbered

Synopsis	Enter the **unnumbered** context
Context	**configure** service vprn *string* interface *string* ipv4 unnumbered
Tree	unnumbered
Introduced	16.0.R1
Platforms	All

ip-address *string*

Synopsis	IP address for the interface
Context	**configure** service vprn *string* interface *string* ipv4 unnumbered ip-address *string*
Tree	ip-address
Notes	The following elements are part of a choice: **ip-address** or **ip-int-name**.
Introduced	16.0.R1
Platforms	All

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ip-int-name *string*

Synopsis	IP interface name
Context	**configure** service vprn *string* interface *string* ipv4 unnumbered ip-int-name *string*
Tree	ip-int-name
String Length	1 to 32
Notes	The following elements are part of a choice: **ip-address** or **ip-int-name**.
Introduced	16.0.R1
Platforms	All

urpf-check

Synopsis	Enable the **urpf-check** context
Context	**configure** service vprn *string* interface *string* ipv4 urpf-check
Tree	urpf-check
Introduced	16.0.R1
Platforms	All

ignore-default *boolean*

Synopsis	Ignore default route when performing a uRPF check
Context	**configure** service vprn *string* interface *string* ipv4 urpf-check ignore-default *boolean*
Tree	ignore-default
Default	false
Introduced	16.0.R1
Platforms	All

mode *keyword*

Synopsis	Unicast RPF check mode
Context	**configure** service vprn *string* interface *string* ipv4 urpf-check mode *keyword*
Tree	mode
Options	strict, loose, strict-no-ecmp
Default	strict
Introduced	16.0.R1
Platforms	All

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vrrp [virtual-router-id] *number*

Synopsis	Enter the **vrrp** list instance
Context	**configure** service vprn *string* interface *string* ipv4 vrrp *number*
Tree	vrrp
Introduced	16.0.R1
Platforms	All

[**virtual-router-id**] *number*

Synopsis	Virtual Router Identifier (VRID) for the IP interface
Context	**configure** service vprn *string* interface *string* ipv4 vrrp *number*
Tree	vrrp
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of VRRP
Context	**configure** service vprn *string* interface *string* ipv4 vrrp *number* admin-state *keyword*
Tree	admin-state
Description	The command determines the administrative state of non-owner virtual router instances. Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes. When **disabled**, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing. Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated. An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the **admin-state** command within the parent IP interface node which administratively disables the IP interface.
Options	enable, disable

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Default	enable
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Password for simple text authentication
Context	**configure** service vprn *string* interface *string* ipv4 vrrp *number* authentication-key *string*
Tree	authentication-key
Description	This command optionally assigns a simple text password authentication key to generate master VRRP advertisement messages and validate received VRRP advertisement messages. If this command is re-executed with a different password key defined, the new key immediately replaces the old key. This command may be executed at any time.
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

backup *string*

Synopsis	Virtual router IP addresses for the interface
Context	**configure** service vprn *string* interface *string* ipv4 vrrp *number* backup *string*
Tree	backup
Description	This command associates virtual router IP addresses with those of the parental IP interface. This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance. Non-owner virtual router instances create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance. For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is advertising to backup virtual routers receiving the messages. The specified *unicast-ipv4-address* must be equal to one of the existing IP addresses in the parental IP interface (primary or secondary) or this command fails. See "Owner and non-owner VRRP" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide* for more information about owner and non-owner virtual router instances.

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Max. Instances	16
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enable the **bfd-liveness** context
Context	**configure** service vprn *string* interface *string* ipv4 vrrp *number* bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

dest-ip *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination IP address to use for BFD session
Context	**configure** service vprn *string* interface *string* ipv4 vrrp *number* bfd-liveness dest-ip *string*
Tree	dest-ip
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

interface-name *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
Context	**configure** service vprn *string* interface *string* ipv4 vrrp *number* bfd-liveness interface-name *string*
Tree	interface-name
String Length	1 to 32

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

service-name *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	**configure** service vprn *string* interface *string* ipv4 vrrp *number* bfd-liveness service-name *string*
Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

init-delay *number*

Synopsis	VRRP initialization delay timer
Context	**configure** service vprn *string* interface *string* ipv4 vrrp *number* init-delay *number*
Tree	init-delay
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

mac *string*

Synopsis	Virtual MAC address to use in ARP responses
Context	**configure** service vprn *string* interface *string* ipv4 vrrp *number* mac *string*
Tree	mac
Description	This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID. Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many

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hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.

Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with *unicast-mac-address* as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with *unicast-mac-address* as the source MAC.

An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.

Introduced 16.0.R1

Platforms All

master-int-inherit *boolean*

Synopsis Allow master instance to dictate the master down timer

Context **configure** service vprn *string* interface *string* ipv4 vrrp *number* master-int-inherit *boolean*

Tree master-int-inherit

Description When configured to **true**, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.

When configured to **false**, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.

Introduced 16.0.R1

Platforms All

message-interval *number*

Synopsis Interval for sending VRRP advertisement messages

Context **configure** service vprn *string* interface *string* ipv4 vrrp *number* message-interval *number*

Tree message-interval

Description This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.

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The usage of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the **master-int-inherit** command:

- When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The **master-int-inherit** command has no effect when operating as master.
- When a non-owner is in the backup state with **master-int-inherit** disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.
- When a non-owner is in the backup state with **master-int-inherit** enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.

Range	1 to 2559
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VRRP instance to follow a specified operational group
Context	**configure** service vprn *string* interface *string* ipv4 vrrp *number* monitor-oper-group *reference*
Tree	monitor-oper-group
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.
Reference	**configure** service oper-group *string*
Introduced	22.2.R1
Platforms	All

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ntp-reply *boolean*

Synopsis	Allow processing of NTP requests
Context	**configure** service vprn *string* interface *string* ipv4 vrrp *number* ntp-reply *boolean*
Tree	ntp-reply
Description	When configured to **true**, the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router. When configured to **false**, the router does not process NTP requests.
Default	false
Introduced	20.2.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group name associated with the VRRP
Context	**configure** service vprn *string* interface *string* ipv4 vrrp *number* oper-group *reference*
Tree	oper-group
Description	This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states.
Reference	**configure** service oper-group *string*
Introduced	16.0.R1
Platforms	All

owner *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate the virtual router instance as owner
Context	**configure** service vprn *string* interface *string* ipv4 vrrp *number* owner *boolean*
Tree	owner
Description	When configured to **true**, the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for

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forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router.

When configured to **false**, this virtual router instance is designated as a non-owner.

Default	false
Introduced	16.0.R1
Platforms	All

passive *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Suppress the processing of VRRP advertisement messages
Context	**configure** service vprn *string* interface *string* ipv4 vrrp *number* passive *boolean*
Tree	passive
Description	When configured to **true**, the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down). When configured to **false**, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.
Default	false
Introduced	16.0.R1
Platforms	All

ping-reply *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	**configure** service vprn *string* interface *string* ipv4 vrrp *number* ping-reply *boolean*
Tree	ping-reply
Description	When configured to **true**, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address). When configured to **false**, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.

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Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.

Default false

Introduced 16.0.R1

Platforms All

policy *reference*

Synopsis VRRP priority control policy

Context **configure** service vprn *string* interface *string* ipv4 vrrp *number* policy *reference*

Tree policy

Description This command configures a VRRP priority control policy to associate with the virtual router instance.

VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.

An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the **priority** command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.

For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.

Reference **configure** vrrp policy *number*

Introduced 16.0.R1

Platforms All

preempt *boolean*

Synopsis Allow the VRRP to override an existing non-owner master

Context **configure** service vprn *string* interface *string* ipv4 vrrp *number* preempt *boolean*

Tree preempt

Description When configured to **true**, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.

When configured to **false**, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.

Default true

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Platforms	All

priority *number*

Synopsis	Base priority for the VRRP
Context	**configure** service vprn *string* interface *string* ipv4 vrrp *number* priority *number*
Tree	priority
Description	This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process. The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

ssh-reply *boolean*

Synopsis	Allow the non-owner master to reply to SSH requests
Context	**configure** service vprn *string* interface *string* ipv4 vrrp *number* ssh-reply *boolean*
Tree	ssh-reply
Description	When configured to **true**, the router allows the non-owner master to reply to SSH requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the SSH request. SSH cannot be disabled at the management security level (either on the parental IP interface or on the SSH source host address). When configure to **false**, SSH requests to non-owner master virtual IP addresses are silently discarded.
Default	false
Introduced	16.0.R1
Platforms	All

standby-forwarding *boolean*

Synopsis	Allow standby router to forward traffic
Context	**configure** service vprn *string* interface *string* ipv4 vrrp *number* standby-forwarding *boolean*
Tree	standby-forwarding

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Description	When configured to **true**, the standby router forwards all traffic. When configured to **false**, the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.
Default	false
Introduced	16.0.R1
Platforms	All

telnet-reply *boolean*

Synopsis	Allow non-owner master to reply to Telnet requests
Context	**configure** service vprn *string* interface *string* ipv4 vrrp *number* telnet-reply *boolean*
Tree	telnet-reply
Description	When configured to **true**, the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address). When configured to **false**, the router silently discards Telnet requests sent to non-owner master virtual IP addresses.
Default	false
Introduced	16.0.R1
Platforms	All

traceroute-reply *boolean*

Synopsis	Allow non-owner master to reply to traceroute requests
Context	**configure** service vprn *string* interface *string* ipv4 vrrp *number* traceroute-reply *boolean*
Tree	traceroute-reply
Description	When configured to **true**, the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance. When configured to **false**, the router silently discards traceroute requests sent to non-owner master virtual IP addresses. Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).
Default	false
Introduced	16.0.R1
Platforms	All

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ipv6

Synopsis	Enable the **ipv6** context
Context	**configure** service vprn *string* interface *string* ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

address [ipv6-address] *string*

Synopsis	Enter the **address** list instance
Context	**configure** service vprn *string* interface *string* ipv6 address *string*
Tree	address
Introduced	16.0.R1
Platforms	All

[**ipv6-address**] *string*

Synopsis	IPv6 address assigned to the interface
Context	**configure** service vprn *string* interface *string* ipv6 address *string*
Tree	address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

duplicate-address-detection *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable Duplicate Address Detection
Context	**configure** service vprn *string* interface *string* ipv6 address *string* duplicate-address-detection *boolean*
Tree	duplicate-address-detection
Description	When configured to **true**, the router enables Duplicate Address Detection (DAD).

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When configured to **false**, the router disables DAD and sets the address to preferred, even if there is a duplicated address.

Default	true
Introduced	16.0.R1
Platforms	All

eui-64 *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Form IPv6 address from prefix and 64-bit interface ID
Context	**configure** service vprn *string* interface *string* ipv6 address *string* eui-64 *boolean*
Tree	eui-64
Description	When configured to **true**, the router forms a complete IPv6 address from the supplied prefix and 64-bit interface identifier. The 64-bit interface identifier is derived from the MAC address on Ethernet interfaces. For interfaces without a MAC address, for example POS interfaces, use the base MAC address of the chassis.
Default	false
Introduced	16.0.R1
Platforms	All

prefix-length *number*

Synopsis	IPv6 address prefix length
Context	**configure** service vprn *string* interface *string* ipv6 address *string* prefix-length *number*
Tree	prefix-length
Range	4 to 128
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

primary-preference *number*

Synopsis	Index assigned to the IPv6 address of the interface

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Context	**configure** service vprn *string* interface *string* ipv6 address *string* primary-preference *number*
Tree	primary-preference
Description	This command assigns a primary preference index to an IPv6 address of the interface to enforce the order in which the address is used by control plane protocols and applications that require a fixed address of the interface, such as LDP and Segment Routing. In cases where a fixed address is required when originating packets from the interface, the IPv6 address with the lowest primary preference index is selected. If the selected address is removed, the next IPv6 address with the next lowest primary preference index is selected. If this index is not specified for the IPv6 address, the system assigns the next available index value to the address. The address index space is unique across all addresses of a given interface.
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

track-srrp *number*

Synopsis	SRRP ID whose state is tracked on this IP address
Context	**configure** service vprn *string* interface *string* ipv6 address *string* track-srrp *number*
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

bfd

Synopsis	Enter the **bfd** context
Context	**configure** service vprn *string* interface *string* ipv6 bfd
Tree	bfd
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	**configure** service vprn *string* interface *string* ipv6 bfd admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	**configure** service vprn *string* interface *string* ipv6 bfd echo-receive *number*
Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	**configure** service vprn *string* interface *string* ipv6 bfd multiplier *number*
Tree	multiplier
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	16.0.R1
Platforms	All

receive *number*

Synopsis	BFD receive interval over this interface
Context	**configure** service vprn *string* interface *string* ipv6 bfd receive *number*
Tree	receive
Description	This command specifies the receive interval for the BFD session.

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On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

transmit-interval *number*

Synopsis	BFD transmit interval over this interface
Context	**configure** service vprn *string* interface *string* ipv6 bfd transmit-interval *number*
Tree	transmit-interval
Description	This command configures the transmit intervals. On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Local termination point for the BFD session
Context	**configure** service vprn *string* interface *string* ipv6 bfd type *keyword*
Tree	type
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: • **auto** (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the **cpm-np**. • **cpm-np** – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems. • **fp** – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.

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Options	cpm-np, auto, fp
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dhcp6

Synopsis	Enter the **dhcp6** context
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6
Tree	dhcp6
Introduced	16.0.R1
Platforms	All

relay

Synopsis	Enter the **relay** context
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 relay
Tree	relay
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of DHCPv6 Relay
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 relay admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 relay description *string*

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Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

lease-populate

Synopsis	Enter the **lease-populate** context
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 relay lease-populate
Tree	lease-populate
Introduced	16.0.R1
Platforms	All

max-nbr-of-leases *number*

Synopsis	Maximum lease state entries allowed for the interface
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 relay lease-populate max-nbr-of-leases *number*
Tree	max-nbr-of-leases
Range	0 to 32767
Default	0
Introduced	16.0.R1
Platforms	All

route-populate

Synopsis	Enter the **route-populate** context
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 relay lease-populate route-populate
Tree	route-populate
Introduced	16.0.R1
Platforms	All

na *boolean*

Synopsis	Create route based on IA_NA prefix option in relay-reply message

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Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 relay lease-populate route-populate na *boolean*
Tree	na
Default	false
Introduced	16.0.R1
Platforms	All

pd

Synopsis	Enable the **pd** context
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 relay lease-populate route-populate pd
Tree	pd
Introduced	16.0.R1
Platforms	All

exclude *boolean*

Synopsis	Create back hole route based on prefix exclude option in relay-reply message
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 relay lease-populate route-populate pd exclude *boolean*
Tree	exclude
Default	false
Introduced	16.0.R1
Platforms	All

ta *boolean*

Synopsis	Create route based on IA_TA prefix option in relay-reply message
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 relay lease-populate route-populate ta *boolean*
Tree	ta
Default	false
Introduced	16.0.R1
Platforms	All

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link-address *string*

Synopsis	Link address of the DHCPv6 relay messages
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 relay link-address *string*
Tree	link-address
Introduced	16.0.R1
Platforms	All

neighbor-resolution *boolean*

Synopsis	Enable neighbor resolution via DHCPv6 relay
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 relay neighbor-resolution *boolean*
Tree	neighbor-resolution
Default	false
Introduced	16.0.R1
Platforms	All

option

Synopsis	Enter the **option** context
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 relay option
Tree	option
Introduced	16.0.R1
Platforms	All

interface-id

Synopsis	Enter the **interface-id** context
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 relay option interface-id
Tree	interface-id
Introduced	16.0.R1
Platforms	All

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ascii-tuple

Synopsis	Use ASCII-encoded concatenated tuple
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 relay option interface-id ascii-tuple
Tree	ascii-tuple
Notes	The following elements are part of a choice: **ascii-tuple**, **if-index**, **sap-id**, or **string**.
Introduced	16.0.R1
Platforms	All

if-index

Synopsis	Use interface index in the DHCPv6 relay packet
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 relay option interface-id if-index
Tree	if-index
Notes	The following elements are part of a choice: **ascii-tuple**, **if-index**, **sap-id**, or **string**.
Introduced	16.0.R1
Platforms	All

sap-id

Synopsis	Use SAP ID in interface ID option in relay packet
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 relay option interface-id sap-id
Tree	sap-id
Notes	The following elements are part of a choice: **ascii-tuple**, **if-index**, **sap-id**, or **string**.
Introduced	16.0.R1
Platforms	All

string *string*

Synopsis	String for interface ID option in DHCPv6 relay packet
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 relay option interface-id string *string*
Tree	string
String Length	1 to 80
Notes	The following elements are part of a choice: **ascii-tuple**, **if-index**, **sap-id**, or **string**.

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Introduced	16.0.R1
Platforms	All

remote-id *boolean*

Synopsis	Send remote ID option in the DHCPv6 relay packet
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 relay option remote-id *boolean*
Tree	remote-id
Default	false
Introduced	16.0.R1
Platforms	All

python-policy *reference*

Synopsis	Python policy name
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 relay python-policy *reference*
Tree	python-policy
Reference	**configure** python python-policy *string*
Introduced	16.0.R1
Platforms	All

server *string*

Synopsis	DHCPv6 server to which the DHCPv6 requests are forwarded
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 relay server *string*
Tree	server
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

source-address *string*

Synopsis	Source IPv6 address of the DHCPv6 relay messages

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Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 relay source-address *string*
Tree	source-address
Introduced	16.0.R1
Platforms	All

user-db *reference*

Synopsis	Local user database for authentication
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 relay user-db *reference*
Tree	user-db
Reference	**configure** subscriber-mgmt local-user-db *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server

Synopsis	Enter the **server** context
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 server
Tree	server
Introduced	16.0.R1
Platforms	All

max-nbr-of-leases *number*

Synopsis	DHCPv6 leases allowed
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 server max-nbr-of-leases *number*
Tree	max-nbr-of-leases
Range	0 to 8000
Default	8000
Introduced	16.0.R1
Platforms	All

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prefix-delegation

Synopsis	Enter the **prefix-delegation** context
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 server prefix-delegation
Tree	prefix-delegation
Description	Commands in this context configure the options for delegating a long-lived prefix from a delegating router to a requesting router, where the delegating router does not require knowledge about the link topology in the network to which the prefixes are assigned.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the prefix delegation
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 server prefix-delegation admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

prefix [ipv6-prefix] *string*

Synopsis	Enter the **prefix** list instance
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 server prefix-delegation prefix *string*
Tree	prefix
Description	Commands in this context configure the IPv6 prefix that is delegated by the system.
Introduced	16.0.R1
Platforms	All

[ipv6-prefix] *string*

Synopsis	IPv6 address and prefix
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 server prefix-delegation prefix *string*

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Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

client-id

Synopsis	Enter the **client-id** context
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 server prefix-delegation prefix *string* client-id
Tree	client-id
Introduced	16.0.R1
Platforms	All

duid *string*

Synopsis	Requesting router ID
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 server prefix-delegation prefix *string* client-id duid *string*
Tree	duid
String Length	1 to 130
Introduced	16.0.R1
Platforms	All

iaid *number*

Synopsis	IAID from the requesting router to match
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 server prefix-delegation prefix *string* client-id iaid *number*
Tree	iaid
Description	This command configures the Identity Association ID (IAID) associated with a prefix delegation entry and must match the IAID sent by the requesting router for the prefix delegation to succeed.
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

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preferred-lifetime *(number | keyword)*

Synopsis	Preferred lifetime of the prefix
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 server prefix-delegation prefix *string* preferred-lifetime *(number | keyword)*
Tree	preferred-lifetime
Description	This command configures the preferred lifetime of the prefix. The value cannot be greater than the valid lifetime value.
Range	1 to 4294967294
Units	seconds
Options	infinite
Default	604800
Introduced	16.0.R1
Platforms	All

valid-lifetime *(number | keyword)*

Synopsis	Valid lifetime of the prefix
Context	**configure** service vprn *string* interface *string* ipv6 dhcp6 server prefix-delegation prefix *string* valid-lifetime *(number | keyword)*
Tree	valid-lifetime
Range	1 to 4294967294
Units	seconds
Options	infinite
Default	2592000
Introduced	16.0.R1
Platforms	All

duplicate-address-detection *boolean*

Synopsis	Enable Duplicate Address Detection per interface
Context	**configure** service vprn *string* interface *string* ipv6 duplicate-address-detection *boolean*
Tree	duplicate-address-detection
Default	true
Introduced	16.0.R1

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Platforms	All

forward-ipv4-packets *boolean*

Synopsis	Forward unencapsulated IPv4 packets
Context	**configure** service vprn *string* interface *string* ipv6 forward-ipv4-packets *boolean*
Tree	forward-ipv4-packets
Default	false
Introduced	19.5.R1
Platforms	All

icmp6

Synopsis	Enter the **icmp6** context
Context	**configure** service vprn *string* interface *string* ipv6 icmp6
Tree	icmp6
Introduced	16.0.R1
Platforms	All

packet-too-big

Synopsis	Enter the **packet-too-big** context
Context	**configure** service vprn *string* interface *string* ipv6 icmp6 packet-too-big
Tree	packet-too-big
Description	Commands in this context configure limiting the number of ICMPv6 Packet Too Big messages.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Packet Too Big message sends
Context	**configure** service vprn *string* interface *string* ipv6 icmp6 packet-too-big admin-state *keyword*
Tree	admin-state
Options	enable, disable

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Default	enable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number of Packet Too big Messages issued per time frame
Context	**configure** service vprn *string* interface *string* ipv6 icmp6 packet-too-big number *number*
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit Packet Too Big messages
Context	**configure** service vprn *string* interface *string* ipv6 icmp6 packet-too-big seconds *number*
Tree	seconds
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

param-problem

Synopsis	Enter the **param-problem** context
Context	**configure** service vprn *string* interface *string* ipv6 icmp6 param-problem
Tree	param-problem
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Parameter Problem message sends

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Context	**configure** service vprn *string* interface *string* ipv6 icmp6 param-problem admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number used to limit ICMPv6 Parameter Problem messages
Context	**configure** service vprn *string* interface *string* ipv6 icmp6 param-problem number *number*
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit ICMPv6 Parameter Problem messages
Context	**configure** service vprn *string* interface *string* ipv6 icmp6 param-problem seconds *number*
Tree	seconds
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

redirects

Synopsis	Enter the **redirects** context
Context	**configure** service vprn *string* interface *string* ipv6 icmp6 redirects
Tree	redirects
Introduced	16.0.R1

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Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Redirect message sends
Context	**configure** service vprn *string* interface *string* ipv6 icmp6 redirects admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number to limit ICMPv6 Redirect messages per time frame
Context	**configure** service vprn *string* interface *string* ipv6 icmp6 redirects number *number*
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit ICMPv6 Redirect messages
Context	**configure** service vprn *string* interface *string* ipv6 icmp6 redirects seconds *number*
Tree	seconds
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

time-exceeded

Synopsis	Enter the **time-exceeded** context

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Context	**configure** service vprn *string* interface *string* ipv6 icmp6 time-exceeded
Tree	time-exceeded
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Time Exceeded message sends
Context	**configure** service vprn *string* interface *string* ipv6 icmp6 time-exceeded admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number to limit Time Exceeded messages per time frame
Context	**configure** service vprn *string* interface *string* ipv6 icmp6 time-exceeded number *number*
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit ICMPv6 Time Exceeded messages
Context	**configure** service vprn *string* interface *string* ipv6 icmp6 time-exceeded seconds *number*
Tree	seconds
Range	1 to 60
Default	10
Introduced	16.0.R1

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Platforms	All

unreachables

Synopsis	Enter the **unreachables** context
Context	**configure** service vprn *string* interface *string* ipv6 icmp6 unreachables
Tree	unreachables
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Unreachable message sends
Context	**configure** service vprn *string* interface *string* ipv6 icmp6 unreachables admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number to limit Unreachable messages per time frame
Context	**configure** service vprn *string* interface *string* ipv6 icmp6 unreachables number *number*
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit ICMPv6 Unreachable messages
Context	**configure** service vprn *string* interface *string* ipv6 icmp6 unreachables seconds *number*
Tree	seconds

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Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

link-local-address

Synopsis	Enter the **link-local-address** context
Context	**configure** service vprn *string* interface *string* ipv6 link-local-address
Tree	link-local-address
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	IPv6 link-local address
Context	**configure** service vprn *string* interface *string* ipv6 link-local-address address *string*
Tree	address
Introduced	16.0.R1
Platforms	All

duplicate-address-detection *boolean*

Synopsis	Enable Duplicate Address Detection
Context	**configure** service vprn *string* interface *string* ipv6 link-local-address duplicate-address-detection *boolean*
Tree	duplicate-address-detection
Description	When configured to **true**, the router enables Duplicate Address Detection (DAD) on the interface. When configured to **false**, the router disables DAD and sets the address to preferred, even if there is a duplicated address.
Default	true
Introduced	16.0.R1
Platforms	All

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local-dhcp-server *reference*

Synopsis	DHCP server for the interface
Context	**configure** service vprn *string* interface *string* ipv6 local-dhcp-server *reference*
Tree	local-dhcp-server
Reference	**configure** service vprn *string* dhcp-server dhcpv6 *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-discovery

Synopsis	Enter the **neighbor-discovery** context
Context	**configure** service vprn *string* interface *string* ipv6 neighbor-discovery
Tree	neighbor-discovery
Introduced	16.0.R1
Platforms	All

host-route

Synopsis	Enter the **host-route** context
Context	**configure** service vprn *string* interface *string* ipv6 neighbor-discovery host-route
Tree	host-route
Introduced	20.2.R1
Platforms	All

populate [route-type] *keyword*

Synopsis	Enter the **populate** list instance
Context	**configure** service vprn *string* interface *string* ipv6 neighbor-discovery host-route populate *keyword*
Tree	populate
Introduced	20.2.R1
Platforms	All

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[**route-type**] *keyword*

Synopsis	Type of ARP or ND entries that generate host routes
Context	**configure** service vprn *string* interface *string* ipv6 neighbor-discovery host-route populate *keyword*
Tree	populate
Options	static, dynamic, evpn
Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	All

route-tag *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	**configure** service vprn *string* interface *string* ipv6 neighbor-discovery host-route populate *keyword* route-tag *number*
Tree	route-tag
Description	This command specifies the route tag that is added in the route table for ARP or ND host routes. This tag can be matched on BGP VRF export and BGP peer export policies.
Range	1 to 255
Introduced	20.2.R1
Platforms	All

learn-unsolicited *keyword*

Synopsis	Type of entries learned from unsolicited NA messages
Context	**configure** service vprn *string* interface *string* ipv6 neighbor-discovery learn-unsolicited *keyword*
Tree	learn-unsolicited
Description	This command enables the ability to learn neighbor entries out of received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited flag set. When unconfigured, the router follows standard RFC 4861 behavior for learning of neighbor entries. The neighbor is put in the stale state. This is the standard RFC behavior.

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Options	global, link-local, both
Introduced	16.0.R1
Platforms	All

limit

Synopsis	Enter the **limit** context
Context	**configure** service vprn *string* interface *string* ipv6 neighbor-discovery limit
Tree	limit
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Generate log entries when limit is reached
Context	**configure** service vprn *string* interface *string* ipv6 neighbor-discovery limit log-only *boolean*
Tree	log-only
Description	When configured to **true**, the router sends the warning message at the specified threshold percentage or upon exceeding the specified limit. Entries that exceed the limit are learned. When configured to **false**, the router does not send the warning message.
Default	false
Introduced	16.0.R1
Platforms	All

max-entries *number*

Synopsis	Maximum number of entries learned on an IP interface
Context	**configure** service vprn *string* interface *string* ipv6 neighbor-discovery limit max-entries *number*
Tree	max-entries
Description	This command configures the maximum number of entries that can be learned on an IP interface. When unconfigured, no maximum limit is imposed.
Range	0 to 102400

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Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Threshold percentage that triggers a warning message
Context	**configure** service vprn *string* interface *string* ipv6 neighbor-discovery limit threshold *number*
Tree	threshold
Range	1 to 100
Units	percent
Default	90
Introduced	16.0.R1
Platforms	All

local-proxy-nd *boolean*

Synopsis	Enable local proxy neighbor discovery on the interface
Context	**configure** service vprn *string* interface *string* ipv6 neighbor-discovery local-proxy-nd *boolean*
Tree	local-proxy-nd
Description	When configured to **true**, the router enables local proxy neighbor discovery on the interface and replies to neighbor solicitation requests when both the hosts are on the same subnet. In this case, ICMP redirects are disabled. When configured to **false**, the router disables local proxy neighbor discovery on the interface and does not reply to neighbor solicitation requests if both the hosts are on the same subnet.
Default	false
Introduced	16.0.R1
Platforms	All

proactive-refresh *keyword*

Synopsis	Proactive refresh of neighbor entries
Context	**configure** service vprn *string* interface *string* ipv6 neighbor-discovery proactive-refresh *keyword*
Tree	proactive-refresh

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Description	This command enables a proactive refresh of the neighbor entries. After the stale timer expires, the router sends an NUD message to the host (regardless of the existence of traffic to the IP address on the IOM), so the entry can be refreshed or removed.
Options	global, link-local, both
Introduced	16.0.R1
Platforms	All

proxy-nd-policy *reference*

Synopsis	Proxy Neighbor Discovery policy name for the interface
Context	**configure** service vprn *string* interface *string* ipv6 neighbor-discovery proxy-nd-policy *reference*
Tree	proxy-nd-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

reachable-time *number*

Synopsis	Neighbor reachability detection timer
Context	**configure** service vprn *string* interface *string* ipv6 neighbor-discovery reachable-time *number*
Tree	reachable-time
Range	30 to 3600
Introduced	16.0.R1
Platforms	All

secure-nd

Synopsis	Enter the **secure-nd** context
Context	**configure** service vprn *string* interface *string* ipv6 neighbor-discovery secure-nd
Tree	secure-nd
Introduced	16.0.R1

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Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Secure Neighbor Discovery
Context	**configure** service vprn *string* interface *string* ipv6 neighbor-discovery secure-nd admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

allow-unsecured-msgs *boolean*

Synopsis	Accept unsecured messages
Context	**configure** service vprn *string* interface *string* ipv6 neighbor-discovery secure-nd allow-unsecured-msgs *boolean*
Tree	allow-unsecured-msgs
Description	When configured to **true**, the router accepts unsecured messages. When Secure Neighbor Discovery (SeND) is enabled, only secure messages are accepted. When configured to **false**, the router disables the acceptance of unsecured messages.
Default	true
Introduced	16.0.R1
Platforms	All

public-key-min-bits *number*

Synopsis	Minimum acceptable key length for public keys in CGA
Context	**configure** service vprn *string* interface *string* ipv6 neighbor-discovery secure-nd public-key-min-bits *number*
Tree	public-key-min-bits
Range	512 to 1024
Default	1024
Introduced	16.0.R1
Platforms	All

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security-parameter *number*

Synopsis	Security parameter used in the generation of a CGA
Context	**configure** service vprn *string* interface *string* ipv6 neighbor-discovery secure-nd security-parameter *number*
Tree	security-parameter
Range	0 to 1
Default	1
Introduced	16.0.R1
Platforms	All

stale-time *number*

Synopsis	Time a Neighbor Discovery cache entry remains stale
Context	**configure** service vprn *string* interface *string* ipv6 neighbor-discovery stale-time *number*
Tree	stale-time
Range	60 to 65535
Introduced	16.0.R1
Platforms	All

static-neighbor [ipv6-address] *string*

Synopsis	Enter the **static-neighbor** list instance
Context	**configure** service vprn *string* interface *string* ipv6 neighbor-discovery static-neighbor *string*
Tree	static-neighbor
Introduced	16.0.R1
Platforms	All

[**ipv6-address**] *string*

Synopsis	IPv6 address corresponding to the physical address
Context	**configure** service vprn *string* interface *string* ipv6 neighbor-discovery static-neighbor *string*
Tree	static-neighbor
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	All

mac-address *string*

Synopsis	MAC address for the static neighbor
Context	**configure** service vprn *string* interface *string* ipv6 neighbor-discovery static-neighbor *string* mac-address *string*
Tree	mac-address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

qos-route-lookup *keyword*

Synopsis	QoS Route lookup
Context	**configure** service vprn *string* interface *string* ipv6 qos-route-lookup *keyword*
Tree	qos-route-lookup
Options	destination, source
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tcp-mss *number*

Synopsis	TCP maximum segment size for the interface
Context	**configure** service vprn *string* interface *string* ipv6 tcp-mss *number*
Tree	tcp-mss
Range	1220 to 9726
Introduced	16.0.R1
Platforms	All

urpf-check

Synopsis	Enable the **urpf-check** context
Context	**configure** service vprn *string* interface *string* ipv6 urpf-check

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Tree	urpf-check
Introduced	16.0.R1
Platforms	All

ignore-default *boolean*

Synopsis	Ignore default route when performing a uRPF check
Context	**configure** service vprn *string* interface *string* ipv6 urpf-check ignore-default *boolean*
Tree	ignore-default
Default	false
Introduced	16.0.R1
Platforms	All

mode *keyword*

Synopsis	Unicast RPF check mode
Context	**configure** service vprn *string* interface *string* ipv6 urpf-check mode *keyword*
Tree	mode
Options	strict, loose, strict-no-ecmp
Default	strict
Introduced	16.0.R1
Platforms	All

vrrp [virtual-router-id] *number*

Synopsis	Enter the **vrrp** list instance
Context	**configure** service vprn *string* interface *string* ipv6 vrrp *number*
Tree	vrrp
Max. Instances	4
Introduced	16.0.R1
Platforms	All

[**virtual-router-id**] *number*

Synopsis	Virtual Router Identifier (VRID) for the IP interface

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Context	**configure** service vprn *string* interface *string* ipv6 vrrp *number*
Tree	vrrp
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of VRRP
Context	**configure** service vprn *string* interface *string* ipv6 vrrp *number* admin-state *keyword*
Tree	admin-state
Description	The command determines the administrative state of non-owner virtual router instances. Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes. When **disabled**, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing. Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated. An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the **admin-state** command within the parent IP interface node which administratively disables the IP interface.
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

backup *string*

Synopsis	Virtual router IP addresses for the interface
Context	**configure** service vprn *string* interface *string* ipv6 vrrp *number* backup *string*
Tree	backup
Description	This command associates router IPv6 virtual router IP addresses with those of the parental IP interface.

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This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.

Non-owner virtual router instance create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.

For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is representing to backup virtual routers receiving the messages. The specified IPv6 address must be equal to one of the existing parental IP addresses in the parental IP interface (primary or secondary) or this command fails.

See "Owner and non-owner VRRP" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide* for more information about owner and non-owner virtual router instances.

Max. Instances	4
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enable the **bfd-liveness** context
Context	**configure** service vprn *string* interface *string* ipv6 vrrp *number* bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

dest-ip *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination address for the BFD session
Context	**configure** service vprn *string* interface *string* ipv6 vrrp *number* bfd-liveness dest-ip *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	dest-ip
Notes	This element is mandatory.
Introduced	16.0.R1

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Platforms	All

interface-name *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
Context	**configure** service vprn *string* interface *string* ipv6 vrrp *number* bfd-liveness interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

service-name *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	**configure** service vprn *string* interface *string* ipv6 vrrp *number* bfd-liveness service-name *string*
Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

init-delay *number*

Synopsis	VRRP initialization delay timer
Context	**configure** service vprn *string* interface *string* ipv6 vrrp *number* init-delay *number*
Tree	init-delay
Range	1 to 65535

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Units	seconds
Introduced	16.0.R1
Platforms	All

mac *string*

Synopsis	Virtual MAC address to use in ARP responses
Context	**configure** service vprn *string* interface *string* ipv6 vrrp *number* mac *string*
Tree	mac
Description	This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID. Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address. Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with *unicast-mac-address* as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with *unicast-mac-address* as the source MAC. An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.
Introduced	16.0.R1
Platforms	All

master-int-inherit *boolean*

Synopsis	Allow master instance to dictate the master down timer
Context	**configure** service vprn *string* interface *string* ipv6 vrrp *number* master-int-inherit *boolean*
Tree	master-int-inherit
Description	When configured to **true**, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer. When configured to **false**, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.

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Introduced	16.0.R1
Platforms	All

message-interval *number*

Synopsis	Interval for sending VRRP advertisement messages
Context	**configure** service vprn *string* interface *string* ipv6 vrrp *number* message-interval *number*
Tree	message-interval
Description	This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command. The use of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the **master-int-inherit** command: • When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The **master-int-inherit** command has no effect when operating as the master. • When a non-owner is in the backup state with **master-int-inherit** disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement. • When a non-owner is in the backup state with **master-int-inherit** enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.
Range	10 to 4095
Units	centiseconds
Default	100
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VRRP instance to follow a specified operational group

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Context	**configure** service vprn *string* interface *string* ipv6 vrrp *number* monitor-oper-group *reference*
Tree	monitor-oper-group
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.
Reference	**configure** service oper-group *string*
Introduced	22.2.R1
Platforms	All

ntp-reply *boolean*

Synopsis	Allow processing of NTP requests
Context	**configure** service vprn *string* interface *string* ipv6 vrrp *number* ntp-reply *boolean*
Tree	ntp-reply
Description	When configured to **true**, the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router. When configured to **false**, the router does not process NTP requests.
Default	false
Introduced	20.2.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group name associated with the VRRP
Context	**configure** service vprn *string* interface *string* ipv6 vrrp *number* oper-group *reference*
Tree	oper-group
Description	This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states.
Reference	**configure** service oper-group *string*
Introduced	16.0.R1
Platforms	All

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owner *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate the virtual router instance as owner
Context	**configure** service vprn *string* interface *string* ipv6 vrrp *number* owner *boolean*
Tree	owner
Description	When configured to **true**, the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router. When configured to **false**, this virtual router instance is designated as a non-owner.
Default	false
Introduced	16.0.R1
Platforms	All

passive *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Suppress the processing of VRRP advertisement messages
Context	**configure** service vprn *string* interface *string* ipv6 vrrp *number* passive *boolean*
Tree	passive
Description	When configured to **true**, the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down). When configured to **false**, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.
Default	false
Introduced	16.0.R1
Platforms	All

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ping-reply *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	**configure** service vprn *string* interface *string* ipv6 vrrp *number* ping-reply *boolean*
Tree	ping-reply
Description	When configured to **true**, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address). When configured to **false**, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded. Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.
Default	false
Introduced	16.0.R1
Platforms	All

policy *reference*

Synopsis	VRRP priority control policy
Context	**configure** service vprn *string* interface *string* ipv6 vrrp *number* policy *reference*
Tree	policy
Description	This command configures a VRRP priority control policy to associate with the virtual router instance. VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis. An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the **priority** command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value. For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.
Reference	**configure** vrrp policy *number*
Introduced	16.0.R1
Platforms	All

preempt *boolean*

Synopsis	Allow the VRRP to override an existing non-owner master

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Context	**configure** service vprn *string* interface *string* ipv6 vrrp *number* preempt *boolean*
Tree	preempt
Description	When configured to **true**, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router. When configured to **false**, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.
Default	true
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Base priority for the VRRP
Context	**configure** service vprn *string* interface *string* ipv6 vrrp *number* priority *number*
Tree	priority
Description	This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process. The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

standby-forwarding *boolean*

Synopsis	Allow standby router to forward traffic
Context	**configure** service vprn *string* interface *string* ipv6 vrrp *number* standby-forwarding *boolean*
Tree	standby-forwarding
Description	When configured to **true**, the standby router forwards all traffic. When configured to **false**, the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.
Default	false

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Introduced	16.0.R1
Platforms	All

telnet-reply *boolean*

Synopsis	Allow non-owner master to reply to Telnet requests
Context	**configure** service vprn *string* interface *string* ipv6 vrrp *number* telnet-reply *boolean*
Tree	telnet-reply
Description	When configured to **true**, the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address). When configured to **false**, the router silently discards Telnet requests sent to non-owner master virtual IP addresses.
Default	false
Introduced	16.0.R1
Platforms	All

traceroute-reply *boolean*

Synopsis	Allow non-owner master to reply to traceroute requests
Context	**configure** service vprn *string* interface *string* ipv6 vrrp *number* traceroute-reply *boolean*
Tree	traceroute-reply
Description	When configured to **true**, the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance. When configured to **false**, the router silently discards traceroute requests sent to non-owner master virtual IP addresses. Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).
Default	false
Introduced	16.0.R1
Platforms	All

load-balancing

Synopsis	Enter the **load-balancing** context
Context	**configure** service vprn *string* interface *string* load-balancing

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Tree	load-balancing
Introduced	16.0.R1
Platforms	All

flow-label-load-balancing *boolean*

Synopsis	Enable flow label load balancing
Context	**configure** service vprn *string* interface *string* load-balancing flow-label-load-balancing *boolean*
Tree	flow-label-load-balancing
Description	When configured to **true**, the router enables load balancing in ECMP and LAG based on the output of a hash performed on the triplet (SA, DA, flow label) in the header of an IPv6 packet received on an IES, VPRN, R-VPLS, CSC, or network interface. When configured to **false**, the router disables load balancing in ECMP and LAG.
Default	false
Introduced	21.5.R1
Platforms	All

ip-load-balancing *keyword*

Synopsis	IP load-balancing algorithm
Context	**configure** service vprn *string* interface *string* load-balancing ip-load-balancing *keyword*
Tree	ip-load-balancing
Description	This command specifies whether to include the source address, destination address, or both in LAG or ECMP hash on IP interfaces. Additionally, when the **l4-load-balancing** command is enabled, this command also includes the source or destination port in the hash inputs.
Options	both, destination, source, inner-ip
Default	both
Introduced	16.0.R3
Platforms	All

spi-load-balancing *boolean*

Synopsis	Enable SPI use in hashing
Context	**configure** service vprn *string* interface *string* load-balancing spi-load-balancing *boolean*
Tree	spi-load-balancing

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Description	When configured to **true**, the router uses the Security Parameter Index (SPI) in hashing for ESP and AH encrypted IPv4 and IPv6 traffic. This is a per-interface setting.
Default	false
Introduced	16.0.R1
Platforms	All

teid-load-balancing *boolean*

Synopsis	Enable use of TEID in hashing
Context	**configure** service vprn *string* interface *string* load-balancing teid-load-balancing *boolean*
Tree	teid-load-balancing
Default	false
Introduced	16.0.R1
Platforms	All

loopback *boolean*

Synopsis	Use interface as a loopback interface
Context	**configure** service vprn *string* interface *string* loopback *boolean*
Tree	loopback
Default	false
Introduced	16.0.R1
Platforms	All

mac *string*

Synopsis	MAC address for the interface
Context	**configure** service vprn *string* interface *string* mac *string*
Tree	mac
Introduced	16.0.R1
Platforms	All

mac-accounting *boolean*

Synopsis	Enable MAC accounting functionality

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Context	**configure** service vprn *string* interface *string* mac-accounting *boolean*
Tree	mac-accounting
Default	false
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference*

Synopsis	Operational group to monitor
Context	**configure** service vprn *string* interface *string* monitor-oper-group *reference*
Tree	monitor-oper-group
Reference	**configure** service oper-group *string*
Introduced	16.0.R1
Platforms	All

multi-chassis-shunting-profile *reference*

Synopsis	Multi-chassis shunting profile name
Context	**configure** service vprn *string* interface *string* multi-chassis-shunting-profile *reference*
Tree	multi-chassis-shunting-profile
Description	This command configures the name of a multi-chassis shunting profile to use on public or private tunnel interfaces.
Reference	**configure** service vprn *string* ipsec multi-chassis-shunting-profile *string*
Notes	The following elements are part of a choice: **multi-chassis-shunting-profile** or (**dynamic-tunnel-redundant-nexthop** and **static-tunnel-redundant-nexthop**).
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ping-template

Synopsis	Enable the **ping-template** context
Context	**configure** service vprn *string* interface *string* ping-template
Tree	ping-template
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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admin-state *keyword*

Synopsis	Administrative state of the ping template
Context	**configure** service vprn *string* interface *string* ping-template admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

destination-address *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ping template destination address
Context	**configure** service vprn *string* interface *string* ping-template destination-address *string*
Tree	destination-address
Description	This command configures the address to where the ICMP echo requests are directed to test connectivity. The source of the ICMP echo request is the primary IPv4 address of the interface under which the ping-template is configured. The destination address must be on the same subnet as the source IP address. Unnumbered interfaces and loopback addresses are not supported.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

name *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Ping template name
Context	**configure** service vprn *string* interface *string* ping-template name *reference*
Tree	name
Description	This command configures the name of the ping template to be assigned to the IP interface.

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Reference	**configure** test-oam icmp ping-template *string*
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ptp-hw-assist

Synopsis	Enter the **ptp-hw-assist** context
Context	**configure** service vprn *string* interface *string* ptp-hw-assist
Tree	ptp-hw-assist
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the PTP time stamping assist
Context	**configure** service vprn *string* interface *string* ptp-hw-assist admin-state *keyword*
Tree	admin-state
Description	This command controls the administrative state of port-based time stamping assist of PTP packets at the physical interface.This capability is supported on specific hardware. The command may be blocked if not all hardware has the required level of support. Only one interface per physical port can have ptp-hw-assist enabled. This feature cannot be enabled if the physical port supporting the interface is configured as a PTP port.
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

radius-auth-policy *reference*

Synopsis	Authentication policy
Context	**configure** service vprn *string* interface *string* radius-auth-policy *reference*
Tree	radius-auth-policy
Reference	**configure** subscriber-mgmt radius-authentication-policy *string*
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap [sap-id] *string*

Synopsis	Enter the **sap** list instance
Context	**configure** service vprn *string* interface *string* sap *string*
Tree	sap
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[**sap-id**] *string*

Synopsis	SAP ID
Context	**configure** service vprn *string* interface *string* sap *string*
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

aarp

Synopsis	Enable the **aarp** context
Context	**configure** service vprn *string* interface *string* sap *string* aarp
Tree	aarp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id *reference*

Synopsis	AARP instance ID
Context	**configure** service vprn *string* interface *string* sap *string* aarp id *reference*
Tree	id

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Reference	**configure** application-assurance aarp *number*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Role referenced by the AARP
Context	**configure** service vprn *string* interface *string* sap *string* aarp type *keyword*
Tree	type
Options	dual-homed, dual-homed-secondary
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	Accounting policy
Context	**configure** service vprn *string* interface *string* sap *string* accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the SAP
Context	**configure** service vprn *string* interface *string* sap *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

anti-spoof *keyword*

Synopsis	Anti-spoof filtering

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Context	**configure** service vprn *string* interface *string* sap *string* anti-spoof *keyword*
Tree	anti-spoof
Options	source-ip-addr, source-mac-addr, source-ip-and-mac-addr, next-hop-ip-and-mac-addr
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Application profile name
Context	**configure** service vprn *string* interface *string* sap *string* app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bandwidth *number*

Synopsis	SAP bandwidth
Context	**configure** service vprn *string* interface *string* sap *string* bandwidth *number*
Tree	bandwidth
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

calling-station-id *string*

Synopsis	Calling station ID
Context	**configure** service vprn *string* interface *string* sap *string* calling-station-id *string*
Tree	calling-station-id
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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collect-stats *boolean*

Synopsis	Collect accounting statistics
Context	**configure** service vprn *string* interface *string* sap *string* collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

cpu-protection

Synopsis	Enter the **cpu-protection** context
Context	**configure** service vprn *string* interface *string* sap *string* cpu-protection
Tree	cpu-protection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

eth-cfm-monitoring

Synopsis	Enable the **eth-cfm-monitoring** context
Context	**configure** service vprn *string* interface *string* sap *string* cpu-protection eth-cfm-monitoring
Tree	eth-cfm-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

aggregate

Synopsis	Apply rate limit to the sum of the per peer packet rates
Context	**configure** service vprn *string* interface *string* sap *string* cpu-protection eth-cfm-monitoring aggregate
Tree	aggregate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

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car

Synopsis	Ignore Ethernet CFM packets when enforcing overall rate
Context	**configure** service vprn *string* interface *string* sap *string* cpu-protection eth-cfm-monitoring car
Tree	car
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

ip-src-monitoring

Synopsis	Enable IP source monitoring for CPU protection
Context	**configure** service vprn *string* interface *string* sap *string* cpu-protection ip-src-monitoring
Tree	ip-src-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	**configure** service vprn *string* interface *string* sap *string* cpu-protection mac-monitoring
Tree	mac-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

policy-id *reference*

Synopsis	CPM protection policy
Context	**configure** service vprn *string* interface *string* sap *string* cpu-protection policy-id *reference*
Tree	policy-id
Reference	**configure** system security cpu-protection policy *number*

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* interface *string* sap *string* description *string*
Tree	description
String Length	1 to 160
Introduced	16.0.R1
Platforms	All

dist-cpu-protection *reference*

Synopsis	Distributed CPU protection policy for SAP
Context	**configure** service vprn *string* interface *string* sap *string* dist-cpu-protection *reference*
Tree	dist-cpu-protection
Reference	**configure** system security dist-cpu-protection policy *string*
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** service vprn *string* interface *string* sap *string* egress
Tree	egress
Introduced	16.0.R1
Platforms	All

agg-rate

Synopsis	Enter the **agg-rate** context
Context	**configure** service vprn *string* interface *string* sap *string* egress agg-rate
Tree	agg-rate
Notes	The following elements are part of a choice: **agg-rate** or **percent-agg-rate**.

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Introduced	16.0.R1
Platforms	All

adaptation-rule *keyword*

Synopsis	Adaptation rule to compute the operational PIR value when an aggregate shaper is used
Context	**configure** service vprn *string* interface *string* sap *string* egress agg-rate adaptation-rule *keyword*
Tree	adaptation-rule
Options	max, min, closest
Default	closest
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

burst-limit *(number | keyword)*

Synopsis	Shaping burst size when an aggregate shaper is used
Context	**configure** service vprn *string* interface *string* sap *string* egress agg-rate burst-limit *(number | keyword)*
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

limit-unused-bandwidth *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	**configure** service vprn *string* interface *string* sap *string* egress agg-rate limit-unused-bandwidth *boolean*
Tree	limit-unused-bandwidth
Default	false
Introduced	16.0.R1
Platforms	All

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queue-frame-based-accounting *boolean*

Synopsis	Enable frame based accounting on policers and queues
Context	**configure** service vprn *string* interface *string* sap *string* egress agg-rate queue-frame-based-accounting *boolean*
Tree	queue-frame-based-accounting
Default	false
Introduced	16.0.R1
Platforms	All

rate *number*

Synopsis	Enforced aggregate rate for all queues
Context	**configure** service vprn *string* interface *string* sap *string* egress agg-rate rate *number*
Tree	rate
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the **filter** context
Context	**configure** service vprn *string* interface *string* sap *string* egress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service vprn *string* interface *string* sap *string* egress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1

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Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service vprn *string* interface *string* sap *string* egress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** service vprn *string* interface *string* sap *string* egress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

policer-control-policy

Synopsis	Enter the **policer-control-policy** context
Context	**configure** service vprn *string* interface *string* sap *string* egress qos policer-control-policy
Tree	policer-control-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis	Enable the **overrides** context
Context	**configure** service vprn *string* interface *string* sap *string* egress qos policer-control-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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root

Synopsis	Enter the **root** context
Context	**configure** service vprn *string* interface *string* sap *string* egress qos policer-control-policy overrides root
Tree	root
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate *(number | keyword)*

Synopsis	Maximum frame-based bandwidth limit
Context	**configure** service vprn *string* interface *string* sap *string* egress qos policer-control-policy overrides root max-rate *(number | keyword)*
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis	Enter the **priority-mbs-thresholds** context
Context	**configure** service vprn *string* interface *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-thresh-separation *(number | keyword)*

Synopsis	Minimum amount of separation buffer space
Context	**configure** service vprn *string* interface *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation *(number | keyword)*
Tree	min-thresh-separation
Range	0 to 16777216

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Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [priority-level] *number*

Synopsis	Enter the **priority** list instance
Context	**configure** service vprn *string* interface *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*
Tree	priority
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**priority-level**] *number*

Synopsis	Priority level
Context	**configure** service vprn *string* interface *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution *(number | keyword)*

Synopsis	Minimum amount of cumulative buffer space allowed
Context	**configure** service vprn *string* interface *string* sap *string* egress qos policer-control-policy overrides root priority-mbs-thresholds priority *number* mbs-contribution *(number | keyword)*
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	**configure** service vprn *string* interface *string* sap *string* egress qos policer-control-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos policer-control-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

qinq-mark-top-only *boolean*

Synopsis	Mark top Q-tags
Context	**configure** service vprn *string* interface *string* sap *string* egress qos qinq-mark-top-only *boolean*
Tree	qinq-mark-top-only
Default	false
Introduced	16.0.R1
Platforms	All

sap-egress

Synopsis	Enter the **sap-egress** context
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress
Tree	sap-egress
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the **overrides** context
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides
Tree	overrides

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Introduced	16.0.R1
Platforms	All

hs-secondary-shaper *string*

Synopsis	HS Secondary Shaper
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides hs-secondary-shaper *string*
Tree	hs-secondary-shaper
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-group [group-id] *reference*

Synopsis	Enter the **hs-wrr-group** list instance
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides hs-wrr-group *reference*
Tree	hs-wrr-group
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[**group-id**] *reference*

Synopsis	HS WRR group identifier
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides hs-wrr-group *reference*
Tree	hs-wrr-group
Reference	**configure** qos sap-egress *string* hs-wrr-group *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-class-weight *number*

Synopsis	Class weight override of the WRR group

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Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides hs-wrr-group *reference* hs-class-weight *number*
Tree	hs-class-weight
Range	1 | 2 | 4 | 8
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

percent-rate *decimal-number*

Synopsis	Percent rate override applied to the HS WRR group
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides hs-wrr-group *reference* percent-rate *decimal-number*
Tree	percent-rate
Range	0.01 to 100.00
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

rate *(number | keyword)*

Synopsis	Scheduling rate override applied to the HS WRR group
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides hs-wrr-group *reference* rate *(number | keyword)*
Tree	rate
Range	1 to 2000000000
Units	kilobps
Options	max
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policer [policer-id] *reference*

Synopsis	Enter the **policer** list instance
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides policer *reference*

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Tree	policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**policer-id**] *reference*

Synopsis	Policer unique ID
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides policer *reference*
Tree	policer
Reference	**configure** qos sap-egress *string* policer *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs *(number | keyword)*

Synopsis	CBS
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides policer *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides policer *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides policer *reference* packet-byte-offset *number*
Tree	packet-byte-offset
Range	-64 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides policer *reference* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *decimal-number*

Synopsis	CIR percent rate
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides policer *reference* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *decimal-number*

Synopsis	PIR percent rate

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Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides policer *reference* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis	Enter the **rate** context
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides policer *reference* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *(number | keyword)*

Synopsis	CIR rate
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides policer *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *(number | keyword)*

Synopsis	PIR rate
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides policer *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000

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Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides policer *reference* stat-mode *keyword*
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue [queue-id] *reference*

Synopsis	Enter the **queue** list instance
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference*
Tree	queue
Introduced	16.0.R1
Platforms	All

[**queue-id**] *reference*

Synopsis	Policer unique ID
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference*
Tree	queue
Reference	**configure** qos sap-egress *string* queue *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* adaptation-rule cir *keyword*
Tree	cir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

avg-frame-overhead *decimal-number*

Synopsis	Average packet-to-frame encapsulation overhead
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* avg-frame-overhead *decimal-number*
Tree	avg-frame-overhead
Range	0.00 to 100.00

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Introduced	16.0.R1
Platforms	All

burst-limit *(number | keyword)*

Synopsis	Explicit shaping burst size for the queue
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* burst-limit *(number | keyword)*
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

cbs *(number | keyword)*

Synopsis	CBS
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the **drop-tail** context
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

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low

Synopsis	Enter the **low** context
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs *(number | keyword)*

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* drop-tail low percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

hs-class-weight *number*

Synopsis	Class weight override for the queue
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* hs-class-weight *number*
Tree	hs-class-weight
Range	1 | 2 | 4 | 8
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wred-queue

Synopsis	Enter the **hs-wred-queue** context
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* hs-wred-queue
Tree	hs-wred-queue

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Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policy *reference*

Synopsis	Slope policy applied to the HSQ queue group queue
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* hs-wred-queue policy *reference*
Tree	policy
Reference	**configure** qos slope-policy *string*
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-weight *number*

Synopsis	WRR weight to parent with the queue into the scheduler
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* hs-wrr-weight *number*
Tree	hs-wrr-weight
Range	1 to 127
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

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monitor-queue-depth

Synopsis	Enable the **monitor-queue-depth** context
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* monitor-queue-depth
Tree	monitor-queue-depth
Introduced	20.10.R1
Platforms	All

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* monitor-queue-depth fast-polling *boolean*
Tree	fast-polling
Description	When configured to **true**, this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth.
Default	false
Introduced	20.10.R1
Platforms	All

violation-threshold *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* monitor-queue-depth violation-threshold *decimal-number*
Tree	violation-threshold
Description	This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

parent

Synopsis	Enter the **parent** context

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Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* parent
Tree	parent
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	PIR parameter that overrides parent for queue group
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* parent weight *number*
Tree	weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

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cir *decimal-number*

Synopsis	CIR percent rate
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	PIR percent rate
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	CIR rate
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000

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Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	PIR rate
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress overrides queue *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-egress *string*
Introduced	16.0.R1
Platforms	All

port-redirect-group

Synopsis	Enter the **port-redirect-group** context
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	All

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group-name *reference*

Synopsis	Name of the queue group redirect list policy
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress port-redirect-group group-name *reference*
Tree	group-name
Reference	**configure** qos queue-group-templates egress queue-group *string*
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Instance of port queue group
Context	**configure** service vprn *string* interface *string* sap *string* egress qos sap-egress port-redirect-group instance *number*
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

scheduler-policy

Synopsis	Enter the **scheduler-policy** context
Context	**configure** service vprn *string* interface *string* sap *string* egress qos scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the **overrides** context
Context	**configure** service vprn *string* interface *string* sap *string* egress qos scheduler-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

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scheduler [scheduler-name] *string*

Synopsis	Enter the **scheduler** list instance
Context	**configure** service vprn *string* interface *string* sap *string* egress qos scheduler-policy overrides scheduler *string*
Tree	scheduler
Introduced	16.0.R1
Platforms	All

[**scheduler-name**] *string*

Synopsis	Scheduler name
Context	**configure** service vprn *string* interface *string* sap *string* egress qos scheduler-policy overrides scheduler *string*
Tree	scheduler
Description	This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands. If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name. If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

parent

Synopsis	Enter the **parent** context
Context	**configure** service vprn *string* interface *string* sap *string* egress qos scheduler-policy overrides scheduler *string* parent
Tree	parent

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Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	**configure** service vprn *string* interface *string* sap *string* egress qos scheduler-policy overrides scheduler *string* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	**configure** service vprn *string* interface *string* sap *string* egress qos scheduler-policy overrides scheduler *string* parent weight *number*
Tree	weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** service vprn *string* interface *string* sap *string* egress qos scheduler-policy overrides scheduler *string* rate
Tree	rate
Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	CIR at which the queue it to operate
Context	**configure** service vprn *string* interface *string* sap *string* egress qos scheduler-policy overrides scheduler *string* rate cir *(number | keyword)*

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Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	PIR at which the queue is to operate
Context	**configure** service vprn *string* interface *string* sap *string* egress qos scheduler-policy overrides scheduler *string* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy name
Context	**configure** service vprn *string* interface *string* sap *string* egress qos scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos scheduler-policy *string*
Introduced	16.0.R1
Platforms	All

queue-group-redirect-list *reference*

Synopsis	Assign queue-group redirect list
Context	**configure** service vprn *string* interface *string* sap *string* egress queue-group-redirect-list *reference*
Tree	queue-group-redirect-list
Reference	**configure** qos queue-group-redirect-list *string*

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Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the **eth-cfm** context
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm
Tree	eth-cfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-fc-stats

Synopsis	Enter the **collect-lmm-fc-stats** context
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm collect-lmm-fc-stats
Tree	collect-lmm-fc-stats
Description	Commands in this context configure per forwarding class (FC) LMM information collection. The commands **fc-in-profile** and **fc** in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively. This command and the **collect-lmm-stats** command are mutually exclusive when there is entity resource contention.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc *keyword*

Synopsis	Forwarding class name for profile-unaware counter
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm collect-lmm-fc-stats fc *keyword*
Tree	fc
Description	This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter. An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the **fc-in-profile** command under the **collect-lmm-fc-stats** context.

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When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc-in-profile *keyword*

Synopsis	Forwarding class name for profile-aware counter
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm collect-lmm-fc-stats fc-in-profile *keyword*
Tree	fc-in-profile
Description	This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter. An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the **fc** command under the **collect-lmm-fc-stats** context. When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm collect-lmm-stats *boolean*
Tree	collect-lmm-stats
Description	When configured to **true**, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings. The **show eth-cfm collect-lmm-stats** command displays entities that have been enabled to collect transit and receive counters.

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When configured to **false**, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*

Synopsis	Enter the **mep** list instance
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string* association *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais *boolean*

Synopsis	Enable the generation and the reception of AIS messages
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais *boolean*
Tree	ais
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the **alarm-notification** context

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Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification
Tree	alarm-notification
Description	Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm. Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-alarm-time *number*
Tree	fng-alarm-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-reset-time *number*
Tree	fng-reset-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis	Generate CCM messages

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Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm *boolean*
Tree	ccm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-ltm-priority *number*
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-padding-size *number*
Tree	ccm-padding-size
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU. This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through **configure eth-cfm domain association ccm-interval)** is less than 1 second.
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

csf

Synopsis	Enable the **csf** context

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Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* csf
Tree	csf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* csf multiplier *decimal-number*
Tree	multiplier
Range	0.0 | 2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the **eth-test** context
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the **oam eth-cfm eth-test** command.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test bit-error-threshold *number*
Tree	bit-error-threshold
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis	Enter the **test-pattern** context
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern crc-tlv *boolean*
Tree	crc-tlv
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern pattern *keyword*
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fault-propagation *keyword*

Synopsis	Fault propagation for the MEP
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* fault-propagation *keyword*
Tree	fault-propagation
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the **grace** context
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the **eth-ed** context

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Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed max-rx-defect-window *number*
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed priority *number*
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed rx-eth-ed *boolean*
Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.

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Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed tx-eth-ed *boolean*
Tree	tx-eth-ed
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis	Enter the **eth-vsm-grace** context
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace rx-eth-vsm-grace *boolean*
Tree	rx-eth-vsm-grace
Description	When configured to **true**, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to **false**, the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1

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Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis Transmit ETH-ED PDUs from the MEP

Context **configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace tx-eth-vsm-grace *boolean*

Tree tx-eth-vsm-grace

Description When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.

The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis Lowest priority defect allowed to generate fault alarm

Context **configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* low-priority-defect *keyword*

Tree low-priority-defect

Options all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon

Default mac-rem-err-xcon

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis Threshold time limit for the one-way delay test

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Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* one-way-delay-threshold *number*
Tree	one-way-delay-threshold
Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch-ingress-levels *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded
Context	**configure** service vprn *string* interface *string* sap *string* eth-cfm squelch-ingress-levels *number*
Tree	squelch-ingress-levels
Description	This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option. The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.
Range	0 to 7
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fwd-wholesale

Synopsis	Enter the **fwd-wholesale** context
Context	**configure** service vprn *string* interface *string* sap *string* fwd-wholesale
Tree	fwd-wholesale
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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pppoe-service *reference*

Synopsis	PPPoE service name
Context	**configure** service vprn *string* interface *string* sap *string* fwd-wholesale pppoe-service *reference*
Tree	pppoe-service
Reference	**configure** service epipe *string*
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-admin-state *keyword*

Synopsis	Administrative state of the hosts
Context	**configure** service vprn *string* interface *string* sap *string* host-admin-state *keyword*
Tree	host-admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-lockout-policy *reference*

Synopsis	Host lockout policy
Context	**configure** service vprn *string* interface *string* sap *string* host-lockout-policy *reference*
Tree	host-lockout-policy
Reference	**configure** subscriber-mgmt host-lockout-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service vprn *string* interface *string* sap *string* ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

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filter

Synopsis	Enter the **filter** context
Context	**configure** service vprn *string* interface *string* sap *string* ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service vprn *string* interface *string* sap *string* ingress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service vprn *string* interface *string* sap *string* ingress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

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match-qinq-dot1p *keyword*

Synopsis	Ingress match QinQ Dot1p
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos match-qinq-dot1p *keyword*
Tree	match-qinq-dot1p
Options	top, bottom
Introduced	16.0.R1
Platforms	All

policer-control-policy

Synopsis	Enter the **policer-control-policy** context
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos policer-control-policy
Tree	policer-control-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis	Enable the **overrides** context
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos policer-control-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

root

Synopsis	Enter the **root** context
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos policer-control-policy overrides root
Tree	root
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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max-rate *(number | keyword)*

Synopsis	Maximum frame-based bandwidth limit
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos policer-control-policy overrides root max-rate *(number | keyword)*
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis	Enter the **priority-mbs-thresholds** context
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-thresh-separation *(number | keyword)*

Synopsis	Minimum amount of separation buffer space
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation *(number | keyword)*
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [priority-level] *number*

Synopsis	Enter the **priority** list instance
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*

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Tree	priority
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**priority-level**] *number*

Synopsis	Priority level
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution *(number | keyword)*

Synopsis	Minimum amount of cumulative buffer space allowed
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds priority *number* mbs-contribution *(number | keyword)*
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos policer-control-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos policer-control-policy *string*
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

sap-ingress

Synopsis	Enter the **sap-ingress** context
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress
Tree	sap-ingress
Introduced	16.0.R1
Platforms	All

fp-redirect-group

Synopsis	Enter the **fp-redirect-group** context
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress fp-redirect-group
Tree	fp-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Queue group template name created on forwarding plane
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress fp-redirect-group group-name *reference*
Tree	group-name
Reference	**configure** qos queue-group-templates ingress queue-group *string*
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Queue group instance
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress fp-redirect-group instance *number*
Tree	instance
Range	1 to 65535

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Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the **overrides** context
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

ip-criteria

Synopsis	Enter the **ip-criteria** context
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides ip-criteria
Tree	ip-criteria
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

activate-entry-tag *number*

Synopsis	Tag ID activated for IPv4 criteria
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides ip-criteria activate-entry-tag *number*
Tree	activate-entry-tag
Range	1 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6-criteria

Synopsis	Enter the **ipv6-criteria** context
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides ipv6-criteria
Tree	ipv6-criteria

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Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

activate-entry-tag *number*

Synopsis	Tag ID activated for IPv6 criteria
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides ipv6-criteria activate-entry-tag *number*
Tree	activate-entry-tag
Range	1 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policer [policer-id] *reference*

Synopsis	Enter the **policer** list instance
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides policer *reference*
Tree	policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[**policer-id**] *reference*

Synopsis	Policer unique ID
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides policer *reference*
Tree	policer
Reference	**configure** qos sap-ingress *string* policer *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs *(number | keyword)*

Synopsis	CBS

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Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides policer *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides policer *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides policer *reference* packet-byte-offset *number*
Tree	packet-byte-offset
Range	-32 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides policer *reference* percent-rate

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Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *decimal-number*

Synopsis	CIR percent rate
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides policer *reference* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *decimal-number*

Synopsis	PIR percent rate
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides policer *reference* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis	Enter the **rate** context
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides policer *reference* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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cir *(number | keyword)*

Synopsis	CIR rate
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides policer *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *(number | keyword)*

Synopsis	PIR rate
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides policer *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides policer *reference* stat-mode *keyword*
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

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queue [queue-id] *reference*

Synopsis	Enter the **queue** list instance
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference*
Tree	queue
Introduced	16.0.R1
Platforms	All

[**queue-id**] *reference*

Synopsis	Policer unique ID
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference*
Tree	queue
Reference	**configure** qos sap-ingress *string* queue *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* adaptation-rule cir *keyword*
Tree	cir
Options	max, min, closest
Introduced	16.0.R1

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Platforms	All

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

cbs *(number | keyword)*

Synopsis	CBS
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the **drop-tail** context
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the **low** context

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Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs *(number | keyword)*

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* drop-tail low percent-reduction-from-mbs *(number | keyword)*
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the **monitor-queue-depth** context
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* monitor-queue-depth
Tree	monitor-queue-depth
Introduced	21.7.R1

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Platforms	All

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* monitor-queue-depth fast-polling *boolean*
Tree	fast-polling
Default	false
Introduced	21.7.R1
Platforms	All

parent

Synopsis	Enter the **parent** context
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* parent
Tree	parent
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	PIR parameter that overrides parent for queue group
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* parent weight *number*
Tree	weight

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Range	0 to 100
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the **percent-rate** context
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

cir *decimal-number*

Synopsis	CIR percent rate
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* percent-rate cir *decimal-number*
Tree	cir
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	PIR percent rate
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* percent-rate pir *decimal-number*
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

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rate

Synopsis	Enter the **rate** context
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* rate
Tree	rate
Notes	The following elements are part of a choice: **percent-rate** or **rate**.
Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	CIR rate
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	PIR rate
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress overrides queue *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Policy ID

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Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-ingress *string*
Introduced	16.0.R1
Platforms	All

queuing-type *keyword*

Synopsis	Queuing type
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos sap-ingress queuing-type *keyword*
Tree	queuing-type
Options	shared, multipoint-shared
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR

scheduler-policy

Synopsis	Enter the **scheduler-policy** context
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the **overrides** context
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos scheduler-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

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scheduler [scheduler-name] *string*

Synopsis	Enter the **scheduler** list instance
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos scheduler-policy overrides scheduler *string*
Tree	scheduler
Introduced	16.0.R1
Platforms	All

[**scheduler-name**] *string*

Synopsis	Scheduler name
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos scheduler-policy overrides scheduler *string*
Tree	scheduler
Description	This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands. If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name. If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

parent

Synopsis	Enter the **parent** context
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* parent
Tree	parent
Introduced	16.0.R1

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Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* parent cir-weight *number*
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* parent weight *number*
Tree	weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* rate
Tree	rate
Introduced	16.0.R1
Platforms	All

cir *(number | keyword)*

Synopsis	CIR at which the queue it to operate
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* rate cir *(number | keyword)*
Tree	cir

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Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

pir *(number | keyword)*

Synopsis	PIR at which the queue is to operate
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos scheduler-policy overrides scheduler *string* rate pir *(number | keyword)*
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy name
Context	**configure** service vprn *string* interface *string* sap *string* ingress qos scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos scheduler-policy *string*
Introduced	16.0.R1
Platforms	All

queue-group-redirect-list *reference*

Synopsis	Queue group redirect list
Context	**configure** service vprn *string* interface *string* sap *string* ingress queue-group-redirect-list *reference*
Tree	queue-group-redirect-list
Reference	**configure** qos queue-group-redirect-list *string*
Introduced	16.0.R1

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Platforms	All

ip-tunnel [tunnel-name] *string*

Synopsis	Enter the **ip-tunnel** list instance
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string*
Tree	ip-tunnel
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[**tunnel-name**] *string*

Synopsis	IP tunnel name
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string*
Tree	ip-tunnel
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the IP tunnel
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

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backup-remote-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Backup remote IP address that is applied to this tunnel
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* backup-remote-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	backup-remote-ip-address
Introduced	16.0.R1
Platforms	All

clear-df-bit *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear the Do-not-Fragment bit
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* clear-df-bit *boolean*
Tree	clear-df-bit
Description	When configured to **true**, the DF bit is cleared (set to 0) in all payload IP packets associated with the GRE or IPsec tunnel, before any potential fragmentation resulting from the ip-mtu command. This requires a modification of the header checksum. When configured to **false**, clearing of the DF bit is disabled.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

delivery-service *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Service to originate and terminate GRE packets
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* delivery-service *string*

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Tree	delivery-service
Description	This command specifies the service used to originate and terminate the GRE encapsulated packets belonging to the GRE tunnel. The delivery service may be the same service that owns the private tunnel SAP associated with the GRE tunnel. The GRE tunnel does not come up until a valid delivery service is configured.
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

description *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Text description
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dest-ip [dest-ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Add a list entry for **dest-ip**
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* dest-ip *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	dest-ip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**dest-ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the remote IP tunnel endpoint
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* dest-ip *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	dest-ip

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Description	This command configures the IP address of the remote IP tunnel endpoint. If the remote IP address is not within the subnet of the IP interface associated with the tunnel, the tunnel fails to come up.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dscp *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Differentiated Services Code Point (DSCP) name
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encapsulated-ip-mtu *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum size of the encapsulated tunnel packet
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* encapsulated-ip-mtu *number*
Tree	encapsulated-ip-mtu
Description	This command specifies the maximum size of the encapsulated tunnel packet for the IP tunnel. If the packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	bytes
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gre-header

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **gre-header** context
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* gre-header
Tree	gre-header
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of the GRE header in the tunnel
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* gre-header admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

key

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **key** context
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* gre-header key
Tree	key
Introduced	16.0.R1

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Platforms	All

admin-state *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of the keys in the GRE header
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* gre-header key admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

receive *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Receive key of the GRE header
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* gre-header key receive *number*
Tree	receive
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R1
Platforms	All

send *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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Synopsis	Send key of the GRE header
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* gre-header key send *number*
Tree	send
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R1
Platforms	All

icmp-generation

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **icmp-generation** context
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* icmp-generation
Tree	icmp-generation
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

frag-required

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **frag-required** context
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* icmp-generation frag-required
Tree	frag-required
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send fragmentation required messages
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* icmp-generation frag-required admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum interval that the ICMP messages can be sent
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* icmp-generation frag-required interval *number*
Tree	interval
Range	1 to 60
Units	seconds
Default	10
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

message-count *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMP messages sent
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* icmp-generation frag-required message-count *number*

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Tree	message-count
Description	This command configures the maximum number of ICMP messages that can be sent during the period specified by the **interval** command.
Range	10 to 1000
Default	100
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp6-generation

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **icmp6-generation** context
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* icmp6-generation
Tree	icmp6-generation
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packet-too-big

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **packet-too-big** context
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* icmp6-generation packet-too-big
Tree	packet-too-big
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending Packet Too Big messages
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* icmp6-generation packet-too-big admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

number *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of PTB ICMPv6 messages that can be sent
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* icmp6-generation packet-too-big number *number*
Tree	number
Description	This command configures the maximum number of ICMPv6 messages that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum interval when PTB messages can be sent

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Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* icmp6-generation packet-too-big seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP MTU for the interface
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* ip-mtu *number*
Tree	ip-mtu
Description	This command specifies the IP MTU for the interface. If the DF bit is not set in the packet, IP packet fragmentation is performed, if necessary, based on this configured value. When unconfigured, all IP packets, regardless of the packet size or DF bit setting, are allowed into the tunnel without fragmentation.
Range	512 to 9000
Units	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-transport-mode-profile *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec transport mode profile name
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* ipsec-transport-mode-profile *reference*
Tree	ipsec-transport-mode-profile

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Reference	**configure** ipsec ipsec-transport-mode-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IP address of this tunnel
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* local-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	local-ip-address
Description	This command specifies the local IP address to use for the IP tunnel. This configuration applies to the outer IP header of the encapsulated packets. The address must belong to one of the IP subnets associated with the public SAP interface of the tunnel group. The source IP address, the remote IP address, and the backup remote IP address of a tunnel must all belong to the same address family (IPv4 or IPv6). When this command specifies an IPv6 address, it must be a global unicast address.
Introduced	16.0.R1
Platforms	All

pmtu-discovery-aging *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time to age out the learned path MTU
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* pmtu-discovery-aging *number*
Tree	pmtu-discovery-aging
Description	This command configures the temporary public MTU expiration time. The temporary public MTU is used for MTU propagation.
Range	900 to 3600
Units	seconds
Default	900

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Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

private-tcp-mss-adjust *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP Maximum Segment Size (MSS) on the private side
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* private-tcp-mss-adjust *number*
Tree	private-tcp-mss-adjust
Description	This command specifies the TCP MSS to adjust for tunnels on the private side. The value is used to adjust the TCP MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

propagate-pmtu-v4 *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* propagate-pmtu-v4 *boolean*
Tree	propagate-pmtu-v4
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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propagate-pmtu-v6 *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of path MTU to IPv6 hosts
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* propagate-pmtu-v6 *boolean*
Tree	propagate-pmtu-v6
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

public-tcp-mss-adjust *(number | keyword)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP Maximum Segment Size (MSS) on the public side
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* public-tcp-mss-adjust *(number | keyword)*
Tree	public-tcp-mss-adjust
Description	This command specifies the TCP MSS for TCP traffic sent from the public network to the private network. The value is used to adjust the TCP MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reassembly *(number | keyword)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum reassembly wait time

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Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* reassembly *(number | keyword)*
Tree	reassembly
Description	This command configures the maximum time to wait to receive all fragments of a particular IPsec or GRE packet for reassembly.
Range	1 to 5000
Units	milliseconds
Options	use-tunnel-group-setting, none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote IP address of the tunnel
Context	**configure** service vprn *string* interface *string* sap *string* ip-tunnel *string* remote-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	remote-ip-address
Introduced	16.0.R1
Platforms	All

ipsec-gateway [name] *string*

Synopsis	Enter the **ipsec-gateway** list instance
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string*
Tree	ipsec-gateway
Max. Instances	1
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	IPsec gateway name

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Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string*
Tree	ipsec-gateway
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the IPsec gateway
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cert

Synopsis	Enter the **cert** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* cert
Tree	cert
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cert-profile *reference*

Synopsis	Certificate profile name
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* cert cert-profile *reference*
Tree	cert-profile
Reference	**configure** ipsec cert-profile *string*
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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status-verify

Synopsis	Enter the **status-verify** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* cert status-verify
Tree	status-verify
Description	Commands in this context configure certificate revocation status verification.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-result *keyword*

Synopsis	Default result of Certificate Status Verification (CSV)
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* cert status-verify default-result *keyword*
Tree	default-result
Description	This command specifies the default result when both the primary and secondary methods fail to provide an answer.
Options	revoked, good
Default	revoked
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

primary *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* cert status-verify primary *keyword*
Tree	primary
Options	crl, ocsp
Default	crl
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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secondary *keyword*

Synopsis	Secondary method of CSV to verify the revocation status
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* cert status-verify secondary *keyword*
Tree	secondary
Options	none, crl, ocsp
Default	none
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

trust-anchor-profile *reference*

Synopsis	Trust anchor profile name
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* cert trust-anchor-profile *reference*
Tree	trust-anchor-profile
Reference	**configure** ipsec trust-anchor-profile *string*
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

client-db

Synopsis	Enable the **client-db** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* client-db
Tree	client-db
Description	Commands in this context configure the IPsec client database. The client database is used to authenticate the IKEv2 dynamic LAN-to-LAN tunnel.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fallback *boolean*

Synopsis	Fall back to the default authentication policy
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* client-db fallback *boolean*
Tree	fallback

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Description	When configured to **true**, this command specifies whether the IPsec gateway can fall back to the default authentication policy when the IPsec tunnel authentication request fails to match any clients in the IPsec database. When configured to **false** and the client database lookup fails to return a matched result, the system fails the tunnel setup.
Default	true
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *reference*

Synopsis	Client database name
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* client-db name *reference*
Tree	name
Reference	**configure** ipsec client-db *string*
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-secure-service

Synopsis	Enable the **default-secure-service** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* default-secure-service
Tree	default-secure-service
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private IPsec tunnel interface name
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* default-secure-service interface *string*

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Tree	interface
String Length	1 to 32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

service-name *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default security service name
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* default-secure-service service-name *string*
Tree	service-name
String Length	1 to 64
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-tunnel-template *reference*

Synopsis	Default tunnel policy template for the gateway
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* default-tunnel-template *reference*
Tree	default-tunnel-template
Reference	**configure** ipsec tunnel-template *number*
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp-address-assignment

Synopsis	Enter the **dhcp-address-assignment** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment
Tree	dhcp-address-assignment
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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dhcpv4

Synopsis	Enable the **dhcpv4** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv4
Tree	dhcpv4
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the IPsec DHCPv4 server
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv4 admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gi-address *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Gateway IP address of DHCPv4 packets sent by the system
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv4 gi-address *string*
Tree	gi-address
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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send-release *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send DHCPv4 release message when IPsec tunnel removed
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv4 send-release *boolean*
Tree	send-release
Default	true
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **server** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv4 server
Tree	server
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DHCPv4 server addresses
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv4 server address *string*
Tree	address
Description	This command specifies DHCPv4 server addresses for the DHCPv4-based address assignment. If multiple server addresses are specified, the first advertised DHCPv4 address received is chosen.

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Max. Instances	8
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance used to reach the DHCPv4 server
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv4 server router-instance *string*
Tree	router-instance
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcpv6

Synopsis	Enable the **dhcpv6** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv6
Tree	dhcpv6
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 server
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv6 admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.7.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Link address of the relayed DHCPv6 packets
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv6 link-address *string*
Tree	link-address
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

send-release *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send DHCPv6 release message when IPsec tunnel removed
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv6 send-release *boolean*
Tree	send-release
Default	true
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **server** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv6 server
Tree	server

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Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DHCPv6 server addresses
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv6 server address *string*
Tree	address
Description	This command specifies DHCPv6 server addresses for the DHCPv6-based address assignment. If multiple server addresses are specified, the first advertised DHCPv6 address received is chosen.
Max. Instances	8
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance to reach the DHCPv6 server
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* dhcp-address-assignment dhcpv6 server router-instance *string*
Tree	router-instance
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-policy *reference*

Synopsis	IKE policy ID

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Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* ike-policy *reference*
Tree	ike-policy
Reference	**configure** ipsec ike-policy *number*
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local

Synopsis	Enter the **local** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* local
Tree	local
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address-assignment

Synopsis	Enable the **address-assignment** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* local address-assignment
Tree	address-assignment
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of local address assignments
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* local address-assignment admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ipv4

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **ipv4** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* local address-assignment ipv4
Tree	ipv4
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp-server *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local DHCPv4 server name
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* local address-assignment ipv4 dhcp-server *string*
Tree	dhcp-server
String Length	1 to 32
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the pool defined in the specified DHCPv4 server
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* local address-assignment ipv4 pool *string*
Tree	pool
String Length	1 to 32

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Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance ID for the local DHCPv4 server
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* local address-assignment ipv4 router-instance *string*
Tree	router-instance
String Length	1 to 64
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

secondary-pool *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the secondary pool defined in the DHCPv4 server
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* local address-assignment ipv4 secondary-pool *string*
Tree	secondary-pool
String Length	1 to 32
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ipv6

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **ipv6** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* local address-assignment ipv6
Tree	ipv6
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp-server *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local DHCPv6 server name
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* local address-assignment ipv6 dhcp-server *string*
Tree	dhcp-server
String Length	1 to 32
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Secondary pool name defined in the DHCPv6 server
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* local address-assignment ipv6 pool *string*
Tree	pool
String Length	1 to 32

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Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance ID hosting the DHCPv6 connection
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* local address-assignment ipv6 router-instance *string*
Tree	router-instance
String Length	1 to 64
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gateway-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local gateway address of the IPsec gateway
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* local gateway-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	gateway-address
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id

Synopsis	Enter the **id** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* local id
Tree	id

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Description	Commands in this context specify the local ID used for the Identification Indicator (IDi) or Identification Responder (IDr) in the IKEv2 tunnel.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

auto

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Select ID based on authentication method in IKE policy
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* local id auto
Tree	auto
Notes	The following elements are part of a choice: **auto**, **fqdn**, **ipv4**, or **ipv6**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fqdn *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN as the local ID type
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* local id fqdn *string*
Tree	fqdn
String Length	1 to 255
Notes	The following elements are part of a choice: **auto**, **fqdn**, **ipv4**, or **ipv6**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ipv4 *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 address as the local ID type
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* local id ipv4 *string*
Tree	ipv4
Notes	The following elements are part of a choice: **auto**, **fqdn**, **ipv4**, or **ipv6**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6 *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 address as the local ID type
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* local id ipv6 *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ipv6
Notes	The following elements are part of a choice: **auto**, **fqdn**, **ipv4**, or **ipv6**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-history-key-records

Synopsis	Enter the **max-history-key-records** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* max-history-key-records
Tree	max-history-key-records
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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esp *number*

Synopsis	Maximum number of recent records
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* max-history-key-records esp *number*
Tree	esp
Range	1 to 48
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike *number*

Synopsis	Maximum number of historical IKE keys recorded
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* max-history-key-records ike *number*
Tree	ike
Range	1 to 3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pre-shared-key *string*

Synopsis	Pre-shared key for the IPsec gateway
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* pre-shared-key *string*
Tree	pre-shared-key
String Length	1 to 115
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius

Synopsis	Enter the **radius** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* radius
Tree	radius
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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accounting-policy *reference*

Synopsis	RADIUS accounting policy
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* radius accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** ipsec radius accounting-policy *string*
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication-policy *reference*

Synopsis	RADIUS authentication policy
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* radius authentication-policy *reference*
Tree	authentication-policy
Reference	**configure** ipsec radius authentication-policy *string*
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ts-list *reference*

Synopsis	TS list used for IKEv2 TS negotiation
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-gateway *string* ts-list *reference*
Tree	ts-list
Reference	**configure** ipsec ts-list *string*
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-tunnel [name] *string*

Synopsis	Enter the **ipsec-tunnel** list instance
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string*
Tree	ipsec-tunnel
Introduced	19.7.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	IPsec tunnel name
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string*
Tree	ipsec-tunnel
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the IPsec tunnel
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bfd

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **bfd** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* bfd
Tree	bfd
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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bfd-designate *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Designate IPsec tunnel to carry BFD traffic
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* bfd bfd-designate *boolean*
Tree	bfd-designate
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bfd-liveness

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **bfd-liveness** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* bfd bfd-liveness
Tree	bfd-liveness
Description	Commands in this context configure a BFD session to provide a heart-beat mechanism for a specified IPsec tunnel. There can be only one BFD session assigned to any given IPsec tunnel, but there can be multiple IPsec tunnels using the same BFD session. BFD controls the state of the association tunnel. If the BFD session goes down, the system brings down the associated non-designated IPsec tunnel.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dest-ip *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination address used for the BFD session

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Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* bfd bfd-liveness dest-ip *string*
Tree	dest-ip
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the interface used by the BFD session
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* bfd bfd-liveness interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

service-name *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* bfd bfd-liveness service-name *string*
Tree	service-name
Description	This command configures the name of the service where BFD traffic is forwarded to.
String Length	1 to 64
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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clear-df-bit *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reset the DF bit to 0 in all payload IP packets
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* clear-df-bit *boolean*
Tree	clear-df-bit
Description	When configured to **true**, the DF bit is set to 0 in all payload IP packets associated with the IPsec tunnel, before any potential fragmentation occurs.
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

copy-traffic-class-upon-decapsulation *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable traffic class copy upon decapsulation
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* copy-traffic-class-upon-decapsulation *boolean*
Tree	copy-traffic-class-upon-decapsulation
Description	When configured to **true**, the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private).
Default	false
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* description *string*

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Tree	description
String Length	1 to 80
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dest-ip [address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Add a list entry for **dest-ip**
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* dest-ip *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	dest-ip
Max. Instances	16
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Private IP address of the remote IP tunnel endpoint
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* dest-ip *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	dest-ip
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encapsulated-ip-mtu *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum size of the encapsulated tunnel packet
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* encapsulated-ip-mtu *number*
Tree	encapsulated-ip-mtu
Description	This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If

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	the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	bytes
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp-generation

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **icmp-generation** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* icmp-generation
Tree	icmp-generation
Description	Commands in this context configure settings for ICMPv4 message generation.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

frag-required

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **frag-required** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* icmp-generation frag-required
Tree	frag-required
Description	Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending ICMP messages
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* icmp-generation frag-required admin-state *keyword*
Tree	admin-state
Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Options	enable, disable
Default	enable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending ICMP messages
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* icmp-generation frag-required interval *number*
Tree	interval
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Units	seconds
Default	10
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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message-count *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMP messages that can be sent
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* icmp-generation frag-required message-count *number*
Tree	message-count
Description	This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp6-generation

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **icmp6-generation** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* icmp6-generation
Tree	icmp6-generation
Description	Commands in this context configure settings for ICMPv6 message generation.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packet-too-big

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **packet-too-big** context

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Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* icmp6-generation packet-too-big
Tree	packet-too-big
Description	Commands in this context configure the parameters to send ICMPv6 PTB (Packet Too Big) messages on the private side. The system sends PTB messages if a received IPv6 packet on the private side is greater than 1280 bytes and it exceeds the private MTU of the tunnel. The private MTU for the tunnel is configured via the **configure router interface ipsec ipsec-tunnel ip-mtu** command for the interface.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of Packet Too Big message sends
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* icmp6-generation packet-too-big admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending Packet Too Big messages
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* icmp6-generation packet-too-big interval *number*
Tree	interval
Range	1 to 60

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Units	seconds
Default	10
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

message-count *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMPv6 PTB messages that can be sent
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* icmp6-generation packet-too-big message-count *number*
Tree	message-count
Description	This command configures the maximum number of PTB messages that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private MTU of the IPsec tunnel
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* ip-mtu *number*
Tree	ip-mtu
Description	This command specifies the private MTU of the IPsec tunnel. The private MTU is used to determine the need for fragmentation before encapsulation of the payload packet.
Range	512 to 9000
Units	bytes
Introduced	19.7.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

key-exchange

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **key-exchange** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* key-exchange
Tree	key-exchange
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **dynamic** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* key-exchange dynamic
Tree	dynamic
Notes	The following elements are part of a choice: **dynamic** or **manual**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

auto-establish *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Attempt to establish a phase 1 exchange automatically
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* key-exchange dynamic auto-establish *boolean*

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Tree	auto-establish
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cert

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **cert** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* key-exchange dynamic cert
Tree	cert
Description	Commands in this context configure the attributes of the dynamic keying certificate.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cert-profile *reference*

Synopsis	Certificate profile name
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* key-exchange dynamic cert cert-profile *reference*
Tree	cert-profile
Reference	**configure** ipsec cert-profile *string*
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

status-verify

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **status-verify** context

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Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* key-exchange dynamic cert status-verify
Tree	status-verify
Description	Commands in this context configure attributes of Certificate Status Verification (CSV).
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-result *keyword*

Synopsis	Default result for Certificate Status Verification
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* key-exchange dynamic cert status-verify default-result *keyword*
Tree	default-result
Description	This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.
Options	revoked, good
Default	revoked
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

primary *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* key-exchange dynamic cert status-verify primary *keyword*
Tree	primary
Description	This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.
Options	crl, ocsp
Default	crl
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

secondary *keyword*

Synopsis	Secondary method used to verify certificate revocation

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Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* key-exchange dynamic cert status-verify secondary *keyword*
Tree	secondary
Description	This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.
Options	none, crl, ocsp
Default	none
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

trust-anchor-profile *reference*

Synopsis	Trust anchor profile name
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* key-exchange dynamic cert trust-anchor-profile *reference*
Tree	trust-anchor-profile
Reference	**configure** ipsec trust-anchor-profile *string*
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **id** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* key-exchange dynamic id
Tree	id
Description	Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation. The default behavior depends on the local authentication method as follows: • Psk: local tunnel IP address • Cert-auth: subject of the local certificate
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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fqdn *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN used as the local ID IKE type
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* key-exchange dynamic id fqdn *string*
Tree	fqdn
String Length	1 to 255
Notes	The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4 *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 as the local ID type
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* key-exchange dynamic id ipv4 *string*
Tree	ipv4
Notes	The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6 *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 used as the local IKE ID type
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* key-exchange dynamic id ipv6 *(ipv4-address-no-zone | ipv6-address-no-zone)*

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Tree	ipv6
Notes	The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-policy *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IKE policy ID
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* key-exchange dynamic ike-policy *reference*
Tree	ike-policy
Description	This command specifies the ID of the IKE policy used for IKE negotiation. The **ipsec-transport-mode-profile** configuration only supports IKEv2.
Reference	**configure** ipsec ike-policy *number*
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-transform *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec transform IDs used by the dynamic key
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* key-exchange dynamic ipsec-transform *reference*
Tree	ipsec-transform
Description	This command specifies IPsec transform IDs used for CHILD_SA negotiation.
Reference	**configure** ipsec ipsec-transform *number*
Max. Instances	4
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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pre-shared-key *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pre-shared key for authentication
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* key-exchange dynamic pre-shared-key *string*
Tree	pre-shared-key
String Length	1 to 115
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

manual

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **manual** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* key-exchange manual
Tree	manual
Notes	The following elements are part of a choice: **dynamic** or **manual**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keys [security-association] *number* direction *keyword*

Synopsis	Enter the **keys** list instance
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword*
Tree	keys
Description	Commands in this context configure the security association list for the tunnel.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**security-association**] *number*

Synopsis	SA entry ID
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword*
Tree	keys
Range	1 to 16
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of the IPsec tunnel
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword*
Tree	keys
Options	inbound, outbound
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication-key *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the authentication algorithm
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword* authentication-key *string*
Tree	authentication-key
String Length	1 to 130
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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encryption-key *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the encryption algorithm
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword* encryption-key *string*
Tree	encryption-key
String Length	1 to 66
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-transform *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Transform entry used by manual SAs
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword* ipsec-transform *reference*
Tree	ipsec-transform
Reference	**configure** ipsec ipsec-transform *number*
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

spi *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SPI of inbound and outbound packets
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* key-exchange manual keys *number* direction *keyword* spi *number*
Tree	spi

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Description	This command specifies the Security Parameter Index (SPI) used to look up the instruction to verify and decrypt the incoming IPsec packets when the direction is inbound. When the direction is outbound, the SPI is used in the encoding of the outgoing packets. The remote node can use the SPI to look up the instruction to verify and decrypt the packet.
Range	256 to 16383
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-history-key-records

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **max-history-key-records** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* max-history-key-records
Tree	max-history-key-records
Description	Commands in this context configure the settings for recording historical IPsec keys.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esp *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of recent records
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* max-history-key-records esp *number*
Tree	esp
Range	1 to 48
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ike *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of historical IKE key records
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* max-history-key-records ike *number*
Tree	ike
Range	1 to 3
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pmtu-discovery-aging *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Aging out time of the learned path MTU
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* pmtu-discovery-aging *number*
Tree	pmtu-discovery-aging
Description	This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation.
Range	900 to 3600
Units	seconds
Default	900
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

private-tcp-mss-adjust *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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Synopsis	TCP maximum segment size (MSS) adjustment
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* private-tcp-mss-adjust *number*
Tree	private-tcp-mss-adjust
Description	This command specifies the TCP MSS to adjust for the tunnel on the private side. When configured, the system may use the value to update the MSS option in the received TCP SYN packet on the private side.
Range	512 to 9000
Units	bytes
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

propagate-pmtu-v4 *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* propagate-pmtu-v4 *boolean*
Tree	propagate-pmtu-v4
Description	When configured to **true**, the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).
Default	true
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

propagate-pmtu-v6 *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv6 hosts
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* propagate-pmtu-v6 *boolean*
Tree	propagate-pmtu-v6

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Description	When configured to **true**, the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).
Default	true
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

public-tcp-mss-adjust *(number | keyword)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) on the public network
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* public-tcp-mss-adjust *(number | keyword)*
Tree	public-tcp-mss-adjust
Description	This command configures the MSS for the TCP traffic in an IPsec tunnel that is sent from the public network to the private network. The system may use this value to adjust or insert the MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Options	auto
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

replay-window *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Anti-replay window size
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* replay-window *number*
Tree	replay-window
Description	This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.
Range	32 | 64 | 128 | 256 | 512

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Units	packets
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

security-policy

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **security-policy** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* security-policy
Tree	security-policy
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec security policy ID
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* security-policy id *reference*
Tree	id
Reference	**configure** service vprn *string* ipsec security-policy *number*
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

strict-match *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable strict match of the security policy entry

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Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* security-policy strict-match *boolean*
Tree	strict-match
Description	When configured to **true**, this command enables strict match of the security policy entry. When a CREATE_CHILD exchange request is received for a static IPsec tunnel, and this request is not a rekey request, ISA matches the received TSi and TSr with the configured security policy. This can be a match only when a received TS (in TSi or TSr) address range matches exactly with the subnet in a security policy entry. If there is no match, the setup fails, and TS_UNACCEPTABLE is sent. If there is a match, but there is an existing CHILD_SA for the matched security policy, the setup fails, and NO_PROPOSAL_CHOSEN is sent. If there is a match, and there is not a CHILD_SA for the matched entry, the subnet is sent in the matched security policy entry as TSi and TSr, and the CHILD_SA is created.
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-endpoint

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **tunnel-endpoint** context
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* tunnel-endpoint
Tree	tunnel-endpoint
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

delivery-service *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delivery service name
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* tunnel-endpoint delivery-service *string*

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Tree	delivery-service
String Length	1 to 64
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-gateway-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Address used for tunnel of the remote security gateway
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* tunnel-endpoint local-gateway-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	local-gateway-address
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote IP address of this tunnel.
Context	**configure** service vprn *string* interface *string* sap *string* ipsec-tunnel *string* tunnel-endpoint remote-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	remote-ip-address
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lag

Synopsis	Enter the **lag** context

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Context	**configure** service vprn *string* interface *string* sap *string* lag
Tree	lag
Introduced	16.0.R1
Platforms	All

link-map-profile *number*

Synopsis	LAG link map profile for a SAP or network interface
Context	**configure** service vprn *string* interface *string* sap *string* lag link-map-profile *number*
Tree	link-map-profile
Description	This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration. If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.
Range	1 to 64
Introduced	16.0.R1
Platforms	All

per-link-hash

Synopsis	Enter the **per-link-hash** context
Context	**configure** service vprn *string* interface *string* sap *string* lag per-link-hash
Tree	per-link-hash
Introduced	16.0.R1
Platforms	All

class *number*

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	**configure** service vprn *string* interface *string* sap *string* lag per-link-hash class *number*
Tree	class
Range	1 to 3
Default	1
Introduced	16.0.R1

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Platforms	All

weight *number*

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	**configure** service vprn *string* interface *string* sap *string* lag per-link-hash weight *number*
Tree	weight
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	All

multi-service-site *reference*

Synopsis	Multi service site name
Context	**configure** service vprn *string* interface *string* sap *string* multi-service-site *reference*
Tree	multi-service-site
Reference	**configure** service customer *string* multi-service-site *string*
Introduced	16.0.R1
Platforms	All

static-host

Synopsis	Enter the **static-host** context
Context	**configure** service vprn *string* interface *string* sap *string* static-host
Tree	static-host
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4 [ip] *string* mac *string*

Synopsis	Enter the **ipv4** list instance
Context	**configure** service vprn *string* interface *string* sap *string* static-host ipv4 *string* mac *string*
Tree	ipv4
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**ip**] *string*

Synopsis	IP address
Context	**configure** service vprn *string* interface *string* sap *string* static-host ipv4 *string* mac *string*
Tree	ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *string*

Synopsis	MAC address
Context	**configure** service vprn *string* interface *string* sap *string* static-host ipv4 *string* mac *string*
Tree	ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the static host
Context	**configure** service vprn *string* interface *string* sap *string* static-host ipv4 *string* mac *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-string *string*

Synopsis	ANCP string
Context	**configure** service vprn *string* interface *string* sap *string* static-host ipv4 *string* mac *string* ancp-string *string*

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Tree	ancp-string
String Length	1 to 63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile

Synopsis	Enter the **app-profile** context
Context	**configure** service vprn *string* interface *string* sap *string* static-host ipv4 *string* mac *string* app-profile
Tree	app-profile
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

profile *reference*

Synopsis	Application profile used by the static host
Context	**configure** service vprn *string* interface *string* sap *string* static-host ipv4 *string* mac *string* app-profile profile *reference*
Tree	profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

int-dest-id *string*

Synopsis	Intermediate destination ID
Context	**configure** service vprn *string* interface *string* sap *string* static-host ipv4 *string* mac *string* int-dest-id *string*
Tree	int-dest-id
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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sla-profile *reference*

Synopsis	SLA profile name
Context	**configure** service vprn *string* interface *string* sap *string* static-host ipv4 *string* mac *string* sla-profile *reference*
Tree	sla-profile
Reference	**configure** subscriber-mgmt sla-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Sub-profile name
Context	**configure** service vprn *string* interface *string* sap *string* static-host ipv4 *string* mac *string* sub-profile *reference*
Tree	sub-profile
Reference	**configure** subscriber-mgmt sub-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id

Synopsis	Enter the **subscriber-id** context
Context	**configure** service vprn *string* interface *string* sap *string* static-host ipv4 *string* mac *string* subscriber-id
Tree	subscriber-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Subscriber identification
Context	**configure** service vprn *string* interface *string* sap *string* static-host ipv4 *string* mac *string* subscriber-id string *string*
Tree	string
String Length	1 to 64
Notes	The following elements are part of a choice: **string** or **use-sap-id**.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-sap-id

Synopsis	Use the SAP id as subscriber ID
Context	**configure** service vprn *string* interface *string* sap *string* static-host ipv4 *string* mac *string* subscriber-id use-sap-id
Tree	use-sap-id
Notes	The following elements are part of a choice: **string** or **use-sap-id**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

transit-policy

Synopsis	Enable the **transit-policy** context
Context	**configure** service vprn *string* interface *string* sap *string* transit-policy
Tree	transit-policy
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP transit policy ID
Context	**configure** service vprn *string* interface *string* sap *string* transit-policy ip *reference*
Tree	ip
Reference	**configure** application-assurance group *number* partition *number* transit-ip-policy *number*
Notes	The following elements are part of a mandatory choice: **ip** or **prefix**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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prefix *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	**configure** service vprn *string* interface *string* sap *string* transit-policy prefix *reference*
Tree	prefix
Reference	**configure** application-assurance group *number* partition *number* transit-prefix-policy *number*
Notes	The following elements are part of a mandatory choice: **ip** or **prefix**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

shcv-policy-ipv4 *reference*

Synopsis	Host connectivity IPv4 policy
Context	**configure** service vprn *string* interface *string* shcv-policy-ipv4 *reference*
Tree	shcv-policy-ipv4
Reference	**configure** subscriber-mgmt shcv-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

spoke-sdp [sdp-bind-id] *string*

Synopsis	Enter the **spoke-sdp** list instance
Context	**configure** service vprn *string* interface *string* spoke-sdp *string*
Tree	spoke-sdp
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[**sdp-bind-id**] *string*

Synopsis	SDP binding ID

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Context	**configure** service vprn *string* interface *string* spoke-sdp *string*
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

aarp

Synopsis	Enable the **aarp** context
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* aarp
Tree	aarp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id *reference*

Synopsis	AARP instance ID
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* aarp id *reference*
Tree	id
Reference	**configure** application-assurance aarp *number*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Role referenced by the AARP
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* aarp type *keyword*
Tree	type
Options	dual-homed, dual-homed-secondary
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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accounting-policy *reference*

Synopsis	Policy to collect accounting statistics
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the SDP binding to the service
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

app-profile *reference*

Synopsis	Application profile name for this SDP
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bfd

Synopsis	Enter the **bfd** context
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* bfd
Tree	bfd
Introduced	21.2.R1
Platforms	All

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bfd-liveness

Synopsis	Enable the **bfd-liveness** context
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* bfd bfd-liveness
Tree	bfd-liveness
Introduced	21.2.R1
Platforms	All

encap *keyword*

Synopsis	BFD encapsulation used on the SDP binding
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* bfd bfd-liveness encap *keyword*
Tree	encap
Options	ipv4
Default	ipv4
Introduced	21.2.R1
Platforms	All

bfd-template *reference*

Synopsis	BFD template associated with the SDP binding
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* bfd bfd-template *reference*
Tree	bfd-template
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the **configure router bfd** context.
Reference	**configure** bfd bfd-template *string*
Introduced	21.2.R1
Platforms	All

failure-action *keyword*

Synopsis	VCCV BFD action taken on the SDP binding

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Context	**configure** service vprn *string* interface *string* spoke-sdp *string* bfd failure-action *keyword*
Tree	failure-action
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the **configure router bfd** context.
Options	none, down
Default	none
Introduced	21.2.R1
Platforms	All

wait-for-up-timer *number*

Synopsis	Time waited for BFD up status
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* bfd wait-for-up-timer *number*
Tree	wait-for-up-timer
Description	This command configures the time interval that is used to wait for a BFD session to come up. This command is triggered when a spoke-SDP is first administratively enabled and a VCCV BFD session transitions from up to down. The command is required to allow time for BFD sessions to come up, and for BFD to settle before selecting the active spoke-SDP for use in a redundant set. In the case where a VCCV BFD session is bouncing, the timer prevents excessive flapping of the operational state of a spoke-SDP.
Range	1 to 60
Units	seconds
Introduced	21.2.R1
Platforms	All

collect-stats *boolean*

Synopsis	Allow agent to collect accounting statistics
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

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control-word *boolean*

Synopsis	Use the control word as preferred
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* control-word *boolean*
Tree	control-word
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cpu-protection

Synopsis	Enter the **cpu-protection** context
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* cpu-protection
Tree	cpu-protection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

eth-cfm-monitoring

Synopsis	Enable the **eth-cfm-monitoring** context
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* cpu-protection eth-cfm-monitoring
Tree	eth-cfm-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

aggregate

Synopsis	Apply rate limit to the sum of the per peer packet rates
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* cpu-protection eth-cfm-monitoring aggregate
Tree	aggregate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

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car

Synopsis	Ignore Ethernet CFM packets when enforcing overall rate
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* cpu-protection eth-cfm-monitoring car
Tree	car
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

ip-src-monitoring

Synopsis	Enable IP source monitoring for CPU protection
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* cpu-protection ip-src-monitoring
Tree	ip-src-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* cpu-protection mac-monitoring
Tree	mac-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

policy-id *reference*

Synopsis	CPM protection policy
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* cpu-protection policy-id *reference*
Tree	policy-id

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Reference	**configure** system security cpu-protection policy *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* egress
Tree	egress
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the **filter** context
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* egress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* egress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*

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Introduced	16.0.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* egress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* egress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

network

Synopsis	Enter the **network** context
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* egress qos network
Tree	network
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Network policy ID
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* egress qos network policy-name *reference*
Tree	policy-name
Reference	**configure** qos network *string*

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Introduced	16.0.R1
Platforms	All

port-redirect-group

Synopsis	Enter the **port-redirect-group** context
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* egress qos network port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Name of the egress port queue group
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* egress qos network port-redirect-group group-name *reference*
Tree	group-name
Reference	**configure** qos queue-group-templates egress queue-group *string*
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Queue-group instance ID
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* egress qos network port-redirect-group instance *number*
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

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vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* egress vc-label *number*
Tree	vc-label
Range	16 to 1048575
Introduced	16.0.R1
Platforms	All

entropy-label

Synopsis	Enable the use of entropy labels for spoke SDPs
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* entropy-label
Tree	entropy-label
Notes	The following elements are part of a choice: **entropy-label** or **hash-label**.
Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the **eth-cfm** context
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm
Tree	eth-cfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-fc-stats

Synopsis	Enter the **collect-lmm-fc-stats** context
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm collect-lmm-fc-stats
Tree	collect-lmm-fc-stats

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Description	Commands in this context configure per forwarding class (FC) LMM information collection. The commands **fc-in-profile** and **fc** in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively. This command and the **collect-lmm-stats** command are mutually exclusive when there is entity resource contention.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc *keyword*

Synopsis	Forwarding class name for profile-unaware counter
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm collect-lmm-fc-stats fc *keyword*
Tree	fc
Description	This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter. An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the **fc-in-profile** command under the **collect-lmm-fc-stats** context. When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc-in-profile *keyword*

Synopsis	Forwarding class name for profile-aware counter
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm collect-lmm-fc-stats fc-in-profile *keyword*
Tree	fc-in-profile
Description	This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.

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An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the **fc** command under the **collect-lmm-fc-stats** context.

When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm collect-lmm-stats *boolean*
Tree	collect-lmm-stats
Description	When configured to **true**, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings. The **show eth-cfm collect-lmm-stats** command displays entities that have been enabled to collect transit and receive counters. When configured to **false**, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*

Synopsis	Enter the **mep** list instance
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string* association *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MEP

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Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais *boolean*

Synopsis	Enable the generation and the reception of AIS messages
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais *boolean*
Tree	ais
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the **alarm-notification** context
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification
Tree	alarm-notification
Description	Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm. Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-alarm-time *number*

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Tree	fng-alarm-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-reset-time *number*
Tree	fng-reset-time
Range	250 | 500 | 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis	Generate CCM messages
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm *boolean*
Tree	ccm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-ltm-priority *number*
Tree	ccm-ltm-priority
Range	0 to 7
Default	7

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-padding-size *number*
Tree	ccm-padding-size
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU. This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through **configure eth-cfm domain association ccm-interval)** is less than 1 second.
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

csf

Synopsis	Enable the **csf** context
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* csf
Tree	csf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* csf multiplier *decimal-number*
Tree	multiplier
Range	0.0 | 2.0 to 30.0
Default	3.5

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the **eth-test** context
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the **oam eth-cfm eth-test** command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test bit-error-threshold *number*
Tree	bit-error-threshold
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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test-pattern

Synopsis	Enter the **test-pattern** context
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern crc-tlv *boolean*
Tree	crc-tlv
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern pattern *keyword*
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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fault-propagation *keyword*

Synopsis	Fault propagation for the MEP
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* fault-propagation *keyword*
Tree	fault-propagation
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the **grace** context
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the **eth-ed** context
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed max-rx-defect-window *number*
Tree	max-rx-defect-window

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Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed priority *number*
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed rx-eth-ed *boolean*
Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed tx-eth-ed *boolean*
Tree	tx-eth-ed
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis	Enter the **eth-vsm-grace** context
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace rx-eth-vsm-grace *boolean*
Tree	rx-eth-vsm-grace
Description	When configured to **true**, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to **false**, the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace tx-eth-vsm-grace *boolean*
Tree	tx-eth-vsm-grace
Description	When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards. The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

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The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* low-priority-defect *keyword*
Tree	low-priority-defect
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* one-way-delay-threshold *number*
Tree	one-way-delay-threshold
Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch-ingress-levels *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded

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Context	**configure** service vprn *string* interface *string* spoke-sdp *string* eth-cfm squelch-ingress-levels *number*
Tree	squelch-ingress-levels
Description	This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option. The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.
Range	0 to 7
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

hash-label

Synopsis	Enable the **hash-label** context
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* hash-label
Tree	hash-label
Description	Commands in this context configure the use of hash labels for egress datapaths. For information about hash-label handling, see the "Hash labels" section of the *7450 ESS, 7750 SR, 7950 XRS, and VSR MPLS Guide*.
Notes	The following elements are part of a choice: **entropy-label** or **hash-label**.
Introduced	16.0.R1
Platforms	All

signal-capability

Synopsis	Signal hash label capability to the remote PE
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* hash-label signal-capability
Tree	signal-capability
Description	When configured, this command enables the signaling and negotiating of the hash label between the local and remote PE nodes.

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The signaling process outcome determines whether the local PE inserts the hash label on the user packets. This outcome can override the local PE configuration.

Introduced 16.0.R1

Platforms All

ingress

Synopsis Enter the **ingress** context

Context **configure** service vprn *string* interface *string* spoke-sdp *string* ingress

Tree ingress

Introduced 16.0.R1

Platforms All

filter

Synopsis Enter the **filter** context

Context **configure** service vprn *string* interface *string* spoke-sdp *string* ingress filter

Tree filter

Introduced 16.0.R1

Platforms All

ip *reference*

Synopsis IPv4 filter policy name

Context **configure** service vprn *string* interface *string* spoke-sdp *string* ingress filter ip *reference*

Tree ip

Reference **configure** filter ip-filter *string*

Introduced 16.0.R1

Platforms All

ipv6 *reference*

Synopsis IPv6 filter policy name

Context **configure** service vprn *string* interface *string* spoke-sdp *string* ingress filter ipv6 *reference*

Tree ipv6

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Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

network

Synopsis	Enter the **network** context
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* ingress qos network
Tree	network
Introduced	16.0.R1
Platforms	All

fp-redirect-group

Synopsis	Enter the **fp-redirect-group** context
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* ingress qos network fp-redirect-group
Tree	fp-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Name of the forwarding plane queue group template
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* ingress qos network fp-redirect-group group-name *reference*
Tree	group-name
Reference	**configure** qos queue-group-templates ingress queue-group *string*

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Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Instance of FP ingress queue group for the SDP binding
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* ingress qos network fp-redirect-group instance *number*
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Network policy ID
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* ingress qos network policy-name *reference*
Tree	policy-name
Reference	**configure** qos network *string*
Introduced	16.0.R1
Platforms	All

vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* ingress vc-label *number*
Tree	vc-label
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

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transit-policy

Synopsis	Enable the **transit-policy** context
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* transit-policy
Tree	transit-policy
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP transit policy ID
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* transit-policy ip *reference*
Tree	ip
Reference	**configure** application-assurance group *number* partition *number* transit-ip-policy *number*
Notes	The following elements are part of a mandatory choice: **ip** or **prefix**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* transit-policy prefix *reference*
Tree	prefix
Reference	**configure** application-assurance group *number* partition *number* transit-prefix-policy *number*
Notes	The following elements are part of a mandatory choice: **ip** or **prefix**.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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vc-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Type of virtual circuit (VC) associated with the SDP binding
Context	**configure** service vprn *string* interface *string* spoke-sdp *string* vc-type *keyword*
Tree	vc-type
Options	ether, ipipe
Default	ether
Introduced	16.0.R1
Platforms	All

static-tunnel-redundant-nexthop *string*

Synopsis	Address for the static ISA tunnel redundant next-hop
Context	**configure** service vprn *string* interface *string* static-tunnel-redundant-nexthop *string*
Tree	static-tunnel-redundant-nexthop
Description	This command specifies the redundant next-hop address on public or private IPsec interfaces (with a public or private tunnel SAP) for the static IPsec tunnel. The next-hop address is resolved in the routing table of the corresponding service.
Notes	The following elements are part of a choice: **multi-chassis-shunting-profile** or (**dynamic-tunnel-redundant-nexthop** and **static-tunnel-redundant-nexthop**).
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tos-marking-state *keyword*

Synopsis	TOS marking state
Context	**configure** service vprn *string* interface *string* tos-marking-state *keyword*
Tree	tos-marking-state
Options	trusted, untrusted
Default	trusted
Introduced	16.0.R1
Platforms	All

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tunnel *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable/disable tunnel interface
Context	**configure** service vprn *string* interface *string* tunnel *boolean*
Tree	tunnel
Default	false
Introduced	16.0.R1
Platforms	All

vas-if-type *keyword*

Synopsis	VAS interface type
Context	**configure** service vprn *string* interface *string* vas-if-type *keyword*
Tree	vas-if-type
Options	to-from-access, to-from-network, to-from-both
Introduced	16.0.R1
Platforms	All

vpls [vpls-name] *string*

Synopsis	Enter the **vpls** list instance
Context	**configure** service vprn *string* interface *string* vpls *string*
Tree	vpls
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[**vpls-name**] *string*

Synopsis	VPLS service
Context	**configure** service vprn *string* interface *string* vpls *string*

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Tree	vpls
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** service vprn *string* interface *string* vpls *string* egress
Tree	egress
Introduced	16.0.R1
Platforms	All

reclassify-using-qos *reference*

Synopsis	Egress QoS policy
Context	**configure** service vprn *string* interface *string* vpls *string* egress reclassify-using-qos *reference*
Tree	reclassify-using-qos
Reference	**configure** qos sap-egress *string*
Introduced	16.0.R1
Platforms	All

routed-override-filter

Synopsis	Enter the **routed-override-filter** context
Context	**configure** service vprn *string* interface *string* vpls *string* egress routed-override-filter
Tree	routed-override-filter
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name

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Context	**configure** service vprn *string* interface *string* vpls *string* egress routed-override-filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service vprn *string* interface *string* vpls *string* egress routed-override-filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	All

evpn

Synopsis	Enter the **evpn** context
Context	**configure** service vprn *string* interface *string* vpls *string* evpn
Tree	evpn
Introduced	19.10.R1
Platforms	All

arp

Synopsis	Enter the **arp** context
Context	**configure** service vprn *string* interface *string* vpls *string* evpn arp
Tree	arp
Introduced	19.10.R1
Platforms	All

advertise [route-type] *keyword*

Synopsis	Enter the **advertise** list instance

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Context	**configure** service vprn *string* interface *string* vpls *string* evpn arp advertise *keyword*
Tree	advertise
Description	Commands in this context specify the configuration to allow ARP or ND entries that are installed in the ARP or ND cache to be advertised in EVPN MAC/IP routes. The **learn-dynamic** command must be set to **false** when using this functionality.
Introduced	19.10.R1
Platforms	All

[**route-type**] *keyword*

Synopsis	Type of ARP or ND entries that generate host routes
Context	**configure** service vprn *string* interface *string* vpls *string* evpn arp advertise *keyword*
Tree	advertise
Description	This command specifies the type of ARP or ND entries that are installed in the ARP or ND cache into EVPN MAC/IP routes.
Options	static, dynamic
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

route-tag *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	**configure** service vprn *string* interface *string* vpls *string* evpn arp advertise *keyword* route-tag *number*
Tree	route-tag
Description	This command specifies the route tag that is added separately to dynamic or static ARP or ND entries that are advertised in EVPN MAC/IP routes. This tag can be matched on BGP vsi-export (in the R-VPLS) and BGP peer export policies.
Range	0 to 255
Introduced	19.10.R1
Platforms	All

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flood-garp-and-unknown-req *boolean*

Synopsis	Allow CPM originated ARP frames to flood R-VPLS service
Context	**configure** service vprn *string* interface *string* vpls *string* evpn arp flood-garp-and-unknown-req *boolean*
Tree	flood-garp-and-unknown-req
Description	When configured to **true**, the system allows CPM-originated ARP frames to be flooded in the R-VPLS service. Any frames that are data path flooded such as the ARP messages received on a SAP, are flooded irrespective of this command. When configured to **false**, CPM-originated ARP flooding is suppressed.
Default	true
Introduced	19.10.R1
Platforms	All

learn-dynamic *boolean*

Synopsis	Process ARP or ND messages on EVPN tunnels
Context	**configure** service vprn *string* interface *string* vpls *string* evpn arp learn-dynamic *boolean*
Tree	learn-dynamic
Description	When configured to **true**, the system processes ARP or ND messages that arrive on EVPN tunnels. When configured to **false**, learning is disabled and table entries are not created for these messages.
Default	true
Introduced	19.10.R1
Platforms	All

nd

Synopsis	Enter the **nd** context
Context	**configure** service vprn *string* interface *string* vpls *string* evpn nd
Tree	nd
Introduced	20.5.R1
Platforms	All

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advertise [route-type] *keyword*

Synopsis	Enter the **advertise** list instance
Context	**configure** service vprn *string* interface *string* vpls *string* evpn nd advertise *keyword*
Tree	advertise
Description	Commands in this context specify the configuration to allow ARP or ND entries that are installed in the ARP or ND cache to be advertised in EVPN MAC/IP routes. The **learn-dynamic** command must be set to **false** when using this functionality.
Introduced	20.5.R1
Platforms	All

[**route-type**] *keyword*

Synopsis	Type of ARP or ND entries that generate host routes
Context	**configure** service vprn *string* interface *string* vpls *string* evpn nd advertise *keyword*
Tree	advertise
Description	This command specifies the type of ARP or ND entries that are installed in the ARP or ND cache into EVPN MAC/IP routes.
Options	static, dynamic
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

route-tag *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	**configure** service vprn *string* interface *string* vpls *string* evpn nd advertise *keyword* route-tag *number*
Tree	route-tag
Description	This command specifies the route tag that is added separately to dynamic or static ARP or ND entries that are advertised in EVPN MAC/IP routes. This tag can be matched on BGP vsi-export (in the R-VPLS) and BGP peer export policies.
Range	0 to 255
Introduced	20.5.R1

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Platforms	All

learn-dynamic *boolean*

Synopsis	Process ARP or ND messages on EVPN tunnels
Context	**configure** service vprn *string* interface *string* vpls *string* evpn nd learn-dynamic *boolean*
Tree	learn-dynamic
Description	When configured to **true**, the system processes ARP or ND messages that arrive on EVPN tunnels. When configured to **false**, learning is disabled and table entries are not created for these messages.
Default	true
Introduced	20.5.R1
Platforms	All

evpn-tunnel

Synopsis	Enable the **evpn-tunnel** context
Context	**configure** service vprn *string* interface *string* vpls *string* evpn-tunnel
Tree	evpn-tunnel
Introduced	16.0.R1
Platforms	All

allow-bfd *boolean*

Synopsis	Allow BFD on the EVPN tunnel
Context	**configure** service vprn *string* interface *string* vpls *string* evpn-tunnel allow-bfd *boolean*
Tree	allow-bfd
Default	false
Introduced	22.5.R1
Platforms	All

ipv6-gateway-address *keyword*

Synopsis	Type of IPv6 gateway address

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Context	**configure** service vprn *string* interface *string* vpls *string* evpn-tunnel ipv6-gateway-address *keyword*
Tree	ipv6-gateway-address
Options	ip, mac
Default	ip
Introduced	16.0.R4
Platforms	All

supplementary-broadcast-domain *boolean*

Synopsis	Use the EVPN tunnel as a Supplementary Broadcast Domain
Context	**configure** service vprn *string* interface *string* vpls *string* evpn-tunnel supplementary-broadcast-domain *boolean*
Tree	supplementary-broadcast-domain
Description	When configured to **true**, this command allows the EVPN tunnel to be used as a Supplementary Broadcast Domain (SBD). The SBD is used in EVPN OISM to advertise the SMET routes and to receive the multicast traffic on egress PEs that are not attached to the source R-VPLS service. When configured to **false**, this command disables EVPN tunnel use as an SBD.
Default	false
Introduced	19.10.R1
Platforms	All

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service vprn *string* interface *string* vpls *string* ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

routed-override-filter

Synopsis	Enter the **routed-override-filter** context
Context	**configure** service vprn *string* interface *string* vpls *string* ingress routed-override-filter
Tree	routed-override-filter
Introduced	16.0.R1

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Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service vprn *string* interface *string* vpls *string* ingress routed-override-filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service vprn *string* interface *string* vpls *string* ingress routed-override-filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	All

ip-mirror-interface [interface-name] *string*

Synopsis	Enter the **ip-mirror-interface** list instance
Context	**configure** service vprn *string* ip-mirror-interface *string*
Tree	ip-mirror-interface
Introduced	16.0.R1
Platforms	All

[**interface-name**] *string*

Synopsis	Interface name
Context	**configure** service vprn *string* ip-mirror-interface *string*
Tree	ip-mirror-interface
String Length	1 to 32

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	**configure** service vprn *string* ip-mirror-interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* ip-mirror-interface *string* description *string*
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

spoke-sdp [sdp-bind-id] *string*

Synopsis	Enter the **spoke-sdp** list instance
Context	**configure** service vprn *string* ip-mirror-interface *string* spoke-sdp *string*
Tree	spoke-sdp
Max. Instances	1
Introduced	16.0.R1
Platforms	All

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[**sdp-bind-id**] *string*

Synopsis	SDP binding ID
Context	**configure** service vprn *string* ip-mirror-interface *string* spoke-sdp *string*
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the SDP binding to the service
Context	**configure** service vprn *string* ip-mirror-interface *string* spoke-sdp *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* ip-mirror-interface *string* spoke-sdp *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service vprn *string* ip-mirror-interface *string* spoke-sdp *string* ingress
Tree	ingress

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Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the **filter** context
Context	**configure** service vprn *string* ip-mirror-interface *string* spoke-sdp *string* ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service vprn *string* ip-mirror-interface *string* spoke-sdp *string* ingress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	All

vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Spoke SDP ingress VC label
Context	**configure** service vprn *string* ip-mirror-interface *string* spoke-sdp *string* ingress vc-label *number*
Tree	vc-label
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

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ipsec

Synopsis	Enter the **ipsec** context
Context	**configure** service vprn *string* ipsec
Tree	ipsec
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

allow-reverse-route-override-type *keyword*

Synopsis	System behavior for new reverse route
Context	**configure** service vprn *string* ipsec allow-reverse-route-override-type *keyword*
Tree	allow-reverse-route-override-type
Description	This command specifies the system behavior when a new reverse route overlaps with an existing reverse route. When unconfigured, the system does not allow a new dynamic LAN-to-LAN tunnel that terminates in the private VPRN service to be created with an overlapping reverse route.
Options	same-idi, any-idi
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-chassis-shunt-interface [name] *reference*

Synopsis	Enter the **multi-chassis-shunt-interface** list instance
Context	**configure** service vprn *string* ipsec multi-chassis-shunt-interface *reference*
Tree	multi-chassis-shunt-interface
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *reference*

Synopsis	Multi-chassis shunt interface name
Context	**configure** service vprn *string* ipsec multi-chassis-shunt-interface *reference*
Tree	multi-chassis-shunt-interface
Reference	**configure** service vprn *string* interface *string*
Notes	This element is part of a list key.

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Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

next-hop

Synopsis	Enter the **next-hop** context
Context	**configure** service vprn *string* ipsec multi-chassis-shunt-interface *reference* next-hop
Tree	next-hop
Description	Commands in this context configure the next hop for shunting over the interface.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Next hop address for the shunting interface
Context	**configure** service vprn *string* ipsec multi-chassis-shunt-interface *reference* next-hop address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	address
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-chassis-shunting-profile [name] *string*

Synopsis	Enter the **multi-chassis-shunting-profile** list instance
Context	**configure** service vprn *string* ipsec multi-chassis-shunting-profile *string*
Tree	multi-chassis-shunting-profile
Max. Instances	64
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Multi-chassis shunting profile name
Context	**configure** service vprn *string* ipsec multi-chassis-shunting-profile *string*
Tree	multi-chassis-shunting-profile

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String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer [ip-address] *reference*

Synopsis	Enter the **peer** list instance
Context	**configure** service vprn *string* ipsec multi-chassis-shunting-profile *string* peer *reference*
Tree	peer
Max. Instances	3
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**ip-address**] *reference*

Synopsis	Peer address
Context	**configure** service vprn *string* ipsec multi-chassis-shunting-profile *string* peer *reference*
Tree	peer
Reference	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone | ipv6-address-no-zone)*
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-chassis-shunt-interface *reference*

Synopsis	Multi-chassis shunt interface
Context	**configure** service vprn *string* ipsec multi-chassis-shunting-profile *string* peer *reference* multi-chassis-shunt-interface *reference*
Tree	multi-chassis-shunt-interface
Reference	**configure** service vprn *string* ipsec multi-chassis-shunt-interface *reference*
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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security-policy [id] *number*

Synopsis	Enter the **security-policy** list instance
Context	**configure** service vprn *string* ipsec security-policy *number*
Tree	security-policy
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	IPsec security policy ID
Context	**configure** service vprn *string* ipsec security-policy *number*
Tree	security-policy
Range	1 to 32768
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** service vprn *string* ipsec security-policy *number* entry *number*
Tree	entry
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**entry-id**] *number*

Synopsis	IPsec security policy entry ID
Context	**configure** service vprn *string* ipsec security-policy *number* entry *number*
Tree	entry
Range	1 to 16
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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local-ip

Synopsis	Enter the **local-ip** context
Context	**configure** service vprn *string* ipsec security-policy *number* entry *number* local-ip
Tree	local-ip
Description	Commands in this context configure the local (from the VPN) IPv4 prefix/mask for the policy entry. The system evaluates the local IP as the source IP when traffic is examined in the direction of the flows from private to public and as the destination IP when traffic flows from public to private.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis	Destination IPv4 address of the aggregate route
Context	**configure** service vprn *string* ipsec security-policy *number* entry *number* local-ip address *string*
Tree	address
Notes	The following elements are part of a choice: **address** or **any**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

any *boolean*

Synopsis	Use any IP address
Context	**configure** service vprn *string* ipsec security-policy *number* entry *number* local-ip any *boolean*
Tree	any
Default	false
Notes	The following elements are part of a choice: **address** or **any**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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local-ipv6

Synopsis	Enter the **local-ipv6** context
Context	**configure** service vprn *string* ipsec security-policy *number* entry *number* local-ipv6
Tree	local-ipv6
Description	Commands in this context configure the local (from the VPN) IPv6 prefix/mask for the policy entry. The system evaluates the local IP as the source IP when traffic is examined in the direction of the flows from private to public and as the destination IP when traffic flows from public to private.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis	Destination IPv6 address of the aggregate route
Context	**configure** service vprn *string* ipsec security-policy *number* entry *number* local-ipv6 address *string*
Tree	address
Notes	The following elements are part of a choice: **address** or **any**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

any *boolean*

Synopsis	Use any IP address
Context	**configure** service vprn *string* ipsec security-policy *number* entry *number* local-ipv6 any *boolean*
Tree	any
Default	false
Notes	The following elements are part of a choice: **address** or **any**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-ip

Synopsis	Enter the **remote-ip** context

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Context	**configure** service vprn *string* ipsec security-policy *number* entry *number* remote-ip
Tree	remote-ip
Description	Commands in this context configure the remote (from the tunnel) IP prefix/mask for the policy entry. The system evaluates the remote IP as the source IP when traffic flows public to private and as the destination IP when traffic flows from private to public.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis	Destination IPv4 address of the aggregate route
Context	**configure** service vprn *string* ipsec security-policy *number* entry *number* remote-ip address *string*
Tree	address
Notes	The following elements are part of a choice: **address** or **any**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

any *boolean*

Synopsis	Use any IP address
Context	**configure** service vprn *string* ipsec security-policy *number* entry *number* remote-ip any *boolean*
Tree	any
Default	false
Notes	The following elements are part of a choice: **address** or **any**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-ipv6

Synopsis	Enter the **remote-ipv6** context
Context	**configure** service vprn *string* ipsec security-policy *number* entry *number* remote-ipv6
Tree	remote-ipv6

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Description	Commands in this context configure the remote (from the tunnel) IPv6 prefix/mask for the policy entry. The system evaluates the remote IP as the source IP when traffic flows from public to private and as the destination IP when traffic flows from private to public.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis	Destination IPv6 address of the aggregate route
Context	**configure** service vprn *string* ipsec security-policy *number* entry *number* remote-ipv6 address *string*
Tree	address
Notes	The following elements are part of a choice: **address** or **any**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

any *boolean*

Synopsis	Use any IP address
Context	**configure** service vprn *string* ipsec security-policy *number* entry *number* remote-ipv6 any *boolean*
Tree	any
Default	false
Notes	The following elements are part of a choice: **address** or **any**.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** service vprn *string* ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

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neighbor-discovery

Synopsis	Enter the **neighbor-discovery** context
Context	**configure** service vprn *string* ipv6 neighbor-discovery
Tree	neighbor-discovery
Introduced	16.0.R1
Platforms	All

reachable-time *number*

Synopsis	Neighbor reachability detection timer
Context	**configure** service vprn *string* ipv6 neighbor-discovery reachable-time *number*
Tree	reachable-time
Range	30 to 3600
Default	30
Introduced	16.0.R1
Platforms	All

stale-time *number*

Synopsis	Neighbor discovery cache entry stale time
Context	**configure** service vprn *string* ipv6 neighbor-discovery stale-time *number*
Tree	stale-time
Range	60 to 65535
Default	14400
Introduced	16.0.R1
Platforms	All

router-advertisement

Synopsis	Enter the **router-advertisement** context
Context	**configure** service vprn *string* ipv6 router-advertisement
Tree	router-advertisement
Introduced	16.0.R1
Platforms	All

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dns-options

Synopsis	Enable the **dns-options** context
Context	**configure** service vprn *string* ipv6 router-advertisement dns-options
Tree	dns-options
Introduced	16.0.R1
Platforms	All

rdnss-lifetime *(keyword | number)*

Synopsis	Maximum time over which the RDNSS address is valid
Context	**configure** service vprn *string* ipv6 router-advertisement dns-options rdnss-lifetime *(keyword | number)*
Tree	rdnss-lifetime
Description	This command specifies the maximum time that the RDNSS address is used for name resolution by the client.
Range	0 | 4 to 3600
Units	seconds
Options	infinite
Default	infinite
Introduced	16.0.R1
Platforms	All

server *string*

Synopsis	RAs that are forwarded to IPv6 DNS servers
Context	**configure** service vprn *string* ipv6 router-advertisement dns-options server *string*
Tree	server
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

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interface [ip-int-name] *reference*

Synopsis	Enter the **interface** list instance
Context	**configure** service vprn *string* ipv6 router-advertisement interface *reference*
Tree	interface
Introduced	16.0.R1
Platforms	All

[**ip-int-name**] *reference*

Synopsis	VPRN interface name
Context	**configure** service vprn *string* ipv6 router-advertisement interface *reference*
Tree	interface
Reference	**configure** service vprn *string* interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of router advertisement
Context	**configure** service vprn *string* ipv6 router-advertisement interface *reference* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

current-hop-limit *number*

Synopsis	Hop limit advertised in RA messages
Context	**configure** service vprn *string* ipv6 router-advertisement interface *reference* current-hop-limit *number*
Tree	current-hop-limit
Range	0 to 255

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Default	64
Introduced	16.0.R1
Platforms	All

dns-options

Synopsis	Enable the **dns-options** context
Context	**configure** service vprn *string* ipv6 router-advertisement interface *reference* dns-options
Tree	dns-options
Introduced	16.0.R1
Platforms	All

include-rdnss *boolean*

Synopsis	Include the RDNSS option in the RA
Context	**configure** service vprn *string* ipv6 router-advertisement interface *reference* dns-options include-rdnss *boolean*
Tree	include-rdnss
Default	true
Introduced	16.0.R1
Platforms	All

rdnss-lifetime *(number | keyword)*

Synopsis	Maximum time over which the RDNSS address 25 is valid
Context	**configure** service vprn *string* ipv6 router-advertisement interface *reference* dns-options rdnss-lifetime *(number | keyword)*
Tree	rdnss-lifetime
Range	0 | 4 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	All

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server *string*

Synopsis	RAs that are forwarded to IPv6 DNS servers
Context	**configure** service vprn *string* ipv6 router-advertisement interface *reference* dns-options server *string*
Tree	server
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

managed-configuration *boolean*

Synopsis	Set the managed address configuration flag
Context	**configure** service vprn *string* ipv6 router-advertisement interface *reference* managed-configuration *boolean*
Tree	managed-configuration
Default	false
Introduced	16.0.R1
Platforms	All

max-advertisement-interval *number*

Synopsis	Maximum time between sending advertisement messages
Context	**configure** service vprn *string* ipv6 router-advertisement interface *reference* max-advertisement-interval *number*
Tree	max-advertisement-interval
Range	4 to 1800
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	All

min-advertisement-interval *number*

Synopsis	Minimum interval between router advertisement messages

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Context	**configure** service vprn *string* ipv6 router-advertisement interface *reference* min-advertisement-interval *number*
Tree	min-advertisement-interval
Range	3 to 1350
Units	seconds
Default	200
Introduced	16.0.R1
Platforms	All

mtu *number*

Synopsis	MTU for sending packets to the router
Context	**configure** service vprn *string* ipv6 router-advertisement interface *reference* mtu *number*
Tree	mtu
Range	1280 to 9800
Introduced	16.0.R1
Platforms	All

other-stateful-configuration *boolean*

Synopsis	Set the other configuration flag
Context	**configure** service vprn *string* ipv6 router-advertisement interface *reference* other-stateful-configuration *boolean*
Tree	other-stateful-configuration
Default	false
Introduced	16.0.R1
Platforms	All

prefix [ipv6-prefix] *string*

Synopsis	Enter the **prefix** list instance
Context	**configure** service vprn *string* ipv6 router-advertisement interface *reference* prefix *string*
Tree	prefix
Max. Instances	254
Introduced	16.0.R1

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Platforms	All

[**ipv6-prefix**] *string*

Synopsis	IPv6 address prefix
Context	**configure** service vprn *string* ipv6 router-advertisement interface *reference* prefix *string*
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

autonomous *boolean*

Synopsis	Set the autonomous flag value
Context	**configure** service vprn *string* ipv6 router-advertisement interface *reference* prefix *string* autonomous *boolean*
Tree	autonomous
Default	true
Introduced	16.0.R1
Platforms	All

on-link *boolean*

Synopsis	Use prefix for on-link determination
Context	**configure** service vprn *string* ipv6 router-advertisement interface *reference* prefix *string* on-link *boolean*
Tree	on-link
Default	true
Introduced	16.0.R1
Platforms	All

preferred-lifetime *(keyword | number)*

Synopsis	Remaining time that the prefix remains preferred
Context	**configure** service vprn *string* ipv6 router-advertisement interface *reference* prefix *string* preferred-lifetime *(keyword | number)*

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Tree	preferred-lifetime
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	604800
Introduced	16.0.R1
Platforms	All

valid-lifetime *(keyword | number)*

Synopsis	Remaining time in which the prefix is still valid
Context	**configure** service vprn *string* ipv6 router-advertisement interface *reference* prefix *string* valid-lifetime *(keyword | number)*
Tree	valid-lifetime
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	2592000
Introduced	16.0.R1
Platforms	All

reachable-time *number*

Synopsis	Time the router is reachable by other hosts or nodes
Context	**configure** service vprn *string* ipv6 router-advertisement interface *reference* reachable-time *number*
Tree	reachable-time
Range	0 to 3600000
Units	milliseconds
Default	0
Introduced	16.0.R1
Platforms	All

retransmit-time *number*

Synopsis	Time to advertise neighbor advertisement messages

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Context	**configure** service vprn *string* ipv6 router-advertisement interface *reference* retransmit-time *number*
Tree	retransmit-time
Range	0 to 1800000
Units	milliseconds
Default	0
Introduced	16.0.R1
Platforms	All

router-lifetime *number*

Synopsis	Lifetime value in neighbor advertisement messages
Context	**configure** service vprn *string* ipv6 router-advertisement interface *reference* router-lifetime *number*
Tree	router-lifetime
Range	0 | 4 to 9000
Units	seconds
Default	1800
Introduced	16.0.R1
Platforms	All

use-virtual-mac *boolean*

Synopsis	Use VRRP virtual MAC address for advertisement message
Context	**configure** service vprn *string* ipv6 router-advertisement interface *reference* use-virtual-mac *boolean*
Tree	use-virtual-mac
Default	false
Introduced	16.0.R1
Platforms	All

isis [isis-instance] *number*

Synopsis	Enter the **isis** list instance
Context	**configure** service vprn *string* isis *number*
Tree	isis

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Introduced	16.0.R1
Platforms	All

[**isis-instance**] *number*

Synopsis	Instance ID for the IS-IS instance
Context	**configure** service vprn *string* isis *number*
Tree	isis
Range	0 to 127
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the IS-IS instance
Context	**configure** service vprn *string* isis *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

advertise-passive-only *boolean*

Synopsis	Advertise prefixes that belong to passive interfaces
Context	**configure** service vprn *string* isis *number* advertise-passive-only *boolean*
Tree	advertise-passive-only
Default	false
Introduced	16.0.R1
Platforms	All

advertise-router-capability *keyword*

Synopsis	Router capabilities advertisement to neighbors

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Context	**configure** service vprn *string* isis *number* advertise-router-capability *keyword*
Tree	advertise-router-capability
Options	area, as
Introduced	16.0.R1
Platforms	All

all-l1isis *string*

Synopsis	Destination MAC address for all L1 IS-IS routers
Context	**configure** service vprn *string* isis *number* all-l1isis *string*
Tree	all-l1isis
Default	01:80:C2:00:00:14
Introduced	16.0.R1
Platforms	All

all-l2isis *string*

Synopsis	Destination MAC address for all L2 IS-IS routers
Context	**configure** service vprn *string* isis *number* all-l2isis *string*
Tree	all-l2isis
Default	01:80:C2:00:00:15
Introduced	16.0.R1
Platforms	All

area-address *string*

Synopsis	Area address portion of the NSAP address
Context	**configure** service vprn *string* isis *number* area-address *string*
Tree	area-address
String Length	2 to 38
Max. Instances	3
Introduced	16.0.R1
Platforms	All

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authentication-check *boolean*

Synopsis	Perform authentication check to reject mismatch PDUs
Context	**configure** service vprn *string* isis *number* authentication-check *boolean*
Tree	authentication-check
Default	true
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Authentication key to verify PDUs sent from neighbors
Context	**configure** service vprn *string* isis *number* authentication-key *string*
Tree	authentication-key
String Length	1 to 366
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	Keychain used to sign and authenticate
Context	**configure** service vprn *string* isis *number* authentication-keychain *reference*
Tree	authentication-keychain
Reference	**configure** system security keychains keychain *string*
Introduced	16.0.R3
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type
Context	**configure** service vprn *string* isis *number* authentication-type *keyword*
Tree	authentication-type
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

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csnp-authentication *boolean*

Synopsis	Authenticate individual IS-IS packets of the CSNP type
Context	**configure** service vprn *string* isis *number* csnp-authentication *boolean*
Tree	csnp-authentication
Default	true
Introduced	16.0.R1
Platforms	All

default-route-tag *number*

Synopsis	Route tag for the default route
Context	**configure** service vprn *string* isis *number* default-route-tag *number*
Tree	default-route-tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

export-limit

Synopsis	Enable the **export-limit** context
Context	**configure** service vprn *string* isis *number* export-limit
Tree	export-limit
Introduced	16.0.R1
Platforms	All

log-percent *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	**configure** service vprn *string* isis *number* export-limit log-percent *number*
Tree	log-percent
Range	1 to 100
Introduced	16.0.R1
Platforms	All

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number *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	**configure** service vprn *string* isis *number* export-limit number *number*
Tree	number
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

export-policy *reference*

Synopsis	Export policies that determine exported routes
Context	**configure** service vprn *string* isis *number* export-policy *reference*
Tree	export-policy
Description	This command configures export routing policies for the routes exported from the routing table to IS-IS. If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied. If the **aggregate** command is also configured in the **configure router** context, the aggregation is applied before the export policy is applied. Routing policies are created in the **configure router policy-options** context.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

graceful-restart

Synopsis	Enable the **graceful-restart** context
Context	**configure** service vprn *string* isis *number* graceful-restart
Tree	graceful-restart

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Introduced	16.0.R1
Platforms	All

helper-mode *boolean*

Synopsis	Enable the Graceful Restart helper for IS-IS
Context	**configure** service vprn *string* isis *number* graceful-restart helper-mode *boolean*
Tree	helper-mode
Default	true
Introduced	16.0.R1
Platforms	All

hello-authentication *boolean*

Synopsis	Authenticate Hello type IS-IS protocol packets
Context	**configure** service vprn *string* isis *number* hello-authentication *boolean*
Tree	hello-authentication
Default	true
Introduced	16.0.R1
Platforms	All

hello-padding *keyword*

Synopsis	IS-IS Hello message padding
Context	**configure** service vprn *string* isis *number* hello-padding *keyword*
Tree	hello-padding
Options	adaptive, loose, strict, none
Introduced	16.0.R1
Platforms	All

ignore-attached-bit *boolean*

Synopsis	Ignore attached bit on received Layer 1 LSPs
Context	**configure** service vprn *string* isis *number* ignore-attached-bit *boolean*
Tree	ignore-attached-bit

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Default	false
Introduced	16.0.R1
Platforms	All

ignore-lsp-errors *boolean*

Synopsis	Ignore LSP packets with errors
Context	**configure** service vprn *string* isis *number* ignore-lsp-errors *boolean*
Tree	ignore-lsp-errors
Default	false
Introduced	16.0.R1
Platforms	All

ignore-narrow-metric *boolean*

Synopsis	Ignore links with narrow metrics
Context	**configure** service vprn *string* isis *number* ignore-narrow-metric *boolean*
Tree	ignore-narrow-metric
Default	false
Introduced	16.0.R1
Platforms	All

iid-tlv *boolean*

Synopsis	Use IID TLVs with IS-IS multi-instance
Context	**configure** service vprn *string* isis *number* iid-tlv *boolean*
Tree	iid-tlv
Default	false
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy names for routes from IGP to route table
Context	**configure** service vprn *string* isis *number* import-policy *reference*

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Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

interface [interface-name] *string*

Synopsis	Enter the **interface** list instance
Context	**configure** service vprn *string* isis *number* interface *string*
Tree	interface
Introduced	16.0.R1
Platforms	All

[**interface-name**] *string*

Synopsis	IP interface name
Context	**configure** service vprn *string* isis *number* interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the IS-IS interface
Context	**configure** service vprn *string* isis *number* interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

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bfd-liveness

Synopsis	Enter the **bfd-liveness** context
Context	**configure** service vprn *string* isis *number* interface *string* bfd-liveness
Tree	bfd-liveness
Description	Commands in this context enable the use of bidirectional forwarding (BFD) to control IPv4 and IPv6 adjacencies. Enabling BFD on an IPv4 or IPv6 protocol interface ties the protocol interface state to the BFD session state between the local and remote nodes. BFD must be enabled on the applicable IP interface.
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enable the **ipv4** context
Context	**configure** service vprn *string* isis *number* interface *string* bfd-liveness ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

include-bfd-tlv *boolean*

Synopsis	Enable IS-IS BFD TLVs on the interface
Context	**configure** service vprn *string* isis *number* interface *string* bfd-liveness ipv4 include-bfd-tlv *boolean*
Tree	include-bfd-tlv
Default	false
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enable the **ipv6** context
Context	**configure** service vprn *string* isis *number* interface *string* bfd-liveness ipv6
Tree	ipv6
Introduced	16.0.R1

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Platforms	All

include-bfd-tlv *boolean*

Synopsis	Enable IS-IS BFD TLVs on the interface
Context	**configure** service vprn *string* isis *number* interface *string* bfd-liveness ipv6 include-bfd-tlv *boolean*
Tree	include-bfd-tlv
Default	false
Introduced	16.0.R1
Platforms	All

csnp-interval *number*

Synopsis	Time interval between successive CSN PDUs sent
Context	**configure** service vprn *string* isis *number* interface *string* csnp-interval *number*
Tree	csnp-interval
Range	1 to 65535
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

default-instance *boolean*

Synopsis	Allow non-MI capable router to establish an adjacency
Context	**configure** service vprn *string* isis *number* interface *string* default-instance *boolean*
Tree	default-instance
Default	false
Introduced	16.0.R1
Platforms	All

hello-authentication *boolean*

Synopsis	Authenticate Hello type IS-IS protocol packets
Context	**configure** service vprn *string* isis *number* interface *string* hello-authentication *boolean*

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Tree	hello-authentication
Default	true
Introduced	16.0.R1
Platforms	All

hello-authentication-key *string*

Synopsis	Authentication key or hash string for Hello PDUs
Context	**configure** service vprn *string* isis *number* interface *string* hello-authentication-key *string*
Tree	hello-authentication-key
String Length	1 to 366
Introduced	16.0.R1
Platforms	All

hello-authentication-keychain *reference*

Synopsis	Authentication keychain to use for the session
Context	**configure** service vprn *string* isis *number* interface *string* hello-authentication-keychain *reference*
Tree	hello-authentication-keychain
Reference	**configure** system security keychains keychain *string*
Introduced	16.0.R3
Platforms	All

hello-authentication-type *keyword*

Synopsis	Hello authentication type
Context	**configure** service vprn *string* isis *number* interface *string* hello-authentication-type *keyword*
Tree	hello-authentication-type
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

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hello-padding *keyword*

Synopsis	Padding on IS-IS Hello packets
Context	**configure** service vprn *string* isis *number* interface *string* hello-padding *keyword*
Tree	hello-padding
Options	adaptive, loose, strict, none
Introduced	16.0.R1
Platforms	All

interface-type *keyword*

Synopsis	Interface type to broadcast, point-to-point, or to be default
Context	**configure** service vprn *string* isis *number* interface *string* interface-type *keyword*
Tree	interface-type
Options	point-to-point, broadcast
Introduced	16.0.R1
Platforms	All

ipv4-multicast *boolean*

Synopsis	Enable IPv4 multicast routing for the interface
Context	**configure** service vprn *string* isis *number* interface *string* ipv4-multicast *boolean*
Tree	ipv4-multicast
Default	true
Introduced	16.0.R1
Platforms	All

ipv6-unicast *boolean*

Synopsis	Enable IPv6 unicast routing for the interface
Context	**configure** service vprn *string* isis *number* interface *string* ipv6-unicast *boolean*
Tree	ipv6-unicast
Default	true
Introduced	16.0.R1
Platforms	All

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level [level-number] *keyword*

Synopsis	Enter the **level** list instance
Context	**configure** service vprn *string* isis *number* interface *string* level *keyword*
Tree	level
Max. Instances	2
Introduced	16.0.R1
Platforms	All

[**level-number**] *keyword*

Synopsis	ISIS protocol level number
Context	**configure** service vprn *string* isis *number* interface *string* level *keyword*
Tree	level
Options	1, 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

hello-authentication-key *string*

Synopsis	Authentication key for Hello PDUs
Context	**configure** service vprn *string* isis *number* interface *string* level *keyword* hello-authentication-key *string*
Tree	hello-authentication-key
Description	This command configures the authentication key (password) for Hello PDUs. Both the Hello authentication key and the Hello authentication type on a segment must match. If both IS-IS and Hello authentication are configured, Hello messages are validated using Hello authentication. If only IS-IS authentication is configured, it is used to authenticate all IS-IS (including Hello) protocol PDUs.
String Length	1 to 366
Introduced	16.0.R1
Platforms	All

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hello-authentication-keychain *reference*

Synopsis	Authentication keychain to use for the session
Context	**configure** service vprn *string* isis *number* interface *string* level *keyword* hello-authentication-keychain *reference*
Tree	hello-authentication-keychain
Reference	**configure** system security keychains keychain *string*
Introduced	16.0.R3
Platforms	All

hello-authentication-type *keyword*

Synopsis	Hello authentication enabled on the context
Context	**configure** service vprn *string* isis *number* interface *string* level *keyword* hello-authentication-type *keyword*
Tree	hello-authentication-type
Description	This command enables Hello authentication at the level context. Both the Hello authentication key and the Hello authentication type on a segment must match. The Hello **authentication-key** statement must also be included.
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

hello-interval *number*

Synopsis	Interval between Hello messages sent on this level
Context	**configure** service vprn *string* isis *number* interface *string* level *keyword* hello-interval *number*
Tree	hello-interval
Range	1 to 20000
Units	seconds
Default	9
Introduced	16.0.R1
Platforms	All

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hello-multiplier *number*

Synopsis	Hello messages missed from neighbor before router declares adjacency down
Context	**configure** service vprn *string* isis *number* interface *string* level *keyword* hello-multiplier *number*
Tree	hello-multiplier
Range	2 to 100
Default	3
Introduced	16.0.R1
Platforms	All

hello-padding *keyword*

Synopsis	Padding on IS-IS Hello packets
Context	**configure** service vprn *string* isis *number* interface *string* level *keyword* hello-padding *keyword*
Tree	hello-padding
Options	adaptive, loose, strict, none
Introduced	16.0.R1
Platforms	All

ipv4-multicast-metric *number*

Synopsis	IS-IS interface metric applied for IPv4 multicast
Context	**configure** service vprn *string* isis *number* interface *string* level *keyword* ipv4-multicast-metric *number*
Tree	ipv4-multicast-metric
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

ipv6-unicast-metric *number*

Synopsis	IS-IS interface metric applied for IPv6 unicast
Context	**configure** service vprn *string* isis *number* interface *string* level *keyword* ipv6-unicast-metric *number*
Tree	ipv6-unicast-metric

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Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	IS-IS interface metric applied for IPv4 unicast
Context	**configure** service vprn *string* isis *number* interface *string* level *keyword* metric *number*
Tree	metric
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

passive *boolean*

Synopsis	Passive interface
Context	**configure** service vprn *string* isis *number* interface *string* level *keyword* passive *boolean*
Tree	passive
Default	false
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Router to become the designated router on a multi-access network
Context	**configure** service vprn *string* isis *number* interface *string* level *keyword* priority *number*
Tree	priority
Range	0 to 127
Default	64
Introduced	16.0.R1
Platforms	All

sd-offset *number*

Synopsis	Value of the signal degrade offset

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Context	**configure** service vprn *string* isis *number* interface *string* level *keyword* sd-offset *number*
Tree	sd-offset
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

sf-offset *number*

Synopsis	Value of the signal fail offset
Context	**configure** service vprn *string* isis *number* interface *string* level *keyword* sf-offset *number*
Tree	sf-offset
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

level-capability *keyword*

Synopsis	IS-IS levels for this interface
Context	**configure** service vprn *string* isis *number* interface *string* level-capability *keyword*
Tree	level-capability
Options	1, 2, 1/2
Default	1/2
Introduced	16.0.R1
Platforms	All

load-balancing-weight *number*

Synopsis	Load balancing weight
Context	**configure** service vprn *string* isis *number* interface *string* load-balancing-weight *number*
Tree	load-balancing-weight
Max. Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

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loopfree-alternate

Synopsis	Enter the **loopfree-alternate** context
Context	**configure** service vprn *string* isis *number* interface *string* loopfree-alternate
Tree	loopfree-alternate
Introduced	16.0.R3
Platforms	All

exclude *boolean*

Synopsis	Enable/disable Loopfree Alternative at interface level.
Context	**configure** service vprn *string* isis *number* interface *string* loopfree-alternate exclude *boolean*
Tree	exclude
Default	false
Introduced	16.0.R3
Platforms	All

policy-map

Synopsis	Enable the **policy-map** context
Context	**configure** service vprn *string* isis *number* interface *string* loopfree-alternate policy-map
Tree	policy-map
Introduced	16.0.R3
Platforms	All

route-nh-template *reference*

Synopsis	Route next hop policy template name
Context	**configure** service vprn *string* isis *number* interface *string* loopfree-alternate policy-map route-nh-template *reference*
Tree	route-nh-template
Reference	**configure** routing-options route-next-hop-policy template *string*
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

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lsp-pacing-interval *number*

Synopsis	Interval for sending LSPs from interface
Context	**configure** service vprn *string* isis *number* interface *string* lsp-pacing-interval *number*
Tree	lsp-pacing-interval
Range	0 to 65535
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

mesh-group

Synopsis	Enable the **mesh-group** context
Context	**configure** service vprn *string* isis *number* interface *string* mesh-group
Tree	mesh-group
Introduced	16.0.R1
Platforms	All

blocked

Synopsis	Prevent the interface from flooding LSPs
Context	**configure** service vprn *string* isis *number* interface *string* mesh-group blocked
Tree	blocked
Notes	The following elements are part of a choice: **blocked** or **value**.
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Mesh group for the interface
Context	**configure** service vprn *string* isis *number* interface *string* mesh-group value *number*
Tree	value
Range	1 to 2000000000
Notes	The following elements are part of a choice: **blocked** or **value**.

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Introduced	16.0.R1
Platforms	All

passive *boolean*

Synopsis	Passive interface
Context	**configure** service vprn *string* isis *number* interface *string* passive *boolean*
Tree	passive
Default	false
Introduced	16.0.R1
Platforms	All

retransmit-interval *number*

Synopsis	Minimum time between LSP PDU retransmissions on point-to-point interface
Context	**configure** service vprn *string* isis *number* interface *string* retransmit-interval *number*
Tree	retransmit-interval
Range	1 to 65535
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

tag *number*

Synopsis	Route tag for IP address of interface
Context	**configure** service vprn *string* isis *number* interface *string* tag *number*
Tree	tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

ipv4-multicast-routing *keyword*

Synopsis	IS-IS topology for IPv4 multicast routing

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Context	**configure** service vprn *string* isis *number* ipv4-multicast-routing *keyword*
Tree	ipv4-multicast-routing
Options	false, native, mt
Default	native
Introduced	16.0.R1
Platforms	All

ipv4-routing *boolean*

Synopsis	Support IPv4 routing for IS-IS instance
Context	**configure** service vprn *string* isis *number* ipv4-routing *boolean*
Tree	ipv4-routing
Default	true
Introduced	16.0.R1
Platforms	All

ipv6-routing *keyword*

Synopsis	Routing topology for IPv6
Context	**configure** service vprn *string* isis *number* ipv6-routing *keyword*
Tree	ipv6-routing
Options	false, native, mt
Default	false
Introduced	16.0.R1
Platforms	All

level [level-number] *keyword*

Synopsis	Enter the **level** list instance
Context	**configure** service vprn *string* isis *number* level *keyword*
Tree	level
Max. Instances	2
Introduced	16.0.R1
Platforms	All

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[**level-number**] *keyword*

Synopsis	ISIS protocol level number
Context	**configure** service vprn *string* isis *number* level *keyword*
Tree	level
Options	1, 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	**configure** service vprn *string* isis *number* level *keyword* advertise-router-capability *boolean*
Tree	advertise-router-capability
Default	true
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Authentication key to verify PDUs sent on the interface
Context	**configure** service vprn *string* isis *number* level *keyword* authentication-key *string*
Tree	authentication-key
Description	This command sets the authentication key used to verify PDUs sent by neighboring routers on the interface. Neighboring routers use passwords to authenticate PDUs sent from an interface. For authentication to work, both the authentication key and the authentication type on a segment must match. The **authentication-type** command must also be included.
String Length	1 to 366
Introduced	16.0.R1
Platforms	All

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authentication-keychain *reference*

Synopsis	Keychain used to sign and authenticate
Context	**configure** service vprn *string* isis *number* level *keyword* authentication-keychain *reference*
Tree	authentication-keychain
Reference	**configure** system security keychains keychain *string*
Introduced	16.0.R3
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type to be used
Context	**configure** service vprn *string* isis *number* level *keyword* authentication-type *keyword*
Tree	authentication-type
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

csnp-authentication *boolean*

Synopsis	Enable authentication of CSNP IS-IS protocol packets
Context	**configure** service vprn *string* isis *number* level *keyword* csnp-authentication *boolean*
Tree	csnp-authentication
Default	true
Introduced	16.0.R1
Platforms	All

default-ipv4-multicast-metric *number*

Synopsis	Default metric for IPv4 unicast
Context	**configure** service vprn *string* isis *number* level *keyword* default-ipv4-multicast-metric *number*
Tree	default-ipv4-multicast-metric
Range	1 to 16777215
Default	10

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Introduced	16.0.R1
Platforms	All

default-ipv6-unicast-metric *number*

Synopsis	Default metric for IPv6 unicast
Context	**configure** service vprn *string* isis *number* level *keyword* default-ipv6-unicast-metric *number*
Tree	default-ipv6-unicast-metric
Range	1 to 16777215
Default	10
Introduced	16.0.R1
Platforms	All

default-metric *number*

Synopsis	Default metric
Context	**configure** service vprn *string* isis *number* level *keyword* default-metric *number*
Tree	default-metric
Range	1 to 16777215
Default	10
Introduced	16.0.R1
Platforms	All

external-preference *number*

Synopsis	External route preference for IS-IS level
Context	**configure** service vprn *string* isis *number* level *keyword* external-preference *number*
Tree	external-preference
Range	1 to 255
Introduced	16.0.R1
Platforms	All

hello-authentication *boolean*

Synopsis	Authenticate Hello type IS-IS protocol packets

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Context	**configure** service vprn *string* isis *number* level *keyword* hello-authentication *boolean*
Tree	hello-authentication
Default	true
Introduced	16.0.R1
Platforms	All

hello-padding *keyword*

Synopsis	Padding on IS-IS Hello packets
Context	**configure** service vprn *string* isis *number* level *keyword* hello-padding *keyword*
Tree	hello-padding
Options	adaptive, loose, strict, none
Introduced	16.0.R1
Platforms	All

loopfree-alternate-exclude *boolean*

Synopsis	Exclude interface participating in specific IS-IS level in SPF LFA computation
Context	**configure** service vprn *string* isis *number* level *keyword* loopfree-alternate-exclude *boolean*
Tree	loopfree-alternate-exclude
Default	false
Introduced	16.0.R1
Platforms	All

lsp-mtu-size *number*

WARNING:
Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	LSP MTU size
Context	**configure** service vprn *string* isis *number* level *keyword* lsp-mtu-size *number*
Tree	lsp-mtu-size
Range	490 to 9778
Units	bytes

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Default	1492
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	External route preference at level
Context	**configure** service vprn *string* isis *number* level *keyword* preference *number*
Tree	preference
Range	1 to 255
Introduced	16.0.R1
Platforms	All

psnp-authentication *boolean*

Synopsis	Enable authentication on PSNP IS-IS protocol packets
Context	**configure** service vprn *string* isis *number* level *keyword* psnp-authentication *boolean*
Tree	psnp-authentication
Default	true
Introduced	16.0.R1
Platforms	All

wide-metrics-only *boolean*

Synopsis	Use wide metrics advertisements in the LSPs
Context	**configure** service vprn *string* isis *number* level *keyword* wide-metrics-only *boolean*
Tree	wide-metrics-only
Default	false
Introduced	16.0.R1
Platforms	All

level-capability *keyword*

Synopsis	Routing level for instance
Context	**configure** service vprn *string* isis *number* level-capability *keyword*

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Tree	level-capability
Options	1, 2, 1/2
Default	1/2
Introduced	16.0.R1
Platforms	All

link-group [link-group-name] *string*

Synopsis	Enter the **link-group** list instance
Context	**configure** service vprn *string* isis *number* link-group *string*
Tree	link-group
Introduced	16.0.R1
Platforms	All

[**link-group-name**] *string*

Synopsis	Link group name for the IS-IS protocol
Context	**configure** service vprn *string* isis *number* link-group *string*
Tree	link-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* isis *number* link-group *string* description *string*
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

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level [level-number] *keyword*

Synopsis	Enter the **level** list instance
Context	**configure** service vprn *string* isis *number* link-group *string* level *keyword*
Tree	level
Max. Instances	2
Introduced	16.0.R1
Platforms	All

[**level-number**] *keyword*

Synopsis	ISIS protocol level number
Context	**configure** service vprn *string* isis *number* link-group *string* level *keyword*
Tree	level
Options	1, 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

ipv4-multicast-metric-offset *number*

Synopsis	Offset value for the IPv4 multicast address family
Context	**configure** service vprn *string* isis *number* link-group *string* level *keyword* ipv4-multicast-metric-offset *number*
Tree	ipv4-multicast-metric-offset
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

ipv4-unicast-metric-offset *number*

Synopsis	Offset value for the IPv4 unicast address family
Context	**configure** service vprn *string* isis *number* link-group *string* level *keyword* ipv4-unicast-metric-offset *number*
Tree	ipv4-unicast-metric-offset
Range	1 to 16777215

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Introduced	16.0.R1
Platforms	All

ipv6-unicast-metric-offset *number*

Synopsis	Offset value for the IPv6 unicast address family
Context	**configure** service vprn *string* isis *number* link-group *string* level *keyword* ipv6-unicast-metric-offset *number*
Tree	ipv6-unicast-metric-offset
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

member [interface-name] *reference*

Synopsis	Add a list entry for **member**
Context	**configure** service vprn *string* isis *number* link-group *string* level *keyword* member *reference*
Tree	member
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[**interface-name**] *reference*

Synopsis	Interface name for the associated link group
Context	**configure** service vprn *string* isis *number* link-group *string* level *keyword* member *reference*
Tree	member
Reference	**configure** service vprn *string* isis *number* interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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oper-members *number*

Synopsis	Minimum number of operational links
Context	**configure** service vprn *string* isis *number* link-group *string* level *keyword* oper-members *number*
Tree	oper-members
Range	1 to 8
Introduced	16.0.R1
Platforms	All

revert-members *number*

Synopsis	Minimum number of operational links to return link group to normal state and remove offsets
Context	**configure** service vprn *string* isis *number* link-group *string* level *keyword* revert-members *number*
Tree	revert-members
Range	1 to 8
Introduced	16.0.R1
Platforms	All

loopfree-alternate

Synopsis	Enable the **loopfree-alternate** context
Context	**configure** service vprn *string* isis *number* loopfree-alternate
Tree	loopfree-alternate
Introduced	16.0.R1
Platforms	All

exclude

Synopsis	Enter the **exclude** context
Context	**configure** service vprn *string* isis *number* loopfree-alternate exclude
Tree	exclude
Introduced	16.0.R3
Platforms	All

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prefix-policy *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	**configure** service vprn *string* isis *number* loopfree-alternate exclude prefix-policy *reference*
Tree	prefix-policy
Description	This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation. An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R3
Platforms	All

lsp-lifetime *number*

WARNING:
Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	Amount of time during which an LSP is considered valid
Context	**configure** service vprn *string* isis *number* lsp-lifetime *number*
Tree	lsp-lifetime
Range	350 to 65535
Units	seconds
Default	1200
Introduced	16.0.R1
Platforms	All

lsp-minimum-remaining-lifetime *number*

Synopsis	Minimum value for the Remaining Lifetime of an LSP
Context	**configure** service vprn *string* isis *number* lsp-minimum-remaining-lifetime *number*
Tree	lsp-minimum-remaining-lifetime

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Range	350 to 65535
Units	seconds
Introduced	19.7.R1
Platforms	All

lsp-mtu-size *number*

WARNING:
Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	LSP MTU size
Context	**configure** service vprn *string* isis *number* lsp-mtu-size *number*
Tree	lsp-mtu-size
Range	490 to 9778
Units	bytes
Default	1492
Introduced	16.0.R1
Platforms	All

lsp-refresh

Synopsis	Enter the **lsp-refresh** context
Context	**configure** service vprn *string* isis *number* lsp-refresh
Tree	lsp-refresh
Introduced	16.0.R1
Platforms	All

half-lifetime *boolean*

Synopsis	Set the refresh interval to always be half the LSP lifetime
Context	**configure** service vprn *string* isis *number* lsp-refresh half-lifetime *boolean*
Tree	half-lifetime
Default	true
Introduced	16.0.R1
Platforms	All

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interval *number*

Synopsis	Refresh timer interval
Context	**configure** service vprn *string* isis *number* lsp-refresh interval *number*
Tree	interval
Range	150 to 65535
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	All

mru-mismatch-detection *boolean*

Synopsis	Enable detection of MRU mismatch
Context	**configure** service vprn *string* isis *number* mru-mismatch-detection *boolean*
Tree	mru-mismatch-detection
Description	When configured to **true**, this command verifies that the received IS-IS Hello (IIH) packet size does not exceed the configured maximum port MTU size. The received IIH packet is dropped when its size exceeds the maximum port MTU size. When configured to **false**, the IS-IS router instance will not drop oversized IIH packets. By default, FP-based hardware can receive oversized packets but it will not originate them.
Default	false
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multi-topology

Synopsis	Enable the **multi-topology** context
Context	**configure** service vprn *string* isis *number* multi-topology
Tree	multi-topology
Introduced	16.0.R1
Platforms	All

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ipv4-multicast *boolean*

Synopsis	Support IPv4 topology (MT3)
Context	**configure** service vprn *string* isis *number* multi-topology ipv4-multicast *boolean*
Tree	ipv4-multicast
Default	false
Introduced	16.0.R1
Platforms	All

ipv6-unicast *boolean*

Synopsis	Support multi-topology TLVs
Context	**configure** service vprn *string* isis *number* multi-topology ipv6-unicast *boolean*
Tree	ipv6-unicast
Default	false
Introduced	16.0.R1
Platforms	All

multicast-import

Synopsis	Enter the **multicast-import** context
Context	**configure** service vprn *string* isis *number* multicast-import
Tree	multicast-import
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Submit IPv4 routes into the multicast RPF of the RTM
Context	**configure** service vprn *string* isis *number* multicast-import ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

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overload

Synopsis	Enable the **overload** context
Context	**configure** service vprn *string* isis *number* overload
Tree	overload
Introduced	16.0.R1
Platforms	All

max-metric *boolean*

Synopsis	Advertise transit links with maximum metric instead of setting overload bit
Context	**configure** service vprn *string* isis *number* overload max-metric *boolean*
Tree	max-metric
Default	false
Introduced	16.0.R1
Platforms	All

overload-export-external *boolean*

Synopsis	Advertise the external routes when router is in overloaded
Context	**configure** service vprn *string* isis *number* overload-export-external *boolean*
Tree	overload-export-external
Default	false
Introduced	16.0.R1
Platforms	All

overload-export-interlevel *boolean*

Synopsis	Advertise the inter-level routes when router is overloaded
Context	**configure** service vprn *string* isis *number* overload-export-interlevel *boolean*
Tree	overload-export-interlevel
Default	false
Introduced	16.0.R1
Platforms	All

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overload-fib-error-notify-only

Synopsis	Enable the **overload-fib-error-notify-only** context
Context	**configure** service vprn *string* isis *number* overload-fib-error-notify-only
Tree	overload-fib-error-notify-only
Description	Commands in this context configure the IS-IS router to send a notification when an overload condition occurs while programming the FIB, instead of advertising the overload condition of the router in the IS-IS LSP. **Note**: Nokia recommends being careful using this command. When you configure the router not to advertise the IS-IS overload state in the IS-IS LSP, other routers are not instructed to take the overloaded router out of the IS-IS forwarding topology and this will cause suboptimal forwarding and non-deterministic behavior on the overloaded router. To avoid changing the default IS-IS overflow behavior, leave this command disabled. When this command is configured, the IS-IS router enters a suboptimal state where it sends only a notification trap; transit traffic can still use the router in this state. The IS-IS router tracks the segment routing prefix SIDs where FIB programming failed. With the **retry** command configured, the router retries programming the segment routing prefix SIDs in the FIB using this tracked information. When this command is not configured, during normal operation, the system may force the router to enter an overload state because of a lack of FIB resources. In this state, the router is used to terminate traffic and is not used to transit traffic.
Introduced	23.7.R1
Platforms	All

retry *number*

Synopsis	Time to retry programming failed entries in the FIB
Context	**configure** service vprn *string* isis *number* overload-fib-error-notify-only retry *number*
Tree	retry
Description	This command configures the time the router uses to retry programming the failed entries in the FIB. The **overload-fib-error-notify-only** command must be configured to use the retry timer. The removal of the **overload-fib-error-notify-only** configuration causes the system to program the failed entries in the FIB by triggering an immediate SPF.
Range	10 to 1800
Units	seconds
Default	10
Introduced	23.7.R1
Platforms	All

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overload-on-boot

Synopsis	Enable the **overload-on-boot** context
Context	**configure** service vprn *string* isis *number* overload-on-boot
Tree	overload-on-boot
Introduced	16.0.R1
Platforms	All

max-metric *boolean*

Synopsis	Advertise transit links with maximum metric instead of setting overload bit
Context	**configure** service vprn *string* isis *number* overload-on-boot max-metric *boolean*
Tree	max-metric
Default	false
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Time during which the router operates in overload state after reboot
Context	**configure** service vprn *string* isis *number* overload-on-boot timeout *number*
Tree	timeout
Range	60 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

poi-tlv *boolean*

Synopsis	Purge Originator Identification TLV
Context	**configure** service vprn *string* isis *number* poi-tlv *boolean*
Tree	poi-tlv
Default	false
Introduced	16.0.R1
Platforms	All

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prefix-attributes-tlv *boolean*

Synopsis	Use IS-IS Prefix Attributes TLV to exchange extended IPv4 and IPv6 reachability information
Context	**configure** service vprn *string* isis *number* prefix-attributes-tlv *boolean*
Tree	prefix-attributes-tlv
Default	false
Introduced	16.0.R1
Platforms	All

prefix-limit

Synopsis	Enable the **prefix-limit** context
Context	**configure** service vprn *string* isis *number* prefix-limit
Tree	prefix-limit
Introduced	16.0.R1
Platforms	All

limit *number*

Synopsis	Maximum number of prefixes for IS-IS instance
Context	**configure** service vprn *string* isis *number* prefix-limit limit *number*
Tree	limit
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Send warning message when the prefix limit is reached
Context	**configure** service vprn *string* isis *number* prefix-limit log-only *boolean*
Tree	log-only
Default	false
Introduced	16.0.R1

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Platforms	All

overload-timeout *(number | keyword)*

Synopsis	Time in overload state when prefix limit is reached
Context	**configure** service vprn *string* isis *number* prefix-limit overload-timeout *(number | keyword)*
Tree	overload-timeout
Range	1 to 1800
Units	seconds
Options	forever
Default	forever
Introduced	16.0.R1
Platforms	All

warning-threshold *number*

Synopsis	Threshold value to trigger a warning message to be sent
Context	**configure** service vprn *string* isis *number* prefix-limit warning-threshold *number*
Tree	warning-threshold
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	All

psnp-authentication *boolean*

Synopsis	Authenticate individual IS-IS protocol packets of partial sequence number PDU (PSNP) type
Context	**configure** service vprn *string* isis *number* psnp-authentication *boolean*
Tree	psnp-authentication
Default	true
Introduced	16.0.R1
Platforms	All

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reference-bandwidth *number*

Synopsis	Reference bandwidth for bandwidth relative costing
Context	**configure** service vprn *string* isis *number* reference-bandwidth *number*
Tree	reference-bandwidth
Range	1 to 18446744073709551615
Units	kilobps
Introduced	16.0.R1
Platforms	All

rib-priority

Synopsis	Enter the **rib-priority** context
Context	**configure** service vprn *string* isis *number* rib-priority
Tree	rib-priority
Introduced	16.0.R1
Platforms	All

high

Synopsis	Enter the **high** context
Context	**configure** service vprn *string* isis *number* rib-priority high
Tree	high
Introduced	16.0.R1
Platforms	All

prefix-list *reference*

Synopsis	List used to select routes processed at higher priority through OSPF route calculation process
Context	**configure** service vprn *string* isis *number* rib-priority high prefix-list *reference*
Tree	prefix-list
Reference	**configure** policy-options prefix-list *string*
Notes	The following elements are part of a choice: **prefix-list** or **tag**.
Introduced	16.0.R1

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Platforms	All

tag *number*

Synopsis	Tag value that is used to match IS-IS routes
Context	**configure** service vprn *string* isis *number* rib-priority high tag *number*
Tree	tag
Range	1 to 4294967295
Notes	The following elements are part of a choice: **prefix-list** or **tag**.
Introduced	16.0.R1
Platforms	All

router-id *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique router ID for the ISIS instance
Context	**configure** service vprn *string* isis *number* router-id *string*
Tree	router-id
Introduced	16.0.R1
Platforms	All

standard-multi-instance *boolean*

Synopsis	Enable RFC standards compliant multi-instance behavior
Context	**configure** service vprn *string* isis *number* standard-multi-instance *boolean*
Tree	standard-multi-instance
Default	false
Introduced	16.0.R1
Platforms	All

strict-adjacency-check *boolean*

Synopsis	Enable strict checking of address families for IS-IS adjacencies

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Context	**configure** service vprn *string* isis *number* strict-adjacency-check *boolean*
Tree	strict-adjacency-check
Default	false
Introduced	16.0.R1
Platforms	All

summary-address [ip-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **summary-address** list instance
Context	**configure** service vprn *string* isis *number* summary-address *(ipv4-prefix | ipv6-prefix)*
Tree	summary-address
Introduced	16.0.R1
Platforms	All

[**ip-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP prefix for the summary address
Context	**configure** service vprn *string* isis *number* summary-address *(ipv4-prefix | ipv6-prefix)*
Tree	summary-address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

level-capability *keyword*

Synopsis	IS-IS level for the summary address
Context	**configure** service vprn *string* isis *number* summary-address *(ipv4-prefix | ipv6-prefix)* level-capability *keyword*
Tree	level-capability
Options	1, 2, 1/2
Default	1/2
Introduced	16.0.R1
Platforms	All

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route-tag *number*

Synopsis	Route tag assigned to the summary address
Context	**configure** service vprn *string* isis *number* summary-address *(ipv4-prefix | ipv6-prefix)* route-tag *number*
Tree	route-tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

suppress-attached-bit *boolean*

Synopsis	Allow IS-IS to suppress setting attached bit on LSPs
Context	**configure** service vprn *string* isis *number* suppress-attached-bit *boolean*
Tree	suppress-attached-bit
Default	false
Introduced	16.0.R1
Platforms	All

system-id *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	System ID
Context	**configure** service vprn *string* isis *number* system-id *string*
Tree	system-id
String Length	14
Default	0000.0000.0000
Introduced	16.0.R1
Platforms	All

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timers

Synopsis	Enter the **timers** context
Context	**configure** service vprn *string* isis *number* timers
Tree	timers
Introduced	16.0.R1
Platforms	All

lsp-wait

Synopsis	Enter the **lsp-wait** context
Context	**configure** service vprn *string* isis *number* timers lsp-wait
Tree	lsp-wait
Introduced	16.0.R1
Platforms	All

lsp-initial-wait *number*

Synopsis	Initial LSP generation delay
Context	**configure** service vprn *string* isis *number* timers lsp-wait lsp-initial-wait *number*
Tree	lsp-initial-wait
Range	10 to 100000
Units	milliseconds
Default	10
Introduced	16.0.R1
Platforms	All

lsp-max-wait *number*

Synopsis	Maximum time between two consecutive LSP occurrences
Context	**configure** service vprn *string* isis *number* timers lsp-wait lsp-max-wait *number*
Tree	lsp-max-wait
Range	10 to 120000
Units	milliseconds
Default	5000
Introduced	16.0.R1

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Platforms	All

lsp-second-wait *number*

Synopsis	Delay between first and second LSP generation
Context	**configure** service vprn *string* isis *number* timers lsp-wait lsp-second-wait *number*
Tree	lsp-second-wait
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

spf-wait

Synopsis	Enter the **spf-wait** context
Context	**configure** service vprn *string* isis *number* timers spf-wait
Tree	spf-wait
Introduced	16.0.R1
Platforms	All

spf-initial-wait *number*

Synopsis	Initial SPF calculation delay after topology change
Context	**configure** service vprn *string* isis *number* timers spf-wait spf-initial-wait *number*
Tree	spf-initial-wait
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

spf-max-wait *number*

Synopsis	Maximum interval amid two consecutive SPF calculations

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Context	**configure** service vprn *string* isis *number* timers spf-wait spf-max-wait *number*
Tree	spf-max-wait
Range	10 to 120000
Units	milliseconds
Default	10000
Introduced	16.0.R1
Platforms	All

spf-second-wait *number*

Synopsis	Hold time between first and second SPF calculations
Context	**configure** service vprn *string* isis *number* timers spf-wait spf-second-wait *number*
Tree	spf-second-wait
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

unicast-import

Synopsis	Enter the **unicast-import** context
Context	**configure** service vprn *string* isis *number* unicast-import
Tree	unicast-import
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Submit IPv4 routes into unicast RTM
Context	**configure** service vprn *string* isis *number* unicast-import ipv4 *boolean*
Tree	ipv4
Default	true
Introduced	16.0.R1
Platforms	All

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ipv6 *boolean*

Synopsis	Submit IPv6 routes into unicast RTM
Context	**configure** service vprn *string* isis *number* unicast-import ipv6 *boolean*
Tree	ipv6
Default	true
Introduced	16.0.R1
Platforms	All

l2tp

Synopsis	Enable the **l2tp** context
Context	**configure** service vprn *string* l2tp
Tree	l2tp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of L2TP
Context	**configure** service vprn *string* l2tp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

avp-hiding *keyword*

Synopsis	Attribute of the Value Pair (AVP) hiding algorithm
Context	**configure** service vprn *string* l2tp avp-hiding *keyword*
Tree	avp-hiding
Options	sensitive, always
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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challenge *boolean*

Synopsis	Use challenge-response authentication
Context	**configure** service vprn *string* l2tp challenge *boolean*
Tree	challenge
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destruct-timeout *number*

Synopsis	Destruction timeout
Context	**configure** service vprn *string* l2tp destruct-timeout *number*
Tree	destruct-timeout
Range	60 to 86400
Units	seconds
Default	60
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ethernet-tunnel

Synopsis	Enter the **ethernet-tunnel** context
Context	**configure** service vprn *string* l2tp ethernet-tunnel
Tree	ethernet-tunnel
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reconnect-timeout *(number | keyword)*

Synopsis	Timeout for a session setup retry
Context	**configure** service vprn *string* l2tp ethernet-tunnel reconnect-timeout *(number | keyword)*
Tree	reconnect-timeout
Range	10 to 3600
Units	seconds

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Options	infinite
Default	infinite
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

exclude-avps

Synopsis	Enter the **exclude-avps** context
Context	**configure** service vprn *string* l2tp exclude-avps
Tree	exclude-avps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

calling-number *boolean*

Synopsis	Calling Number AVP to exclude
Context	**configure** service vprn *string* l2tp exclude-avps calling-number *boolean*
Tree	calling-number
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

initial-rx-lcp-conf-req *boolean*

Synopsis	Exclude the Initial Received LCP CONFREQ AVP
Context	**configure** service vprn *string* l2tp exclude-avps initial-rx-lcp-conf-req *boolean*
Tree	initial-rx-lcp-conf-req
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the **failover** context
Context	**configure** service vprn *string* l2tp failover

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Tree	failover
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-max-session-lifetime *number*

Synopsis	Subset of sessions that this system attempts to synchronize in the Session State Synchronization phase
Context	**configure** service vprn *string* l2tp failover recovery-max-session-lifetime *number*
Tree	recovery-max-session-lifetime
Range	2 to 4294967295
Units	centiseconds
Default	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-method *keyword*

Synopsis	Recovery method of the sequence numbers after failover
Context	**configure** service vprn *string* l2tp failover recovery-method *keyword*
Tree	recovery-method
Options	mcs, recovery-tunnel
Default	mcs
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-time *number*

Synopsis	Time requested from the L2TP peer before assuming failover as failed
Context	**configure** service vprn *string* l2tp failover recovery-time *number*
Tree	recovery-time
Range	0 to 900
Units	seconds
Default	0
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-srrp [id] *reference*

Synopsis	Enter the **track-srrp** list instance
Context	**configure** service vprn *string* l2tp failover track-srrp *reference*
Tree	track-srrp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**id**] *reference*

Synopsis	SRRP instance ID for multi-chassis redundancy failover
Context	**configure** service vprn *string* l2tp failover track-srrp *reference*
Tree	track-srrp
Reference	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)* sync track-srrp *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer *reference*

Synopsis	Multi-chassis peer address
Context	**configure** service vprn *string* l2tp failover track-srrp *reference* peer *reference*
Tree	peer
Reference	**configure** redundancy multi-chassis peer *(ipv4-address-no-zone* | *ipv6-address-no-zone)*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*

Synopsis	Synchronization tag on the multi-chassis peer

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Context	**configure** service vprn *string* l2tp failover track-srrp *reference* sync-tag *string*
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group [tunnel-group-name] *string*

Synopsis	Enter the **group** list instance
Context	**configure** service vprn *string* l2tp group *string*
Tree	group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**tunnel-group-name**] *string*

Synopsis	Tunnel group name
Context	**configure** service vprn *string* l2tp group *string*
Tree	group
String Length	1 to 63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the L2TP tunnel group
Context	**configure** service vprn *string* l2tp group *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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avp-hiding *keyword*

Synopsis	The AVP hiding algorithm
Context	**configure** service vprn *string* l2tp group *string* avp-hiding *keyword*
Tree	avp-hiding
Options	never, sensitive, always
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

challenge *keyword*

Synopsis	Enable use of challenge-response authentication
Context	**configure** service vprn *string* l2tp group *string* challenge *keyword*
Tree	challenge
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* l2tp group *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destruct-timeout *number*

Synopsis	Destruction timeout
Context	**configure** service vprn *string* l2tp group *string* destruct-timeout *number*
Tree	destruct-timeout
Range	60 to 86400
Units	seconds
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ethernet-tunnel

Synopsis	Enter the **ethernet-tunnel** context
Context	**configure** service vprn *string* l2tp group *string* ethernet-tunnel
Tree	ethernet-tunnel
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reconnect-timeout *(number | keyword)*

Synopsis	Timeout for a session setup retry at group level
Context	**configure** service vprn *string* l2tp group *string* ethernet-tunnel reconnect-timeout *(number | keyword)*
Tree	reconnect-timeout
Range	10 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the **failover** context
Context	**configure** service vprn *string* l2tp group *string* failover
Tree	failover
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-method *keyword*

Synopsis	Recovery method of the sequence numbers after failover
Context	**configure** service vprn *string* l2tp group *string* failover recovery-method *keyword*
Tree	recovery-method
Options	mcs, recovery-tunnel

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-time *number*

Synopsis	Time requested from the L2TP peer before assuming failover as failed
Context	**configure** service vprn *string* l2tp group *string* failover recovery-time *number*
Tree	recovery-time
Range	0 to 900
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hello-interval *(number | keyword)*

Synopsis	Hello interval
Context	**configure** service vprn *string* l2tp group *string* hello-interval *(number | keyword)*
Tree	hello-interval
Range	10 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

idle-timeout *(number | keyword)*

Synopsis	Idle timeout
Context	**configure** service vprn *string* l2tp group *string* idle-timeout *(number | keyword)*
Tree	idle-timeout
Range	0 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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l2tpv3

Synopsis	Enter the **l2tpv3** context
Context	**configure** service vprn *string* l2tp group *string* l2tpv3
Tree	l2tpv3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cookie-length *(number | keyword)*

Synopsis	Cookie field length
Context	**configure** service vprn *string* l2tp group *string* l2tpv3 cookie-length *(number | keyword)*
Tree	cookie-length
Range	4 | 8
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

digest-type *keyword*

Synopsis	Hashing algorithm that calculates the message digest
Context	**configure** service vprn *string* l2tp group *string* l2tpv3 digest-type *keyword*
Tree	digest-type
Options	none, md5, sha1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nonce-length *number*

Synopsis	Length for the local L2TPv3 nonce (random number)
Context	**configure** service vprn *string* l2tp group *string* l2tpv3 nonce-length *number*
Tree	nonce-length
Range	0 | 16 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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password *string*

Synopsis	L2TPv3 password
Context	**configure** service vprn *string* l2tp group *string* l2tpv3 password *string*
Tree	password
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

private-tcp-mss-adjust *(number | keyword)*

Synopsis	TCP maximum segment size (MSS) on private network
Context	**configure** service vprn *string* l2tp group *string* l2tpv3 private-tcp-mss-adjust *(number | keyword)*
Tree	private-tcp-mss-adjust
Range	512 to 9000
Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

public-tcp-mss-adjust *(number | keyword)*

Synopsis	TCP Maximum Segment Size (MSS) on public network
Context	**configure** service vprn *string* l2tp group *string* l2tpv3 public-tcp-mss-adjust *(number | keyword)*
Tree	public-tcp-mss-adjust
Range	512 to 9000
Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pw-cap-list

Synopsis	Enter the **pw-cap-list** context

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Context	**configure** service vprn *string* l2tp group *string* l2tpv3 pw-cap-list
Tree	pw-cap-list
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ethernet *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Advertise Ethernet pseudowire type
Context	**configure** service vprn *string* l2tp group *string* l2tpv3 pw-cap-list ethernet *boolean*
Tree	ethernet
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ethernet-vlan *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Advertise Ethernet VLAN pseudowire type
Context	**configure** service vprn *string* l2tp group *string* l2tpv3 pw-cap-list ethernet-vlan *boolean*
Tree	ethernet-vlan
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rem-router-id *string*

Synopsis	Filter on remote router ID
Context	**configure** service vprn *string* l2tp group *string* l2tpv3 rem-router-id *string*
Tree	rem-router-id
Default	0.0.0.0

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-password-change *boolean*

Synopsis	Enable tracking of password changes
Context	**configure** service vprn *string* l2tp group *string* l2tpv3 track-password-change *boolean*
Tree	track-password-change
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lac

Synopsis	Enter the **lac** context
Context	**configure** service vprn *string* l2tp group *string* lac
Tree	lac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

df-bit *keyword*

Synopsis	DF (do not fragment) bit in data traffic transmitted as LAC
Context	**configure** service vprn *string* l2tp group *string* lac df-bit *keyword*
Tree	df-bit
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lns

Synopsis	Enter the **lns** context
Context	**configure** service vprn *string* l2tp group *string* lns
Tree	lns
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lns-group *reference*

Synopsis	ISA LNS group
Context	**configure** service vprn *string* l2tp group *string* lns lns-group *reference*
Tree	lns-group
Reference	**configure** isa lns-group *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

load-balance-method *keyword*

Synopsis	New sessions for L2TP ISA MDA
Context	**configure** service vprn *string* l2tp group *string* lns load-balance-method *keyword*
Tree	load-balance-method
Options	per-session, per-tunnel
Default	per-session
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mlppp

Synopsis	Enter the **mlppp** context
Context	**configure** service vprn *string* l2tp group *string* lns mlppp
Tree	mlppp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of MLPPP in the L2TP tunnel group
Context	**configure** service vprn *string* l2tp group *string* lns mlppp admin-state *keyword*
Tree	admin-state
Options	enable, disable

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Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

endpoint

Synopsis	Enter the **endpoint** context
Context	**configure** service vprn *string* l2tp group *string* lns mlppp endpoint
Tree	endpoint
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

ip *(ipv4-address | keyword)*

Synopsis	Endpoint ID as an IP address
Context	**configure** service vprn *string* l2tp group *string* lns mlppp endpoint ip *(ipv4-address | keyword)*
Tree	ip
Options	system
Notes	The following elements are part of a choice: **ip** or **mac**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

mac *(mac-address | keyword)*

Synopsis	Endpoint ID as a MAC address
Context	**configure** service vprn *string* l2tp group *string* lns mlppp endpoint mac *(mac-address | keyword)*
Tree	mac
Options	system
Notes	The following elements are part of a choice: **ip** or **mac**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

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interleave *boolean*

Synopsis	Enable link fragmentation and interleaving
Context	**configure** service vprn *string* l2tp group *string* lns mlppp interleave *boolean*
Tree	interleave
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

max-fragment-delay *(number | keyword)*

Synopsis	Maximum fragment delay caused by transmission on a link
Context	**configure** service vprn *string* l2tp group *string* lns mlppp max-fragment-delay *(number | keyword)*
Tree	max-fragment-delay
Range	5 to 1000
Units	milliseconds
Options	no-fragmentation
Default	no-fragmentation
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

max-links *number*

Synopsis	Maximum MLPPP links
Context	**configure** service vprn *string* l2tp group *string* lns mlppp max-links *number*
Tree	max-links
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

reassembly-timeout *number*

Synopsis	Reassembly timeout
Context	**configure** service vprn *string* l2tp group *string* lns mlppp reassembly-timeout *number*

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Tree	reassembly-timeout
Range	100 | 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

short-sequence-numbers *boolean*

Synopsis	Request a peer to send short sequence numbers
Context	**configure** service vprn *string* l2tp group *string* lns mlppp short-sequence-numbers *boolean*
Tree	short-sequence-numbers
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

ppp

Synopsis	Enter the **ppp** context
Context	**configure** service vprn *string* l2tp group *string* lns ppp
Tree	ppp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication *keyword*

Synopsis	PPP authentication protocol to negotiate
Context	**configure** service vprn *string* l2tp group *string* lns ppp authentication *keyword*
Tree	authentication
Options	pap, chap, pref-chap, pref-pap
Default	pref-chap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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authentication-policy *string*

Synopsis	Authentication policy when a DHCP message is received
Context	**configure** service vprn *string* l2tp group *string* lns ppp authentication-policy *string*
Tree	authentication-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

chap-challenge-length

Synopsis	Enter the **chap-challenge-length** context
Context	**configure** service vprn *string* l2tp group *string* lns ppp chap-challenge-length
Tree	chap-challenge-length
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the PPP CHAP challenge length
Context	**configure** service vprn *string* l2tp group *string* lns ppp chap-challenge-length end *number*
Tree	end
Range	8 to 64
Units	octets
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of the PPP CHAP challenge length
Context	**configure** service vprn *string* l2tp group *string* lns ppp chap-challenge-length start *number*
Tree	start
Range	8 to 64

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Units	octets
Default	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-group-interface

Synopsis	Enter the **default-group-interface** context
Context	**configure** service vprn *string* l2tp group *string* lns ppp default-group-interface
Tree	default-group-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface *string*

Synopsis	Group interface
Context	**configure** service vprn *string* l2tp group *string* lns ppp default-group-interface interface *string*
Tree	interface
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

service-name *string*

Synopsis	Administrative service name
Context	**configure** service vprn *string* l2tp group *string* lns ppp default-group-interface service-name *string*
Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipcp-subnet-negotiation *boolean*

Synopsis	Allow IPCP subnet negotiation for PPPoE hosts

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Context	**configure** service vprn *string* l2tp group *string* lns ppp ipcp-subnet-negotiation *boolean*
Tree	ipcp-subnet-negotiation
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keepalive

Synopsis	Enter the **keepalive** context
Context	**configure** service vprn *string* l2tp group *string* lns ppp keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	PPP keepalive interval
Context	**configure** service vprn *string* l2tp group *string* lns ppp keepalive interval *number*
Tree	interval
Range	10 to 300
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multiplier *number*

Synopsis	PPP keepalive multiplier
Context	**configure** service vprn *string* l2tp group *string* lns ppp keepalive multiplier *number*
Tree	multiplier
Range	1 to 5
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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lcp-force-ack-accm *boolean*

Synopsis	Force acknowledgement of the LCP Asynchronous Control Character Map (ACCM) option
Context	**configure** service vprn *string* l2tp group *string* lns ppp lcp-force-ack-accm *boolean*
Tree	lcp-force-ack-accm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lcp-ignore-magic-numbers *boolean*

Synopsis	Check magic number in echo request and reply messages
Context	**configure** service vprn *string* l2tp group *string* lns ppp lcp-ignore-magic-numbers *boolean*
Tree	lcp-ignore-magic-numbers
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtu *number*

Synopsis	Maximum PPP MTU size
Context	**configure** service vprn *string* l2tp group *string* lns ppp mtu *number*
Tree	mtu
Range	512 to 9212
Units	octets
Default	1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

proxy-authentication *boolean*

Synopsis	Use authentication AVPs that are received from LAC
Context	**configure** service vprn *string* l2tp group *string* lns ppp proxy-authentication *boolean*
Tree	proxy-authentication

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Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

proxy-lcp *boolean*

Synopsis	Proxy LCP AVPs that are received from LAC
Context	**configure** service vprn *string* l2tp group *string* lns ppp proxy-lcp *boolean*
Tree	proxy-lcp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reject-disabled-ncp *boolean*

Synopsis	Force LCP Protocol Reject for IPv6CP Configure Request
Context	**configure** service vprn *string* l2tp group *string* lns ppp reject-disabled-ncp *boolean*
Tree	reject-disabled-ncp
Default	false
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

user-db *string*

Synopsis	Local user database for PPP PAP and CHAP authentication
Context	**configure** service vprn *string* l2tp group *string* lns ppp user-db *string*
Tree	user-db
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-address *string*

Synopsis	Local address
Context	**configure** service vprn *string* l2tp group *string* local-address *string*

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Tree	local-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-name *string*

Synopsis	Local host name used to distinguish tunnels
Context	**configure** service vprn *string* l2tp group *string* local-name *string*
Tree	local-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-estab *number*

Synopsis	Maximum retries for established tunnels
Context	**configure** service vprn *string* l2tp group *string* max-retries-estab *number*
Tree	max-retries-estab
Range	2 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-not-estab *number*

Synopsis	Maximum retries for unestablished tunnels
Context	**configure** service vprn *string* l2tp group *string* max-retries-not-estab *number*
Tree	max-retries-not-estab
Range	2 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	Password between L2TP LAC and LNS
Context	**configure** service vprn *string* l2tp group *string* password *string*

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Tree	password
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

protocol *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Protocol version
Context	**configure** service vprn *string* l2tp group *string* protocol *keyword*
Tree	protocol
Options	v2, v3, v3draft
Default	v2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy *reference*

Synopsis	RADIUS accounting policy
Context	**configure** service vprn *string* l2tp group *string* radius-accounting-policy *reference*
Tree	radius-accounting-policy
Reference	**configure** aaa radius l2tp-accounting-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

receive-window-size *number*

Synopsis	L2TP receive window size
Context	**configure** service vprn *string* l2tp group *string* receive-window-size *number*
Tree	receive-window-size
Range	4 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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session-assign-method *keyword*

Synopsis	Session assignment method
Context	**configure** service vprn *string* l2tp group *string* session-assign-method *keyword*
Tree	session-assign-method
Options	existing-first, weighted, weighted-random
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *(number | keyword)*

Synopsis	Session limit
Context	**configure** service vprn *string* l2tp group *string* session-limit *(number | keyword)*
Tree	session-limit
Range	1 to 250000
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tunnel [tunnel-name] *string*

Synopsis	Enter the **tunnel** list instance
Context	**configure** service vprn *string* l2tp group *string* tunnel *string*
Tree	tunnel
Max. Instances	31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**tunnel-name**] *string*

Synopsis	Tunnel name
Context	**configure** service vprn *string* l2tp group *string* tunnel *string*
Tree	tunnel
String Length	1 to 32

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the L2TP tunnel
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-establish *boolean*

Synopsis	Allow the tunnel to be automatically set up by the system
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* auto-establish *boolean*
Tree	auto-establish
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

avp-hiding *keyword*

Synopsis	The AVP hiding algorithm
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* avp-hiding *keyword*
Tree	avp-hiding
Options	never, sensitive, always
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

challenge *keyword*

Synopsis	Enable use of challenge-response authentication

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Context	**configure** service vprn *string* l2tp group *string* tunnel *string* challenge *keyword*
Tree	challenge
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destruct-timeout *number*

Synopsis	Destruction timeout
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* destruct-timeout *number*
Tree	destruct-timeout
Range	60 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the **failover** context
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* failover
Tree	failover
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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recovery-method *keyword*

Synopsis	Recovery method of the sequence numbers after failover
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* failover recovery-method *keyword*
Tree	recovery-method
Options	mcs, recovery-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-time *number*

Synopsis	Time requested from the L2TP peer before assuming failover as failed
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* failover recovery-time *number*
Tree	recovery-time
Range	0 to 900
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hello-interval *(number | keyword)*

Synopsis	Hello interval
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* hello-interval *(number | keyword)*
Tree	hello-interval
Range	10 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

idle-timeout *(number | keyword)*

Synopsis	Idle timeout

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Context	**configure** service vprn *string* l2tp group *string* tunnel *string* idle-timeout *(number | keyword)*
Tree	idle-timeout
Range	0 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2tpv3

Synopsis	Enter the **l2tpv3** context
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* l2tpv3
Tree	l2tpv3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

private-tcp-mss-adjust *(number | keyword)*

Synopsis	TCP maximum segment size (MSS) on private network
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* l2tpv3 private-tcp-mss-adjust *(number | keyword)*
Tree	private-tcp-mss-adjust
Range	512 to 9000
Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

public-tcp-mss-adjust *(number | keyword)*

Synopsis	TCP maximum segment size (MSS) on public network
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* l2tpv3 public-tcp-mss-adjust *(number | keyword)*
Tree	public-tcp-mss-adjust
Range	512 to 9000

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Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lac

Synopsis	Enter the **lac** context
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lac
Tree	lac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

df-bit *keyword*

Synopsis	DF (do not fragment) bit in data traffic transmitted as LAC
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lac df-bit *keyword*
Tree	df-bit
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lns

Synopsis	Enter the **lns** context
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns
Tree	lns
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lns-group *reference*

Synopsis	ISA LNS group
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns lns-group *reference*
Tree	lns-group

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Reference	**configure** isa lns-group *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

load-balance-method *keyword*

Synopsis	New sessions for L2TP ISA MDA
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns load-balance-method *keyword*
Tree	load-balance-method
Options	per-session, per-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mlppp

Synopsis	Enter the **mlppp** context
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns mlppp
Tree	mlppp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of MLPPP in the L2TP tunnel
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns mlppp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

endpoint

Synopsis	Enter the **endpoint** context
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns mlppp endpoint

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Tree	endpoint
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

ip *(ipv4-address | keyword)*

Synopsis	Endpoint ID as an IP address
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns mlppp endpoint ip *(ipv4-address | keyword)*
Tree	ip
Options	system
Notes	The following elements are part of a choice: **ip** or **mac**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

mac *(mac-address | keyword)*

Synopsis	Endpoint ID as a MAC address
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns mlppp endpoint mac *(mac-address | keyword)*
Tree	mac
Options	system
Notes	The following elements are part of a choice: **ip** or **mac**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

interleave *keyword*

Synopsis	Use of Link fragmentation and interleaving
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns mlppp interleave *keyword*
Tree	interleave
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

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max-fragment-delay *number*

Synopsis	Maximum fragment delay caused by transmission on a link
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns mlppp max-fragment-delay *number*
Tree	max-fragment-delay
Range	5 to 1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

max-links *number*

Synopsis	Maximum MLPPP links
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns mlppp max-links *number*
Tree	max-links
Range	1 to 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

reassembly-timeout *number*

Synopsis	Reassembly timeout
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns mlppp reassembly-timeout *number*
Tree	reassembly-timeout
Range	100 | 1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

short-sequence-numbers *keyword*

Synopsis	Request a peer to send short sequence numbers
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns mlppp short-sequence-numbers *keyword*

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Tree	short-sequence-numbers
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

ppp

Synopsis	Enter the **ppp** context
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns ppp
Tree	ppp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication *keyword*

Synopsis	PPP authentication protocol to negotiate
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns ppp authentication *keyword*
Tree	authentication
Options	pap, chap, pref-chap, pref-pap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication-policy *string*

Synopsis	Authentication policy when a DHCP message is received
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns ppp authentication-policy *string*
Tree	authentication-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

chap-challenge-length

Synopsis	Enter the **chap-challenge-length** context

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Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns ppp chap-challenge-length
Tree	chap-challenge-length
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the PPP CHAP challenge length
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns ppp chap-challenge-length end *number*
Tree	end
Range	8 to 64
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of the PPP CHAP challenge length
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns ppp chap-challenge-length start *number*
Tree	start
Range	8 to 64
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-group-interface

Synopsis	Enter the **default-group-interface** context
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns ppp default-group-interface
Tree	default-group-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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interface *string*

Synopsis	Group interface
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns ppp default-group-interface interface *string*
Tree	interface
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

service-name *string*

Synopsis	Administrative service name
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns ppp default-group-interface service-name *string*
Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipcp-subnet-negotiation *keyword*

Synopsis	Use of IPCP subnet negotiation for PPPoE hosts
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns ppp ipcp-subnet-negotiation *keyword*
Tree	ipcp-subnet-negotiation
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keepalive

Synopsis	Enter the **keepalive** context
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns ppp keepalive
Tree	keepalive
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	PPP keepalive interval
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns ppp keepalive interval *number*
Tree	interval
Range	10 to 300
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multiplier *number*

Synopsis	PPP keepalive multiplier
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns ppp keepalive multiplier *number*
Tree	multiplier
Range	1 to 5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lcp-force-ack-accm *keyword*

Synopsis	Forced acknowledgement of the LCP Asynchronous Control Character Map (ACCM) option
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns ppp lcp-force-ack-accm *keyword*
Tree	lcp-force-ack-accm
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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lcp-ignore-magic-numbers *keyword*

Synopsis	Magic-Number field in LCP Echo-Request and LCP Echo-Reply messages that are checked
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns ppp lcp-ignore-magic-numbers *keyword*
Tree	lcp-ignore-magic-numbers
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtu *number*

Synopsis	Maximum PPP MTU size
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns ppp mtu *number*
Tree	mtu
Range	512 to 9212
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

proxy-authentication *keyword*

Synopsis	Authentication AVPs that are received from LAC
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns ppp proxy-authentication *keyword*
Tree	proxy-authentication
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

proxy-lcp *keyword*

Synopsis	Use the Proxy LCP AVPs that are received from the LAC
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns ppp proxy-lcp *keyword*
Tree	proxy-lcp
Options	false, true

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reject-disabled-ncp *keyword*

Synopsis	Force LCP Project Reject for IPv6CP Configure Request
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns ppp reject-disabled-ncp *keyword*
Tree	reject-disabled-ncp
Options	false, true
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

user-db *string*

Synopsis	Local user database for PPP PAP and CHAP authentication
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* lns ppp user-db *string*
Tree	user-db
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-address *string*

Synopsis	Local address
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* local-address *string*
Tree	local-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-name *string*

Synopsis	Local host name used to distinguish tunnels
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* local-name *string*
Tree	local-name
String Length	1 to 64

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-estab *number*

Synopsis	Maximum retries for established tunnels
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* max-retries-estab *number*
Tree	max-retries-estab
Range	2 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-not-estab *number*

Synopsis	Maximum retries for unestablished tunnels
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* max-retries-not-estab *number*
Tree	max-retries-not-estab
Range	2 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	Password between L2TP LAC and LNS
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* password *string*
Tree	password
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer *string*

Synopsis	Peer address
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* peer *string*
Tree	peer

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference *number*

Synopsis	Tunnel preference number with its group
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* preference *number*
Tree	preference
Range	0 to 16777215
Default	50
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy *reference*

Synopsis	RADIUS accounting policy
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* radius-accounting-policy *reference*
Tree	radius-accounting-policy
Reference	**configure** aaa radius l2tp-accounting-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

receive-window-size *number*

Synopsis	L2TP receive window size
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* receive-window-size *number*
Tree	receive-window-size
Range	4 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-name *string*

Synopsis	Remote tunnel host name

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Context	**configure** service vprn *string* l2tp group *string* tunnel *string* remote-name *string*
Tree	remote-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *(number | keyword)*

Synopsis	L2TP session limit for each tunnel of this router
Context	**configure** service vprn *string* l2tp group *string* tunnel *string* session-limit *(number | keyword)*
Tree	session-limit
Range	1 to 65534
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-session-limit *number*

Synopsis	L2TP session limit for each group of this router
Context	**configure** service vprn *string* l2tp group-session-limit *number*
Tree	group-session-limit
Range	1 to 250000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hello-interval *(number | keyword)*

Synopsis	Hello interval
Context	**configure** service vprn *string* l2tp hello-interval *(number | keyword)*
Tree	hello-interval
Range	10 to 3600
Units	seconds
Options	infinite
Default	300

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

idle-timeout *(number | keyword)*

Synopsis	Idle timeout
Context	**configure** service vprn *string* l2tp idle-timeout *(number | keyword)*
Tree	idle-timeout
Range	0 to 3600
Units	seconds
Options	infinite
Default	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-avps

Synopsis	Enter the **ignore-avps** context
Context	**configure** service vprn *string* l2tp ignore-avps
Tree	ignore-avps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sequencing-required *boolean*

Synopsis	Ignore Sequencing Required AVP
Context	**configure** service vprn *string* l2tp ignore-avps sequencing-required *boolean*
Tree	sequencing-required
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2tpv3

Synopsis	Enter the **l2tpv3** context

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Context	**configure** service vprn *string* l2tp l2tpv3
Tree	l2tpv3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cookie-length *number*

Synopsis	Cookie field length
Context	**configure** service vprn *string* l2tp l2tpv3 cookie-length *number*
Tree	cookie-length
Range	4 | 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

digest-type *keyword*

Synopsis	Hashing algorithm that calculates the message digest
Context	**configure** service vprn *string* l2tp l2tpv3 digest-type *keyword*
Tree	digest-type
Options	md5, sha1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nonce-length *number*

Synopsis	Length of the local L2TPv3 nonce (random number)
Context	**configure** service vprn *string* l2tp l2tpv3 nonce-length *number*
Tree	nonce-length
Range	0 | 16 to 64
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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password *string*

Synopsis	L2TPv3 password
Context	**configure** service vprn *string* l2tp l2tpv3 password *string*
Tree	password
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

private-tcp-mss-adjust *number*

Synopsis	TCP maximum segment size (MSS) on private network
Context	**configure** service vprn *string* l2tp l2tpv3 private-tcp-mss-adjust *number*
Tree	private-tcp-mss-adjust
Range	512 to 9000
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

public-tcp-mss-adjust *number*

Synopsis	TCP maximum segment size (MSS) on public network
Context	**configure** service vprn *string* l2tp l2tpv3 public-tcp-mss-adjust *number*
Tree	public-tcp-mss-adjust
Range	512 to 9000
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

transport-type

Synopsis	Enter the **transport-type** context
Context	**configure** service vprn *string* l2tp l2tpv3 transport-type
Tree	transport-type
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ip *boolean*

Synopsis	Use IP as the transport type for the L2TPv3 tunnel
Context	**configure** service vprn *string* l2tp l2tpv3 transport-type ip *boolean*
Tree	ip
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lac

Synopsis	Enter the **lac** context
Context	**configure** service vprn *string* l2tp lac
Tree	lac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

calling-number-format *string*

Synopsis	Calling Number AVP for L2TP control messages
Context	**configure** service vprn *string* l2tp lac calling-number-format *string*
Tree	calling-number-format
String Length	1 to 255
Default	%S %s
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cisco-nas-port

Synopsis	Enter the **cisco-nas-port** context
Context	**configure** service vprn *string* l2tp lac cisco-nas-port
Tree	cisco-nas-port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ethernet *string*

Synopsis	L2TP Cisco NAS port AVP with binary patterns for Ethernet
Context	**configure** service vprn *string* l2tp lac cisco-nas-port ethernet *string*
Tree	ethernet
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

df-bit *boolean*

Synopsis	Send all L2TP packets with DF bit set to 1
Context	**configure** service vprn *string* l2tp lac df-bit *boolean*
Tree	df-bit
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-address *string*

Synopsis	Local address
Context	**configure** service vprn *string* l2tp local-address *string*
Tree	local-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-name *string*

Synopsis	Local host name
Context	**configure** service vprn *string* l2tp local-name *string*
Tree	local-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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max-retries-estab *number*

Synopsis	Maximum retries for established tunnels
Context	**configure** service vprn *string* l2tp max-retries-estab *number*
Tree	max-retries-estab
Range	2 to 7
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-not-estab *number*

Synopsis	Maximum retries for unestablished tunnels
Context	**configure** service vprn *string* l2tp max-retries-not-estab *number*
Tree	max-retries-not-estab
Range	2 to 7
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

next-attempt *keyword*

Synopsis	Tunnel that is selected when previous session setup failed
Context	**configure** service vprn *string* l2tp next-attempt *keyword*
Tree	next-attempt
Options	same-preference-level, next-preference-level
Default	next-preference-level
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	L2TP password
Context	**configure** service vprn *string* l2tp password *string*
Tree	password

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String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer-address-change-policy *keyword*

Synopsis	Reaction for L2TP response from a different address
Context	**configure** service vprn *string* l2tp peer-address-change-policy *keyword*
Tree	peer-address-change-policy
Options	accept, ignore, reject
Default	reject
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy *reference*

Synopsis	RADIUS accounting policy
Context	**configure** service vprn *string* l2tp radius-accounting-policy *reference*
Tree	radius-accounting-policy
Reference	**configure** aaa radius l2tp-accounting-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

receive-window-size *number*

Synopsis	L2TP receive window size
Context	**configure** service vprn *string* l2tp receive-window-size *number*
Tree	receive-window-size
Range	4 to 1024
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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replace-result-code

Synopsis	Enter the **replace-result-code** context
Context	**configure** service vprn *string* l2tp replace-result-code
Tree	replace-result-code
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-invalid-dst *boolean*

Synopsis	Replace result code with general error code
Context	**configure** service vprn *string* l2tp replace-result-code cdn-invalid-dst *boolean*
Tree	cdn-invalid-dst
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-permanent-no-facilities *boolean*

Synopsis	Replace result code with general error
Context	**configure** service vprn *string* l2tp replace-result-code cdn-permanent-no-facilities *boolean*
Tree	cdn-permanent-no-facilities
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-temporary-no-facilities *boolean*

Synopsis	Replace result code with general error
Context	**configure** service vprn *string* l2tp replace-result-code cdn-temporary-no-facilities *boolean*
Tree	cdn-temporary-no-facilities
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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rtm-debounce-time *(number | keyword)*

Synopsis	Debounce timer that declares L2TP action for route table management events
Context	**configure** service vprn *string* l2tp rtm-debounce-time *(number | keyword)*
Tree	rtm-debounce-time
Range	0 to 5000
Units	milliseconds
Options	infinite
Default	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-assign-method *keyword*

Synopsis	Session assignment method
Context	**configure** service vprn *string* l2tp session-assign-method *keyword*
Tree	session-assign-method
Options	existing-first, weighted, weighted-random
Default	existing-first
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *number*

Synopsis	L2TP session limit of this router
Context	**configure** service vprn *string* l2tp session-limit *number*
Tree	session-limit
Range	1 to 250000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tunnel-selection-blacklist

Synopsis	Enter the **tunnel-selection-blacklist** context
Context	**configure** service vprn *string* l2tp tunnel-selection-blacklist

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Tree	tunnel-selection-blacklist
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

add-tunnel-on

Synopsis	Enter the **add-tunnel-on** context
Context	**configure** service vprn *string* l2tp tunnel-selection-blacklist add-tunnel-on
Tree	add-tunnel-on
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address-change-timeout *boolean*

Synopsis	Enable a timed-out tunnel to be forced to the denylist
Context	**configure** service vprn *string* l2tp tunnel-selection-blacklist add-tunnel-on address-change-timeout *boolean*
Tree	address-change-timeout
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-err-code *boolean*

Synopsis	Add to deny if CDN is received with code: General error
Context	**configure** service vprn *string* l2tp tunnel-selection-blacklist add-tunnel-on cdn-err-code *boolean*
Tree	cdn-err-code
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-invalid-dst *boolean*

Synopsis	Force tunnel to the denylist in case of Result Codes 6

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Context	**configure** service vprn *string* l2tp tunnel-selection-blacklist add-tunnel-on cdn-invalid-dst *boolean*
Tree	cdn-invalid-dst
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-permanent-no-facilities *boolean*

Synopsis	Force tunnel to the denylist in case of Result Codes 5
Context	**configure** service vprn *string* l2tp tunnel-selection-blacklist add-tunnel-on cdn-permanent-no-facilities *boolean*
Tree	cdn-permanent-no-facilities
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-temporary-no-facilities *boolean*

Synopsis	Force tunnel to the denylist in case of Result Codes 4
Context	**configure** service vprn *string* l2tp tunnel-selection-blacklist add-tunnel-on cdn-temporary-no-facilities *boolean*
Tree	cdn-temporary-no-facilities
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stop-ccn-err-code *boolean*

Synopsis	Add to denylist if received with general error code
Context	**configure** service vprn *string* l2tp tunnel-selection-blacklist add-tunnel-on stop-ccn-err-code *boolean*
Tree	stop-ccn-err-code
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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stop-ccn-other *boolean*

Synopsis	Add to denylist if StopCCN received with general error
Context	**configure** service vprn *string* l2tp tunnel-selection-blacklist add-tunnel-on stop-ccn-other *boolean*
Tree	stop-ccn-other
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tx-cdn-not-established-in-time *boolean*

Synopsis	Add to denylist if CDN transmitted with result code
Context	**configure** service vprn *string* l2tp tunnel-selection-blacklist add-tunnel-on tx-cdn-not-established-in-time *boolean*
Tree	tx-cdn-not-established-in-time
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-list-length *(number | keyword)*

Synopsis	Number of tunnels or peers in the denylist
Context	**configure** service vprn *string* l2tp tunnel-selection-blacklist max-list-length *(number | keyword)*
Tree	max-list-length
Range	1 to 65535
Options	infinite
Default	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-time *number*

Synopsis	Time that a tunnel or peer can remain in the denylist
Context	**configure** service vprn *string* l2tp tunnel-selection-blacklist max-time *number*

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Tree	max-time
Range	1 to 60
Units	minutes
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout-action *keyword*

Synopsis	Action when a tunnel or peer exceeds time in denylist
Context	**configure** service vprn *string* l2tp tunnel-selection-blacklist timeout-action *keyword*
Tree	timeout-action
Options	remove-from-blacklist, try-one-session
Default	remove-from-blacklist
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tunnel-session-limit *number*

Synopsis	L2TP session limit for each tunnel of this router
Context	**configure** service vprn *string* l2tp tunnel-session-limit *number*
Tree	tunnel-session-limit
Range	1 to 65534
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

label-mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allocation mode for VPRN service labels
Context	**configure** service vprn *string* label-mode *keyword*
Tree	label-mode
Options	vrf, next-hop

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Default	vrf
Introduced	16.0.R1
Platforms	All

local-routes-domain-id *string*

Synopsis	Local routes domain ID
Context	**configure** service vprn *string* local-routes-domain-id *string*
Tree	local-routes-domain-id
Description	This command specifies the domain ID that is used in the D-PATH attribute for local routes before those routes are exported to a BGP neighbor using BGP-IPVPN, EVPN-IFF, EVPN-IFL, or PE-CE BGP. A local route is a non-BGP route installed in the VPRN route table and learned using static route or an IGP. The domain IDs are used in the D-PATH attribute, in accordance with draft-ietf-bess-evpn-ipvpn-interworking. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN IFL and BGP IPVPN). Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).
Introduced	21.10.R1
Platforms	All

log

Synopsis	Enter the **log** context
Context	**configure** service vprn *string* log
Tree	log
Introduced	16.0.R1
Platforms	All

filter [filter-name] *string*

Synopsis	Enter the **filter** list instance
Context	**configure** service vprn *string* log filter *string*
Tree	filter
Max. Instances	1500

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Introduced	16.0.R1
Platforms	All

[**filter-name**] *string*

Synopsis	Filter ID
Context	**configure** service vprn *string* log filter *string*
Tree	filter
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

default-action *keyword*

Synopsis	Default action for the event filter
Context	**configure** service vprn *string* log filter *string* default-action *keyword*
Tree	default-action
Options	drop, forward
Default	forward
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* log filter *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

named-entry [entry-name] *string*

Synopsis	Enter the **named-entry** list instance

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Context	**configure** service vprn *string* log filter *string* named-entry *string*
Tree	named-entry
Description	Commands in this context create or edit an event filter entry.
Max. Instances	999
Notes	This element is ordered by the user.
Introduced	21.2.R1
Platforms	All

[**entry-name**] *string*

Synopsis	Entry name
Context	**configure** service vprn *string* log filter *string* named-entry *string*
Tree	named-entry
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

action *keyword*

Synopsis	Action for this event filter entry
Context	**configure** service vprn *string* log filter *string* named-entry *string* action *keyword*
Tree	action
Options	drop, forward
Introduced	21.2.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* log filter *string* named-entry *string* description *string*
Tree	description
String Length	1 to 80
Introduced	21.2.R1

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Platforms	All

match

Synopsis	Enter the **match** context
Context	**configure** service vprn *string* log filter *string* named-entry *string* match
Tree	match
Introduced	21.2.R1
Platforms	All

application

Synopsis	Enter the **application** context
Context	**configure** service vprn *string* log filter *string* named-entry *string* match application
Tree	application
Introduced	21.2.R1
Platforms	All

eq *keyword*

Synopsis	Application to match
Context	**configure** service vprn *string* log filter *string* named-entry *string* match application eq *keyword*
Tree	eq
Options	application-assurance, aps, bgp, cflowd, chassis, debug, dhcp, dhcps, diameter, dot1x, efm-oam, elmi, ering, eth-cfm, etun, filter, gsmp, igmp, igmp-snooping, ip, ipsec, isis, l2tp, lag, ldp, li, lldp, logger, mcpath, mc-redundancy, mirror, mld, mld-snooping, mpls, msdp, nat, ntp, oam, ospf, pim, pim-snooping, port, pppoe, ptp, rip, route-policy, rsvp, security, snmp, stp, svcmgr, system, user, video, vrrp, vrtr, radius, wpp, wlan-gw, dynsvc, mpls-tp, bfd, python, ripng, openflow, sflow, rpki, pcep, calltrace, satellite, ldap, pppoe-clnt, tls, adp, mgmt-core, macsec, pcap, auto-prov, bier, pfcp, tree-sid, srv6, sr-mpls, anysec
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.2.R1
Platforms	All

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neq *keyword*

Synopsis	Application to be filtered out
Context	**configure** service vprn *string* log filter *string* named-entry *string* match application neq *keyword*
Tree	neq
Options	application-assurance, aps, bgp, cflowd, chassis, debug, dhcp, dhcps, diameter, dot1x, efm-oam, elmi, ering, eth-cfm, etun, filter, gsmp, igmp, igmp-snooping, ip, ipsec, isis, l2tp, lag, ldp, li, lldp, logger, mcpath, mc-redundancy, mirror, mld, mld-snooping, mpls, msdp, nat, ntp, oam, ospf, pim, pim-snooping, port, pppoe, ptp, rip, route-policy, rsvp, security, snmp, stp, svcmgr, system, user, video, vrrp, vrtr, radius, wpp, wlan-gw, dynsvc, mpls-tp, bfd, python, ripng, openflow, sflow, rpki, pcep, calltrace, satellite, ldap, pppoe-clnt, tls, adp, mgmt-core, macsec, pcap, auto-prov, bier, pfcp, tree-sid, srv6, sr-mpls, anysec
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.2.R1
Platforms	All

event

Synopsis	Enter the **event** context
Context	**configure** service vprn *string* log filter *string* named-entry *string* match event
Tree	event
Introduced	21.2.R1
Platforms	All

eq *number*

Synopsis	Log event message to match
Context	**configure** service vprn *string* log filter *string* named-entry *string* match event eq *number*
Tree	eq
Range	1 to 4294967295
Notes	The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.
Introduced	21.2.R1
Platforms	All

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gt *number*

Synopsis	Number of the log event to match
Context	**configure** service vprn *string* log filter *string* named-entry *string* match event gt *number*
Tree	gt
Range	1 to 4294967295
Notes	The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.
Introduced	21.2.R1
Platforms	All

gte *number*

Synopsis	Number of the log event to match
Context	**configure** service vprn *string* log filter *string* named-entry *string* match event gte *number*
Tree	gte
Range	1 to 4294967295
Notes	The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.
Introduced	21.2.R1
Platforms	All

lt *number*

Synopsis	Number of the log event to match
Context	**configure** service vprn *string* log filter *string* named-entry *string* match event lt *number*
Tree	lt
Range	1 to 4294967295
Notes	The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.
Introduced	21.2.R1
Platforms	All

lte *number*

Synopsis	Number of the log event to match
Context	**configure** service vprn *string* log filter *string* named-entry *string* match event lte *number*
Tree	lte

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Range	1 to 4294967295
Notes	The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.
Introduced	21.2.R1
Platforms	All

neq *number*

Synopsis	Log event message to filter out
Context	**configure** service vprn *string* log filter *string* named-entry *string* match event neq *number*
Tree	neq
Range	1 to 4294967295
Notes	The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.
Introduced	21.2.R1
Platforms	All

message

Synopsis	Enter the **message** context
Context	**configure** service vprn *string* log filter *string* named-entry *string* match message
Tree	message
Introduced	21.2.R1
Platforms	All

eq *string*

Synopsis	Log event message to match
Context	**configure** service vprn *string* log filter *string* named-entry *string* match message eq *string*
Tree	eq
String Length	1 to 400
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.2.R1
Platforms	All

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neq *string*

Synopsis	Log event message to be filtered out
Context	**configure** service vprn *string* log filter *string* named-entry *string* match message neq *string*
Tree	neq
String Length	1 to 400
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.2.R1
Platforms	All

regexp *boolean*

Synopsis	String comparison to determine if the log event matches the value of pattern
Context	**configure** service vprn *string* log filter *string* named-entry *string* match message regexp *boolean*
Tree	regexp
Default	false
Introduced	21.2.R1
Platforms	All

severity

Synopsis	Enter the **severity** context
Context	**configure** service vprn *string* log filter *string* named-entry *string* match severity
Tree	severity
Introduced	21.2.R1
Platforms	All

eq *keyword*

Synopsis	Log event severity level to match
Context	**configure** service vprn *string* log filter *string* named-entry *string* match severity eq *keyword*
Tree	eq
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.

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Introduced	21.2.R1
Platforms	All

gt *keyword*

Synopsis	Log event severity level
Context	**configure** service vprn *string* log filter *string* named-entry *string* match severity gt *keyword*
Tree	gt
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.
Introduced	21.2.R1
Platforms	All

gte *keyword*

Synopsis	Log event severity level
Context	**configure** service vprn *string* log filter *string* named-entry *string* match severity gte *keyword*
Tree	gte
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.
Introduced	21.2.R1
Platforms	All

lt *keyword*

Synopsis	Log event severity level
Context	**configure** service vprn *string* log filter *string* named-entry *string* match severity lt *keyword*
Tree	lt
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.
Introduced	21.2.R1
Platforms	All

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lte *keyword*

Synopsis	Log event severity level
Context	**configure** service vprn *string* log filter *string* named-entry *string* match severity lte *keyword*
Tree	lte
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.
Introduced	21.2.R1
Platforms	All

neq *keyword*

Synopsis	Log event severity level to filter out
Context	**configure** service vprn *string* log filter *string* named-entry *string* match severity neq *keyword*
Tree	neq
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.
Introduced	21.2.R1
Platforms	All

subject

Synopsis	Enter the **subject** context
Context	**configure** service vprn *string* log filter *string* named-entry *string* match subject
Tree	subject
Introduced	21.2.R1
Platforms	All

eq *string*

Synopsis	Log event subject string to match
Context	**configure** service vprn *string* log filter *string* named-entry *string* match subject eq *string*
Tree	eq

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String Length	1 to 32
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.2.R1
Platforms	All

neq *string*

Synopsis	Log event subject string to filter out
Context	**configure** service vprn *string* log filter *string* named-entry *string* match subject neq *string*
Tree	neq
String Length	1 to 32
Notes	The following elements are part of a choice: **eq** or **neq**.
Introduced	21.2.R1
Platforms	All

regexp *boolean*

Synopsis	String comparison to determine if the log event matches the value of subject
Context	**configure** service vprn *string* log filter *string* named-entry *string* match subject regexp *boolean*
Tree	regexp
Default	false
Introduced	21.2.R1
Platforms	All

log-id [name] *string*

Synopsis	Enter the **log-id** list instance
Context	**configure** service vprn *string* log log-id *string*
Tree	log-id
Max. Instances	30
Introduced	16.0.R1
Platforms	All

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[**name**] *string*

Synopsis	Log ID
Context	**configure** service vprn *string* log log-id *string*
Tree	log-id
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the log
Context	**configure** service vprn *string* log log-id *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* log log-id *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

destination

Synopsis	Enter the **destination** context
Context	**configure** service vprn *string* log log-id *string* destination
Tree	destination
Introduced	16.0.R1

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Platforms	All

netconf

Synopsis	Enable the **netconf** context
Context	**configure** service vprn *string* log log-id *string* destination netconf
Tree	netconf
Notes	The following elements are part of a choice: **netconf**, **snmp**, or **syslog**.
Introduced	16.0.R1
Platforms	All

max-entries *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in the NETCONF log
Context	**configure** service vprn *string* log log-id *string* destination netconf max-entries *number*
Tree	max-entries
Range	50 to 3000
Default	100
Introduced	16.0.R1
Platforms	All

snmp

Synopsis	Enable the **snmp** context
Context	**configure** service vprn *string* log log-id *string* destination snmp
Tree	snmp
Notes	The following elements are part of a choice: **netconf**, **snmp**, or **syslog**.
Introduced	16.0.R1
Platforms	All

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max-entries *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in the memory log
Context	**configure** service vprn *string* log log-id *string* destination snmp max-entries *number*
Tree	max-entries
Range	50 to 3000
Default	100
Introduced	16.0.R1
Platforms	All

syslog *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Index with the information to format event messages sent to a specific SYSLOG collector
Context	**configure** service vprn *string* log log-id *string* destination syslog *reference*
Tree	syslog
Reference	**configure** service vprn *string* log syslog *string*
Notes	The following elements are part of a choice: **netconf**, **snmp**, or **syslog**.
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Event filter policy with the log destination
Context	**configure** service vprn *string* log log-id *string* filter *reference*
Tree	filter
Reference	**configure** service vprn *string* log filter *string*
Introduced	16.0.R1
Platforms	All

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netconf-stream *string*

Synopsis	Destination NETCONF stream name
Context	**configure** service vprn *string* log log-id *string* netconf-stream *string*
Tree	netconf-stream
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

python-policy *reference*

Synopsis	Python policy name
Context	**configure** service vprn *string* log log-id *string* python-policy *reference*
Tree	python-policy
Reference	**configure** python python-policy *string*
Introduced	16.0.R1
Platforms	All

source

Synopsis	Enter the **source** context
Context	**configure** service vprn *string* log log-id *string* source
Tree	source
Introduced	16.0.R1
Platforms	All

change *boolean*

Synopsis	Collect log events from the change event stream
Context	**configure** service vprn *string* log log-id *string* source change *boolean*
Tree	change
Default	false
Introduced	16.0.R1
Platforms	All

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debug *boolean*

Synopsis	Collect log events from the debug event stream
Context	**configure** service vprn *string* log log-id *string* source debug *boolean*
Tree	debug
Default	false
Introduced	19.10.R1
Platforms	All

main *boolean*

Synopsis	Collect log events from the main event stream
Context	**configure** service vprn *string* log log-id *string* source main *boolean*
Tree	main
Default	false
Introduced	16.0.R1
Platforms	All

security *boolean*

Synopsis	Collect log events from the security event stream
Context	**configure** service vprn *string* log log-id *string* source security *boolean*
Tree	security
Default	false
Introduced	19.10.R1
Platforms	All

time-format *keyword*

Synopsis	Time zone output for file log contents and syslog
Context	**configure** service vprn *string* log log-id *string* time-format *keyword*
Tree	time-format
Options	utc, local
Default	utc
Introduced	16.0.R1

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Platforms	All

snmp-trap-group [log-name] *string*

Synopsis	Enter the **snmp-trap-group** list instance
Context	**configure** service vprn *string* log snmp-trap-group *string*
Tree	snmp-trap-group
Introduced	16.0.R1
Platforms	All

[**log-name**] *string*

Synopsis	Log ID
Context	**configure** service vprn *string* log snmp-trap-group *string*
Tree	snmp-trap-group
String Length	1 to 17
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* log snmp-trap-group *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

trap-target [name] *string*

Synopsis	Enter the **trap-target** list instance
Context	**configure** service vprn *string* log snmp-trap-group *string* trap-target *string*
Tree	trap-target

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Max. Instances	25
Introduced	16.0.R1
Platforms	All

[**name**] *string*

Synopsis	Trap target name
Context	**configure** service vprn *string* log snmp-trap-group *string* trap-target *string*
Tree	trap-target
String Length	1 to 28
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the trap receiver
Context	**configure** service vprn *string* log snmp-trap-group *string* trap-target *string* address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* log snmp-trap-group *string* trap-target *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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notify-community *string*

Synopsis	SNMPv1 or SNMPv2c community name string, or SNMPv3 security name, for sending a notification
Context	**configure** service vprn *string* log snmp-trap-group *string* trap-target *string* notify-community *string*
Tree	notify-community
String Length	1 to 31
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

port *number*

Synopsis	UDP port number to send messages to this remote SNMP notification collector
Context	**configure** service vprn *string* log snmp-trap-group *string* trap-target *string* port *number*
Tree	port
Range	0 | 1 to 65535
Default	162
Introduced	16.0.R1
Platforms	All

replay *boolean*

Synopsis	Retransmit missed notifications
Context	**configure** service vprn *string* log snmp-trap-group *string* trap-target *string* replay *boolean*
Tree	replay
Default	false
Introduced	16.0.R1
Platforms	All

security-level *keyword*

Synopsis	Security level at which SNMP notification messages are sent to SNMP notification collector

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Context	**configure** service vprn *string* log snmp-trap-group *string* trap-target *string* security-level *keyword*
Tree	security-level
Options	no-auth-no-privacy, auth-no-privacy, privacy
Default	no-auth-no-privacy
Introduced	16.0.R1
Platforms	All

version *keyword*

Synopsis	SNMP version to format notification messages sent to this SNMP notification collector
Context	**configure** service vprn *string* log snmp-trap-group *string* trap-target *string* version *keyword*
Tree	version
Options	snmpv1, snmpv2c, snmpv3
Default	snmpv3
Introduced	16.0.R1
Platforms	All

syslog [syslog-name] *string*

Synopsis	Enter the **syslog** list instance
Context	**configure** service vprn *string* log syslog *string*
Tree	syslog
Max. Instances	30
Introduced	16.0.R1
Platforms	All

[**syslog-name**] *string*

Synopsis	Syslog name
Context	**configure** service vprn *string* log syslog *string*
Tree	syslog
String Length	1 to 64
Notes	This element is part of a list key.

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Introduced	21.2.R1
Platforms	All

address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the Syslog target host
Context	**configure** service vprn *string* log syslog *string* address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	address
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* log syslog *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

facility *keyword*

Synopsis	Facility code for messages
Context	**configure** service vprn *string* log syslog *string* facility *keyword*
Tree	facility
Options	kernel, user, mail, systemd, auth, syslogd, printer, netnews, uucp, cron, authpriv, ftp, ntp, logaudit, logalert, cron2, local0, local1, local2, local3, local4, local5, local6, local7
Default	local7
Introduced	16.0.R1
Platforms	All

hostname

Synopsis	Enter the **hostname** context
Context	**configure** service vprn *string* log syslog *string* hostname

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Tree	hostname
Description	Commands in this context control how the HOSTNAME field of syslog messages is populated. If no command option is configured, the HOSTNAME is populated with an IP address.
Introduced	23.7.R1
Platforms	All

use-system-name

Synopsis	Enable the **use-system-name** context
Context	**configure** service vprn *string* log syslog *string* hostname use-system-name
Tree	use-system-name
Description	Commands in this context configure the system to use the system name configured with the **configure system name** command as the HOSTNAME field of syslog messages. Do not use any spaces in the system name if it is used for the syslog HOSTNAME.
Notes	The following elements are part of a choice: **use-system-name**, **use-vprn-name**, or **value**.
Introduced	23.7.R1
Platforms	All

use-vprn-name

Synopsis	Enable the **use-vprn-name** context
Context	**configure** service vprn *string* log syslog *string* hostname use-vprn-name
Tree	use-vprn-name
Description	Commands in this context configure the system to use the VPRN service name configured with the **configure service vprn service-name** command as the HOSTNAME field of syslog messages sent in this VPRN. Do not use any spaces in the VPRN name if it is used for the syslog HOSTNAME.
Notes	The following elements are part of a choice: **use-system-name**, **use-vprn-name**, or **value**.
Introduced	23.7.R1
Platforms	All

value *string*

Synopsis	Syslog HOSTNAME field value

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Context	**configure** service vprn *string* log syslog *string* hostname value *string*
Tree	value
Description	This command configures a string as the HOSTNAME field of syslog messages. Do not use any spaces in the string used for the syslog HOSTNAME.
String Length	1 to 255
Notes	The following elements are part of a choice: **use-system-name**, **use-vprn-name**, or **value**.
Introduced	23.7.R1
Platforms	All

log-prefix *(keyword | string)*

Synopsis	Prefix string to log message sent to target syslog host
Context	**configure** service vprn *string* log syslog *string* log-prefix *(keyword | string)*
Tree	log-prefix
String Length	1 to 32
Options	no-prefix
Default	TMNX
Introduced	16.0.R1
Platforms	All

port *number*

Synopsis	Destination port when sending syslog over UDP
Context	**configure** service vprn *string* log syslog *string* port *number*
Tree	port
Range	0 | 1 to 65535
Default	514
Introduced	16.0.R1
Platforms	All

severity *keyword*

Synopsis	Severity level threshold for the syslog message
Context	**configure** service vprn *string* log syslog *string* severity *keyword*

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Tree	severity
Options	emergency, alert, critical, error, warning, notice, info, debug
Default	info
Introduced	16.0.R1
Platforms	All

tls-client-profile *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	TLS client profile used to encrypt syslog communication
Context	**configure** service vprn *string* log syslog *string* tls-client-profile *reference*
Tree	tls-client-profile
Description	This command specifies the Transport Layer Security (TLS) client profile used to encrypt syslog communications. When configured, syslog messages are sent using TLS. Any change to this command results in a brief interruption of the event log, which may cause the loss of a few syslog messages. When this command is unconfigured, the syslog messages are sent over UDP.
Reference	**configure** system security tls client-tls-profile *string*
Introduced	21.10.R1
Platforms	All

management

Synopsis	Enable the **management** context
Context	**configure** service vprn *string* management
Tree	management
Introduced	16.0.R4
Platforms	All

allow-ftp *boolean*

Synopsis	Allow access to the FTP server
Context	**configure** service vprn *string* management allow-ftp *boolean*

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Tree	allow-ftp
Description	When configured to **true**, this command allows FTP access to the SR OS router via the VPRN router instance. When configured to **false**, this command disallows access to the SR OS FTP server.
Default	false
Introduced	16.0.R6
Platforms	All

allow-grpc *boolean*

Synopsis	Allow access to the gRPC server
Context	**configure** service vprn *string* management allow-grpc *boolean*
Tree	allow-grpc
Description	When configured to **true**, this command allows access to the gRPC server via the VPRN router instance. When configured to **false**, this command disallows gRPC server access.
Default	false
Introduced	19.5.R1
Platforms	All

allow-netconf *boolean*

Synopsis	Allow access to the NETCONF server
Context	**configure** service vprn *string* management allow-netconf *boolean*
Tree	allow-netconf
Description	When configured to **true**, this command allows NETCONF server access to the SR OS router via the VPRN router instance. When configured to **false**, this command disallows access to the NETCONF server.
Default	false
Introduced	19.5.R1
Platforms	All

allow-ssh *boolean*

Synopsis	Allow access to the SSH server
Context	**configure** service vprn *string* management allow-ssh *boolean*

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Tree	allow-ssh
Description	When configured to **true**, this command allows SSH server access to the SR OS router via the VPRN router instance. When configured to **false**, this command disallows SSH server access.
Default	false
Introduced	16.0.R5
Platforms	All

allow-telnet *boolean*

Synopsis	Allow access to the IPv4 Telnet server
Context	**configure** service vprn *string* management allow-telnet *boolean*
Tree	allow-telnet
Description	When configured to **true**, this command allows IPv4 Telnet server access to the SR OS router via the VPRN router instance. When configured to **false**, this command disallows access to the IPv4 Telnet server.
Default	false
Introduced	16.0.R5
Platforms	All

allow-telnet6 *boolean*

Synopsis	Allow access to the Telnet IPv6 server
Context	**configure** service vprn *string* management allow-telnet6 *boolean*
Tree	allow-telnet6
Description	When configured to **true**, this command allows IPv6 Telnet server access to the SR OS router via the VPRN router instance. When configured to **false**, this command removes access to the IPv6 Telnet server.
Default	false
Introduced	16.0.R5
Platforms	All

maximum-ipv4-routes

Synopsis	Enter the **maximum-ipv4-routes** context
Context	**configure** service vprn *string* maximum-ipv4-routes

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Tree	maximum-ipv4-routes
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Action when the maximum number of routes, held within a VRF context, is reached
Context	**configure** service vprn *string* maximum-ipv4-routes log-only *boolean*
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Mid-level water marker for the number of routes which this VRF holds
Context	**configure** service vprn *string* maximum-ipv4-routes threshold *number*
Tree	threshold
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

value *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of routes that are configured on this virtual router
Context	**configure** service vprn *string* maximum-ipv4-routes value *number*
Tree	value
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

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maximum-ipv6-routes

Synopsis	Enter the **maximum-ipv6-routes** context
Context	**configure** service vprn *string* maximum-ipv6-routes
Tree	maximum-ipv6-routes
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Action when the maximum number of routes, held within a VRF context, is reached
Context	**configure** service vprn *string* maximum-ipv6-routes log-only *boolean*
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Mid-level water marker for the number of routes which this VRF holds
Context	**configure** service vprn *string* maximum-ipv6-routes threshold *number*
Tree	threshold
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

value *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of routes that are configured on this virtual router
Context	**configure** service vprn *string* maximum-ipv6-routes value *number*
Tree	value

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Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

mc-maximum-routes

Synopsis	Enter the **mc-maximum-routes** context
Context	**configure** service vprn *string* mc-maximum-routes
Tree	mc-maximum-routes
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Log and allow learning of new multicast routes
Context	**configure** service vprn *string* mc-maximum-routes log-only *boolean*
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Maximum multicast routes which the VRF holds
Context	**configure** service vprn *string* mc-maximum-routes threshold *number*
Tree	threshold
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Maximum multicast routes configured on virtual router
Context	**configure** service vprn *string* mc-maximum-routes value *number*

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Tree	value
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

mld

Synopsis	Enable the **mld** context
Context	**configure** service vprn *string* mld
Tree	mld
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MLD
Context	**configure** service vprn *string* mld admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

forwarding-group-interface forwarding-service *string* group-interface-name *reference*

Synopsis	Enter the **forwarding-group-interface** list instance
Context	**configure** service vprn *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference*
Tree	forwarding-group-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

forwarding-service *string*

Synopsis	Forwarding service for a subscriber interface in a retailer context

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Context	**configure** service vprn *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference*
Tree	forwarding-group-interface
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface-name *reference*

Synopsis	Group interface name
Context	**configure** service vprn *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference*
Tree	forwarding-group-interface
Reference	**configure** service vprn *string* subscriber-interface *string* group-interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the MLD interface
Context	**configure** service vprn *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy to filter MLD packets
Context	**configure** service vprn *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* import-policy *reference*
Tree	import-policy

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Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	**configure** service vprn *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* maximum-number-group-sources *number*
Tree	maximum-number-group-sources
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	**configure** service vprn *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	**configure** service vprn *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* maximum-number-sources *number*
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mcac

Synopsis	Enter the **mcac** context
Context	**configure** service vprn *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* mcac
Tree	mcac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bandwidth

Synopsis	Enter the **bandwidth** context
Context	**configure** service vprn *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mandatory *(number | keyword)*

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	**configure** service vprn *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* mcac bandwidth mandatory *(number | keyword)*
Tree	mandatory
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

total *(number | keyword)*

Synopsis	Maximum allowed bandwidth
Context	**configure** service vprn *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* mcac bandwidth total *(number | keyword)*

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Tree	total
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	**configure** service vprn *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* mcac interface-policy *reference*
Tree	interface-policy
Reference	**configure** mcac interface-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	Multicast CAC policy name
Context	**configure** service vprn *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* mcac policy *reference*
Tree	policy
Description	This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment. Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode. If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect. Hierarchical MCAC (HMCAC) is supported on two levels simultaneously: • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).
Reference	**configure** mcac policy *string*

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** service vprn *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* query-interval *number*
Tree	query-interval
Range	2 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	**configure** service vprn *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* query-last-member-interval *number*
Tree	query-last-member-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	**configure** service vprn *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* query-response-interval *number*
Tree	query-response-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-source-address *string*

Synopsis	Source address for MLD queries

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Context	**configure** service vprn *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* query-source-address *string*
Tree	query-source-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	**configure** service vprn *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* router-alert-check *boolean*
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-hosts-only *boolean*

Synopsis	Allow MLD traffic from known hosts only
Context	**configure** service vprn *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* sub-hosts-only *boolean*
Tree	sub-hosts-only
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subnet-check *boolean*

Synopsis	Enable subnet checking
Context	**configure** service vprn *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* subnet-check *boolean*
Tree	subnet-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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version *keyword*

Synopsis	MLD protocol version
Context	**configure** service vprn *string* mld forwarding-group-interface forwarding-service *string* group-interface-name *reference* version *keyword*
Tree	version
Options	1, 2
Default	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-if-query-source-address *string*

Synopsis	Source address in queries for group interfaces when not configured at group interface level
Context	**configure** service vprn *string* mld group-if-query-source-address *string*
Tree	group-if-query-source-address
Introduced	16.0.R1
Platforms	All

group-interface [group-interface-name] *reference*

Synopsis	Enter the **group-interface** list instance
Context	**configure** service vprn *string* mld group-interface *reference*
Tree	group-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**group-interface-name**] *reference*

Synopsis	Group interface name
Context	**configure** service vprn *string* mld group-interface *reference*
Tree	group-interface
Reference	**configure** service vprn *string* subscriber-interface *string* group-interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the MLD interface
Context	**configure** service vprn *string* mld group-interface *reference* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy to filter MLD packets
Context	**configure** service vprn *string* mld group-interface *reference* import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	**configure** service vprn *string* mld group-interface *reference* maximum-number-group-sources *number*
Tree	maximum-number-group-sources
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	**configure** service vprn *string* mld group-interface *reference* maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	**configure** service vprn *string* mld group-interface *reference* maximum-number-sources *number*
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mcac

Synopsis	Enter the **mcac** context
Context	**configure** service vprn *string* mld group-interface *reference* mcac
Tree	mcac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bandwidth

Synopsis	Enter the **bandwidth** context
Context	**configure** service vprn *string* mld group-interface *reference* mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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mandatory *(number | keyword)*

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	**configure** service vprn *string* mld group-interface *reference* mcac bandwidth mandatory *(number | keyword)*
Tree	mandatory
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

total *(number | keyword)*

Synopsis	Maximum allowed bandwidth
Context	**configure** service vprn *string* mld group-interface *reference* mcac bandwidth total *(number | keyword)*
Tree	total
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	**configure** service vprn *string* mld group-interface *reference* mcac interface-policy *reference*
Tree	interface-policy
Reference	**configure** mcac interface-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	Multicast CAC policy name

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Context	**configure** service vprn *string* mld group-interface *reference* mcac policy *reference*
Tree	policy
Description	This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment. Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode. If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect. Hierarchical MCAC (HMCAC) is supported on two levels simultaneously: • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).
Reference	**configure** mcac policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** service vprn *string* mld group-interface *reference* query-interval *number*
Tree	query-interval
Range	2 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	**configure** service vprn *string* mld group-interface *reference* query-last-member-interval *number*
Tree	query-last-member-interval
Range	1 to 1023
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	**configure** service vprn *string* mld group-interface *reference* query-response-interval *number*
Tree	query-response-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-source-address *string*

Synopsis	Source address for MLD queries
Context	**configure** service vprn *string* mld group-interface *reference* query-source-address *string*
Tree	query-source-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	**configure** service vprn *string* mld group-interface *reference* router-alert-check *boolean*
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-hosts-only *boolean*

Synopsis	Allow MLD traffic from known hosts only
Context	**configure** service vprn *string* mld group-interface *reference* sub-hosts-only *boolean*
Tree	sub-hosts-only
Default	true
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subnet-check *boolean*

Synopsis	Enable subnet checking
Context	**configure** service vprn *string* mld group-interface *reference* subnet-check *boolean*
Tree	subnet-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis	MLD protocol version
Context	**configure** service vprn *string* mld group-interface *reference* version *keyword*
Tree	version
Options	1, 2
Default	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface [ip-interface-name] *string*

Synopsis	Enter the **interface** list instance
Context	**configure** service vprn *string* mld interface *string*
Tree	interface
Introduced	16.0.R1
Platforms	All

[**ip-interface-name**] *string*

Synopsis	IP interface name
Context	**configure** service vprn *string* mld interface *string*
Tree	interface
String Length	1 to 32

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Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the MLD interface
Context	**configure** service vprn *string* mld interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy to filter MLD packets
Context	**configure** service vprn *string* mld interface *string* import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	All

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	**configure** service vprn *string* mld interface *string* maximum-number-group-sources *number*
Tree	maximum-number-group-sources
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1

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Platforms	All

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	**configure** service vprn *string* mld interface *string* maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	**configure** service vprn *string* mld interface *string* maximum-number-sources *number*
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

mcac

Synopsis	Enter the **mcac** context
Context	**configure** service vprn *string* mld interface *string* mcac
Tree	mcac
Introduced	16.0.R1
Platforms	All

bandwidth

Synopsis	Enter the **bandwidth** context
Context	**configure** service vprn *string* mld interface *string* mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	All

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mandatory *(number | keyword)*

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	**configure** service vprn *string* mld interface *string* mcac bandwidth mandatory *(number | keyword)*
Tree	mandatory
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

total *(number | keyword)*

Synopsis	Maximum allowed bandwidth
Context	**configure** service vprn *string* mld interface *string* mcac bandwidth total *(number | keyword)*
Tree	total
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	**configure** service vprn *string* mld interface *string* mcac interface-policy *reference*
Tree	interface-policy
Reference	**configure** mcac interface-policy *string*
Introduced	16.0.R1
Platforms	All

mc-constraints

Synopsis	Enter the **mc-constraints** context

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Context	**configure** service vprn *string* mld interface *string* mcac mc-constraints
Tree	mc-constraints
Introduced	16.0.R1
Platforms	All

level [level-id] *number*

Synopsis	Enter the **level** list instance
Context	**configure** service vprn *string* mld interface *string* mcac mc-constraints level *number*
Tree	level
Introduced	16.0.R1
Platforms	All

[**level-id**] *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	**configure** service vprn *string* mld interface *string* mcac mc-constraints level *number*
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Bandwidth available for this level
Context	**configure** service vprn *string* mld interface *string* mcac mc-constraints level *number* bandwidth *number*
Tree	bandwidth
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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number-down [number-lag-port-down] *number*

Synopsis	Enter the **number-down** list instance
Context	**configure** service vprn *string* mld interface *string* mcac mc-constraints number-down *number*
Tree	number-down
Introduced	16.0.R1
Platforms	All

[**number-lag-port-down**] *number*

Synopsis	Number of ports that are down in this LAG link
Context	**configure** service vprn *string* mld interface *string* mcac mc-constraints number-down *number*
Tree	number-down
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level ID to associate with number of down LAG ports
Context	**configure** service vprn *string* mld interface *string* mcac mc-constraints number-down *number* level *number*
Tree	level
Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

use-lag-port-weight *boolean*

Synopsis	Use LAG port weight in calculating MCAC constraints

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Context	**configure** service vprn *string* mld interface *string* mcac mc-constraints use-lag-port-weight *boolean*
Tree	use-lag-port-weight
Description	When configured to **true**, port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.
Default	false
Introduced	16.0.R1
Platforms	All

policy *reference*

Synopsis	Multicast CAC policy name
Context	**configure** service vprn *string* mld interface *string* mcac policy *reference*
Tree	policy
Description	This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment. Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode. If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect. Hierarchical MCAC (HMCAC) is supported on two levels simultaneously: • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).
Reference	**configure** mcac policy *string*
Introduced	16.0.R1
Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** service vprn *string* mld interface *string* query-interval *number*

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Tree	query-interval
Range	2 to 1024
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	**configure** service vprn *string* mld interface *string* query-last-member-interval *number*
Tree	query-last-member-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	**configure** service vprn *string* mld interface *string* query-response-interval *number*
Tree	query-response-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	All

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	**configure** service vprn *string* mld interface *string* router-alert-check *boolean*
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	All

ssm-translate

Synopsis	Enter the **ssm-translate** context

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Context	**configure** service vprn *string* mld interface *string* ssm-translate
Tree	ssm-translate
Introduced	16.0.R1
Platforms	All

group-range start *string* end *string*

Synopsis	Enter the **group-range** list instance
Context	**configure** service vprn *string* mld interface *string* ssm-translate group-range start *string* end *string*
Tree	group-range
Introduced	16.0.R1
Platforms	All

start *string*

Synopsis	Lower bound of the group range
Context	**configure** service vprn *string* mld interface *string* ssm-translate group-range start *string* end *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *string*

Synopsis	Upper bound of the group range
Context	**configure** service vprn *string* mld interface *string* ssm-translate group-range start *string* end *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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source [source-address] *string*

Synopsis	Add a list entry for **source**
Context	**configure** service vprn *string* mld interface *string* ssm-translate group-range start *string* end *string* source *string*
Tree	source
Min. Instances	1
Introduced	16.0.R1
Platforms	All

[**source-address**] *string*

Synopsis	Source IP address
Context	**configure** service vprn *string* mld interface *string* ssm-translate group-range start *string* end *string* source *string*
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

static

Synopsis	Enter the **static** context
Context	**configure** service vprn *string* mld interface *string* static
Tree	static
Introduced	16.0.R1
Platforms	All

group [group-address] *string*

Synopsis	Enter the **group** list instance
Context	**configure** service vprn *string* mld interface *string* static group *string*
Tree	group
Introduced	16.0.R1
Platforms	All

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[**group-address**] *string*

Synopsis	Group address of multicast channel
Context	**configure** service vprn *string* mld interface *string* static group *string*
Tree	group
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [source-address] *string*

Synopsis	Add a list entry for **source**
Context	**configure** service vprn *string* mld interface *string* static group *string* source *string*
Tree	source
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R1
Platforms	All

[**source-address**] *string*

Synopsis	Source IP address
Context	**configure** service vprn *string* mld interface *string* static group *string* source *string*
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	any source address (*,G)
Context	**configure** service vprn *string* mld interface *string* static group *string* starg
Tree	starg
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R2

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Platforms	All

group-range start *string* end *string* step *string*

Synopsis	Enter the **group-range** list instance
Context	**configure** service vprn *string* mld interface *string* static group-range start *string* end *string* step *string*
Tree	group-range
Introduced	16.0.R1
Platforms	All

start *string*

Synopsis	Lower bound of the static multicast group
Context	**configure** service vprn *string* mld interface *string* static group-range start *string* end *string* step *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *string*

Synopsis	Upper bound of the static multicast group
Context	**configure** service vprn *string* mld interface *string* static group-range start *string* end *string* step *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

step *string*

Synopsis	Step interval for the group-range addresses
Context	**configure** service vprn *string* mld interface *string* static group-range start *string* end *string* step *string*

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Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [source-address] *string*

Synopsis	Add a list entry for **source**
Context	**configure** service vprn *string* mld interface *string* static group-range start *string* end *string* step *string* source *string*
Tree	source
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R1
Platforms	All

[**source-address**] *string*

Synopsis	Source IP address
Context	**configure** service vprn *string* mld interface *string* static group-range start *string* end *string* step *string* source *string*
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	any source address (*,G)
Context	**configure** service vprn *string* mld interface *string* static group-range start *string* end *string* step *string* starg
Tree	starg
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R2
Platforms	All

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version *keyword*

Synopsis	MLD protocol version
Context	**configure** service vprn *string* mld interface *string* version *keyword*
Tree	version
Options	1, 2
Default	2
Introduced	16.0.R1
Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** service vprn *string* mld query-interval *number*
Tree	query-interval
Range	2 to 1024
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	**configure** service vprn *string* mld query-last-member-interval *number*
Tree	query-last-member-interval
Range	1 to 1023
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	**configure** service vprn *string* mld query-response-interval *number*

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Tree	query-response-interval
Range	1 to 1023
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	**configure** service vprn *string* mld robust-count *number*
Tree	robust-count
Range	2 to 10
Default	2
Introduced	16.0.R1
Platforms	All

ssm-translate

Synopsis	Enter the **ssm-translate** context
Context	**configure** service vprn *string* mld ssm-translate
Tree	ssm-translate
Introduced	16.0.R1
Platforms	All

group-range start *string* end *string*

Synopsis	Enter the **group-range** list instance
Context	**configure** service vprn *string* mld ssm-translate group-range start *string* end *string*
Tree	group-range
Introduced	16.0.R1
Platforms	All

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start *string*

Synopsis	Lower bound of the group range
Context	**configure** service vprn *string* mld ssm-translate group-range start *string* end *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *string*

Synopsis	Upper bound of the group range
Context	**configure** service vprn *string* mld ssm-translate group-range start *string* end *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [source-address] *string*

Synopsis	Add a list entry for **source**
Context	**configure** service vprn *string* mld ssm-translate group-range start *string* end *string* source *string*
Tree	source
Min. Instances	1
Introduced	16.0.R1
Platforms	All

[**source-address**] *string*

Synopsis	Source IP address
Context	**configure** service vprn *string* mld ssm-translate group-range start *string* end *string* source *string*
Tree	source
Notes	This element is part of a list key.

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Introduced	16.0.R2
Platforms	All

msdp

Synopsis	Enable the **msdp** context
Context	**configure** service vprn *string* msdp
Tree	msdp
Introduced	19.10.R1
Platforms	All

active-source-limit *number*

Synopsis	Maximum number of active messages accepted by MSDP
Context	**configure** service vprn *string* msdp active-source-limit *number*
Tree	active-source-limit
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MSDP
Context	**configure** service vprn *string* msdp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	19.10.R1
Platforms	All

data-encapsulation *boolean*

Synopsis	Enable encapsulation of multicast data used by MSDP
Context	**configure** service vprn *string* msdp data-encapsulation *boolean*
Tree	data-encapsulation

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Default	true
Introduced	19.10.R1
Platforms	All

export-policy *reference*

Synopsis	Policies to export source active state into MSDP
Context	**configure** service vprn *string* msdp export-policy *reference*
Tree	export-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

group [name] *string*

Synopsis	Enter the **group** list instance
Context	**configure** service vprn *string* msdp group *string*
Tree	group
Introduced	19.10.R1
Platforms	All

[**name**] *string*

Synopsis	MSDP group name
Context	**configure** service vprn *string* msdp group *string*
Tree	group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

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active-source-limit *number*

Synopsis	Maximum number of active messages accepted by MSDP
Context	**configure** service vprn *string* msdp group *string* active-source-limit *number*
Tree	active-source-limit
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MSDP
Context	**configure** service vprn *string* msdp group *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	19.10.R1
Platforms	All

export-policy *reference*

Synopsis	Policies to export source active state into MSDP
Context	**configure** service vprn *string* msdp group *string* export-policy *reference*
Tree	export-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

import-policy *reference*

Synopsis	Policy to import source active state from MSDP
Context	**configure** service vprn *string* msdp group *string* import-policy *reference*
Tree	import-policy

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Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

local-address *string*

Synopsis	Local end of an MSDP session
Context	**configure** service vprn *string* msdp group *string* local-address *string*
Tree	local-address
Introduced	19.10.R1
Platforms	All

mode *keyword*

Synopsis	Topology of groups of peers
Context	**configure** service vprn *string* msdp group *string* mode *keyword*
Tree	mode
Options	standard, mesh-group
Default	standard
Introduced	19.10.R1
Platforms	All

peer [ip-address] *string*

Synopsis	Enter the **peer** list instance
Context	**configure** service vprn *string* msdp group *string* peer *string*
Tree	peer
Introduced	19.10.R1
Platforms	All

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[**ip-address**] *string*

Synopsis	IP address of the remote MSDP router for peering
Context	**configure** service vprn *string* msdp group *string* peer *string*
Tree	peer
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

active-source-limit *number*

Synopsis	Maximum number of active messages accepted by MSDP
Context	**configure** service vprn *string* msdp group *string* peer *string* active-source-limit *number*
Tree	active-source-limit
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MSDP
Context	**configure** service vprn *string* msdp group *string* peer *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	19.10.R1
Platforms	All

authentication-key *string*

Synopsis	MD5 authentication key for the MSDP peering session
Context	**configure** service vprn *string* msdp group *string* peer *string* authentication-key *string*
Tree	authentication-key
String Length	1 to 370
Introduced	19.10.R1
Platforms	All

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default-peer *boolean*

Synopsis	Enable/Disable default peer as MSDP peer
Context	**configure** service vprn *string* msdp group *string* peer *string* default-peer *boolean*
Tree	default-peer
Default	false
Introduced	19.10.R1
Platforms	All

export-policy *reference*

Synopsis	Policies to export source active state into MSDP
Context	**configure** service vprn *string* msdp group *string* peer *string* export-policy *reference*
Tree	export-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

import-policy *reference*

Synopsis	Policy to import source active state from MSDP
Context	**configure** service vprn *string* msdp group *string* peer *string* import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

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local-address *string*

Synopsis	Local end of an MSDP session
Context	**configure** service vprn *string* msdp group *string* peer *string* local-address *string*
Tree	local-address
Introduced	19.10.R1
Platforms	All

receive-message-rate

Synopsis	Enter the **receive-message-rate** context
Context	**configure** service vprn *string* msdp group *string* peer *string* receive-message-rate
Tree	receive-message-rate
Introduced	19.10.R1
Platforms	All

rate *number*

Synopsis	Number of MSDP messages read from the TCP session
Context	**configure** service vprn *string* msdp group *string* peer *string* receive-message-rate rate *number*
Tree	rate
Range	10 to 10000
Introduced	19.10.R1
Platforms	All

threshold *number*

Synopsis	Limit for MSDP messages read from the TCP session
Context	**configure** service vprn *string* msdp group *string* peer *string* receive-message-rate threshold *number*
Tree	threshold
Range	1 to 1000000
Introduced	19.10.R1
Platforms	All

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time *number*

Synopsis	Limit of MSDP messages read from the TCP session
Context	**configure** service vprn *string* msdp group *string* peer *string* receive-message-rate time *number*
Tree	time
Range	1 to 600
Units	seconds
Introduced	19.10.R1
Platforms	All

receive-message-rate

Synopsis	Enter the **receive-message-rate** context
Context	**configure** service vprn *string* msdp group *string* receive-message-rate
Tree	receive-message-rate
Introduced	19.10.R1
Platforms	All

rate *number*

Synopsis	Number of MSDP messages read from the TCP session
Context	**configure** service vprn *string* msdp group *string* receive-message-rate rate *number*
Tree	rate
Range	10 to 10000
Introduced	19.10.R1
Platforms	All

threshold *number*

Synopsis	Limit for MSDP messages read from the TCP session
Context	**configure** service vprn *string* msdp group *string* receive-message-rate threshold *number*
Tree	threshold
Range	1 to 1000000
Introduced	19.10.R1

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Platforms	All

time *number*

Synopsis	Limit of MSDP messages read from the TCP session
Context	**configure** service vprn *string* msdp group *string* receive-message-rate time *number*
Tree	time
Range	1 to 600
Units	seconds
Introduced	19.10.R1
Platforms	All

import-policy *reference*

Synopsis	Policy to import source active state from MSDP
Context	**configure** service vprn *string* msdp import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

local-address *string*

Synopsis	Local end of an MSDP session
Context	**configure** service vprn *string* msdp local-address *string*
Tree	local-address
Introduced	19.10.R1
Platforms	All

peer [ip-address] *string*

Synopsis	Enter the **peer** list instance

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Context	**configure** service vprn *string* msdp peer *string*
Tree	peer
Introduced	19.10.R1
Platforms	All

[**ip-address**] *string*

Synopsis	IP address of the remote MSDP router for peering
Context	**configure** service vprn *string* msdp peer *string*
Tree	peer
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

active-source-limit *number*

Synopsis	Maximum number of active messages accepted by MSDP
Context	**configure** service vprn *string* msdp peer *string* active-source-limit *number*
Tree	active-source-limit
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MSDP
Context	**configure** service vprn *string* msdp peer *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	19.10.R1
Platforms	All

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authentication-key *string*

Synopsis	MD5 authentication key for the MSDP peering session
Context	**configure** service vprn *string* msdp peer *string* authentication-key *string*
Tree	authentication-key
String Length	1 to 370
Introduced	19.10.R1
Platforms	All

default-peer *boolean*

Synopsis	Enable/Disable default peer as MSDP peer
Context	**configure** service vprn *string* msdp peer *string* default-peer *boolean*
Tree	default-peer
Default	false
Introduced	19.10.R1
Platforms	All

export-policy *reference*

Synopsis	Policies to export source active state into MSDP
Context	**configure** service vprn *string* msdp peer *string* export-policy *reference*
Tree	export-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

import-policy *reference*

Synopsis	Policy to import source active state from MSDP
Context	**configure** service vprn *string* msdp peer *string* import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*

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Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

local-address *string*

Synopsis	Local end of an MSDP session
Context	**configure** service vprn *string* msdp peer *string* local-address *string*
Tree	local-address
Introduced	19.10.R1
Platforms	All

receive-message-rate

Synopsis	Enter the **receive-message-rate** context
Context	**configure** service vprn *string* msdp peer *string* receive-message-rate
Tree	receive-message-rate
Introduced	19.10.R1
Platforms	All

rate *number*

Synopsis	Number of MSDP messages read from the TCP session
Context	**configure** service vprn *string* msdp peer *string* receive-message-rate rate *number*
Tree	rate
Range	10 to 10000
Introduced	19.10.R1
Platforms	All

threshold *number*

Synopsis	Limit for MSDP messages read from the TCP session
Context	**configure** service vprn *string* msdp peer *string* receive-message-rate threshold *number*

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Tree	threshold
Range	1 to 1000000
Introduced	19.10.R1
Platforms	All

time *number*

Synopsis	Limit of MSDP messages read from the TCP session
Context	**configure** service vprn *string* msdp peer *string* receive-message-rate time *number*
Tree	time
Range	1 to 600
Units	seconds
Introduced	19.10.R1
Platforms	All

receive-message-rate

Synopsis	Enter the **receive-message-rate** context
Context	**configure** service vprn *string* msdp receive-message-rate
Tree	receive-message-rate
Introduced	19.10.R1
Platforms	All

rate *number*

Synopsis	Number of MSDP messages read from the TCP session
Context	**configure** service vprn *string* msdp receive-message-rate rate *number*
Tree	rate
Range	10 to 10000
Introduced	19.10.R1
Platforms	All

threshold *number*

Synopsis	Limit for MSDP messages read from the TCP session

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Context	**configure** service vprn *string* msdp receive-message-rate threshold *number*
Tree	threshold
Range	1 to 1000000
Introduced	19.10.R1
Platforms	All

time *number*

Synopsis	Limit of MSDP messages read from the TCP session
Context	**configure** service vprn *string* msdp receive-message-rate time *number*
Tree	time
Range	1 to 600
Units	seconds
Introduced	19.10.R1
Platforms	All

rpf-table *keyword*

Synopsis	Route tables for RPF lookup
Context	**configure** service vprn *string* msdp rpf-table *keyword*
Tree	rpf-table
Options	rtable-m, rtable-u, both
Default	rtable-u
Introduced	19.10.R1
Platforms	All

source [ip-prefix] *string*

Synopsis	Enter the **source** list instance
Context	**configure** service vprn *string* msdp source *string*
Tree	source
Introduced	19.10.R1
Platforms	All

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[**ip-prefix**] *string*

Synopsis	Source IP address for accepted active source messages
Context	**configure** service vprn *string* msdp source *string*
Tree	source
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

active-source-limit *number*

Synopsis	Number of active source messages accepted by MSDP
Context	**configure** service vprn *string* msdp source *string* active-source-limit *number*
Tree	active-source-limit
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

source-active-cache-lifetime *number*

Synopsis	Lifetime of SA entries in the cache
Context	**configure** service vprn *string* msdp source-active-cache-lifetime *number*
Tree	source-active-cache-lifetime
Range	90 to 600
Units	seconds
Default	90
Introduced	19.10.R1
Platforms	All

mss-adjust

Synopsis	Enable the **mss-adjust** context
Context	**configure** service vprn *string* mss-adjust
Tree	mss-adjust
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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nat-group *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group used for TCP-MSS adjustment
Context	**configure** service vprn *string* mss-adjust nat-group *number*
Tree	nat-group
Max. Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

segment-size *number*

Synopsis	TCP-MSS option value in transmitted TCP SYN requests
Context	**configure** service vprn *string* mss-adjust segment-size *number*
Tree	segment-size
Range	160 to 10240
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtrace2

Synopsis	Enter the **mtrace2** context
Context	**configure** service vprn *string* mtrace2
Tree	mtrace2
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of multicast path tracing
Context	**configure** service vprn *string* mtrace2 admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

udp-port *number*

Synopsis	Destination and listening port for the mtrace2 command
Context	**configure** service vprn *string* mtrace2 udp-port *number*
Tree	udp-port
Range	1024 to 49151
Default	5000
Introduced	16.0.R1
Platforms	All

multicast-info-policy *reference*

Synopsis	Multicast policy name for virtual router
Context	**configure** service vprn *string* multicast-info-policy *reference*
Tree	multicast-info-policy
Reference	**configure** multicast-management multicast-info-policy *string*
Introduced	16.0.R1
Platforms	All

mvpn

Synopsis	Enable the **mvpn** context
Context	**configure** service vprn *string* mvpn
Tree	mvpn
Introduced	19.5.R1
Platforms	All

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auto-discovery

Synopsis	Enter the **auto-discovery** context
Context	**configure** service vprn *string* mvpn auto-discovery
Tree	auto-discovery
Introduced	19.5.R1
Platforms	All

source-address *string*

Synopsis	IPv4 source address
Context	**configure** service vprn *string* mvpn auto-discovery source-address *string*
Tree	source-address
Default	0.0.0.0
Introduced	19.5.R1
Platforms	All

type *keyword*

Synopsis	Status of multicast VPN membership auto-discovery
Context	**configure** service vprn *string* mvpn auto-discovery type *keyword*
Tree	type
Options	bgp, mdt-safi
Introduced	19.5.R1
Platforms	All

c-mcast-signaling *keyword*

Synopsis	Protocol for PE-to-PE signaling of CE multicast states
Context	**configure** service vprn *string* mvpn c-mcast-signaling *keyword*
Tree	c-mcast-signaling
Options	bgp, pim
Default	pim
Introduced	19.5.R1
Platforms	All

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intersite-shared

Synopsis	Enter the **intersite-shared** context
Context	**configure** service vprn *string* mvpn intersite-shared
Tree	intersite-shared
Description	Commands in this context configure whether to use inter-site shared C-trees. Optional parameters allow enabling additional intersite shared functionality. Not specifying an optional parameter when executing the command disables that parameter.
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of inter-site shared C-trees use
Context	**configure** service vprn *string* mvpn intersite-shared admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	19.5.R1
Platforms	All

kat-type5-advertisement-withdraw *boolean*

Synopsis	Enable KATs on source PEs for ng-MVPN deployments
Context	**configure** service vprn *string* mvpn intersite-shared kat-type5-advertisement-withdraw *boolean*
Tree	kat-type5-advertisement-withdraw
Description	When configured to **true**, this command specifies that the MVPN Type-5 “Source Active AD routes” are not removed even if all receivers are removed from the tree.
Default	false
Introduced	19.5.R1
Platforms	All

persistent-type5-advertisement *boolean*

Synopsis	Ensure Type-5 S-A routes are generated for MCAST source

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Context	**configure** service vprn *string* mvpn intersite-shared persistent-type5-advertisement *boolean*
Tree	persistent-type5-advertisement
Description	When configured to **true**, this command removes the MVPN Type-5 “Source Active AD routes” even if receivers are present but the keepalive timer (KAT) has timed out because of no traffic.
Default	false
Introduced	19.5.R1
Platforms	All

mdt-type *keyword*

Synopsis	MVPN instance type per PE node
Context	**configure** service vprn *string* mvpn mdt-type *keyword*
Tree	mdt-type
Options	sender-only, receiver-only, sender-receiver
Default	sender-receiver
Introduced	19.5.R1
Platforms	All

provider-tunnel

Synopsis	Enter the **provider-tunnel** context
Context	**configure** service vprn *string* mvpn provider-tunnel
Tree	provider-tunnel
Introduced	19.5.R1
Platforms	All

inclusive

Synopsis	Enter the **inclusive** context
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive
Tree	inclusive
Introduced	19.5.R1
Platforms	All

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bier

Synopsis	Enable the **bier** context
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive bier
Tree	bier
Notes	The following elements are part of a choice: **bier**, **mldp**, **p2mp-sr**, **pim**, or **rsvp**.
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BIER
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive bier admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

sub-domain *number*

Synopsis	Sub-domain used to attach the BIER provider tunnel
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive bier sub-domain *number*
Tree	sub-domain
Range	0 to 255
Introduced	19.5.R1
Platforms	All

bsr *keyword*

Synopsis	BSR signaling type
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive bsr *keyword*
Tree	bsr
Options	unicast, spmsi
Introduced	19.5.R1

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Platforms	All

mldp

Synopsis	Enable the **mldp** context
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive mldp
Tree	mldp
Notes	The following elements are part of a choice: **bier**, **mldp**, **p2mp-sr**, **pim**, or **rsvp**.
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MLDP LSP use for tunnels
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive mldp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

p2mp-sr

Synopsis	Enable the **p2mp-sr** context
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive p2mp-sr
Tree	p2mp-sr
Notes	The following elements are part of a choice: **bier**, **mldp**, **p2mp-sr**, **pim**, or **rsvp**.
Introduced	21.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state for P2MP SR
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive p2mp-sr admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	All

bfd-leaf *boolean*

Synopsis	Enable unidirectional multipoint BFD on the leaf PE
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive p2mp-sr bfd-leaf *boolean*
Tree	bfd-leaf
Description	When configured to **true**, this command enables unidirectional multipoint BFD sessions on a receiver (leaf) PE node for upstream fast failure detection over P2MP SR tree LSP.
Default	false
Introduced	21.10.R1
Platforms	All

bfd-root

Synopsis	Enable the **bfd-root** context
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive p2mp-sr bfd-root
Tree	bfd-root
Introduced	21.10.R1
Platforms	All

multiplier *number*

Synopsis	Multiplier for the transmit interval of the BFD session
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive p2mp-sr bfd-root multiplier *number*
Tree	multiplier
Description	This command configures the multiplier for the transmit interval. The interval and the multiplier are used to calculate the detection time, which is the period of time without receiving BFD packets after which the session failure is determined.
Range	1 to 20
Default	3

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Introduced	21.10.R1
Platforms	All

transmit-interval *number*

Synopsis	Transmit interval of the BFD session
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive p2mp-sr bfd-root transmit-interval *number*
Tree	transmit-interval
Description	This command configures the transmit interval. The interval and the multiplier are used to calculate the detection time, which is the period of time without receiving BFD packets after which the session failure is determined.
Range	10 to 100000
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	All

p2mp-policy *boolean*

Synopsis	Use P2MP policy for inclusive MVPN provider tunnel
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive p2mp-sr p2mp-policy *boolean*
Tree	p2mp-policy
Default	false
Introduced	21.5.R1
Platforms	All

static-policy *reference*

Synopsis	Static policy for inclusive MVPN provider tunnel
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive p2mp-sr static-policy *reference*
Tree	static-policy
Reference	**configure** router *string* p2mp-sr-tree p2mp-policy *string*
Introduced	21.5.R1
Platforms	All

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pim

Synopsis	Enable the **pim** context
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive pim
Tree	pim
Notes	The following elements are part of a choice: **bier**, **mldp**, **p2mp-sr**, **pim**, or **rsvp**.
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of PIM use for provider tunnels
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive pim admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	19.5.R1
Platforms	All

group-address *string*

Synopsis	Multicast group address
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive pim group-address *string*
Tree	group-address
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

hello-interval *number*

Synopsis	Frequency at which PIM Hello messages are transmitted
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive pim hello-interval *number*
Tree	hello-interval
Range	0 to 255
Default	30

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Introduced	19.5.R1
Platforms	All

hello-multiplier *number*

Synopsis	Multiplier to determine the holdtime for a PIM neighbor
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive pim hello-multiplier *number*
Tree	hello-multiplier
Range	20 to 100
Default	35
Introduced	19.5.R1
Platforms	All

improved-assert *boolean*

Synopsis	Enable the improved assert procedure
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive pim improved-assert *boolean*
Tree	improved-assert
Default	true
Introduced	19.5.R1
Platforms	All

mode *keyword*

Synopsis	PIM mode for the inclusive provider tunnel
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive pim mode *keyword*
Tree	mode
Options	asm, ssm
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

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three-way-hello *boolean*

Synopsis	Enable PIM three-way hello
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive pim three-way-hello *boolean*
Tree	three-way-hello
Default	false
Introduced	19.5.R1
Platforms	All

tracking-support *boolean*

Synopsis	Enable the T bit in the LAN Prune Delay option
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive pim tracking-support *boolean*
Tree	tracking-support
Default	false
Introduced	19.5.R1
Platforms	All

rsvp

Synopsis	Enable the **rsvp** context
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive rsvp
Tree	rsvp
Notes	The following elements are part of a choice: **bier**, **mldp**, **p2mp-sr**, **pim**, or **rsvp**.
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of RSVP use for provider tunnels
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive rsvp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable

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Introduced	19.5.R1
Platforms	All

bfd-leaf *boolean*

Synopsis	Enable unidirectional multi-point BFD on a receiver
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive rsvp bfd-leaf *boolean*
Tree	bfd-leaf
Default	false
Introduced	19.5.R1
Platforms	All

bfd-root

Synopsis	Enable the **bfd-root** context
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive rsvp bfd-root
Tree	bfd-root
Introduced	19.5.R1
Platforms	All

multiplier *number*

Synopsis	Enable unidirectional multi-point BFD on a sender
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive rsvp bfd-root multiplier *number*
Tree	multiplier
Range	1 to 20
Default	3
Introduced	19.5.R1
Platforms	All

transmit-interval *number*

Synopsis	Transmit interval for the BFD session
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive rsvp bfd-root transmit-interval *number*

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Tree	transmit-interval
Range	10 to 100000
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

lsp-template *reference*

Synopsis	P2MP LSP created as the provider tunnel
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive rsvp lsp-template *reference*
Tree	lsp-template
Reference	**configure** router *string* mpls lsp-template *string*
Introduced	19.5.R1
Platforms	All

umh-rate-monitoring

Synopsis	Enter the **umh-rate-monitoring** context
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive umh-rate-monitoring
Tree	umh-rate-monitoring
Introduced	21.5.R1
Platforms	All

revertive-timer *number*

Synopsis	Time until switch to primary PMSI after recovering rate
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive umh-rate-monitoring revertive-timer *number*
Tree	revertive-timer
Range	0 to 3600
Introduced	21.5.R1
Platforms	All

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traffic-rate-delta *number*

Synopsis	Rate delta between PMSIs under which traffic switches
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive umh-rate-monitoring traffic-rate-delta *number*
Tree	traffic-rate-delta
Range	0 to 4294967294
Introduced	21.5.R1
Platforms	All

wildcard-spmsi *boolean*

Synopsis	Enable RFC 6625 S-PMSI functionality for NG-MVPN
Context	**configure** service vprn *string* mvpn provider-tunnel inclusive wildcard-spmsi *boolean*
Tree	wildcard-spmsi
Default	false
Introduced	19.5.R1
Platforms	All

selective

Synopsis	Enter the **selective** context
Context	**configure** service vprn *string* mvpn provider-tunnel selective
Tree	selective
Introduced	19.5.R1
Platforms	All

asm-mdt *boolean*

Synopsis	Enable Data MDT with PIM-ASM mode on receiver PE node
Context	**configure** service vprn *string* mvpn provider-tunnel selective asm-mdt *boolean*
Tree	asm-mdt
Default	false
Introduced	19.5.R1
Platforms	All

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auto-discovery *boolean*

Synopsis	Enable C-trees to P-tunnel binding auto-discovery
Context	**configure** service vprn *string* mvpn provider-tunnel selective auto-discovery *boolean*
Tree	auto-discovery
Default	false
Introduced	19.5.R1
Platforms	All

bier

Synopsis	Enable the **bier** context
Context	**configure** service vprn *string* mvpn provider-tunnel selective bier
Tree	bier
Notes	The following elements are part of a choice: **bier**, **mldp**, **p2mp-sr**, **pim**, or **rsvp**.
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BIER
Context	**configure** service vprn *string* mvpn provider-tunnel selective bier admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

sub-domain *number*

Synopsis	Sub-domain used to attach the BIER provider tunnel
Context	**configure** service vprn *string* mvpn provider-tunnel selective bier sub-domain *number*
Tree	sub-domain
Range	0 to 255
Introduced	19.5.R1
Platforms	All

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data-delay-interval *number*

Synopsis	Interval a PE switches from inclusive to selective
Context	**configure** service vprn *string* mvpn provider-tunnel selective data-delay-interval *number*
Tree	data-delay-interval
Range	3 to 180
Default	3
Introduced	19.5.R1
Platforms	All

data-threshold

Synopsis	Enter the **data-threshold** context
Context	**configure** service vprn *string* mvpn provider-tunnel selective data-threshold
Tree	data-threshold
Introduced	19.5.R1
Platforms	All

group-prefix [ip-group-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **group-prefix** list instance
Context	**configure** service vprn *string* mvpn provider-tunnel selective data-threshold group-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	group-prefix
Introduced	19.5.R1
Platforms	All

[**ip-group-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	IPv4 or IPv6 multicast group address and prefix
Context	**configure** service vprn *string* mvpn provider-tunnel selective data-threshold group-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	19.5.R1

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Platforms	All

pe-threshold-add *number*

Synopsis	PE add threshold
Context	**configure** service vprn *string* mvpn provider-tunnel selective data-threshold group-prefix *(ipv4-prefix | ipv6-prefix)* pe-threshold-add *number*
Tree	pe-threshold-add
Range	1 to 65535
Default	65535
Introduced	19.5.R1
Platforms	All

pe-threshold-delete *number*

Synopsis	PE delete threshold
Context	**configure** service vprn *string* mvpn provider-tunnel selective data-threshold group-prefix *(ipv4-prefix | ipv6-prefix)* pe-threshold-delete *number*
Tree	pe-threshold-delete
Range	2 to 65535
Default	65535
Introduced	19.5.R1
Platforms	All

threshold *number*

Synopsis	S-PMSI threshold
Context	**configure** service vprn *string* mvpn provider-tunnel selective data-threshold group-prefix *(ipv4-prefix | ipv6-prefix)* threshold *number*
Tree	threshold
Range	0 to 4294967294
Units	kilobps
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

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join-tlv-packing *boolean*

Synopsis	Enable packing of MDT join TLVs into a single PDU
Context	**configure** service vprn *string* mvpn provider-tunnel selective join-tlv-packing *boolean*
Tree	join-tlv-packing
Default	true
Introduced	19.5.R1
Platforms	All

mldp

Synopsis	Enable the **mldp** context
Context	**configure** service vprn *string* mvpn provider-tunnel selective mldp
Tree	mldp
Notes	The following elements are part of a choice: **bier**, **mldp**, **p2mp-sr**, **pim**, or **rsvp**.
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MLDP LSP use for tunnels
Context	**configure** service vprn *string* mvpn provider-tunnel selective mldp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

maximum-p2mp-spmsi *number*

Synopsis	Maximum number of RSVP P2MP or LDP P2MP S-PMSI tunnels
Context	**configure** service vprn *string* mvpn provider-tunnel selective mldp maximum-p2mp-spmsi *number*
Tree	maximum-p2mp-spmsi
Range	1 to 4000

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Default	10
Introduced	19.5.R1
Platforms	All

multistream-spmsi [multistream-id] *number*

Synopsis	Enter the **multistream-spmsi** list instance
Context	**configure** service vprn *string* mvpn provider-tunnel selective multistream-spmsi *number*
Tree	multistream-spmsi
Introduced	19.5.R1
Platforms	All

[**multistream-id**] *number*

Synopsis	Multistream spmsi id
Context	**configure** service vprn *string* mvpn provider-tunnel selective multistream-spmsi *number*
Tree	multistream-spmsi
Range	1 to 1024
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of multi-stream S-PMSI
Context	**configure** service vprn *string* mvpn provider-tunnel selective multistream-spmsi *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

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group-prefix [ip-group-prefix] *(ipv4-prefix | ipv6-prefix)* source-prefix *(ipv4-prefix | ipv6-prefix)*

Synopsis	Add a list entry for **group-prefix**
Context	**configure** service vprn *string* mvpn provider-tunnel selective multistream-spmsi *number* group-prefix *(ipv4-prefix | ipv6-prefix)* source-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	group-prefix
Introduced	19.5.R1
Platforms	All

[**ip-group-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	IPv4 or IPv6 multicast group address and prefix
Context	**configure** service vprn *string* mvpn provider-tunnel selective multistream-spmsi *number* group-prefix *(ipv4-prefix | ipv6-prefix)* source-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

source-prefix *(ipv4-prefix | ipv6-prefix)*

Synopsis	IPv4 or IPv6 unicast source address and prefix
Context	**configure** service vprn *string* mvpn provider-tunnel selective multistream-spmsi *number* group-prefix *(ipv4-prefix | ipv6-prefix)* source-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

lsp-template *reference*

Synopsis	RSVP-TE LSP template for S-PMSI
Context	**configure** service vprn *string* mvpn provider-tunnel selective multistream-spmsi *number* lsp-template *reference*
Tree	lsp-template
Reference	**configure** router *string* mpls lsp-template *string*

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Notes	The following elements are part of a choice: **lsp-template**, **p2mp-sr**, or **pim**.
Introduced	19.5.R1
Platforms	All

p2mp-sr

Synopsis	Enter the **p2mp-sr** context
Context	**configure** service vprn *string* mvpn provider-tunnel selective multistream-spmsi *number* p2mp-sr
Tree	p2mp-sr
Notes	The following elements are part of a choice: **lsp-template**, **p2mp-sr**, or **pim**.
Introduced	21.5.R1
Platforms	All

p2mp-policy *boolean*

Synopsis	Use P2MP policy for selective MVPN provider tunnel
Context	**configure** service vprn *string* mvpn provider-tunnel selective multistream-spmsi *number* p2mp-sr p2mp-policy *boolean*
Tree	p2mp-policy
Default	false
Introduced	21.5.R1
Platforms	All

static-policy *reference*

Synopsis	P2MP static policy for inclusive MVPN provider tunnel
Context	**configure** service vprn *string* mvpn provider-tunnel selective multistream-spmsi *number* p2mp-sr static-policy *reference*
Tree	static-policy
Reference	**configure** router *string* p2mp-sr-tree p2mp-policy *string*
Introduced	21.5.R1
Platforms	All

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pim

Synopsis	Enable the **pim** context
Context	**configure** service vprn *string* mvpn provider-tunnel selective multistream-spmsi *number* pim
Tree	pim
Notes	The following elements are part of a choice: **lsp-template**, **p2mp-sr**, or **pim**.
Introduced	19.5.R1
Platforms	All

group-address *string*

Synopsis	Group address of the data MDT
Context	**configure** service vprn *string* mvpn provider-tunnel selective multistream-spmsi *number* pim group-address *string*
Tree	group-address
Introduced	19.5.R1
Platforms	All

mode *keyword*

Synopsis	PIM mode for the selective provider tunnel
Context	**configure** service vprn *string* mvpn provider-tunnel selective multistream-spmsi *number* pim mode *keyword*
Tree	mode
Options	asm, ssm
Introduced	19.5.R1
Platforms	All

p2mp-sr

Synopsis	Enable the **p2mp-sr** context
Context	**configure** service vprn *string* mvpn provider-tunnel selective p2mp-sr
Tree	p2mp-sr
Notes	The following elements are part of a choice: **bier**, **mldp**, **p2mp-sr**, **pim**, or **rsvp**.
Introduced	21.5.R1

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Platforms	All

admin-state *keyword*

Synopsis	Administrative state of P2MP SR
Context	**configure** service vprn *string* mvpn provider-tunnel selective p2mp-sr admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	All

p2mp-policy *boolean*

Synopsis	Use P2MP policy for selective MVPN provider tunnel
Context	**configure** service vprn *string* mvpn provider-tunnel selective p2mp-sr p2mp-policy *boolean*
Tree	p2mp-policy
Default	false
Introduced	21.5.R1
Platforms	All

static-policy *reference*

Synopsis	Static policy for selective MVPN provider tunnel
Context	**configure** service vprn *string* mvpn provider-tunnel selective p2mp-sr static-policy *reference*
Tree	static-policy
Reference	**configure** router *string* p2mp-sr-tree p2mp-policy *string*
Introduced	21.5.R1
Platforms	All

pim

Synopsis	Enable the **pim** context

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Context	**configure** service vprn *string* mvpn provider-tunnel selective pim
Tree	pim
Notes	The following elements are part of a choice: **bier**, **mldp**, **p2mp-sr**, **pim**, or **rsvp**.
Introduced	19.5.R1
Platforms	All

group-prefix *string*

Synopsis	Multicast group address and netmask length
Context	**configure** service vprn *string* mvpn provider-tunnel selective pim group-prefix *string*
Tree	group-prefix
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

mode *keyword*

Synopsis	PIM mode.
Context	**configure** service vprn *string* mvpn provider-tunnel selective pim mode *keyword*
Tree	mode
Options	asm, ssm
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

rsvp

Synopsis	Enable the **rsvp** context
Context	**configure** service vprn *string* mvpn provider-tunnel selective rsvp
Tree	rsvp
Notes	The following elements are part of a choice: **bier**, **mldp**, **p2mp-sr**, **pim**, or **rsvp**.
Introduced	19.5.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of RSVP use for provider tunnels
Context	**configure** service vprn *string* mvpn provider-tunnel selective rsvp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

lsp-template *reference*

Synopsis	P2MP LSP created as the selective provider tunnel
Context	**configure** service vprn *string* mvpn provider-tunnel selective rsvp lsp-template *reference*
Tree	lsp-template
Reference	**configure** router *string* mpls lsp-template *string*
Introduced	19.5.R1
Platforms	All

maximum-p2mp-spmsi *number*

Synopsis	Maximum number of RSVP P2MP or LDP P2MP S-PMSI tunnels
Context	**configure** service vprn *string* mvpn provider-tunnel selective rsvp maximum-p2mp-spmsi *number*
Tree	maximum-p2mp-spmsi
Range	1 to 4000
Default	10
Introduced	19.5.R1
Platforms	All

umh-rate-monitoring

Synopsis	Enter the **umh-rate-monitoring** context
Context	**configure** service vprn *string* mvpn provider-tunnel selective umh-rate-monitoring
Tree	umh-rate-monitoring

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Introduced	21.5.R1
Platforms	All

group [group-ip-address] *(ipv4-prefix | ipv6-prefix)* source *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **group** list instance
Context	**configure** service vprn *string* mvpn provider-tunnel selective umh-rate-monitoring group *(ipv4-prefix | ipv6-prefix)* source *(ipv4-prefix | ipv6-prefix)*
Tree	group
Introduced	21.5.R1
Platforms	All

[**group-ip-address**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Group IP address
Context	**configure** service vprn *string* mvpn provider-tunnel selective umh-rate-monitoring group *(ipv4-prefix | ipv6-prefix)* source *(ipv4-prefix | ipv6-prefix)*
Tree	group
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

source *(ipv4-prefix | ipv6-prefix)*

Synopsis	Source IP address
Context	**configure** service vprn *string* mvpn provider-tunnel selective umh-rate-monitoring group *(ipv4-prefix | ipv6-prefix)* source *(ipv4-prefix | ipv6-prefix)*
Tree	group
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

revertive-timer *number*

Synopsis	Time until switch to primary PMSI after recovering rate

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Context	**configure** service vprn *string* mvpn provider-tunnel selective umh-rate-monitoring group *(ipv4-prefix | ipv6-prefix)* source *(ipv4-prefix | ipv6-prefix)* revertive-timer *number*
Tree	revertive-timer
Range	0 to 3600
Introduced	21.5.R1
Platforms	All

traffic-rate-delta *number*

Synopsis	Rate delta between PMSIs under which traffic switches
Context	**configure** service vprn *string* mvpn provider-tunnel selective umh-rate-monitoring group *(ipv4-prefix | ipv6-prefix)* source *(ipv4-prefix | ipv6-prefix)* traffic-rate-delta *number*
Tree	traffic-rate-delta
Range	0 to 4294967294
Introduced	21.5.R1
Platforms	All

redundant-source-list

Synopsis	Enter the **redundant-source-list** context
Context	**configure** service vprn *string* mvpn redundant-source-list
Tree	redundant-source-list
Introduced	19.5.R1
Platforms	All

source-prefix [ip-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Add a list entry for **source-prefix**
Context	**configure** service vprn *string* mvpn redundant-source-list source-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	source-prefix
Max. Instances	16
Introduced	19.5.R1
Platforms	All

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[**ip-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Unicast address prefix and mask
Context	**configure** service vprn *string* mvpn redundant-source-list source-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	source-prefix
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

rpf-select

Synopsis	Enter the **rpf-select** context
Context	**configure** service vprn *string* mvpn rpf-select
Tree	rpf-select
Introduced	19.5.R1
Platforms	All

core-mvpn [core-mvpn-service-name] *reference*

Synopsis	Enter the **core-mvpn** list instance
Context	**configure** service vprn *string* mvpn rpf-select core-mvpn *reference*
Tree	core-mvpn
Introduced	19.5.R1
Platforms	All

[**core-mvpn-service-name**] *reference*

Synopsis	Core MVPN service name
Context	**configure** service vprn *string* mvpn rpf-select core-mvpn *reference*
Tree	core-mvpn
Reference	**configure** service vprn *string*
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

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group-prefix [ip-group-prefix] *string*

Synopsis	Enter the **group-prefix** list instance
Context	**configure** service vprn *string* mvpn rpf-select core-mvpn *reference* group-prefix *string*
Tree	group-prefix
Min. Instances	1
Introduced	19.5.R1
Platforms	All

[**ip-group-prefix**] *string*

Synopsis	IPv4 multicast address prefix and mask
Context	**configure** service vprn *string* mvpn rpf-select core-mvpn *reference* group-prefix *string*
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

starg *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Starg flag.
Context	**configure** service vprn *string* mvpn rpf-select core-mvpn *reference* group-prefix *string* starg *boolean*
Tree	starg
Default	false
Introduced	19.5.R1
Platforms	All

umh-pe-backup

Synopsis	Enter the **umh-pe-backup** context

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Context	**configure** service vprn *string* mvpn umh-pe-backup
Tree	umh-pe-backup
Introduced	19.5.R1
Platforms	All

umh-pe [ip-address] *string*

Synopsis	Enter the **umh-pe** list instance
Context	**configure** service vprn *string* mvpn umh-pe-backup umh-pe *string*
Tree	umh-pe
Introduced	19.5.R1
Platforms	All

[**ip-address**] *string*

Synopsis	IP address for the standby PE
Context	**configure** service vprn *string* mvpn umh-pe-backup umh-pe *string*
Tree	umh-pe
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

standby *string*

Synopsis	ip-address.
Context	**configure** service vprn *string* mvpn umh-pe-backup umh-pe *string* standby *string*
Tree	standby
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

umh-selection *keyword*

Synopsis	UMH selection mechanism
Context	**configure** service vprn *string* mvpn umh-selection *keyword*

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Tree	umh-selection
Options	highest-ip, hash-based, tunnel-status, unicast-rt-pref
Default	highest-ip
Introduced	19.5.R1
Platforms	All

vrf-export

Synopsis	Enter the **vrf-export** context
Context	**configure** service vprn *string* mvpn vrf-export
Tree	vrf-export
Introduced	19.5.R1
Platforms	All

policy *(policy-expr-string | string)*

Synopsis	Route policy name
Context	**configure** service vprn *string* mvpn vrf-export policy *(policy-expr-string | string)*
Tree	policy
Description	This command specifies the route policy name. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed between double quotes.
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	The following elements are part of a choice: **policy** or **unicast**. This element is ordered by the user.
Introduced	19.5.R1
Platforms	All

unicast *boolean*

Synopsis	Enable the unicast VRF export policy for the MVPN
Context	**configure** service vprn *string* mvpn vrf-export unicast *boolean*
Tree	unicast

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Default	false
Notes	The following elements are part of a choice: **policy** or **unicast**.
Introduced	19.5.R1
Platforms	All

vrf-import

Synopsis	Enter the **vrf-import** context
Context	**configure** service vprn *string* mvpn vrf-import
Tree	vrf-import
Introduced	19.5.R1
Platforms	All

policy *(policy-expr-string | string)*

Synopsis	Route policy name
Context	**configure** service vprn *string* mvpn vrf-import policy *(policy-expr-string | string)*
Tree	policy
Description	This command specifies the route policy name. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed between double quotes.
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	The following elements are part of a choice: **policy** or **unicast**. This element is ordered by the user.
Introduced	19.5.R1
Platforms	All

unicast *boolean*

Synopsis	Enable the unicast VRF import policy for the MVPN
Context	**configure** service vprn *string* mvpn vrf-import unicast *boolean*
Tree	unicast
Default	false

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Notes	The following elements are part of a choice: **policy** or **unicast**.
Introduced	19.5.R1
Platforms	All

vrf-target

Synopsis	Enter the **vrf-target** context
Context	**configure** service vprn *string* mvpn vrf-target
Tree	vrf-target
Introduced	19.5.R1
Platforms	All

community *string*

Synopsis	Extended community name for the MVPN
Context	**configure** service vprn *string* mvpn vrf-target community *string*
Tree	community
String Length	10 to 28
Introduced	19.5.R1
Platforms	All

export

Synopsis	Enter the **export** context
Context	**configure** service vprn *string* mvpn vrf-target export
Tree	export
Introduced	19.5.R1
Platforms	All

community *string*

Synopsis	Extended community name for the MVPN
Context	**configure** service vprn *string* mvpn vrf-target export community *string*
Tree	community
String Length	10 to 28

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Introduced	19.5.R1
Platforms	All

unicast *boolean*

Synopsis	Enable the unicast vrf-target for the MVPN
Context	**configure** service vprn *string* mvpn vrf-target export unicast *boolean*
Tree	unicast
Default	false
Introduced	19.5.R1
Platforms	All

import

Synopsis	Enter the **import** context
Context	**configure** service vprn *string* mvpn vrf-target import
Tree	import
Introduced	19.5.R1
Platforms	All

community *string*

Synopsis	Extended community name for the MVPN
Context	**configure** service vprn *string* mvpn vrf-target import community *string*
Tree	community
String Length	10 to 28
Introduced	19.5.R1
Platforms	All

unicast *boolean*

Synopsis	Enable the unicast vrf-target for the MVPN
Context	**configure** service vprn *string* mvpn vrf-target import unicast *boolean*
Tree	unicast
Default	false

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Introduced	19.5.R1
Platforms	All

unicast *boolean*

Synopsis	Enable unicast vrf-target for the MVPN
Context	**configure** service vprn *string* mvpn vrf-target unicast *boolean*
Tree	unicast
Default	false
Introduced	19.5.R1
Platforms	All

nat

Synopsis	Enable the **nat** context
Context	**configure** service vprn *string* nat
Tree	nat
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside

Synopsis	Enter the **inside** context
Context	**configure** service vprn *string* nat inside
Tree	inside
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2-aware

Synopsis	Enter the **l2-aware** context
Context	**configure** service vprn *string* nat inside l2-aware
Tree	l2-aware
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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force-unique-ip-addresses *boolean*

Synopsis	Enforce unique IPv4 addresses for L2-aware subscribers
Context	**configure** service vprn *string* nat inside l2-aware force-unique-ip-addresses *boolean*
Tree	force-unique-ip-addresses
Description	When configured to **true**, the system enforces the uniqueness of IPv4 addresses of L2-aware subscribers in an inside routing context. This functionality is required if multicast sourced from the inside routing context is enabled for L2-aware subscribers.
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscribers [prefix] *string*

Synopsis	Add a list entry for **subscribers**
Context	**configure** service vprn *string* nat inside l2-aware subscribers *string*
Tree	subscribers
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**prefix**] *string*

Synopsis	Layer-2 Aware NAT subscriber prefix
Context	**configure** service vprn *string* nat inside l2-aware subscribers *string*
Tree	subscribers
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

large-scale

Synopsis	Enter the **large-scale** context
Context	**configure** service vprn *string* nat inside large-scale
Tree	large-scale

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dnat-only

Synopsis	Enter the **dnat-only** context
Context	**configure** service vprn *string* nat inside large-scale dnat-only
Tree	dnat-only
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source-prefix-list *reference*

Synopsis	NAT prefix list that contains source IP addresses
Context	**configure** service vprn *string* nat inside large-scale dnat-only source-prefix-list *reference*
Tree	source-prefix-list
Reference	**configure** service nat prefix-list *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dual-stack-lite

Synopsis	Enter the **dual-stack-lite** context
Context	**configure** service vprn *string* nat inside large-scale dual-stack-lite
Tree	dual-stack-lite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of Dual Stack Lite
Context	**configure** service vprn *string* nat inside large-scale dual-stack-lite admin-state *keyword*
Tree	admin-state
Options	enable, disable

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Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

deterministic

Synopsis	Enter the **deterministic** context
Context	**configure** service vprn *string* nat inside large-scale dual-stack-lite deterministic
Tree	deterministic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix-map [source-prefix] *string* nat-policy *reference*

Synopsis	Enter the **prefix-map** list instance
Context	**configure** service vprn *string* nat inside large-scale dual-stack-lite deterministic prefix-map *string* nat-policy *reference*
Tree	prefix-map
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**source-prefix**] *string*

Synopsis	List containing source IP addresses on the private side
Context	**configure** service vprn *string* nat inside large-scale dual-stack-lite deterministic prefix-map *string* nat-policy *reference*
Tree	prefix-map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*

Synopsis	NAT policy
Context	**configure** service vprn *string* nat inside large-scale dual-stack-lite deterministic prefix-map *string* nat-policy *reference*

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Tree	prefix-map
Reference	**configure** service nat nat-policy *string*
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the prefix
Context	**configure** service vprn *string* nat inside large-scale dual-stack-lite deterministic prefix-map *string* nat-policy *reference* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

map [from] *string* to *string*

Synopsis	Enter the **map** list instance
Context	**configure** service vprn *string* nat inside large-scale dual-stack-lite deterministic prefix-map *string* nat-policy *reference* map *string* to *string*
Tree	map
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**from**] *string*

Synopsis	Beginning of the range for IPv6 addresses
Context	**configure** service vprn *string* nat inside large-scale dual-stack-lite deterministic prefix-map *string* nat-policy *reference* map *string* to *string*
Tree	map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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to *string*

Synopsis	End of the range for IPv6 addresses
Context	**configure** service vprn *string* nat inside large-scale dual-stack-lite deterministic prefix-map *string* nat-policy *reference* map *string* to *string*
Tree	map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

first-outside-address *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outside IP address mapped to inside IP address range
Context	**configure** service vprn *string* nat inside large-scale dual-stack-lite deterministic prefix-map *string* nat-policy *reference* map *string* to *string* first-outside-address *string*
Tree	first-outside-address
Notes	This element is mandatory.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

endpoint [address] *string*

Synopsis	Enter the **endpoint** list instance
Context	**configure** service vprn *string* nat inside large-scale dual-stack-lite endpoint *string*
Tree	endpoint
Max. Instances	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**address**] *string*

Synopsis	Dual Stack Lite IPv6 address

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Context	**configure** service vprn *string* nat inside large-scale dual-stack-lite endpoint *string*
Tree	endpoint
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-fragmentation *keyword*

Synopsis	Fragmentation control of the AFTR originated downstream IPv6 traffic
Context	**configure** service vprn *string* nat inside large-scale dual-stack-lite endpoint *string* ip-fragmentation *keyword*
Tree	ip-fragmentation
Options	fragment-ipv6, fragment-ipv6-unless-ipv4-df-set
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

min-first-fragment-size-rx *number*

Synopsis	Minimum MTU size for upstream packets
Context	**configure** service vprn *string* nat inside large-scale dual-stack-lite endpoint *string* min-first-fragment-size-rx *number*
Tree	min-first-fragment-size-rx
Description	This command configures the minimum MTU size for the first fragment in the upstream direction. This command can be used to enable processing of first IPv6 fragments smaller than 1280 bytes. RFC 8200 recommends the minimum MTU in IPv6 be 1280 bytes which allows fragmentation only for packets that are larger than 1280 bytes. If a first fragment is smaller than 1280 bytes, DS-lite implementation in the SR OS, by default, drops the first fragment.
Range	512 to 1280
Default	1280
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reassembly *boolean*

Synopsis	Reassembly of IPv6 payload datagrams

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Context	**configure** service vprn *string* nat inside large-scale dual-stack-lite endpoint *string* reassembly *boolean*
Tree	reassembly
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-mtu *number*

Synopsis	DS-Lite tunnel MTU for this address
Context	**configure** service vprn *string* nat inside large-scale dual-stack-lite endpoint *string* tunnel-mtu *number*
Tree	tunnel-mtu
Description	This command configures the Dual Stack Lite (DS-Lite) tunnel MTU for this address.
Range	464 to 9212
Default	1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-subscriber-limit *number*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Largest value for all subscriber limits in each deterministic pool
Context	**configure** service vprn *string* nat inside large-scale dual-stack-lite max-subscriber-limit *number*
Tree	max-subscriber-limit
Range	1 | 2 | 4 | 8 | 16 | 32 | 64 | 128 | 256 | 512 | 1024 | 2048 | 4096 | 8192 | 16384 | 32768
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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subscriber-prefix-length *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	IPv6 prefix length of the Dual Stack Lite subscribers
Context	**configure** service vprn *string* nat inside large-scale dual-stack-lite subscriber-prefix-length *number*
Tree	subscriber-prefix-length
Range	32 to 64 | 128
Default	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filters

Synopsis	Enter the **filters** context
Context	**configure** service vprn *string* nat inside large-scale filters
Tree	filters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

downstream

Synopsis	Enter the **downstream** context
Context	**configure** service vprn *string* nat inside large-scale filters downstream
Tree	downstream
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4 *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service vprn *string* nat inside large-scale filters downstream ipv4 *reference*

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Tree	ipv4
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT policy for LSN
Context	**configure** service vprn *string* nat inside large-scale nat-policy *reference*
Tree	nat-policy
Reference	**configure** service nat nat-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat44

Synopsis	Enter the **nat44** context
Context	**configure** service vprn *string* nat inside large-scale nat44
Tree	nat44
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

destination-prefix [ip-prefix-length] *string*

Synopsis	Enter the **destination-prefix** list instance
Context	**configure** service vprn *string* nat inside large-scale nat44 destination-prefix *string*
Tree	destination-prefix
Max. Instances	6144
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**ip-prefix-length**] *string*

Synopsis	IP prefix for the destination address
Context	**configure** service vprn *string* nat inside large-scale nat44 destination-prefix *string*
Tree	destination-prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT policy
Context	**configure** service vprn *string* nat inside large-scale nat44 destination-prefix *string* nat-policy *reference*
Tree	nat-policy
Reference	**configure** service nat nat-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

deterministic

Synopsis	Enter the **deterministic** context
Context	**configure** service vprn *string* nat inside large-scale nat44 deterministic
Tree	deterministic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix-map [source-prefix] *string* nat-policy *reference*

Synopsis	Enter the **prefix-map** list instance
Context	**configure** service vprn *string* nat inside large-scale nat44 deterministic prefix-map *string* nat-policy *reference*
Tree	prefix-map
Introduced	21.5.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**source-prefix**] *string*

Synopsis	Traffic sent from sources within this prefix will be NATed
Context	**configure** service vprn *string* nat inside large-scale nat44 deterministic prefix-map *string* nat-policy *reference*
Tree	prefix-map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*

Synopsis	NAT policy
Context	**configure** service vprn *string* nat inside large-scale nat44 deterministic prefix-map *string* nat-policy *reference*
Tree	prefix-map
Reference	**configure** service nat nat-policy *string*
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the prefix
Context	**configure** service vprn *string* nat inside large-scale nat44 deterministic prefix-map *string* nat-policy *reference* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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map [from] *string* to *string*

Synopsis	Enter the **map** list instance
Context	**configure** service vprn *string* nat inside large-scale nat44 deterministic prefix-map *string* nat-policy *reference* map *string* to *string*
Tree	map
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**from**] *string*

Synopsis	Beginning of the range for IPv4 addresses
Context	**configure** service vprn *string* nat inside large-scale nat44 deterministic prefix-map *string* nat-policy *reference* map *string* to *string*
Tree	map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

to *string*

Synopsis	End of the range for IPv4 addresses
Context	**configure** service vprn *string* nat inside large-scale nat44 deterministic prefix-map *string* nat-policy *reference* map *string* to *string*
Tree	map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

first-outside-address *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outside IP address mapped to inside IP address range
Context	**configure** service vprn *string* nat inside large-scale nat44 deterministic prefix-map *string* nat-policy *reference* map *string* to *string* first-outside-address *string*

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Tree	first-outside-address
Notes	This element is mandatory.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-subscriber-limit *number*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Largest value for all subscriber limits in each deterministic pool
Context	**configure** service vprn *string* nat inside large-scale nat44 max-subscriber-limit *number*
Tree	max-subscriber-limit
Range	1 | 2 | 4 | 8 | 16 | 32 | 64 | 128 | 256 | 512 | 1024 | 2048 | 4096 | 8192 | 16384 | 32768
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-import *reference*

Synopsis	Import BGP-VPN routes in NAT inside routing context
Context	**configure** service vprn *string* nat inside large-scale nat44 nat-import *reference*
Tree	nat-import
Description	This command references an import policy to determine the routes that should be installed in the routing table as NAT routes, which are used to steer traffic to NAT. A dynamic route obtained by BGP-VPN can be imported into an inside (private side) routing context in NAT environment. This route is associated with a NAT policy that maps traffic destined into a NAT pool and outside routing context. If the NAT policy is not explicitly configured in the import route-policy, the imported NAT route is, by default, associated with the default NAT policy defined in the NAT inside routing context. All BGP-VPN routes that are destined to be imported into NAT inside routing context must be configured with action-type accept in the route policy.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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source-prefix [ip-prefix-length] *string*

Synopsis	Enter the **source-prefix** list instance
Context	**configure** service vprn *string* nat inside large-scale nat44 source-prefix *string*
Tree	source-prefix
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**ip-prefix-length**] *string*

Synopsis	IPv4 prefix length
Context	**configure** service vprn *string* nat inside large-scale nat44 source-prefix *string*
Tree	source-prefix
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	AT policy associated with the source prefix
Context	**configure** service vprn *string* nat inside large-scale nat44 source-prefix *string* nat-policy *reference*
Tree	nat-policy
Reference	**configure** service nat nat-policy *string*
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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nat64

Synopsis	Enable the **nat64** context
Context	**configure** service vprn *string* nat inside large-scale nat64
Tree	nat64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of NAT64
Context	**configure** service vprn *string* nat inside large-scale nat64 admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

drop-zero-ipv4-checksum *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Drop UDP datagrams with zero IPv4 checksum
Context	**configure** service vprn *string* nat inside large-scale nat64 drop-zero-ipv4-checksum *boolean*
Tree	drop-zero-ipv4-checksum
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

insert-ipv6-fragment-header *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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Synopsis	Include IPv6 fragment header to indicate that the sender allows fragmentation
Context	**configure** service vprn *string* nat inside large-scale nat64 insert-ipv6-fragment-header *boolean*
Tree	insert-ipv6-fragment-header
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-fragmentation *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Control fragmentation of originated downstream IPv6 traffic
Context	**configure** service vprn *string* nat inside large-scale nat64 ip-fragmentation *keyword*
Tree	ip-fragmentation
Options	fragment-ipv6, fragment-ipv6-unless-ipv4-df-set
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-mtu *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Size of the IPv6 downstream packet in NAT64
Context	**configure** service vprn *string* nat inside large-scale nat64 ipv6-mtu *number*
Tree	ipv6-mtu
Range	1280 to 9212
Default	1520
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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prefix *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	IPv6 prefix to derive the IPv6 address from the IPv4 address
Context	**configure** service vprn *string* nat inside large-scale nat64 prefix *string*
Tree	prefix
Default	64:ff9b::/96
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-prefix-length *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	IPv6 prefix length for the NAT64 subscribers
Context	**configure** service vprn *string* nat inside large-scale nat64 subscriber-prefix-length *number*
Tree	subscriber-prefix-length
Range	32 to 64 | 128
Default	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tos

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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Synopsis	Enter the **tos** context
Context	**configure** service vprn *string* nat inside large-scale nat64 tos
Tree	tos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

downstream

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **downstream** context
Context	**configure** service vprn *string* nat inside large-scale nat64 tos downstream
Tree	downstream
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

use-ipv4 *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Copy TOS/DSCP bits from the incoming IPv4 frame to the outgoing IPv6 frame
Context	**configure** service vprn *string* nat inside large-scale nat64 tos downstream use-ipv4 *boolean*
Tree	use-ipv4
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

upstream

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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Synopsis	Enter the **upstream** context
Context	**configure** service vprn *string* nat inside large-scale nat64 tos upstream
Tree	upstream
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

set-tos *(keyword | number)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TOS/DSCP bits in IPv4 frame in the upstream direction
Context	**configure** service vprn *string* nat inside large-scale nat64 tos upstream set-tos *(keyword | number)*
Tree	set-tos
Range	0 to 255
Options	use-ipv6
Default	use-ipv6
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

redundancy

Synopsis	Enter the **redundancy** context
Context	**configure** service vprn *string* nat inside large-scale redundancy
Tree	redundancy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer *string*

Synopsis	IP address of the NAT redundancy peer for this virtual router instance
Context	**configure** service vprn *string* nat inside large-scale redundancy peer *string*
Tree	peer
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer6 *string*

Synopsis	IPv6 address of the NAT redundancy peer for this virtual router instance
Context	**configure** service vprn *string* nat inside large-scale redundancy peer6 *string*
Tree	peer6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

steering-route *string*

Synopsis	IP address and prefix length of the steering route
Context	**configure** service vprn *string* nat inside large-scale redundancy steering-route *string*
Tree	steering-route
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-identification

Synopsis	Enter the **subscriber-identification** context
Context	**configure** service vprn *string* nat inside large-scale subscriber-identification
Tree	subscriber-identification
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of subscriber identification
Context	**configure** service vprn *string* nat inside large-scale subscriber-identification admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

attribute

Synopsis	Enter the **attribute** context
Context	**configure** service vprn *string* nat inside large-scale subscriber-identification attribute
Tree	attribute
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	RADIUS attribute used as subscriber identifier
Context	**configure** service vprn *string* nat inside large-scale subscriber-identification attribute type *keyword*
Tree	type
Options	alc-sub-string, user-name, class, station-id, imsi, imei
Default	alc-sub-string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vendor *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	The RADIUS Vendor
Context	**configure** service vprn *string* nat inside large-scale subscriber-identification attribute vendor *keyword*
Tree	vendor
Options	standard, nokia, 3gpp
Default	nokia

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* nat inside large-scale subscriber-identification description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

drop-unidentified-traffic *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Drop traffic from unidentified flows
Context	**configure** service vprn *string* nat inside large-scale subscriber-identification drop-unidentified-traffic *boolean*
Tree	drop-unidentified-traffic
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-proxy-server

Synopsis	Enable the **radius-proxy-server** context
Context	**configure** service vprn *string* nat inside large-scale subscriber-identification radius-proxy-server
Tree	radius-proxy-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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router-instance *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance
Context	**configure** service vprn *string* nat inside large-scale subscriber-identification radius-proxy-server router-instance *string*
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Server name
Context	**configure** service vprn *string* nat inside large-scale subscriber-identification radius-proxy-server server *string*
Tree	server
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

traffic-identification

Synopsis	Enter the **traffic-identification** context
Context	**configure** service vprn *string* nat inside large-scale traffic-identification
Tree	traffic-identification
Description	Commands in this context configure traffic idenification for NAT processing
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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source-prefix-only *boolean*

Synopsis	Allow traffic associated with source prefixes only
Context	**configure** service vprn *string* nat inside large-scale traffic-identification source-prefix-only *boolean*
Tree	source-prefix-only
Default	false
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

map

Synopsis	Enter the **map** context
Context	**configure** service vprn *string* nat map
Tree	map
Introduced	16.0.R1
Platforms	VSR

map-domain [domain-name] *reference*

Synopsis	Add a list entry for **map-domain**
Context	**configure** service vprn *string* nat map map-domain *reference*
Tree	map-domain
Introduced	16.0.R1
Platforms	VSR

[**domain-name**] *reference*

Synopsis	MAP domain template name
Context	**configure** service vprn *string* nat map map-domain *reference*
Tree	map-domain
Reference	**configure** service nat map-t domain *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	VSR

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outside

Synopsis	Enter the **outside** context
Context	**configure** service vprn *string* nat outside
Tree	outside
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dnat-only

Synopsis	Enter the **dnat-only** context
Context	**configure** service vprn *string* nat outside dnat-only
Tree	dnat-only
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

route-limit *number*

Synopsis	Limit for internal routes for downstream traffic
Context	**configure** service vprn *string* nat outside dnat-only route-limit *number*
Tree	route-limit
Range	1 to 131072
Default	32768
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filters

Synopsis	Enter the **filters** context
Context	**configure** service vprn *string* nat outside filters
Tree	filters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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downstream

Synopsis	Enter the **downstream** context
Context	**configure** service vprn *string* nat outside filters downstream
Tree	downstream
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4 *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service vprn *string* nat outside filters downstream ipv4 *reference*
Tree	ipv4
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service vprn *string* nat outside filters downstream ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

upstream

Synopsis	Enter the **upstream** context
Context	**configure** service vprn *string* nat outside filters upstream
Tree	upstream
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ipv4 *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service vprn *string* nat outside filters upstream ipv4 *reference*
Tree	ipv4
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service vprn *string* nat outside filters upstream ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtu *number*

Synopsis	MTU for downstream traffic
Context	**configure** service vprn *string* nat outside mtu *number*
Tree	mtu
Range	512 to 9000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool [name] *string*

Synopsis	Enter the **pool** list instance
Context	**configure** service vprn *string* nat outside pool *string*
Tree	pool
Max. Instances	4096
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**name**] *string*

Synopsis	NAT pool name
Context	**configure** service vprn *string* nat outside pool *string*
Tree	pool
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address-pooling *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Outside IP address allocation mode for a NAT subscriber
Context	**configure** service vprn *string* nat outside pool *string* address-pooling *keyword*
Tree	address-pooling
Description	This command configures address pooling which defines a relationship between the NAT subscriber and its outside IP address(es). The behavior in NAT, as defined in RFC 7857, strongly recommends that the NAT subscribers be mapped to a single outside IP address. If this outside IP address runs out of ports, no new ports for the subscriber are allocated. This behavior is called paired address pooling. The alternative behavior is arbitrary address pooling, where a NAT subscriber is mapped to multiple IP addresses when the current outside IP address runs out of ports. This way, the subscriber becomes associated with multiple outside IP addresses. While this results in better resource utilization in NAT, it may negatively affect the behavior of some applications.
Options	paired, arbitrary
Default	paired
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address-range [start] *string* end *string*

Synopsis	Enter the **address-range** list instance

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Context	**configure** service vprn *string* nat outside pool *string* address-range *string* end *string*
Tree	address-range
Max. Instances	4096
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**start**] *string*

Synopsis	Lower bound of the NAT address range
Context	**configure** service vprn *string* nat outside pool *string* address-range *string* end *string*
Tree	address-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *string*

Synopsis	Upper bound of the NAT address range
Context	**configure** service vprn *string* nat outside pool *string* address-range *string* end *string*
Tree	address-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* nat outside pool *string* address-range *string* end *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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drain *boolean*

Synopsis	Start or stop draining this NAT address range
Context	**configure** service vprn *string* nat outside pool *string* address-range *string* end *string* drain *boolean*
Tree	drain
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the outside routing NAT pool
Context	**configure** service vprn *string* nat outside pool *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

applications

Synopsis	Enter the **applications** context
Context	**configure** service vprn *string* nat outside pool *string* applications
Tree	applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

agnostic *boolean*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT pool to create in the outside routing context

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Context	**configure** service vprn *string* nat outside pool *string* applications agnostic *boolean*
Tree	agnostic
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* nat outside pool *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp-echo-reply *boolean*

Synopsis	Allow NAT pool IP addresses to respond to ICMP PINGs
Context	**configure** service vprn *string* nat outside pool *string* icmp-echo-reply *boolean*
Tree	icmp-echo-reply
Description	This command allows IP addresses in the NAT pool to respond to ICMP Echo requests (PINGs). The configuration can be toggled while the pool is in use. In L2-aware NAT when port-block-extensions is disabled, the reply from an outside IP address is generated only when this IP address has at least one host (binding) behind it. In L2-aware NAT when port-block-extensions is enabled, the reply from an outside IP address is generated regardless if a binding is present. In LSN, the reply from an outside IP address is generated regardless if a binding is present.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2-aware

Synopsis	Enter the **l2-aware** context
Context	**configure** service vprn *string* nat outside pool *string* l2-aware

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Tree	l2-aware
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-host

Synopsis	Enable the **default-host** context
Context	**configure** service vprn *string* nat outside pool *string* l2-aware default-host
Tree	default-host
Description	Commands in this context configure the default DMZ host options. A default DMZ host is a node on the inside to which all unknown traffic is redirected by changing the destination IPv4 address in the traffic header. During this operation, the checksums in the Layer 3 and Layer 4 header (UDP and TCP) are recalculated. Unknown traffic in NAT represent all unmatched traffic arriving from the outside (where there is no pinhole or a matching flow record created by traffic initiated from the inside). The purpose of the default DMZ host is to capture and analyze the unknown traffic as part of threat analysis. The rate of redirected unknown traffic can be restricted by configuration.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside-router-instance *string*

Synopsis	Router instance of the DMZ
Context	**configure** service vprn *string* nat outside pool *string* l2-aware default-host inside-router-instance *string*
Tree	inside-router-instance
Description	This command configures the router instance on the inside where the default DMZ host resides.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis	IP address of the default DMZ host
Context	**configure** service vprn *string* nat outside pool *string* l2-aware default-host ip-address *string*
Tree	ip-address

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Description	This command configures the IP address of the default DMZ host. Redirection to the default DMZ host is achieved by replacing the destination IP address in the traffic header in the unknown traffic initiated from the outside with the one of the default DMZ host.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-limit *number*

Synopsis	Rate limit for unknown traffic sent to default DMZ host
Context	**configure** service vprn *string* nat outside pool *string* l2-aware default-host rate-limit *number*
Tree	rate-limit
Description	This command configures the rate limit of the unknown traffic sent to the default DMZ host. Unknown traffic sent to the default DMZ host is rate limited by a configurable value expressed in mbps. The rate limit is configurable per NAT pool per ISA, vISA, or ESA-VM.
Range	1 to 10000
Units	megabps
Default	10
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

external-assignment *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	External IP address for Layer-2-aware
Context	**configure** service vprn *string* nat outside pool *string* l2-aware external-assignment *boolean*
Tree	external-assignment
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-block-extension

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the **port-block-extension** context
Context	**configure** service vprn *string* nat outside pool *string* l2-aware port-block-extension
Tree	port-block-extension
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ports *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of ports per dynamic port-block
Context	**configure** service vprn *string* nat outside pool *string* l2-aware port-block-extension ports *number*
Tree	ports
Description	For Carrier Grade NAT (CGN), this command represents the size of all port blocks for NAT subscribes in the NAT pool. For L2-Aware NAT, this command represents only the size of the initial port block of a subscriber in the L2-aware NAT pool. Additional port-blocks (extended port blocks) for the L2-Aware subscriber must be explicitly enabled under the **l2-aware port-block-extension** hierarchy in the NAT pool. This command does not affect the size of extended port-blocks.
Range	10 to 5000
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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subscriber

Synopsis	Enter the **subscriber** context
Context	**configure** service vprn *string* nat outside pool *string* l2-aware port-block-extension subscriber
Tree	subscriber
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the **watermarks** context
Context	**configure** service vprn *string* nat outside pool *string* l2-aware port-block-extension subscriber watermarks
Tree	watermarks
Description	This command configures watermarks for NAT resources.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis	High watermark percentage
Context	**configure** service vprn *string* nat outside pool *string* l2-aware port-block-extension subscriber watermarks high *number*
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low *number*

Synopsis	Low watermark percentage

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Context	**configure** service vprn *string* nat outside pool *string* l2-aware port-block-extension subscriber watermarks low *number*
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-limit *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of L2-Aware NAT subscribers per outside address
Context	**configure** service vprn *string* nat outside pool *string* l2-aware port-block-extension subscriber-limit *number*
Tree	subscriber-limit
Description	When port-block extensions for the L2-Aware subscribers are enabled, the port space for an outside IP address is divided into the following: • well-known port (this is a fixed and permanently allocated block of ports for all NAT types) • static port-forwarding range (if enabled by configuration) • port range allocated for initial port blocks of each L2-Aware subscriber • port range allocated for extended port blocks for the remainder after the three previous port ranges The number of L2-Aware NAT subscribers per an outside IP address multiplied by the size of the initial port-block size determines the size of the port range reserved for initial port-blocks of each subscriber. The lower boundary of the extended port range is determined by adding the upper boundary of the configured port forwarding range and the size of the port range allocated for initial port blocks.
Range	2 to 2000
Notes	This element is mandatory.
Introduced	21.7.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the **watermarks** context
Context	**configure** service vprn *string* nat outside pool *string* l2-aware port-block-extension watermarks
Tree	watermarks
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis	High watermark percentage
Context	**configure** service vprn *string* nat outside pool *string* l2-aware port-block-extension watermarks high *number*
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low *number*

Synopsis	Low watermark percentage
Context	**configure** service vprn *string* nat outside pool *string* l2-aware port-block-extension watermarks low *number*
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.

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Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

large-scale

Synopsis	Enter the **large-scale** context
Context	**configure** service vprn *string* nat outside pool *string* large-scale
Tree	large-scale
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-host

Synopsis	Enable the **default-host** context
Context	**configure** service vprn *string* nat outside pool *string* large-scale default-host
Tree	default-host
Description	Commands in this context configure the default DMZ host options. A default DMZ host is a node on the inside to which all unknown traffic is redirected by changing the destination IPv4 address in the traffic header. During this operation, the checksums in the Layer 3 and Layer 4 header (UDP and TCP) are recalculated. Unknown traffic in NAT represent all unmatched traffic arriving from the outside (where there is no pinhole or a matching flow record created by traffic initiated from the inside). The purpose of the default DMZ host is to capture and analyze the unknown traffic as part of threat analysis. The rate of redirected unknown traffic can be restricted by configuration.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside-router-instance *string*

Synopsis	Router instance of the DMZ
Context	**configure** service vprn *string* nat outside pool *string* large-scale default-host inside-router-instance *string*
Tree	inside-router-instance
Description	This command configures the router instance on the inside where the default DMZ host resides.
Introduced	22.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis	IP address of the default DMZ host
Context	**configure** service vprn *string* nat outside pool *string* large-scale default-host ip-address *string*
Tree	ip-address
Description	This command configures the IP address of the default DMZ host. Redirection to the default DMZ host is achieved by replacing the destination IP address in the traffic header in the unknown traffic initiated from the outside with the one of the default DMZ host.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-limit *number*

Synopsis	Rate limit for unknown traffic sent to default DMZ host
Context	**configure** service vprn *string* nat outside pool *string* large-scale default-host rate-limit *number*
Tree	rate-limit
Description	This command configures the rate limit of the unknown traffic sent to the default DMZ host. Unknown traffic sent to the default DMZ host is rate limited by a configurable value expressed in mbps. The rate limit is configurable per NAT pool per ISA, vISA, or ESA-VM.
Range	1 to 10000
Units	megabps
Default	10
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

deterministic

Synopsis	Enter the **deterministic** context
Context	**configure** service vprn *string* nat outside pool *string* large-scale deterministic
Tree	deterministic

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-reservation *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Number of ports per deterministic port-block
Context	**configure** service vprn *string* nat outside pool *string* large-scale deterministic port-reservation *number*
Tree	port-reservation
Range	1 to 65536
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the **watermarks** context
Context	**configure** service vprn *string* nat outside pool *string* large-scale deterministic watermarks
Tree	watermarks
Description	Commands in this context monitor extended (dynamic) port-block utilization per outside IP in a NAT pool in deterministic LSN. High and low thresholds are configured in percentages of total available extended port-blocks per outside IP in a pool. Both values represent extended port-block utilization or occupancy per outside IP in a pool. For the system to generate those events, the NAT event-id 2045 must be enabled through configuration in the log event-control.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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high *number*

Synopsis	High watermark percentage
Context	**configure** service vprn *string* nat outside pool *string* large-scale deterministic watermarks high *number*
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low *number*

Synopsis	Low watermark percentage
Context	**configure** service vprn *string* nat outside pool *string* large-scale deterministic watermarks low *number*
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

redundancy

Synopsis	Enter the **redundancy** context
Context	**configure** service vprn *string* nat outside pool *string* large-scale redundancy
Tree	redundancy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of NAT pool redundancy
Context	**configure** service vprn *string* nat outside pool *string* large-scale redundancy admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Notes	The following elements are part of a choice: (**admin-state**, **export-route**, and **monitor-route**) or **follow**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-route *string*

Synopsis	Route to export to the peer
Context	**configure** service vprn *string* nat outside pool *string* large-scale redundancy export-route *string*
Tree	export-route
Notes	The following elements are part of a choice: (**admin-state**, **export-route**, and **monitor-route**) or **follow**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

follow

Synopsis	Enter the **follow** context
Context	**configure** service vprn *string* nat outside pool *string* large-scale redundancy follow
Tree	follow
Notes	The following elements are part of a choice: (**admin-state**, **export-route**, and **monitor-route**) or **follow**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	Name of the pool where activity is shared

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Context	**configure** service vprn *string* nat outside pool *string* large-scale redundancy follow name *string*
Tree	name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Router instance where the lead pool resides
Context	**configure** service vprn *string* nat outside pool *string* large-scale redundancy follow router-instance *string*
Tree	router-instance
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

monitor-route *string*

Synopsis	Monitor the peer route
Context	**configure** service vprn *string* nat outside pool *string* large-scale redundancy monitor-route *string*
Tree	monitor-route
Notes	The following elements are part of a choice: (**admin-state**, **export-route**, and **monitor-route**) or **follow**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-limit *number*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Maximum number of subscribers per IP address
Context	**configure** service vprn *string* nat outside pool *string* large-scale subscriber-limit *number*
Tree	subscriber-limit
Range	1 to 65535 | 4294967295
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mode *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Mode of operation of this NAT address pool
Context	**configure** service vprn *string* nat outside pool *string* mode *keyword*
Tree	mode
Options	auto, napt, one-to-one
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group *reference*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Create a NAT group
Context	**configure** service vprn *string* nat outside pool *string* nat-group *reference*
Tree	nat-group
Reference	**configure** isa nat-group *number*
Notes	The following elements are part of a mandatory choice: **nat-group** or **wlan-gw-group**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-forwarding

Synopsis	Enter the **port-forwarding** context

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Context	**configure** service vprn *string* nat outside pool *string* port-forwarding
Tree	port-forwarding
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic-block-reservation *boolean*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Reserve dynamic block for subscriber
Context	**configure** service vprn *string* nat outside pool *string* port-forwarding dynamic-block-reservation *boolean*
Tree	dynamic-block-reservation
Description	When configured to **true**, the system reserves dynamic port block when the first port forward for the subscriber is created. The dynamic port block allocation is logged only if the block is being used and mappings are created. Dynamic port block reservation due to the port forward creation but without any dynamic mapping, is not logged. The reserved port block is released only when the last mapping in the block expires and there are no port forwards associated with the subscriber. The de-allocation log (syslog or RADIUS) is generated when the dynamic port block is completely released. Dynamic port block reservations can be enabled only if the configured maximum number of subscribers per outside IP addresses are less than or equal to the maximum number of configured port blocks per outside IP address. When configured to **false**, dynamic port blocks are not reserved when the first port forward for the subscriber is created.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range-end *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	End of the wildcard range for port forwards

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Context	**configure** service vprn *string* nat outside pool *string* port-forwarding range-end *number*
Tree	range-end
Description	This command configures the upper boundary of the wildcard port range dedicated to port forwarding in a NAT pool, whereas the **range-start** command configures the lower boundary (the starting port) of the wildcard port range dedicated to port forwarding in a NAT pool. If unconfigured, the **range-end** implicit value is set to 1023, that represents the end of the well-known port range that is always enabled. Port forwards are supported only in pools in NAPT mode. Pools in 1:1 mode do not support port-forwards.
Range	0 | 1023 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range-start *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Start of the wildcard range for port forwards
Context	**configure** service vprn *string* nat outside pool *string* port-forwarding range-start *number*
Tree	range-start
Description	This command configures the lower boundary (the starting port) of the wildcard port range dedicated to port forwarding in a NAT pool, whereas the **range-end** command configures the upper boundary of the wildcard port range dedicated to port forwarding in a NAT pool. Port 0 is always excluded from the port forwarding range. Port forwards are supported only in pools in Network Address and Port Translation (NAPT) mode. Pools in 1:1 mode do not support configured port forwards.
Range	0 | 1 | 1025 to 65535
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-reservation

Synopsis	Enter the **port-reservation** context
Context	**configure** service vprn *string* nat outside pool *string* port-reservation
Tree	port-reservation

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-blocks *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Port block size for NAT subscribers
Context	**configure** service vprn *string* nat outside pool *string* port-reservation port-blocks *number*
Tree	port-blocks
Description	In CGN, this command specifies the number of port-blocks per outside IP address in the NAT pool. The available ports per outside IP address (the end port minus the upper bound value of the static port-forwarding range) are divided into the number of port blocks specified in this command. This implicitly determines the size of each port block. For L2-aware NAT, this command can be configured only if the port block extensions (extended port blocks) are disabled. You must disable the **l2-aware port-block-extension** hierarchy in the NAT pool.
Range	0 to 64512
Notes	The following elements are part of a choice: **port-blocks** or **ports**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ports *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Size of the port block for NAT subscribers
Context	**configure** service vprn *string* nat outside pool *string* port-reservation ports *number*
Tree	ports

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Description	For carrier-grade NAT (CGN), this command specifies the size of port blocks for NAT subscribes in the NAT pool. For L2-aware NAT, this command specifies the size of the initial port-block of a subscriber in the pool. Additional port blocks (extended port blocks) for the L2-aware subscriber must be explicitly enabled under the **l2-aware port-block-extension** hierarchy in the NAT pool. This command does not affect the size of extended port blocks.
Range	1 to 64512
Notes	The following elements are part of a choice: **port-blocks** or **ports**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT pool type
Context	**configure** service vprn *string* nat outside pool *string* type *keyword*
Tree	type
Options	large-scale, l2-aware, wlan-gw-anchor
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the **watermarks** context
Context	**configure** service vprn *string* nat outside pool *string* watermarks
Tree	watermarks
Description	This command configures watermarks for NAT resources.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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high *number*

Synopsis	High watermark percentage
Context	**configure** service vprn *string* nat outside pool *string* watermarks high *number*
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low *number*

Synopsis	Low watermark percentage
Context	**configure** service vprn *string* nat outside pool *string* watermarks low *number*
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*

WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Create a WLAN GW group for NAT

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Context	**configure** service vprn *string* nat outside pool *string* wlan-gw-group *reference*
Tree	wlan-gw-group
Reference	**configure** isa wlan-gw-group *number*
Notes	The following elements are part of a mandatory choice: **nat-group** or **wlan-gw-group**.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

network

Synopsis	Enter the **network** context
Context	**configure** service vprn *string* network
Tree	network
Introduced	16.0.R4
Platforms	All

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service vprn *string* network ingress
Tree	ingress
Introduced	16.0.R4
Platforms	All

filter

Synopsis	Enter the **filter** context
Context	**configure** service vprn *string* network ingress filter
Tree	filter
Introduced	16.0.R4
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service vprn *string* network ingress filter ip *reference*

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Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R4
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service vprn *string* network ingress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R4
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** service vprn *string* network ingress qos
Tree	qos
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

fp-redirect-group *reference*

Synopsis	The forwarding-plane queue group Policy for this VPRN
Context	**configure** service vprn *string* network ingress qos fp-redirect-group *reference*
Tree	fp-redirect-group
Reference	**configure** qos queue-group-templates ingress queue-group *string*
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

instance *number*

Synopsis	Forwarding plane ingress queue group instance
Context	**configure** service vprn *string* network ingress qos instance *number*

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Tree	instance
Range	1 to 65535
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

network-policy *reference*

Synopsis	Network policy name associated with a VPRN
Context	**configure** service vprn *string* network ingress qos network-policy *reference*
Tree	network-policy
Reference	**configure** qos network *string*
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

urpf-check *boolean*

Synopsis	Enable unicast RPF check of network ingress traffic
Context	**configure** service vprn *string* network ingress urpf-check *boolean*
Tree	urpf-check
Default	true
Introduced	16.0.R4
Platforms	All

network-interface [interface-name] *string*

Synopsis	Enter the **network-interface** list instance
Context	**configure** service vprn *string* network-interface *string*
Tree	network-interface
Introduced	16.0.R1
Platforms	All

[**interface-name**] *string*

Synopsis	Network interface name
Context	**configure** service vprn *string* network-interface *string*

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Tree	network-interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	**configure** service vprn *string* network-interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

cflowd-parameters

Synopsis	Enter the **cflowd-parameters** context
Context	**configure** service vprn *string* network-interface *string* cflowd-parameters
Tree	cflowd-parameters
Introduced	16.0.R1
Platforms	All

sampling [sampling-type] *keyword*

Synopsis	Enter the **sampling** list instance
Context	**configure** service vprn *string* network-interface *string* cflowd-parameters sampling *keyword*
Tree	sampling
Introduced	16.0.R1
Platforms	All

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[**sampling-type**] *keyword*

Synopsis	Traffic sampling type
Context	**configure** service vprn *string* network-interface *string* cflowd-parameters sampling *keyword*
Tree	sampling
Description	This command configures the type of traffic to be sampled on the associated IP interface.
Options	unicast, multicast, both
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

direction *keyword*

Synopsis	Direction of traffic for cflowd sampling
Context	**configure** service vprn *string* network-interface *string* cflowd-parameters sampling *keyword* direction *keyword*
Tree	direction
Description	This command configures the direction in which sampling occurs on the associated IP interfaces.
Options	ingress-only, egress-only, both
Default	ingress-only
Introduced	16.0.R1
Platforms	All

sample-profile *(keyword | number)*

Synopsis	Sample profile ID
Context	**configure** service vprn *string* network-interface *string* cflowd-parameters sampling *keyword* sample-profile *(keyword | number)*
Tree	sample-profile
Description	This command defines the sampling rate profile associated with this interface.
Max. Range	0 to 4294967295
Options	1
Introduced	19.5.R1
Platforms	All

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type *keyword*

Synopsis	Type of cflowd analysis
Context	**configure** service vprn *string* network-interface *string* cflowd-parameters sampling *keyword* type *keyword*
Tree	type
Description	This command configures the cflowd sampling type on the associated IP interface.
Options	acl, interface
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

cpu-protection *reference*

Synopsis	CPM Protection policy associated with an interface
Context	**configure** service vprn *string* network-interface *string* cpu-protection *reference*
Tree	cpu-protection
Reference	**configure** system security cpu-protection policy *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* network-interface *string* description *string*
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

dist-cpu-protection *reference*

Synopsis	Distributed CPU protection policy
Context	**configure** service vprn *string* network-interface *string* dist-cpu-protection *reference*
Tree	dist-cpu-protection

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Reference	**configure** system security dist-cpu-protection policy *string*
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the **egress** context
Context	**configure** service vprn *string* network-interface *string* egress
Tree	egress
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the **filter** context
Context	**configure** service vprn *string* network-interface *string* egress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service vprn *string* network-interface *string* egress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	All

hold-time

Synopsis	Enter the **hold-time** context
Context	**configure** service vprn *string* network-interface *string* hold-time
Tree	hold-time
Introduced	16.0.R1

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Platforms	All

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service vprn *string* network-interface *string* hold-time ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

down

Synopsis	Enter the **down** context
Context	**configure** service vprn *string* network-interface *string* hold-time ipv4 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the **init-only** command.
Introduced	16.0.R1
Platforms	All

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	**configure** service vprn *string* network-interface *string* hold-time ipv4 down init-only *boolean*
Tree	init-only
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Down hold time for the IP interface

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Context	**configure** service vprn *string* network-interface *string* hold-time ipv4 down seconds *number*
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

up

Synopsis	Enter the **up** context
Context	**configure** service vprn *string* network-interface *string* hold-time ipv4 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Up hold time for the IP interface
Context	**configure** service vprn *string* network-interface *string* hold-time ipv4 up seconds *number*
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service vprn *string* network-interface *string* ingress
Tree	ingress
Introduced	16.0.R1

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Platforms	All

filter

Synopsis	Enter the **filter** context
Context	**configure** service vprn *string* network-interface *string* ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service vprn *string* network-interface *string* ingress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	All

ingress-stats *boolean*

Synopsis	Collect ingress statistics
Context	**configure** service vprn *string* network-interface *string* ingress-stats *boolean*
Tree	ingress-stats
Default	false
Introduced	16.0.R1
Platforms	All

ip-mtu *number*

Synopsis	IP MTU applied to outgoing packets
Context	**configure** service vprn *string* network-interface *string* ip-mtu *number*
Tree	ip-mtu
Range	512 to 9786
Units	bytes

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Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service vprn *string* network-interface *string* ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

allow-directed-broadcasts *boolean*

Synopsis	Accept broadcasts that are directed to this interface
Context	**configure** service vprn *string* network-interface *string* ipv4 allow-directed-broadcasts *boolean*
Tree	allow-directed-broadcasts
Default	false
Introduced	16.0.R1
Platforms	All

bfd

Synopsis	Enter the **bfd** context
Context	**configure** service vprn *string* network-interface *string* ipv4 bfd
Tree	bfd
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	**configure** service vprn *string* network-interface *string* ipv4 bfd admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable

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Introduced	16.0.R1
Platforms	All

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	**configure** service vprn *string* network-interface *string* ipv4 bfd echo-receive *number*
Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	**configure** service vprn *string* network-interface *string* ipv4 bfd multiplier *number*
Tree	multiplier
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	16.0.R1
Platforms	All

receive *number*

Synopsis	BFD receive interval over this interface
Context	**configure** service vprn *string* network-interface *string* ipv4 bfd receive *number*
Tree	receive
Description	This command specifies the receive interval for the BFD session. On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.
Range	10 to 100000
Units	milliseconds

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Default	100
Introduced	16.0.R1
Platforms	All

transmit-interval *number*

Synopsis	BFD transmit interval over this interface
Context	**configure** service vprn *string* network-interface *string* ipv4 bfd transmit-interval *number*
Tree	transmit-interval
Description	This command configures the transmit intervals. On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Local termination point for the BFD session
Context	**configure** service vprn *string* network-interface *string* ipv4 bfd type *keyword*
Tree	type
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: • **auto** (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the **cpm-np**. • **cpm-np** – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems. • **fp** – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.
Options	cpm-np, auto, fp
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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icmp

Synopsis	Enter the **icmp** context
Context	**configure** service vprn *string* network-interface *string* ipv4 icmp
Tree	icmp
Introduced	16.0.R1
Platforms	All

mask-reply *boolean*

Synopsis	Allow responses to ICMP mask requests on the interface
Context	**configure** service vprn *string* network-interface *string* ipv4 icmp mask-reply *boolean*
Tree	mask-reply
Default	true
Introduced	16.0.R1
Platforms	All

param-problem

Synopsis	Enter the **param-problem** context
Context	**configure** service vprn *string* network-interface *string* ipv4 icmp param-problem
Tree	param-problem
Description	Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sent Parameter Problem messages
Context	**configure** service vprn *string* network-interface *string* ipv4 icmp param-problem admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1

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Platforms	All

number *number*

Synopsis	Maximum number of Parameter Problem messages to send
Context	**configure** service vprn *string* network-interface *string* ipv4 icmp param-problem number *number*
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit number of Parameter Problem messages
Context	**configure** service vprn *string* network-interface *string* ipv4 icmp param-problem seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

redirects

Synopsis	Enter the **redirects** context
Context	**configure** service vprn *string* network-interface *string* ipv4 icmp redirects
Tree	redirects
Description	Commands in this context configure the settings for ICMP redirect messages generated by the interface. The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of sending ICMP redirect messages
Context	**configure** service vprn *string* network-interface *string* ipv4 icmp redirects admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum number of ICMP redirect messages to send
Context	**configure** service vprn *string* network-interface *string* ipv4 icmp redirects number *number*
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit the number of ICMP redirect messages
Context	**configure** service vprn *string* network-interface *string* ipv4 icmp redirects seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

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ttl-expired

Synopsis	Enter the **ttl-expired** context
Context	**configure** service vprn *string* network-interface *string* ipv4 icmp ttl-expired
Tree	ttl-expired
Description	Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sending TTL expired messages
Context	**configure** service vprn *string* network-interface *string* ipv4 icmp ttl-expired admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum number of TTL expired messages to send
Context	**configure** service vprn *string* network-interface *string* ipv4 icmp ttl-expired number *number*
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit the number of TTL expired messages
Context	**configure** service vprn *string* network-interface *string* ipv4 icmp ttl-expired seconds *number*

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Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

unreachables

Synopsis	Enter the **unreachables** context
Context	**configure** service vprn *string* network-interface *string* ipv4 icmp unreachables
Tree	unreachables
Description	Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sending unreachable messages
Context	**configure** service vprn *string* network-interface *string* ipv4 icmp unreachables admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum number of unreachable messages to send
Context	**configure** service vprn *string* network-interface *string* ipv4 icmp unreachables number *number*
Tree	number
Range	10 to 2000
Default	100

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Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time to limit the number of ICMP unreachable messages
Context	**configure** service vprn *string* network-interface *string* ipv4 icmp unreachables seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

neighbor-discovery

Synopsis	Enter the **neighbor-discovery** context
Context	**configure** service vprn *string* network-interface *string* ipv4 neighbor-discovery
Tree	neighbor-discovery
Introduced	16.0.R1
Platforms	All

retry-timer *number*

Synopsis	ARP retry interval
Context	**configure** service vprn *string* network-interface *string* ipv4 neighbor-discovery retry-timer *number*
Tree	retry-timer
Range	1 to 300
Units	deciseconds
Default	50
Introduced	16.0.R1
Platforms	All

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static-neighbor [ipv4-address] *string*

Synopsis	Enter the **static-neighbor** list instance
Context	**configure** service vprn *string* network-interface *string* ipv4 neighbor-discovery static-neighbor *string*
Tree	static-neighbor
Introduced	16.0.R1
Platforms	All

[**ipv4-address**] *string*

Synopsis	IPv4 address that corresponds to the physical address
Context	**configure** service vprn *string* network-interface *string* ipv4 neighbor-discovery static-neighbor *string*
Tree	static-neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

mac-address *string*

Synopsis	MAC address for the static neighbor
Context	**configure** service vprn *string* network-interface *string* ipv4 neighbor-discovery static-neighbor *string* mac-address *string*
Tree	mac-address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout for an ARP entry learned on the interface
Context	**configure** service vprn *string* network-interface *string* ipv4 neighbor-discovery timeout *number*
Tree	timeout
Description	This command configures the minimum time an ARP entry learned on the IP interface is stored in the ARP table. ARP entries are automatically refreshed when an ARP request

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	or gratuitous ARP is seen by an IP host. Otherwise, the ARP entry is aged from the ARP table.
Range	0 to 65535
Units	seconds
Default	14400
Introduced	16.0.R1
Platforms	All

primary

Synopsis	Enable the **primary** context
Context	**configure** service vprn *string* network-interface *string* ipv4 primary
Tree	primary
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Primary IPv4 address assigned to the interface
Context	**configure** service vprn *string* network-interface *string* ipv4 primary address *string*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

broadcast *keyword*

Synopsis	Broadcast address format
Context	**configure** service vprn *string* network-interface *string* ipv4 primary broadcast *keyword*
Tree	broadcast
Options	all-ones, host-ones
Default	host-ones
Introduced	16.0.R1
Platforms	All

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prefix-length *number*

Synopsis	IPv4 address prefix length
Context	**configure** service vprn *string* network-interface *string* ipv4 primary prefix-length *number*
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

secondary [address] *string*

Synopsis	Enter the **secondary** list instance
Context	**configure** service vprn *string* network-interface *string* ipv4 secondary *string*
Tree	secondary
Introduced	16.0.R1
Platforms	All

[**address**] *string*

Synopsis	Secondary IPv4 address assigned to the interface
Context	**configure** service vprn *string* network-interface *string* ipv4 secondary *string*
Tree	secondary
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

broadcast *keyword*

Synopsis	Broadcast address format
Context	**configure** service vprn *string* network-interface *string* ipv4 secondary *string* broadcast *keyword*
Tree	broadcast
Options	all-ones, host-ones
Default	host-ones
Introduced	16.0.R1

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Platforms	All

igp-inhibit *boolean*

Synopsis	Disable the running IGP from recognizing secondary IP
Context	**configure** service vprn *string* network-interface *string* ipv4 secondary *string* igp-inhibit *boolean*
Tree	igp-inhibit
Description	When configured to **true**, the running IGP does not recognize the secondary IP address as a local interface.
Default	false
Introduced	16.0.R1
Platforms	All

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	**configure** service vprn *string* network-interface *string* ipv4 secondary *string* prefix-length *number*
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

tcp-mss *number*

Synopsis	TCP maximum segment size for the interface
Context	**configure** service vprn *string* network-interface *string* ipv4 tcp-mss *number*
Tree	tcp-mss
Range	384 to 9746
Introduced	16.0.R1
Platforms	All

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urpf-check

Synopsis	Enable the **urpf-check** context
Context	**configure** service vprn *string* network-interface *string* ipv4 urpf-check
Tree	urpf-check
Introduced	16.0.R1
Platforms	All

ignore-default *boolean*

Synopsis	Ignore default route when performing a uRPF check
Context	**configure** service vprn *string* network-interface *string* ipv4 urpf-check ignore-default *boolean*
Tree	ignore-default
Default	false
Introduced	16.0.R1
Platforms	All

mode *keyword*

Synopsis	Unicast RPF check mode
Context	**configure** service vprn *string* network-interface *string* ipv4 urpf-check mode *keyword*
Tree	mode
Options	strict, loose, strict-no-ecmp
Default	strict
Introduced	16.0.R1
Platforms	All

lag

Synopsis	Enter the **lag** context
Context	**configure** service vprn *string* network-interface *string* lag
Tree	lag
Introduced	16.0.R1
Platforms	All

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link-map-profile *number*

Synopsis	LAG link map profile for a SAP or network interface
Context	**configure** service vprn *string* network-interface *string* lag link-map-profile *number*
Tree	link-map-profile
Description	This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration. If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.
Range	1 to 64
Introduced	16.0.R1
Platforms	All

per-link-hash

Synopsis	Enter the **per-link-hash** context
Context	**configure** service vprn *string* network-interface *string* lag per-link-hash
Tree	per-link-hash
Introduced	16.0.R1
Platforms	All

class *number*

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	**configure** service vprn *string* network-interface *string* lag per-link-hash class *number*
Tree	class
Range	1 to 3
Default	1
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	**configure** service vprn *string* network-interface *string* lag per-link-hash weight *number*

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Tree	weight
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	All

load-balancing

Synopsis	Enter the **load-balancing** context
Context	**configure** service vprn *string* network-interface *string* load-balancing
Tree	load-balancing
Introduced	16.0.R1
Platforms	All

flow-label-load-balancing *boolean*

Synopsis	Enable flow label load balancing
Context	**configure** service vprn *string* network-interface *string* load-balancing flow-label-load-balancing *boolean*
Tree	flow-label-load-balancing
Description	When configured to **true**, the router enables load balancing in ECMP and LAG based on the output of a hash performed on the triplet (SA, DA, flow label) in the header of an IPv6 packet received on an IES, VPRN, R-VPLS, CSC, or network interface. When configured to **false**, the router disables load balancing in ECMP and LAG.
Default	false
Introduced	21.5.R1
Platforms	All

ip-load-balancing *keyword*

Synopsis	IP load-balancing algorithm
Context	**configure** service vprn *string* network-interface *string* load-balancing ip-load-balancing *keyword*
Tree	ip-load-balancing
Description	This command specifies whether to include the source address, destination address, or both in LAG or ECMP hash on IP interfaces. Additionally, when the **l4-load-balancing**

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	command is enabled, this command also includes the source or destination port in the hash inputs.
Options	both, destination, source, inner-ip
Default	both
Introduced	16.0.R3
Platforms	All

lsr-load-balancing *keyword*

Synopsis	LSR load-balancing algorithm
Context	**configure** service vprn *string* network-interface *string* load-balancing lsr-load-balancing *keyword*
Tree	lsr-load-balancing
Description	This command specifies whether the IP header is used in the LAG and ECMP LSR hashing algorithm. This is the per-interface setting.
Options	lbl-only, lbl-ip, ip-only, eth-encap-ip, lbl-ip-l4-teid
Introduced	16.0.R1
Platforms	All

spi-load-balancing *boolean*

Synopsis	Enable SPI use in hashing
Context	**configure** service vprn *string* network-interface *string* load-balancing spi-load-balancing *boolean*
Tree	spi-load-balancing
Description	When configured to **true**, the router uses the Security Parameter Index (SPI) in hashing for ESP and AH encrypted IPv4 and IPv6 traffic. This is a per-interface setting.
Default	false
Introduced	16.0.R1
Platforms	All

teid-load-balancing *boolean*

Synopsis	Enable use of TEID in hashing
Context	**configure** service vprn *string* network-interface *string* load-balancing teid-load-balancing *boolean*
Tree	teid-load-balancing

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Default	false
Introduced	16.0.R1
Platforms	All

loopback

Synopsis	Use interface as a loopback interface
Context	**configure** service vprn *string* network-interface *string* loopback
Tree	loopback
Notes	The following elements are part of a choice: **loopback** or **port**.
Introduced	16.0.R1
Platforms	All

mac *string*

Synopsis	MAC address for the interface
Context	**configure** service vprn *string* network-interface *string* mac *string*
Tree	mac
Introduced	16.0.R1
Platforms	All

port *string*

Synopsis	Port to bind the interface
Context	**configure** service vprn *string* network-interface *string* port *string*
Tree	port
String Length	1 to 45
Notes	The following elements are part of a choice: **loopback** or **port**.
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** service vprn *string* network-interface *string* qos

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Tree	qos
Introduced	16.0.R1
Platforms	All

egress-instance *number*

Synopsis	Port egress queue group instance for this interface
Context	**configure** service vprn *string* network-interface *string* qos egress-instance *number*
Tree	egress-instance
Description	This command specifies which instance to associate with this specific network IP interface since multiple instances of the same egress queue-group can be applied to the same port.
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

egress-port-redirect-group *reference*

Synopsis	QoS queue group name
Context	**configure** service vprn *string* network-interface *string* qos egress-port-redirect-group *reference*
Tree	egress-port-redirect-group
Description	This command configures the egress queue group used for all egress forwarding-class redirections specified within the network QoS policy ID. The specified queue group name must exist as an egress queue group applied to the egress context of the port associated with the IP interface.
Reference	**configure** qos queue-group-templates egress queue-group *string*
Introduced	16.0.R1
Platforms	All

ingress-fp-redirect-group *reference*

Synopsis	Forwarding plane queue group policy for the interface
Context	**configure** service vprn *string* network-interface *string* qos ingress-fp-redirect-group *reference*
Tree	ingress-fp-redirect-group

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Description	This command configures the ingress queue-group used for all ingress forwarding-class redirections specified within the network QoS policy ID. The specified queue group name must exist as an ingress queue group applied to the ingress context of the forwarding plane associated with the IP interface.
Reference	**configure** qos queue-group-templates ingress queue-group *string*
Introduced	16.0.R1
Platforms	All

ingress-instance *number*

Synopsis	Forwarding plane ingress queue group for this interface
Context	**configure** service vprn *string* network-interface *string* qos ingress-instance *number*
Tree	ingress-instance
Description	This command configures which instance to associate with this specific network IP interface. An operator can apply multiple instances of the same ingress queue group to the same forwarding plane.
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

network-policy *reference*

Synopsis	Network policy name associated with a network interface
Context	**configure** service vprn *string* network-interface *string* qos network-policy *reference*
Tree	network-policy
Description	This command associates an existing network policy name with the IP interface.
Reference	**configure** qos network *string*
Introduced	16.0.R1
Platforms	All

tos-marking-state *keyword*

Synopsis	TOS marking state
Context	**configure** service vprn *string* network-interface *string* tos-marking-state *keyword*
Tree	tos-marking-state
Options	trusted, untrusted

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Default	trusted
Introduced	16.0.R1
Platforms	All

ntp

Synopsis	Enable the **ntp** context
Context	**configure** service vprn *string* ntp
Tree	ntp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of NTP execution
Context	**configure** service vprn *string* ntp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

authenticate *boolean*

Synopsis	Authentication of NTP PDUs when acting as a server
Context	**configure** service vprn *string* ntp authenticate *boolean*
Tree	authenticate
Default	false
Introduced	16.0.R1
Platforms	All

authentication-check *boolean*

Synopsis	Authenticate NTP PDUs and reject mismatches
Context	**configure** service vprn *string* ntp authentication-check *boolean*

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Tree	authentication-check
Default	true
Introduced	16.0.R1
Platforms	All

authentication-key [key-id] *number*

Synopsis	Enter the **authentication-key** list instance
Context	**configure** service vprn *string* ntp authentication-key *number*
Tree	authentication-key
Introduced	16.0.R1
Platforms	All

[**key-id**] *number*

Synopsis	Authentication key ID used for NTP packets
Context	**configure** service vprn *string* ntp authentication-key *number*
Tree	authentication-key
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

key *string*

Synopsis	Key to authenticate NTP packets
Context	**configure** service vprn *string* ntp authentication-key *number* key *string*
Tree	key
String Length	1 to 71
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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type *keyword*

Synopsis	Authentication method to authenticate NTP packet
Context	**configure** service vprn *string* ntp authentication-key *number* type *keyword*
Tree	type
Options	des, message-digest
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

broadcast [interface-name] *reference*

Synopsis	Enter the **broadcast** list instance
Context	**configure** service vprn *string* ntp broadcast *reference*
Tree	broadcast
Introduced	16.0.R1
Platforms	All

[**interface-name**] *reference*

Synopsis	Local interface used to transmit NTP broadcast packets
Context	**configure** service vprn *string* ntp broadcast *reference*
Tree	broadcast
Reference	**configure** service vprn *string* interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

key-id *reference*

Synopsis	Authentication key and type used by the node
Context	**configure** service vprn *string* ntp broadcast *reference* key-id *reference*
Tree	key-id
Reference	**configure** service vprn *string* ntp authentication-key *number*
Introduced	16.0.R1

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Platforms	All

ttl *number*

Synopsis	TTL of messages transmitted by the broadcast address
Context	**configure** service vprn *string* ntp broadcast *reference* ttl *number*
Tree	ttl
Range	1 to 255
Default	127
Introduced	16.0.R1
Platforms	All

version *number*

Synopsis	NTP version number generated by the node
Context	**configure** service vprn *string* ntp broadcast *reference* version *number*
Tree	version
Range	2 to 4
Default	4
Introduced	16.0.R1
Platforms	All

ospf [ospf-instance] *number*

Synopsis	Enter the **ospf** list instance
Context	**configure** service vprn *string* ospf *number*
Tree	ospf
Max. Instances	32
Introduced	16.0.R1
Platforms	All

[**ospf-instance**] *number*

Synopsis	Specifies the value of the integrated OSPF instance.
Context	**configure** service vprn *string* ospf *number*

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Tree	ospf
Range	0
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OSPF instance
Context	**configure** service vprn *string* ospf *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

advertise-router-capability *keyword*

Synopsis	Allow router advertisement capabilities
Context	**configure** service vprn *string* ospf *number* advertise-router-capability *keyword*
Tree	advertise-router-capability
Options	false, link, area, as
Default	false
Introduced	16.0.R1
Platforms	All

area [area-id] *string*

Synopsis	Enter the **area** list instance
Context	**configure** service vprn *string* ospf *number* area *string*
Tree	area
Introduced	16.0.R1
Platforms	All

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[**area-id**] *string*

Synopsis	Area-ID attribute
Context	**configure** service vprn *string* ospf *number* area *string*
Tree	area
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise-ne-profile *reference*

Synopsis	Network element profile to be advertised
Context	**configure** service vprn *string* ospf *number* area *string* advertise-ne-profile *reference*
Tree	advertise-ne-profile
Reference	**configure** system network-element-discovery profile *string*
Introduced	19.5.R1
Platforms	All

advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	**configure** service vprn *string* ospf *number* area *string* advertise-router-capability *boolean*
Tree	advertise-router-capability
Default	true
Introduced	16.0.R1
Platforms	All

area-range [ip-prefix-mask] *string*

Synopsis	Enter the **area-range** list instance
Context	**configure** service vprn *string* ospf *number* area *string* area-range *string*
Tree	area-range
Introduced	16.0.R1
Platforms	All

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[**ip-prefix-mask**] *string*

Synopsis	IPv4 unicast address prefix and mask
Context	**configure** service vprn *string* ospf *number* area *string* area-range *string*
Tree	area-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	**configure** service vprn *string* ospf *number* area *string* area-range *string* advertise *boolean*
Tree	advertise
Default	true
Introduced	16.0.R1
Platforms	All

blackhole-aggregate *boolean*

Synopsis	Install a low priority blackhole route to avoid loops
Context	**configure** service vprn *string* ospf *number* area *string* blackhole-aggregate *boolean*
Tree	blackhole-aggregate
Default	true
Introduced	16.0.R1
Platforms	All

export-policy *reference*

Synopsis	Type 3 Summary-LSA/OSPFv3 inter-area-prefix-LSA route
Context	**configure** service vprn *string* ospf *number* area *string* export-policy *reference*
Tree	export-policy
Reference	**configure** policy-options policy-statement *string*

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Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Route imported as Summary Type 3/Inter-Area-Prefix-LSA
Context	**configure** service vprn *string* ospf *number* area *string* import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

interface [interface-name] *string*

Synopsis	Enter the **interface** list instance
Context	**configure** service vprn *string* ospf *number* area *string* interface *string*
Tree	interface
Introduced	16.0.R1
Platforms	All

[**interface-name**] *string*

Synopsis	IP interface name
Context	**configure** service vprn *string* ospf *number* area *string* interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the OSPF interface
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* advertise-router-capability *boolean*
Tree	advertise-router-capability
Default	true
Introduced	16.0.R1
Platforms	All

advertise-subnet *boolean*

Synopsis	Advertise point-to-point interfaces as subnet routes
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* advertise-subnet *boolean*
Tree	advertise-subnet
Default	true
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Authentication key
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* authentication-key *string*

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Tree	authentication-key
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* authentication-keychain *reference*
Tree	authentication-keychain
Reference	**configure** system security keychains keychain *string*
Introduced	16.0.R3
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type used on OSPF interface
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* authentication-type *keyword*
Tree	authentication-type
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enable the **bfd-liveness** context
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

remain-down-on-failure *boolean*

Synopsis	Force adjacency down on failure until session returns

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Context	**configure** service vprn *string* ospf *number* area *string* interface *string* bfd-liveness remain-down-on-failure *boolean*
Tree	remain-down-on-failure
Default	false
Introduced	16.0.R1
Platforms	All

strict *boolean*

Synopsis	Enable BFD strict mode
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* bfd-liveness strict *boolean*
Tree	strict
Description	When configured to **true**, the system uses BFD strict-mode. BFD strict-mode mandates that an active BFD session must exist between the OSPF neighbors before establishing a full adjacency. When configured to **true**, the router uses Link-Local Signaling (LLS) with the B-flag set to instruct the OSPF neighbors that BFD must be enabled on the link. BFD strict-mode requires both sides to have the B-flag set. During OSPFv3 BFD strict-mode operations, the router advertises the local interface IPv4 address TLV using LLS, but the SR OS router continues to use IPv6-based BFD sessions for both the IPv4 and IPv6 address families.
Default	false
Introduced	23.3.R1
Platforms	All

strict-mode-holddown *number*

Synopsis	Adjacency up time delay after BFD session establishment
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* bfd-liveness strict-mode-holddown *number*
Tree	strict-mode-holddown
Description	This command configures a delay timer before bringing up the OSPF adjacency after the BFD session establishment. Holddown helps mitigate potential routing churn when BFD sessions are unstable. The holddown timer is reset when a BFD session operationally toggles.
Range	1 to 600
Units	seconds
Introduced	23.3.R1

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Platforms	All

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* dead-interval *number*
Tree	dead-interval
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

hello-interval *number*

Synopsis	Time between OSPF Hellos of this interface
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* hello-interval *number*
Tree	hello-interval
Range	1 to 65535
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

interface-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Interface type
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* interface-type *keyword*
Tree	interface-type
Description	This command specifies the interface type. **broadcast** - Broadcast network

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To significantly improve adjacency forming and network convergence, configure a network as point-to-point if only two routers are connected, even if the network is a broadcast media such as Ethernet.

non-broadcast - Non-broadcast network

point-to-point - Point-to-point link

Set the interface type of an Ethernet link to **point-to-point** to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided is used as a point-to-point.

p2mp-nbma - Point-to-multipoint on a link without broadcast or multicast support

No designated router or backup designated router is elected on this type of interface and all OSPF neighbors connect through individual point-to-point links. Only VPRN and IES services interfaces support this interface type.

secondary - Multiple secondary adjacencies allowed

A **secondary** interface allows multiple secondary adjacencies, in addition to the primary adjacency, to be established over a single IP interface. This interface type can also be applied to the system interface and to loopback interfaces to allow them to participate in multiple areas, although no adjacencies are formed over these types of interfaces.

Options	broadcast, non-broadcast, point-to-point, secondary, p2mp-nbma
Introduced	16.0.R1
Platforms	All

load-balancing-weight *number*

Synopsis	Configure load-balancing-weight.
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* load-balancing-weight *number*
Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	20.2.R1
Platforms	All

loopfree-alternate

Synopsis	Enter the **loopfree-alternate** context
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* loopfree-alternate
Tree	loopfree-alternate
Introduced	16.0.R3
Platforms	All

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exclude *boolean*

Synopsis	Enable fast reroute at OSPF primary interface level
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* loopfree-alternate exclude *boolean*
Tree	exclude
Default	false
Introduced	16.0.R3
Platforms	All

policy-map

Synopsis	Enable the **policy-map** context
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* loopfree-alternate policy-map
Tree	policy-map
Introduced	16.0.R3
Platforms	All

route-nh-template *reference*

Synopsis	Route next hop policy template name
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* loopfree-alternate policy-map route-nh-template *reference*
Tree	route-nh-template
Reference	**configure** routing-options route-next-hop-policy template *string*
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

lsa-filter-out *keyword*

Synopsis	LSA flooding reduction
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* lsa-filter-out *keyword*
Tree	lsa-filter-out

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Options	none, all, except-own-rtrlsa, except-own-rtrlsa-and-defaults
Default	none
Introduced	16.0.R1
Platforms	All

message-digest-key [key-id] *number*

Synopsis	Enter the **message-digest-key** list instance
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* message-digest-key *number*
Tree	message-digest-key
Introduced	16.0.R1
Platforms	All

[**key-id**] *number*

Synopsis	Message digest index
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* message-digest-key *number*
Tree	message-digest-key
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

md5 *string*

Synopsis	MD5 hash key
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* message-digest-key *number* md5 *string*
Tree	md5
String Length	1 to 51
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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metric *number*

Synopsis	Route cost metric for the interface
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* metric *number*
Tree	metric
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

mtu *number*

Synopsis	MTU for the OSPF to use on the interface
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* mtu *number*
Tree	mtu
Range	512 to 9786
Introduced	16.0.R1
Platforms	All

neighbor [address] *string*

Synopsis	Add a list entry for **neighbor**
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* neighbor *string*
Tree	neighbor
Introduced	16.0.R1
Platforms	All

[**address**] *string*

Synopsis	IPv4 address of the OSPFv2 neighbor
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* neighbor *string*
Tree	neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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passive *boolean*

Synopsis	Advertise passive interfaces as OSPF interfaces
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* passive *boolean*
Tree	passive
Introduced	16.0.R1
Platforms	All

poll-interval *number*

Synopsis	Interval for Hellos to non-adjacent OSPF NBMA neighbor
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* poll-interval *number*
Tree	poll-interval
Max. Range	0 to 4294967295
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Interface priority in the DR election on the subnet
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* priority *number*
Tree	priority
Range	0 to 255
Default	1
Introduced	16.0.R1
Platforms	All

retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* retransmit-interval *number*
Tree	retransmit-interval

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Range	1 to 1800
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

rib-priority *keyword*

Synopsis	RIB priority for OSPF
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* rib-priority *keyword*
Tree	rib-priority
Options	high
Introduced	16.0.R1
Platforms	All

transit-delay *number*

Synopsis	Required LSA transmit time
Context	**configure** service vprn *string* ospf *number* area *string* interface *string* transit-delay *number*
Tree	transit-delay
Range	1 to 1800
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

loopfree-alternate-exclude *boolean*

Synopsis	Exclude interfaces in OSPF areas in SPF LFA computation
Context	**configure** service vprn *string* ospf *number* area *string* loopfree-alternate-exclude *boolean*
Tree	loopfree-alternate-exclude
Default	false
Introduced	16.0.R1

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Platforms	All

nssa

Synopsis	Enable the **nssa** context
Context	**configure** service vprn *string* ospf *number* area *string* nssa
Tree	nssa
Introduced	16.0.R1
Platforms	All

area-range [ip-prefix-mask] *string*

Synopsis	Enter the **area-range** list instance
Context	**configure** service vprn *string* ospf *number* area *string* nssa area-range *string*
Tree	area-range
Introduced	16.0.R1
Platforms	All

[ip-prefix-mask] *string*

Synopsis	IPv4 unicast address prefix and mask
Context	**configure** service vprn *string* ospf *number* area *string* nssa area-range *string*
Tree	area-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	**configure** service vprn *string* ospf *number* area *string* nssa area-range *string* advertise *boolean*
Tree	advertise
Default	true
Introduced	16.0.R1

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Platforms	All

originate-default-route

Synopsis	Enable the **originate-default-route** context
Context	**configure** service vprn *string* ospf *number* area *string* nssa originate-default-route
Tree	originate-default-route
Introduced	16.0.R1
Platforms	All

adjacency-check *boolean*

Synopsis	Perform adjacency checks before originating a default route
Context	**configure** service vprn *string* ospf *number* area *string* nssa originate-default-route adjacency-check *boolean*
Tree	adjacency-check
Default	false
Introduced	16.0.R1
Platforms	All

type-nssa *boolean*

Synopsis	Generate a default route using NSSA-LSA type
Context	**configure** service vprn *string* ospf *number* area *string* nssa originate-default-route type-nssa *boolean*
Tree	type-nssa
Default	false
Introduced	16.0.R1
Platforms	All

redistribute-external *boolean*

Synopsis	Redistribute external routes into the NSSA
Context	**configure** service vprn *string* ospf *number* area *string* nssa redistribute-external *boolean*
Tree	redistribute-external
Default	true

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Introduced	16.0.R1
Platforms	All

summaries *boolean*

Synopsis	Send summary (Type 3) LSAs into the NSSA on an ABR
Context	**configure** service vprn *string* ospf *number* area *string* nssa summaries *boolean*
Tree	summaries
Default	true
Introduced	16.0.R1
Platforms	All

sham-link [interface] *string* ip-address *string*

Synopsis	Enter the **sham-link** list instance
Context	**configure** service vprn *string* ospf *number* area *string* sham-link *string* ip-address *string*
Tree	sham-link
Introduced	16.0.R1
Platforms	All

[**interface**] *string*

Synopsis	Local interface name used for the sham-link
Context	**configure** service vprn *string* ospf *number* area *string* sham-link *string* ip-address *string*
Tree	sham-link
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

ip-address *string*

Synopsis	IP address of the sham-link neighbor
Context	**configure** service vprn *string* ospf *number* area *string* sham-link *string* ip-address *string*
Tree	sham-link

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OSPF interface
Context	**configure** service vprn *string* ospf *number* area *string* sham-link *string* ip-address *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Authentication key to send and receive OSPF packets
Context	**configure** service vprn *string* ospf *number* area *string* sham-link *string* ip-address *string* authentication-key *string*
Tree	authentication-key
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	**configure** service vprn *string* ospf *number* area *string* sham-link *string* ip-address *string* authentication-keychain *reference*
Tree	authentication-keychain
Reference	**configure** system security keychains keychain *string*
Introduced	16.0.R3
Platforms	All

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authentication-type *keyword*

Synopsis	Authentication type to be used
Context	**configure** service vprn *string* ospf *number* area *string* sham-link *string* ip-address *string* authentication-type *keyword*
Tree	authentication-type
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	**configure** service vprn *string* ospf *number* area *string* sham-link *string* ip-address *string* dead-interval *number*
Tree	dead-interval
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

hello-interval *number*

Synopsis	Time between OSPF Hellos of this interface
Context	**configure** service vprn *string* ospf *number* area *string* sham-link *string* ip-address *string* hello-interval *number*
Tree	hello-interval
Range	1 to 65535
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

message-digest-key [key-id] *number*

Synopsis	Enter the **message-digest-key** list instance

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Context	**configure** service vprn *string* ospf *number* area *string* sham-link *string* ip-address *string* message-digest-key *number*
Tree	message-digest-key
Introduced	16.0.R1
Platforms	All

[**key-id**] *number*

Synopsis	Message digest index
Context	**configure** service vprn *string* ospf *number* area *string* sham-link *string* ip-address *string* message-digest-key *number*
Tree	message-digest-key
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

md5 *string*

Synopsis	MD5 key or hash key
Context	**configure** service vprn *string* ospf *number* area *string* sham-link *string* ip-address *string* message-digest-key *number* md5 *string*
Tree	md5
String Length	1 to 51
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	Explicit route cost metric that is applied to the sham link
Context	**configure** service vprn *string* ospf *number* area *string* sham-link *string* ip-address *string* metric *number*
Tree	metric
Range	1 to 65535
Default	1

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Introduced	16.0.R1
Platforms	All

retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	**configure** service vprn *string* ospf *number* area *string* sham-link *string* ip-address *string* retransmit-interval *number*
Tree	retransmit-interval
Range	1 to 1800
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

transit-delay *number*

Synopsis	Required LSA transmit time
Context	**configure** service vprn *string* ospf *number* area *string* sham-link *string* ip-address *string* transit-delay *number*
Tree	transit-delay
Range	1 to 1800
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

stub

Synopsis	Enable the **stub** context
Context	**configure** service vprn *string* ospf *number* area *string* stub
Tree	stub
Introduced	16.0.R1
Platforms	All

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default-metric *number*

Synopsis	Metric used by ABR for default route into the stub area
Context	**configure** service vprn *string* ospf *number* area *string* stub default-metric *number*
Tree	default-metric
Range	1 to 16777214
Default	1
Introduced	16.0.R1
Platforms	All

summaries *boolean*

Synopsis	Send summary (Type 3) LSAs into the stub area on an ABR
Context	**configure** service vprn *string* ospf *number* area *string* stub summaries *boolean*
Tree	summaries
Default	true
Introduced	16.0.R1
Platforms	All

virtual-link [router-id] *string* transit-area *reference*

Synopsis	Enter the **virtual-link** list instance
Context	**configure** service vprn *string* ospf *number* area *string* virtual-link *string* transit-area *reference*
Tree	virtual-link
Introduced	16.0.R1
Platforms	All

[**router-id**] *string*

Synopsis	Router identity of the virtual link neighbor
Context	**configure** service vprn *string* ospf *number* area *string* virtual-link *string* transit-area *reference*
Tree	virtual-link
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

transit-area *reference*

Synopsis	Transit area that links backbone area to area without physical connection with the backbone
Context	**configure** service vprn *string* ospf *number* area *string* virtual-link *string* transit-area *reference*
Tree	virtual-link
Reference	**configure** service vprn *string* ospf *number* area *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OSPF interface
Context	**configure** service vprn *string* ospf *number* area *string* virtual-link *string* transit-area *reference* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Authentication key
Context	**configure** service vprn *string* ospf *number* area *string* virtual-link *string* transit-area *reference* authentication-key *string*
Tree	authentication-key
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

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authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	**configure** service vprn *string* ospf *number* area *string* virtual-link *string* transit-area *reference* authentication-keychain *reference*
Tree	authentication-keychain
Reference	**configure** system security keychains keychain *string*
Introduced	16.0.R3
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type used on OSPF interface
Context	**configure** service vprn *string* ospf *number* area *string* virtual-link *string* transit-area *reference* authentication-type *keyword*
Tree	authentication-type
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	**configure** service vprn *string* ospf *number* area *string* virtual-link *string* transit-area *reference* dead-interval *number*
Tree	dead-interval
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

hello-interval *number*

Synopsis	Time between OSPF Hellos of this interface
Context	**configure** service vprn *string* ospf *number* area *string* virtual-link *string* transit-area *reference* hello-interval *number*
Tree	hello-interval

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Range	1 to 65535
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

message-digest-key [key-id] *number*

Synopsis	Enter the **message-digest-key** list instance
Context	**configure** service vprn *string* ospf *number* area *string* virtual-link *string* transit-area *reference* message-digest-key *number*
Tree	message-digest-key
Introduced	16.0.R1
Platforms	All

[**key-id**] *number*

Synopsis	Message digest index
Context	**configure** service vprn *string* ospf *number* area *string* virtual-link *string* transit-area *reference* message-digest-key *number*
Tree	message-digest-key
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

md5 *string*

Synopsis	MD5 hash key
Context	**configure** service vprn *string* ospf *number* area *string* virtual-link *string* transit-area *reference* message-digest-key *number* md5 *string*
Tree	md5
String Length	1 to 51
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	**configure** service vprn *string* ospf *number* area *string* virtual-link *string* transit-area *reference* retransmit-interval *number*
Tree	retransmit-interval
Range	1 to 1800
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

transit-delay *number*

Synopsis	Required LSA transmit time
Context	**configure** service vprn *string* ospf *number* area *string* virtual-link *string* transit-area *reference* transit-delay *number*
Tree	transit-delay
Range	1 to 1800
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

compatible-rfc1583 *boolean*

Synopsis	OSPF summary and external route calculations
Context	**configure** service vprn *string* ospf *number* compatible-rfc1583 *boolean*
Tree	compatible-rfc1583
Default	true
Introduced	16.0.R1
Platforms	All

export-limit

Synopsis	Enable the **export-limit** context

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Context	**configure** service vprn *string* ospf *number* export-limit
Tree	export-limit
Introduced	16.0.R1
Platforms	All

log-percent *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	**configure** service vprn *string* ospf *number* export-limit log-percent *number*
Tree	log-percent
Range	1 to 100
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	**configure** service vprn *string* ospf *number* export-limit number *number*
Tree	number
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

export-policy *reference*

Synopsis	Export policies that determine exported routes
Context	**configure** service vprn *string* ospf *number* export-policy *reference*
Tree	export-policy
Description	This command configures export routing policies for the routes exported from the routing table to IS-IS. If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.

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	If the **aggregate** command is also configured in the **configure router** context, the aggregation is applied before the export policy is applied. Routing policies are created in the **configure router policy-options** context.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

external-db-overflow

Synopsis	Enable the **external-db-overflow** context
Context	**configure** service vprn *string* ospf *number* external-db-overflow
Tree	external-db-overflow
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Time during which the router operates in overload
Context	**configure** service vprn *string* ospf *number* external-db-overflow interval *number*
Tree	interval
Range	0 to 2147483647
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	All

limit *number*

Synopsis	Number of external LSA at which overload is triggered
Context	**configure** service vprn *string* ospf *number* external-db-overflow limit *number*
Tree	limit
Range	0 to 2147483647

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Default	0
Introduced	16.0.R1
Platforms	All

external-preference *number*

Synopsis	Preference for OSPF external routes
Context	**configure** service vprn *string* ospf *number* external-preference *number*
Tree	external-preference
Range	1 to 255
Default	150
Introduced	16.0.R1
Platforms	All

graceful-restart

Synopsis	Enable the **graceful-restart** context
Context	**configure** service vprn *string* ospf *number* graceful-restart
Tree	graceful-restart
Introduced	16.0.R1
Platforms	All

helper-mode *boolean*

Synopsis	Enable graceful restart helper for OSPF
Context	**configure** service vprn *string* ospf *number* graceful-restart helper-mode *boolean*
Tree	helper-mode
Default	true
Introduced	16.0.R1
Platforms	All

strict-lsa-checking *boolean*

Synopsis	Perform strict LSA checking during graceful restart
Context	**configure** service vprn *string* ospf *number* graceful-restart strict-lsa-checking *boolean*

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Tree	strict-lsa-checking
Default	true
Introduced	16.0.R1
Platforms	All

ignore-dn-bit *boolean*

Synopsis	Ignore the DN bit for OSPF LSA packets for the instance
Context	**configure** service vprn *string* ospf *number* ignore-dn-bit *boolean*
Tree	ignore-dn-bit
Default	false
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy names for routes from IGP to route table
Context	**configure** service vprn *string* ospf *number* import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

loopfree-alternate

Synopsis	Enable the **loopfree-alternate** context
Context	**configure** service vprn *string* ospf *number* loopfree-alternate
Tree	loopfree-alternate
Introduced	16.0.R1
Platforms	All

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exclude

Synopsis	Enter the **exclude** context
Context	**configure** service vprn *string* ospf *number* loopfree-alternate exclude
Tree	exclude
Introduced	16.0.R3
Platforms	All

prefix-policy *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	**configure** service vprn *string* ospf *number* loopfree-alternate exclude prefix-policy *reference*
Tree	prefix-policy
Description	This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation. An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R3
Platforms	All

multicast-import *boolean*

Synopsis	Submit routes into the multicast Route Table Manager
Context	**configure** service vprn *string* ospf *number* multicast-import *boolean*
Tree	multicast-import
Default	false
Introduced	16.0.R1
Platforms	All

overload *boolean*

Synopsis	Change local router state to appear overloaded

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Context	**configure** service vprn *string* ospf *number* overload *boolean*
Tree	overload
Default	false
Introduced	16.0.R1
Platforms	All

overload-include-ext-1 *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	**configure** service vprn *string* ospf *number* overload-include-ext-1 *boolean*
Tree	overload-include-ext-1
Default	false
Introduced	19.7.R1
Platforms	All

overload-include-ext-2 *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	**configure** service vprn *string* ospf *number* overload-include-ext-2 *boolean*
Tree	overload-include-ext-2
Default	false
Introduced	16.0.R1
Platforms	All

overload-include-stub *boolean*

Synopsis	Advertise all stub interfaces with max metric value
Context	**configure** service vprn *string* ospf *number* overload-include-stub *boolean*
Tree	overload-include-stub
Default	false
Introduced	16.0.R1
Platforms	All

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overload-on-boot

Synopsis	Enable the **overload-on-boot** context
Context	**configure** service vprn *string* ospf *number* overload-on-boot
Tree	overload-on-boot
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Time during which the router operates in overload state before reestablishing normal operations
Context	**configure** service vprn *string* ospf *number* overload-on-boot timeout *number*
Tree	timeout
Range	60 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Preference for OSPF internal routes
Context	**configure** service vprn *string* ospf *number* preference *number*
Tree	preference
Range	1 to 255
Default	10
Introduced	16.0.R1
Platforms	All

reference-bandwidth *number*

Synopsis	Bandwidth to reference default costing of interfaces
Context	**configure** service vprn *string* ospf *number* reference-bandwidth *number*
Tree	reference-bandwidth
Range	1 to 18446744073709551615
Units	kilobps

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Default	100000000
Introduced	16.0.R1
Platforms	All

rib-priority

Synopsis	Enter the **rib-priority** context
Context	**configure** service vprn *string* ospf *number* rib-priority
Tree	rib-priority
Introduced	16.0.R1
Platforms	All

high

Synopsis	Enter the **high** context
Context	**configure** service vprn *string* ospf *number* rib-priority high
Tree	high
Introduced	16.0.R1
Platforms	All

prefix-list *reference*

Synopsis	Higher priority list used during OSPF route calculation
Context	**configure** service vprn *string* ospf *number* rib-priority high prefix-list *reference*
Tree	prefix-list
Reference	**configure** policy-options prefix-list *string*
Introduced	16.0.R1
Platforms	All

router-id *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique router ID for the OSPF instance

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Context	**configure** service vprn *string* ospf *number* router-id *string*
Tree	router-id
Introduced	16.0.R1
Platforms	All

rtr-adv-lsa-limit

Synopsis	Enable the **rtr-adv-lsa-limit** context
Context	**configure** service vprn *string* ospf *number* rtr-adv-lsa-limit
Tree	rtr-adv-lsa-limit
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Log the event without triggering overload
Context	**configure** service vprn *string* ospf *number* rtr-adv-lsa-limit log-only *boolean*
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

max-lsa-count *number*

Synopsis	Max number of LSAs one router can advertise
Context	**configure** service vprn *string* ospf *number* rtr-adv-lsa-limit max-lsa-count *number*
Tree	max-lsa-count
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

overload-timeout *(number | keyword)*

Synopsis	Maximum time in overload after LSA limit is reached

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Context	**configure** service vprn *string* ospf *number* rtr-adv-lsa-limit overload-timeout *(number | keyword)*
Tree	overload-timeout
Range	1 to 1800
Units	seconds
Options	forever
Default	forever
Introduced	16.0.R1
Platforms	All

warning-threshold *number*

Synopsis	Percentage of the max LSA count that causes a warning
Context	**configure** service vprn *string* ospf *number* rtr-adv-lsa-limit warning-threshold *number*
Tree	warning-threshold
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	All

super-backbone *boolean*

Synopsis	Enable/disable super-backbone functionality.
Context	**configure** service vprn *string* ospf *number* super-backbone *boolean*
Tree	super-backbone
Default	false
Introduced	16.0.R1
Platforms	All

suppress-dn-bit *boolean*

Synopsis	Suppress the DN bit setting for OSPF LSA packets
Context	**configure** service vprn *string* ospf *number* suppress-dn-bit *boolean*
Tree	suppress-dn-bit

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Default	false
Introduced	16.0.R1
Platforms	All

timers

Synopsis	Enter the **timers** context
Context	**configure** service vprn *string* ospf *number* timers
Tree	timers
Introduced	16.0.R1
Platforms	All

incremental-spf-wait *number*

Synopsis	Delay time before an incremental SPF calculation starts
Context	**configure** service vprn *string* ospf *number* timers incremental-spf-wait *number*
Tree	incremental-spf-wait
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

lsa-accumulate *number*

Synopsis	Delay to gather LSAs before advertising to neighbors
Context	**configure** service vprn *string* ospf *number* timers lsa-accumulate *number*
Tree	lsa-accumulate
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

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lsa-arrival *number*

Synopsis	Min delay between receipt of same LSAs from neighbors
Context	**configure** service vprn *string* ospf *number* timers lsa-arrival *number*
Tree	lsa-arrival
Range	0 to 600000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

lsa-generate

Synopsis	Enter the **lsa-generate** context
Context	**configure** service vprn *string* ospf *number* timers lsa-generate
Tree	lsa-generate
Introduced	16.0.R1
Platforms	All

lsa-initial-wait *number*

Synopsis	First wait period between OSPF LSA generation
Context	**configure** service vprn *string* ospf *number* timers lsa-generate lsa-initial-wait *number*
Tree	lsa-initial-wait
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

lsa-second-wait *number*

Synopsis	Hold time between the first and second LSA generation
Context	**configure** service vprn *string* ospf *number* timers lsa-generate lsa-second-wait *number*
Tree	lsa-second-wait
Range	10 to 600000

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Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

max-lsa-wait *number*

Synopsis	Max time between two LSAs being generated
Context	**configure** service vprn *string* ospf *number* timers lsa-generate max-lsa-wait *number*
Tree	max-lsa-wait
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

redistribute-delay *number*

Synopsis	Hold down timer for external routes into OSPF
Context	**configure** service vprn *string* ospf *number* timers redistribute-delay *number*
Tree	redistribute-delay
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

spf-wait

Synopsis	Enter the **spf-wait** context
Context	**configure** service vprn *string* ospf *number* timers spf-wait
Tree	spf-wait
Introduced	16.0.R1
Platforms	All

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spf-initial-wait *number*

Synopsis	Initial SPF calculation delay after a topology change
Context	**configure** service vprn *string* ospf *number* timers spf-wait spf-initial-wait *number*
Tree	spf-initial-wait
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

spf-max-wait *number*

Synopsis	Max interval between two consecutive SPF calculations
Context	**configure** service vprn *string* ospf *number* timers spf-wait spf-max-wait *number*
Tree	spf-max-wait
Range	10 to 120000
Units	milliseconds
Default	10000
Introduced	16.0.R1
Platforms	All

spf-second-wait *number*

Synopsis	Hold time between the first and second SPF calculation
Context	**configure** service vprn *string* ospf *number* timers spf-wait spf-second-wait *number*
Tree	spf-second-wait
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

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unicast-import *boolean*

Synopsis	Submit routes into the unicast Route Table Manager
Context	**configure** service vprn *string* ospf *number* unicast-import *boolean*
Tree	unicast-import
Default	true
Introduced	16.0.R1
Platforms	All

vpn-domain

Synopsis	Enable the **vpn-domain** context
Context	**configure** service vprn *string* ospf *number* vpn-domain
Tree	vpn-domain
Introduced	16.0.R1
Platforms	All

id *string*

Synopsis	OSPF VPN domain ID
Context	**configure** service vprn *string* ospf *number* vpn-domain id *string*
Tree	id
Description	This command specifies the OSPF VPN domain. This is exchanged using BGP in the Extended Community attribute associated with a prefix.
String Length	14
Default	0000.0000.0000
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	VPN domain type
Context	**configure** service vprn *string* ospf *number* vpn-domain type *keyword*
Tree	type
Options	0005, 0105, 0205, 8005
Notes	This element is mandatory.

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Introduced	16.0.R1
Platforms	All

vpn-tag *number*

Synopsis	OSPF VPN tag
Context	**configure** service vprn *string* ospf *number* vpn-tag *number*
Tree	vpn-tag
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R1
Platforms	All

ospf3 [ospf-instance] *number*

Synopsis	Enter the **ospf3** list instance
Context	**configure** service vprn *string* ospf3 *number*
Tree	ospf3
Max. Instances	32
Introduced	16.0.R1
Platforms	All

[**ospf-instance**] *number*

Synopsis	Specifies the value of the integrated OSPF instance.
Context	**configure** service vprn *string* ospf3 *number*
Tree	ospf3
Range	0 to 31 | 64 to 95
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the OSPF instance
Context	**configure** service vprn *string* ospf3 *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

advertise-router-capability *keyword*

Synopsis	Allow router advertisement capabilities
Context	**configure** service vprn *string* ospf3 *number* advertise-router-capability *keyword*
Tree	advertise-router-capability
Options	false, link, area, as
Default	false
Introduced	16.0.R1
Platforms	All

area [area-id] *string*

Synopsis	Enter the **area** list instance
Context	**configure** service vprn *string* ospf3 *number* area *string*
Tree	area
Introduced	16.0.R1
Platforms	All

[**area-id**] *string*

Synopsis	Area-ID attribute
Context	**configure** service vprn *string* ospf3 *number* area *string*
Tree	area
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	**configure** service vprn *string* ospf3 *number* area *string* advertise-router-capability *boolean*
Tree	advertise-router-capability
Default	true
Introduced	16.0.R1
Platforms	All

area-range [ip-prefix-mask] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **area-range** list instance
Context	**configure** service vprn *string* ospf3 *number* area *string* area-range *(ipv4-prefix | ipv6-prefix)*
Tree	area-range
Introduced	16.0.R1
Platforms	All

[**ip-prefix-mask**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Address ranges to create on an ABR for route summarization or suppression
Context	**configure** service vprn *string* ospf3 *number* area *string* area-range *(ipv4-prefix | ipv6-prefix)*
Tree	area-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	**configure** service vprn *string* ospf3 *number* area *string* area-range *(ipv4-prefix | ipv6-prefix)* advertise *boolean*
Tree	advertise
Default	true

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Introduced	16.0.R1
Platforms	All

blackhole-aggregate *boolean*

Synopsis	Install a low priority blackhole route to avoid loops
Context	**configure** service vprn *string* ospf3 *number* area *string* blackhole-aggregate *boolean*
Tree	blackhole-aggregate
Default	true
Introduced	16.0.R1
Platforms	All

export-policy *reference*

Synopsis	Type 3 Summary-LSA/OSPFv3 inter-area-prefix-LSA route
Context	**configure** service vprn *string* ospf3 *number* area *string* export-policy *reference*
Tree	export-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Route imported as Summary Type 3/Inter-Area-Prefix-LSA
Context	**configure** service vprn *string* ospf3 *number* area *string* import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

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interface [interface-name] *string*

Synopsis	Enter the **interface** list instance
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string*
Tree	interface
Introduced	16.0.R1
Platforms	All

[**interface-name**] *string*

Synopsis	IP interface name
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OSPF interface
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* advertise-router-capability *boolean*
Tree	advertise-router-capability
Default	true

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Introduced	16.0.R1
Platforms	All

authentication

Synopsis	Enable the **authentication** context
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* authentication
Tree	authentication
Introduced	16.0.R6
Platforms	All

inbound *reference*

Synopsis	sa-name
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* authentication inbound *reference*
Tree	inbound
Reference	**configure** ipsec static-sa *string*
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

outbound *reference*

Synopsis	sa-name
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* authentication outbound *reference*
Tree	outbound
Reference	**configure** ipsec static-sa *string*
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

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bfd-liveness

Synopsis	Enable the **bfd-liveness** context
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

remain-down-on-failure *boolean*

Synopsis	Force adjacency down on failure until session returns
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* bfd-liveness remain-down-on-failure *boolean*
Tree	remain-down-on-failure
Default	false
Introduced	16.0.R1
Platforms	All

strict *boolean*

Synopsis	Enable BFD strict mode
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* bfd-liveness strict *boolean*
Tree	strict
Description	When configured to **true**, the system uses BFD strict-mode. BFD strict-mode mandates that an active BFD session must exist between the OSPF neighbors before establishing a full adjacency. When configured to **true**, the router uses Link-Local Signaling (LLS) with the B-flag set to instruct the OSPF neighbors that BFD must be enabled on the link. BFD strict-mode requires both sides to have the B-flag set. During OSPFv3 BFD strict-mode operations, the router advertises the local interface IPv4 address TLV using LLS, but the SR OS router continues to use IPv6-based BFD sessions for both the IPv4 and IPv6 address families.
Default	false
Introduced	23.3.R1
Platforms	All

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strict-mode-holddown *number*

Synopsis	Adjacency up time delay after BFD session establishment
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* bfd-liveness strict-mode-holddown *number*
Tree	strict-mode-holddown
Description	This command configures a delay timer before bringing up the OSPF adjacency after the BFD session establishment. Holddown helps mitigate potential routing churn when BFD sessions are unstable. The holddown timer is reset when a BFD session operationally toggles.
Range	1 to 600
Units	seconds
Introduced	23.3.R1
Platforms	All

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* dead-interval *number*
Tree	dead-interval
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

hello-interval *number*

Synopsis	Time between OSPF Hellos of this interface
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* hello-interval *number*
Tree	hello-interval
Range	1 to 65535
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

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interface-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Interface type
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* interface-type *keyword*
Tree	interface-type
Description	This command specifies the interface type. **broadcast** - Broadcast network To significantly improve adjacency forming and network convergence, configure a network as point-to-point if only two routers are connected, even if the network is a broadcast media such as Ethernet. **non-broadcast** - Non-broadcast network **point-to-point** - Point-to-point link Set the interface type of an Ethernet link to **point-to-point** to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided is used as a point-to-point. **p2mp-nbma** - Point-to-multipoint on a link without broadcast or multicast support No designated router or backup designated router is elected on this type of interface and all OSPF neighbors connect through individual point-to-point links. Only VPRN and IES services interfaces support this interface type. **secondary** - Multiple secondary adjacencies allowed A **secondary** interface allows multiple secondary adjacencies, in addition to the primary adjacency, to be established over a single IP interface. This interface type can also be applied to the system interface and to loopback interfaces to allow them to participate in multiple areas, although no adjacencies are formed over these types of interfaces.
Options	broadcast, non-broadcast, point-to-point, secondary, p2mp-nbma
Introduced	16.0.R1
Platforms	All

load-balancing-weight *number*

Synopsis	Configure load-balancing-weight.
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* load-balancing-weight *number*
Tree	load-balancing-weight

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Range	1 to 4294967295
Introduced	20.2.R1
Platforms	All

loopfree-alternate

Synopsis	Enter the **loopfree-alternate** context
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* loopfree-alternate
Tree	loopfree-alternate
Introduced	16.0.R3
Platforms	All

exclude *boolean*

Synopsis	Enable fast reroute at OSPF primary interface level
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* loopfree-alternate exclude *boolean*
Tree	exclude
Default	false
Introduced	16.0.R3
Platforms	All

policy-map

Synopsis	Enable the **policy-map** context
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* loopfree-alternate policy-map
Tree	policy-map
Introduced	16.0.R3
Platforms	All

route-nh-template *reference*

Synopsis	Route next hop policy template name
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* loopfree-alternate policy-map route-nh-template *reference*

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Tree	route-nh-template
Reference	**configure** routing-options route-next-hop-policy template *string*
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

lsa-filter-out *keyword*

Synopsis	LSA flooding reduction
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* lsa-filter-out *keyword*
Tree	lsa-filter-out
Options	none, all, except-own-rtrlsa, except-own-rtrlsa-and-defaults
Default	none
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	Route cost metric for the interface
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* metric *number*
Tree	metric
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

mtu *number*

Synopsis	MTU for the OSPF to use on the interface
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* mtu *number*
Tree	mtu
Range	512 to 9786
Introduced	16.0.R1
Platforms	All

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neighbor [address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Add a list entry for **neighbor**
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* neighbor *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	neighbor
Introduced	16.0.R1
Platforms	All

[**address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IPv6 link local address of the OSPFv3 neighbor
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* neighbor *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

passive *boolean*

Synopsis	Advertise passive interfaces as OSPF interfaces
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* passive *boolean*
Tree	passive
Introduced	16.0.R1
Platforms	All

poll-interval *number*

Synopsis	Interval for Hellos to non-adjacent OSPF NBMA neighbor
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* poll-interval *number*
Tree	poll-interval
Max. Range	0 to 4294967295
Units	seconds
Default	120

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Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Interface priority in the DR election on the subnet
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* priority *number*
Tree	priority
Range	0 to 255
Default	1
Introduced	16.0.R1
Platforms	All

retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* retransmit-interval *number*
Tree	retransmit-interval
Range	1 to 1800
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

rib-priority *keyword*

Synopsis	RIB priority for OSPF
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* rib-priority *keyword*
Tree	rib-priority
Options	high
Introduced	16.0.R1
Platforms	All

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transit-delay *number*

Synopsis	Required LSA transmit time
Context	**configure** service vprn *string* ospf3 *number* area *string* interface *string* transit-delay *number*
Tree	transit-delay
Range	1 to 1800
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

key-rollover-interval *number*

Synopsis	Key rollover interval
Context	**configure** service vprn *string* ospf3 *number* area *string* key-rollover-interval *number*
Tree	key-rollover-interval
Range	10 to 300
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

loopfree-alternate-exclude *boolean*

Synopsis	Exclude interfaces in OSPF areas in SPF LFA computation
Context	**configure** service vprn *string* ospf3 *number* area *string* loopfree-alternate-exclude *boolean*
Tree	loopfree-alternate-exclude
Default	false
Introduced	16.0.R1
Platforms	All

nssa

Synopsis	Enable the **nssa** context

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Context	**configure** service vprn *string* ospf3 *number* area *string* nssa
Tree	nssa
Introduced	16.0.R1
Platforms	All

area-range [ip-prefix-mask] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **area-range** list instance
Context	**configure** service vprn *string* ospf3 *number* area *string* nssa area-range *(ipv4-prefix | ipv6-prefix)*
Tree	area-range
Introduced	16.0.R1
Platforms	All

[**ip-prefix-mask**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Address ranges to create on an ABR for route summarization or suppression
Context	**configure** service vprn *string* ospf3 *number* area *string* nssa area-range *(ipv4-prefix | ipv6-prefix)*
Tree	area-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	**configure** service vprn *string* ospf3 *number* area *string* nssa area-range *(ipv4-prefix | ipv6-prefix)* advertise *boolean*
Tree	advertise
Default	true
Introduced	16.0.R1
Platforms	All

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originate-default-route

Synopsis	Enable the **originate-default-route** context
Context	**configure** service vprn *string* ospf3 *number* area *string* nssa originate-default-route
Tree	originate-default-route
Introduced	16.0.R1
Platforms	All

adjacency-check *boolean*

Synopsis	Perform adjacency checks before originating a default route
Context	**configure** service vprn *string* ospf3 *number* area *string* nssa originate-default-route adjacency-check *boolean*
Tree	adjacency-check
Default	false
Introduced	16.0.R1
Platforms	All

type-nssa *boolean*

Synopsis	Generate a default route using NSSA-LSA type
Context	**configure** service vprn *string* ospf3 *number* area *string* nssa originate-default-route type-nssa *boolean*
Tree	type-nssa
Default	false
Introduced	16.0.R1
Platforms	All

redistribute-external *boolean*

Synopsis	Redistribute external routes into the NSSA
Context	**configure** service vprn *string* ospf3 *number* area *string* nssa redistribute-external *boolean*
Tree	redistribute-external
Default	true
Introduced	16.0.R1
Platforms	All

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summaries *boolean*

Synopsis	Send summary (Type 3) LSAs into the NSSA on an ABR
Context	**configure** service vprn *string* ospf3 *number* area *string* nssa summaries *boolean*
Tree	summaries
Default	true
Introduced	16.0.R1
Platforms	All

stub

Synopsis	Enable the **stub** context
Context	**configure** service vprn *string* ospf3 *number* area *string* stub
Tree	stub
Introduced	16.0.R1
Platforms	All

default-metric *number*

Synopsis	Metric used by ABR for default route into the stub area
Context	**configure** service vprn *string* ospf3 *number* area *string* stub default-metric *number*
Tree	default-metric
Range	1 to 16777214
Default	1
Introduced	16.0.R1
Platforms	All

summaries *boolean*

Synopsis	Send summary (Type 3) LSAs into the stub area on an ABR
Context	**configure** service vprn *string* ospf3 *number* area *string* stub summaries *boolean*
Tree	summaries
Default	true
Introduced	16.0.R1
Platforms	All

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virtual-link [router-id] *string* transit-area *reference*

Synopsis	Enter the **virtual-link** list instance
Context	**configure** service vprn *string* ospf3 *number* area *string* virtual-link *string* transit-area *reference*
Tree	virtual-link
Introduced	16.0.R1
Platforms	All

[**router-id**] *string*

Synopsis	Router identity of the virtual link neighbor
Context	**configure** service vprn *string* ospf3 *number* area *string* virtual-link *string* transit-area *reference*
Tree	virtual-link
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

transit-area *reference*

Synopsis	Transit area that links backbone area to area without physical connection with the backbone
Context	**configure** service vprn *string* ospf3 *number* area *string* virtual-link *string* transit-area *reference*
Tree	virtual-link
Reference	**configure** service vprn *string* ospf3 *number* area *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OSPF interface
Context	**configure** service vprn *string* ospf3 *number* area *string* virtual-link *string* transit-area *reference* admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

authentication

Synopsis	Enable the **authentication** context
Context	**configure** service vprn *string* ospf3 *number* area *string* virtual-link *string* transit-area *reference* authentication
Tree	authentication
Introduced	16.0.R6
Platforms	All

inbound *reference*

Synopsis	sa-name
Context	**configure** service vprn *string* ospf3 *number* area *string* virtual-link *string* transit-area *reference* authentication inbound *reference*
Tree	inbound
Reference	**configure** ipsec static-sa *string*
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

outbound *reference*

Synopsis	sa-name
Context	**configure** service vprn *string* ospf3 *number* area *string* virtual-link *string* transit-area *reference* authentication outbound *reference*
Tree	outbound
Reference	**configure** ipsec static-sa *string*
Notes	This element is mandatory.
Introduced	16.0.R6

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Platforms	All

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	**configure** service vprn *string* ospf3 *number* area *string* virtual-link *string* transit-area *reference* dead-interval *number*
Tree	dead-interval
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

hello-interval *number*

Synopsis	Time between OSPF Hellos of this interface
Context	**configure** service vprn *string* ospf3 *number* area *string* virtual-link *string* transit-area *reference* hello-interval *number*
Tree	hello-interval
Range	1 to 65535
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	**configure** service vprn *string* ospf3 *number* area *string* virtual-link *string* transit-area *reference* retransmit-interval *number*
Tree	retransmit-interval
Range	1 to 1800
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

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transit-delay *number*

Synopsis	Required LSA transmit time
Context	**configure** service vprn *string* ospf3 *number* area *string* virtual-link *string* transit-area *reference* transit-delay *number*
Tree	transit-delay
Range	1 to 1800
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

export-limit

Synopsis	Enable the **export-limit** context
Context	**configure** service vprn *string* ospf3 *number* export-limit
Tree	export-limit
Introduced	16.0.R1
Platforms	All

log-percent *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	**configure** service vprn *string* ospf3 *number* export-limit log-percent *number*
Tree	log-percent
Range	1 to 100
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	**configure** service vprn *string* ospf3 *number* export-limit number *number*
Tree	number
Range	1 to 4294967295

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

export-policy *reference*

Synopsis	Export policies that determine exported routes
Context	**configure** service vprn *string* ospf3 *number* export-policy *reference*
Tree	export-policy
Description	This command configures export routing policies for the routes exported from the routing table to IS-IS. If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied. If the **aggregate** command is also configured in the **configure router** context, the aggregation is applied before the export policy is applied. Routing policies are created in the **configure router policy-options** context.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

external-db-overflow

Synopsis	Enable the **external-db-overflow** context
Context	**configure** service vprn *string* ospf3 *number* external-db-overflow
Tree	external-db-overflow
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Time during which the router operates in overload

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Context	**configure** service vprn *string* ospf3 *number* external-db-overflow interval *number*
Tree	interval
Range	0 to 2147483647
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	All

limit *number*

Synopsis	Number of external LSA at which overload is triggered
Context	**configure** service vprn *string* ospf3 *number* external-db-overflow limit *number*
Tree	limit
Range	0 to 2147483647
Default	0
Introduced	16.0.R1
Platforms	All

external-preference *number*

Synopsis	Preference for OSPF external routes
Context	**configure** service vprn *string* ospf3 *number* external-preference *number*
Tree	external-preference
Range	1 to 255
Default	150
Introduced	16.0.R1
Platforms	All

graceful-restart

Synopsis	Enable the **graceful-restart** context
Context	**configure** service vprn *string* ospf3 *number* graceful-restart
Tree	graceful-restart
Introduced	16.0.R1
Platforms	All

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helper-mode *boolean*

Synopsis	Enable graceful restart helper for OSPF
Context	**configure** service vprn *string* ospf3 *number* graceful-restart helper-mode *boolean*
Tree	helper-mode
Default	true
Introduced	16.0.R1
Platforms	All

strict-lsa-checking *boolean*

Synopsis	Perform strict LSA checking during graceful restart
Context	**configure** service vprn *string* ospf3 *number* graceful-restart strict-lsa-checking *boolean*
Tree	strict-lsa-checking
Default	true
Introduced	16.0.R1
Platforms	All

ignore-dn-bit *boolean*

Synopsis	Ignore the DN bit for OSPF LSA packets for the instance
Context	**configure** service vprn *string* ospf3 *number* ignore-dn-bit *boolean*
Tree	ignore-dn-bit
Default	false
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy names for routes from IGP to route table
Context	**configure** service vprn *string* ospf3 *number* import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5

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Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

loopfree-alternate

Synopsis	Enable the **loopfree-alternate** context
Context	**configure** service vprn *string* ospf3 *number* loopfree-alternate
Tree	loopfree-alternate
Introduced	16.0.R1
Platforms	All

exclude

Synopsis	Enter the **exclude** context
Context	**configure** service vprn *string* ospf3 *number* loopfree-alternate exclude
Tree	exclude
Introduced	16.0.R3
Platforms	All

prefix-policy *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	**configure** service vprn *string* ospf3 *number* loopfree-alternate exclude prefix-policy *reference*
Tree	prefix-policy
Description	This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation. An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R3
Platforms	All

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multicast-import *boolean*

Synopsis	Submit routes into the multicast Route Table Manager
Context	**configure** service vprn *string* ospf3 *number* multicast-import *boolean*
Tree	multicast-import
Default	false
Introduced	16.0.R1
Platforms	All

overload *boolean*

Synopsis	Change local router state to appear overloaded
Context	**configure** service vprn *string* ospf3 *number* overload *boolean*
Tree	overload
Default	false
Introduced	16.0.R1
Platforms	All

overload-include-ext-1 *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	**configure** service vprn *string* ospf3 *number* overload-include-ext-1 *boolean*
Tree	overload-include-ext-1
Default	false
Introduced	19.7.R1
Platforms	All

overload-include-ext-2 *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	**configure** service vprn *string* ospf3 *number* overload-include-ext-2 *boolean*
Tree	overload-include-ext-2
Default	false
Introduced	16.0.R1
Platforms	All

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overload-include-stub *boolean*

Synopsis	Advertise all stub interfaces with max metric value
Context	**configure** service vprn *string* ospf3 *number* overload-include-stub *boolean*
Tree	overload-include-stub
Default	false
Introduced	16.0.R1
Platforms	All

overload-on-boot

Synopsis	Enable the **overload-on-boot** context
Context	**configure** service vprn *string* ospf3 *number* overload-on-boot
Tree	overload-on-boot
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Time during which the router operates in overload state before reestablishing normal operations
Context	**configure** service vprn *string* ospf3 *number* overload-on-boot timeout *number*
Tree	timeout
Range	60 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Preference for OSPF internal routes
Context	**configure** service vprn *string* ospf3 *number* preference *number*
Tree	preference
Range	1 to 255
Default	10

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Introduced	16.0.R1
Platforms	All

reference-bandwidth *number*

Synopsis	Bandwidth to reference default costing of interfaces
Context	**configure** service vprn *string* ospf3 *number* reference-bandwidth *number*
Tree	reference-bandwidth
Range	1 to 18446744073709551615
Units	kilobps
Default	100000000
Introduced	16.0.R1
Platforms	All

rib-priority

Synopsis	Enter the **rib-priority** context
Context	**configure** service vprn *string* ospf3 *number* rib-priority
Tree	rib-priority
Introduced	16.0.R1
Platforms	All

high

Synopsis	Enter the **high** context
Context	**configure** service vprn *string* ospf3 *number* rib-priority high
Tree	high
Introduced	16.0.R1
Platforms	All

prefix-list *reference*

Synopsis	Higher priority list used during OSPF route calculation
Context	**configure** service vprn *string* ospf3 *number* rib-priority high prefix-list *reference*
Tree	prefix-list

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Reference	**configure** policy-options prefix-list *string*
Introduced	16.0.R1
Platforms	All

router-id *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique router ID for the OSPF instance
Context	**configure** service vprn *string* ospf3 *number* router-id *string*
Tree	router-id
Introduced	16.0.R1
Platforms	All

rtr-adv-lsa-limit

Synopsis	Enable the **rtr-adv-lsa-limit** context
Context	**configure** service vprn *string* ospf3 *number* rtr-adv-lsa-limit
Tree	rtr-adv-lsa-limit
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Log the event without triggering overload
Context	**configure** service vprn *string* ospf3 *number* rtr-adv-lsa-limit log-only *boolean*
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

max-lsa-count *number*

Synopsis	Max number of LSAs one router can advertise

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Context	**configure** service vprn *string* ospf3 *number* rtr-adv-lsa-limit max-lsa-count *number*
Tree	max-lsa-count
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

overload-timeout *(number | keyword)*

Synopsis	Maximum time in overload after LSA limit is reached
Context	**configure** service vprn *string* ospf3 *number* rtr-adv-lsa-limit overload-timeout *(number | keyword)*
Tree	overload-timeout
Range	1 to 1800
Units	seconds
Options	forever
Default	forever
Introduced	16.0.R1
Platforms	All

warning-threshold *number*

Synopsis	Percentage of the max LSA count that causes a warning
Context	**configure** service vprn *string* ospf3 *number* rtr-adv-lsa-limit warning-threshold *number*
Tree	warning-threshold
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	All

suppress-dn-bit *boolean*

Synopsis	Suppress the DN bit setting for OSPF LSA packets
Context	**configure** service vprn *string* ospf3 *number* suppress-dn-bit *boolean*

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Tree	suppress-dn-bit
Default	false
Introduced	16.0.R1
Platforms	All

timers

Synopsis	Enter the **timers** context
Context	**configure** service vprn *string* ospf3 *number* timers
Tree	timers
Introduced	16.0.R1
Platforms	All

incremental-spf-wait *number*

Synopsis	Delay time before an incremental SPF calculation starts
Context	**configure** service vprn *string* ospf3 *number* timers incremental-spf-wait *number*
Tree	incremental-spf-wait
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

lsa-accumulate *number*

Synopsis	Delay to gather LSAs before advertising to neighbors
Context	**configure** service vprn *string* ospf3 *number* timers lsa-accumulate *number*
Tree	lsa-accumulate
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

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lsa-arrival *number*

Synopsis	Min delay between receipt of same LSAs from neighbors
Context	**configure** service vprn *string* ospf3 *number* timers lsa-arrival *number*
Tree	lsa-arrival
Range	0 to 600000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

lsa-generate

Synopsis	Enter the **lsa-generate** context
Context	**configure** service vprn *string* ospf3 *number* timers lsa-generate
Tree	lsa-generate
Introduced	16.0.R1
Platforms	All

lsa-initial-wait *number*

Synopsis	First wait period between OSPF LSA generation
Context	**configure** service vprn *string* ospf3 *number* timers lsa-generate lsa-initial-wait *number*
Tree	lsa-initial-wait
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

lsa-second-wait *number*

Synopsis	Hold time between the first and second LSA generation
Context	**configure** service vprn *string* ospf3 *number* timers lsa-generate lsa-second-wait *number*
Tree	lsa-second-wait

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Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

max-lsa-wait *number*

Synopsis	Max time between two LSAs being generated
Context	**configure** service vprn *string* ospf3 *number* timers lsa-generate max-lsa-wait *number*
Tree	max-lsa-wait
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

redistribute-delay *number*

Synopsis	Hold down timer for external routes into OSPF
Context	**configure** service vprn *string* ospf3 *number* timers redistribute-delay *number*
Tree	redistribute-delay
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

spf-wait

Synopsis	Enter the **spf-wait** context
Context	**configure** service vprn *string* ospf3 *number* timers spf-wait
Tree	spf-wait
Introduced	16.0.R1
Platforms	All

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spf-initial-wait *number*

Synopsis	Initial SPF calculation delay after a topology change
Context	**configure** service vprn *string* ospf3 *number* timers spf-wait spf-initial-wait *number*
Tree	spf-initial-wait
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

spf-max-wait *number*

Synopsis	Max interval between two consecutive SPF calculations
Context	**configure** service vprn *string* ospf3 *number* timers spf-wait spf-max-wait *number*
Tree	spf-max-wait
Range	10 to 120000
Units	milliseconds
Default	10000
Introduced	16.0.R1
Platforms	All

spf-second-wait *number*

Synopsis	Hold time between the first and second SPF calculation
Context	**configure** service vprn *string* ospf3 *number* timers spf-wait spf-second-wait *number*
Tree	spf-second-wait
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

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unicast-import *boolean*

Synopsis	Submit routes into the unicast Route Table Manager
Context	**configure** service vprn *string* ospf3 *number* unicast-import *boolean*
Tree	unicast-import
Default	true
Introduced	16.0.R1
Platforms	All

pcp

Synopsis	Enter the **pcp** context
Context	**configure** service vprn *string* pcp
Tree	pcp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server [name] *string*

Synopsis	Enter the **server** list instance
Context	**configure** service vprn *string* pcp server *string*
Tree	server
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	PCP server name
Context	**configure** service vprn *string* pcp server *string*
Tree	server
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of the PCP server
Context	**configure** service vprn *string* pcp server *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* pcp server *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dual-stack-lite-address *string*

Synopsis	Inside Dual Stack Lite AFTR address
Context	**configure** service vprn *string* pcp server *string* dual-stack-lite-address *string*
Tree	dual-stack-lite-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fwd-inside-router *string*

Synopsis	PCP forwarding inside virtual router instance
Context	**configure** service vprn *string* pcp server *string* fwd-inside-router *string*
Tree	fwd-inside-router
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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interface [name] *reference*

Synopsis	Add a list entry for **interface**
Context	**configure** service vprn *string* pcp server *string* interface *reference*
Tree	interface
Max. Instances	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *reference*

Synopsis	Interface name
Context	**configure** service vprn *string* pcp server *string* interface *reference*
Tree	interface
Reference	**configure** service vprn *string* interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	PCP server policy
Context	**configure** service vprn *string* pcp server *string* policy *reference*
Tree	policy
Reference	**configure** service nat pcp-server-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pim

Synopsis	Enable the **pim** context
Context	**configure** service vprn *string* pim
Tree	pim
Introduced	16.0.R1

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Platforms	All

admin-state *keyword*

Synopsis	Administrative state of PIM
Context	**configure** service vprn *string* pim admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

apply-to *keyword*

Synopsis	IES and non-IES interfaces to create in PIM
Context	**configure** service vprn *string* pim apply-to *keyword*
Tree	apply-to
Options	all, none
Default	none
Introduced	16.0.R1
Platforms	All

bgp-nh-override *boolean*

Synopsis	Disable VRF import EC support for next-hop resolution
Context	**configure** service vprn *string* pim bgp-nh-override *boolean*
Tree	bgp-nh-override
Description	When configured to **true**, the RPF check is performed using IPv4 VPN AF next-hop instead of IPv4 AF VRF import extended community (EC). When configured to **false**, the RPF check is performed using IPv4 AF VRF import EC.
Default	false
Introduced	19.7.R1
Platforms	All

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import

Synopsis	Enter the **import** context
Context	**configure** service vprn *string* pim import
Tree	import
Introduced	16.0.R1
Platforms	All

join-policy *reference*

Synopsis	Policy name
Context	**configure** service vprn *string* pim import join-policy *reference*
Tree	join-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

register-policy *reference*

Synopsis	Policy name
Context	**configure** service vprn *string* pim import register-policy *reference*
Tree	register-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

interface [interface-name] *string*

Synopsis	Enter the **interface** list instance
Context	**configure** service vprn *string* pim interface *string*

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Tree	interface
Introduced	16.0.R1
Platforms	All

[**interface-name**] *string*

Synopsis	Interface name
Context	**configure** service vprn *string* pim interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the PIM interface
Context	**configure** service vprn *string* pim interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

assert-period *number*

Synopsis	Time for periodic refreshes of PIM Assert messages on an interface
Context	**configure** service vprn *string* pim interface *string* assert-period *number*
Tree	assert-period
Range	1 to 300
Default	60
Introduced	16.0.R1
Platforms	All

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bfd-liveness

Synopsis	Enter the **bfd-liveness** context
Context	**configure** service vprn *string* pim interface *string* bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Use Bidirectional Forwarding Detection for IPv4 on PIM interface
Context	**configure** service vprn *string* pim interface *string* bfd-liveness ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Use Bidirectional Forwarding Detection for IPv6 on PIM interface
Context	**configure** service vprn *string* pim interface *string* bfd-liveness ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

bsm-check-rtr-alert *boolean*

Synopsis	Check router alert option in bootstrap messages received
Context	**configure** service vprn *string* pim interface *string* bsm-check-rtr-alert *boolean*
Tree	bsm-check-rtr-alert
Default	false
Introduced	16.0.R1
Platforms	All

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hello-interval *number*

Synopsis	Frequency at which PIM Hello messages are sent over this interface
Context	**configure** service vprn *string* pim interface *string* hello-interval *number*
Tree	hello-interval
Range	0 to 255
Default	30
Introduced	16.0.R1
Platforms	All

hello-multiplier *number*

Synopsis	Multiplier to determine the hold time for PIM neighbor
Context	**configure** service vprn *string* pim interface *string* hello-multiplier *number*
Tree	hello-multiplier
Range	20 to 100
Default	35
Introduced	16.0.R1
Platforms	All

improved-assert *boolean*

Synopsis	Allow improved assert processing on interface
Context	**configure** service vprn *string* pim interface *string* improved-assert *boolean*
Tree	improved-assert
Default	true
Introduced	16.0.R1
Platforms	All

instant-prune-echo *boolean*

Synopsis	Allow PIM to send an instant prune echo when router starts the prune pending timer for PIM interface
Context	**configure** service vprn *string* pim interface *string* instant-prune-echo *boolean*
Tree	instant-prune-echo
Default	false

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Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service vprn *string* pim interface *string* ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

monitor-oper-group

Synopsis	Enter the **monitor-oper-group** context
Context	**configure** service vprn *string* pim interface *string* ipv4 monitor-oper-group
Tree	monitor-oper-group
Introduced	16.0.R1
Platforms	All

name *reference*

Synopsis	Operational group identifier
Context	**configure** service vprn *string* pim interface *string* ipv4 monitor-oper-group name *reference*
Tree	name
Reference	**configure** service oper-group *string*
Introduced	16.0.R1
Platforms	All

operation *keyword*

Synopsis	Operation performed when operational group is active
Context	**configure** service vprn *string* pim interface *string* ipv4 monitor-oper-group operation *keyword*
Tree	operation
Options	add, subtract, set

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Introduced	16.0.R1
Platforms	All

priority-delta *number*

Synopsis	Delta priority with operation when operational group is active
Context	**configure** service vprn *string* pim interface *string* ipv4 monitor-oper-group priority-delta *number*
Tree	priority-delta
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

multicast *boolean*

Synopsis	Enable PIM interface operation
Context	**configure** service vprn *string* pim interface *string* ipv4 multicast *boolean*
Tree	multicast
Default	true
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** service vprn *string* pim interface *string* ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

monitor-oper-group

Synopsis	Enter the **monitor-oper-group** context
Context	**configure** service vprn *string* pim interface *string* ipv6 monitor-oper-group
Tree	monitor-oper-group
Introduced	16.0.R1

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Platforms	All

name *reference*

Synopsis	Operational group identifier
Context	**configure** service vprn *string* pim interface *string* ipv6 monitor-oper-group name *reference*
Tree	name
Reference	**configure** service oper-group *string*
Introduced	16.0.R1
Platforms	All

operation *keyword*

Synopsis	Operation performed when operational group is active
Context	**configure** service vprn *string* pim interface *string* ipv6 monitor-oper-group operation *keyword*
Tree	operation
Options	add, subtract, set
Introduced	16.0.R1
Platforms	All

priority-delta *number*

Synopsis	Delta priority with operation when operational group is active
Context	**configure** service vprn *string* pim interface *string* ipv6 monitor-oper-group priority-delta *number*
Tree	priority-delta
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

multicast *boolean*

Synopsis	Enable PIM interface operation
Context	**configure** service vprn *string* pim interface *string* ipv6 multicast *boolean*

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Tree	multicast
Default	true
Introduced	16.0.R1
Platforms	All

max-groups *number*

Synopsis	Maximum number of groups for the interface
Context	**configure** service vprn *string* pim interface *string* max-groups *number*
Tree	max-groups
Range	0 | 1 to 16000
Default	0
Introduced	16.0.R1
Platforms	All

mcac

Synopsis	Enter the **mcac** context
Context	**configure** service vprn *string* pim interface *string* mcac
Tree	mcac
Introduced	16.0.R1
Platforms	All

bandwidth

Synopsis	Enter the **bandwidth** context
Context	**configure** service vprn *string* pim interface *string* mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	All

mandatory *(number | keyword)*

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	**configure** service vprn *string* pim interface *string* mcac bandwidth mandatory *(number | keyword)*

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Tree	mandatory
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

total *(number | keyword)*

Synopsis	Maximum allowed bandwidth
Context	**configure** service vprn *string* pim interface *string* mcac bandwidth total *(number | keyword)*
Tree	total
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	**configure** service vprn *string* pim interface *string* mcac interface-policy *reference*
Tree	interface-policy
Reference	**configure** mcac interface-policy *string*
Introduced	16.0.R1
Platforms	All

mc-constraints

Synopsis	Enter the **mc-constraints** context
Context	**configure** service vprn *string* pim interface *string* mcac mc-constraints
Tree	mc-constraints
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the multicast CAC constraints
Context	**configure** service vprn *string* pim interface *string* mcac mc-constraints admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

level [level-id] *number*

Synopsis	Enter the **level** list instance
Context	**configure** service vprn *string* pim interface *string* mcac mc-constraints level *number*
Tree	level
Introduced	16.0.R1
Platforms	All

[**level-id**] *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	**configure** service vprn *string* pim interface *string* mcac mc-constraints level *number*
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Bandwidth available for this level
Context	**configure** service vprn *string* pim interface *string* mcac mc-constraints level *number* bandwidth *number*
Tree	bandwidth
Range	0 to 2147483647

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Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

number-down [number-lag-port-down] *number*

Synopsis	Enter the **number-down** list instance
Context	**configure** service vprn *string* pim interface *string* mcac mc-constraints number-down *number*
Tree	number-down
Introduced	16.0.R1
Platforms	All

[**number-lag-port-down**] *number*

Synopsis	Number of ports that are down in this LAG link
Context	**configure** service vprn *string* pim interface *string* mcac mc-constraints number-down *number*
Tree	number-down
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level ID to associate with number of down LAG ports
Context	**configure** service vprn *string* pim interface *string* mcac mc-constraints number-down *number* level *number*
Tree	level
Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1

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Platforms All

use-lag-port-weight *boolean*

Synopsis Use LAG port weight in calculating MCAC constraints

Context **configure** service vprn *string* pim interface *string* mcac mc-constraints use-lag-port-weight *boolean*

Tree use-lag-port-weight

Description When configured to **true**, port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.

Default false

Introduced 16.0.R1

Platforms All

policy *reference*

Synopsis Multicast CAC policy name

Context **configure** service vprn *string* pim interface *string* mcac policy *reference*

Tree policy

Description This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.

Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.

If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.

Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:

- subscriber level and redirected interface when redirection is configured
- subscriber level and group-interface level when redirection is unconfigured

In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).

Reference **configure** mcac policy *string*

Introduced 16.0.R1

Platforms All

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multicast-senders *keyword*

Synopsis	Subnet matching for the incoming data packets
Context	**configure** service vprn *string* pim interface *string* multicast-senders *keyword*
Tree	multicast-senders
Options	auto, always, never
Default	auto
Introduced	16.0.R1
Platforms	All

p2mp-ldp-tree-join

Synopsis	Enter the **p2mp-ldp-tree-join** context
Context	**configure** service vprn *string* pim interface *string* p2mp-ldp-tree-join
Tree	p2mp-ldp-tree-join
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv4 *boolean*

Synopsis	Allow dynamic mLDP in-band signaling for IPv4 PIM joins
Context	**configure** service vprn *string* pim interface *string* p2mp-ldp-tree-join ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6 *boolean*

Synopsis	Allow dynamic mLDP in-band signaling for IPv6 PIM joins
Context	**configure** service vprn *string* pim interface *string* p2mp-ldp-tree-join ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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priority *number*

Synopsis	DR election priority for this interface
Context	**configure** service vprn *string* pim interface *string* priority *number*
Tree	priority
Range	1 to 4294967295
Default	1
Introduced	16.0.R1
Platforms	All

sticky-dr

Synopsis	Enable the **sticky-dr** context
Context	**configure** service vprn *string* pim interface *string* sticky-dr
Tree	sticky-dr
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	DR election priority for this interface
Context	**configure** service vprn *string* pim interface *string* sticky-dr priority *number*
Tree	priority
Range	1 to 4294967295
Default	1024
Introduced	16.0.R1
Platforms	All

three-way-hello *boolean*

Synopsis	Allow three-way hello compatibility mode
Context	**configure** service vprn *string* pim interface *string* three-way-hello *boolean*
Tree	three-way-hello
Default	false
Introduced	16.0.R1

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Platforms	All

tracking-support *boolean*

Synopsis	Allow upstream routers to explicitly track join membership
Context	**configure** service vprn *string* pim interface *string* tracking-support *boolean*
Tree	tracking-support
Default	false
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service vprn *string* pim ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of PIM operation for IPv4
Context	**configure** service vprn *string* pim ipv4 admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

grt-extranet

Synopsis	Enter the **grt-extranet** context
Context	**configure** service vprn *string* pim ipv4 grt-extranet
Tree	grt-extranet
Introduced	16.0.R1

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Platforms	All

any

Synopsis	GRT or VRF extranet for the instance
Context	**configure** service vprn *string* pim ipv4 grt-extranet any
Tree	any
Notes	The following elements are part of a choice: **any** or **group-prefix**.
Introduced	16.0.R1
Platforms	All

group-prefix [ip-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **group-prefix** list instance
Context	**configure** service vprn *string* pim ipv4 grt-extranet group-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	group-prefix
Notes	The following elements are part of a choice: **any** or **group-prefix**.
Introduced	16.0.R1
Platforms	All

[**ip-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP address and mask length
Context	**configure** service vprn *string* pim ipv4 grt-extranet group-prefix *(ipv4-prefix | ipv6-prefix)*
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

starg *boolean*

Synopsis	Add a static (*,G) entry
Context	**configure** service vprn *string* pim ipv4 grt-extranet group-prefix *(ipv4-prefix | ipv6-prefix)* starg *boolean*
Tree	starg

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Default	false
Introduced	16.0.R1
Platforms	All

rpf-table *keyword*

Synopsis	Route table for RPF lookup
Context	**configure** service vprn *string* pim ipv4 rpf-table *keyword*
Tree	rpf-table
Options	rtable-m, rtable-u, both
Default	rtable-u
Introduced	16.0.R1
Platforms	All

source-address

Synopsis	Enter the **source-address** context
Context	**configure** service vprn *string* pim ipv4 source-address
Tree	source-address
Description	Commands in this context configure the source IP address for PIM messages.
Introduced	23.3.R1
Platforms	All

register-message *string*

Synopsis	Source IPv4 address for PIM register messages
Context	**configure** service vprn *string* pim ipv4 source-address register-message *string*
Tree	register-message
Description	This command configures the source IPv4 address for register messages in this PIM instance. The IP address can be set to any unicast address, regardless of whether it resides on the node. Ensure that the specified IP address is configured on the router as a loopback or interface IP address. When unconfigured, the source IP address for register messages is selected by choosing the smallest IP address from available interfaces on the node.
Introduced	23.3.R1
Platforms	All

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ssm-assert-compatible-mode *boolean*

Synopsis	Enable SSM assert compatible mode
Context	**configure** service vprn *string* pim ipv4 ssm-assert-compatible-mode *boolean*
Tree	ssm-assert-compatible-mode
Default	false
Introduced	16.0.R1
Platforms	All

ssm-default-range *boolean*

Synopsis	SSM default range
Context	**configure** service vprn *string* pim ipv4 ssm-default-range *boolean*
Tree	ssm-default-range
Default	true
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** service vprn *string* pim ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of PIM operation for IPv6
Context	**configure** service vprn *string* pim ipv6 admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

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rpf-table *keyword*

Synopsis	Route table for RPF lookup
Context	**configure** service vprn *string* pim ipv6 rpf-table *keyword*
Tree	rpf-table
Options	rtable-m, rtable-u, both
Default	rtable-u
Introduced	16.0.R1
Platforms	All

source-address

Synopsis	Enter the **source-address** context
Context	**configure** service vprn *string* pim ipv6 source-address
Tree	source-address
Description	Commands in this context configure the source IP address for PIM messages.
Introduced	23.3.R1
Platforms	All

register-message *string*

Synopsis	Source IPv6 address for PIM register messages
Context	**configure** service vprn *string* pim ipv6 source-address register-message *string*
Tree	register-message
Description	This command configures the source IPv6 address for register messages in this PIM instance. The IP address can be set to any unicast address, regardless of whether it resides on the node. Ensure that the specified IP address is configured on the router as a loopback or interface IP address. When unconfigured, the source IP address for register messages is selected by choosing the smallest IP address from available interfaces on the node.
Introduced	23.3.R1
Platforms	All

ssm-default-range *boolean*

Synopsis	SSM default range

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Context	**configure** service vprn *string* pim ipv6 ssm-default-range *boolean*
Tree	ssm-default-range
Default	true
Introduced	16.0.R1
Platforms	All

mc-ecmp-balance *boolean*

Synopsis	Enable multicast balancing of traffic over ECMP links
Context	**configure** service vprn *string* pim mc-ecmp-balance *boolean*
Tree	mc-ecmp-balance
Default	true
Introduced	16.0.R1
Platforms	All

mc-ecmp-balance-hold *number*

Synopsis	Hold time for multicast balancing over ECMP links
Context	**configure** service vprn *string* pim mc-ecmp-balance-hold *number*
Tree	mc-ecmp-balance-hold
Range	2 to 600
Units	minutes
Introduced	16.0.R1
Platforms	All

mc-ecmp-hashing

Synopsis	Enable the **mc-ecmp-hashing** context
Context	**configure** service vprn *string* pim mc-ecmp-hashing
Tree	mc-ecmp-hashing
Introduced	16.0.R1
Platforms	All

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rebalance *boolean*

Synopsis	Rebalance flows to newly added links immediately instead of waiting until they are pruned
Context	**configure** service vprn *string* pim mc-ecmp-hashing rebalance *boolean*
Tree	rebalance
Default	false
Introduced	16.0.R1
Platforms	All

mtu-over-head *number*

Synopsis	MVPN tunnel MTU size reduction to allow for BIER header
Context	**configure** service vprn *string* pim mtu-over-head *number*
Tree	mtu-over-head
Description	This command subtracts the specified value from the MVPN tunnel MTU to allow a BIER header to be added without exceeding the network MTU.
Range	0 | 44 | 76 | 140 | 268 | 536
Default	0
Introduced	20.5.R1
Platforms	All

non-dr-attract-traffic *boolean*

Synopsis	Attract traffic when the router is not the designated one
Context	**configure** service vprn *string* pim non-dr-attract-traffic *boolean*
Tree	non-dr-attract-traffic
Default	false
Introduced	16.0.R1
Platforms	All

rp

Synopsis	Enter the **rp** context
Context	**configure** service vprn *string* pim rp
Tree	rp

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Introduced	16.0.R1
Platforms	All

bootstrap

Synopsis	Enter the **bootstrap** context
Context	**configure** service vprn *string* pim rp bootstrap
Tree	bootstrap
Introduced	16.0.R1
Platforms	All

export *reference*

Synopsis	Export policy to control the flow of bootstrap messages
Context	**configure** service vprn *string* pim rp bootstrap export *reference*
Tree	export
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

import *reference*

Synopsis	Import policy to control the flow of bootstrap messages
Context	**configure** service vprn *string* pim rp bootstrap import *reference*
Tree	import
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

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ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service vprn *string* pim rp ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

anycast [ipv4-address] *string* rp-set-peer *string*

Synopsis	Add a list entry for **anycast**
Context	**configure** service vprn *string* pim rp ipv4 anycast *string* rp-set-peer *string*
Tree	anycast
Introduced	16.0.R1
Platforms	All

[**ipv4-address**] *string*

Synopsis	Loopback IP address shared by routes in RP set
Context	**configure** service vprn *string* pim rp ipv4 anycast *string* rp-set-peer *string*
Tree	anycast
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

rp-set-peer *string*

Synopsis	Configure a peer in the anycast rp-set.
Context	**configure** service vprn *string* pim rp ipv4 anycast *string* rp-set-peer *string*
Tree	anycast
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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auto-rp-discovery *boolean*

Synopsis	Enable auto RP discovery
Context	**configure** service vprn *string* pim rp ipv4 auto-rp-discovery *boolean*
Tree	auto-rp-discovery
Default	false
Introduced	16.0.R1
Platforms	All

bsr-candidate

Synopsis	Enter the **bsr-candidate** context
Context	**configure** service vprn *string* pim rp ipv4 bsr-candidate
Tree	bsr-candidate
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Candidate BSR IP address for Bootstrap Router election
Context	**configure** service vprn *string* pim rp ipv4 bsr-candidate address *string*
Tree	address
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the Candidate BSR
Context	**configure** service vprn *string* pim rp ipv4 bsr-candidate admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

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hash-mask-len *number*

Synopsis	Length for bootstrap hash mask
Context	**configure** service vprn *string* pim rp ipv4 bsr-candidate hash-mask-len *number*
Tree	hash-mask-len
Range	0 to 32
Default	30
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Bootstrap priority of the router
Context	**configure** service vprn *string* pim rp ipv4 bsr-candidate priority *number*
Tree	priority
Range	0 to 255
Default	0
Introduced	16.0.R1
Platforms	All

candidate *boolean*

Synopsis	Enable auto-RP to advertise candidate RP information
Context	**configure** service vprn *string* pim rp ipv4 candidate *boolean*
Tree	candidate
Description	When configured to **true**, the auto-RP is enabled to advertise the candidate RP information. The auto-RP candidate RP announces the candidate RP messages on the 224.0.1.39 multicast address. This functionality is in addition to the listener functionality enabled by the auto RP discovery. When configured to **false**, the candidate RP information is not specified.
Default	false
Introduced	20.10.R1
Platforms	All

mapping-agent *boolean*

Synopsis	Enable the mapping agent on the node

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Context	**configure** service vprn *string* pim rp ipv4 mapping-agent *boolean*
Tree	mapping-agent
Description	When configured to **true**, the mapping agent is enabled on the node. The auto-RP MA observes the **auto-rp-announcement** messages, selects the RP and generates the RP discovery 224.0.1.40 messages. This functionality is in addition to the auto-RP discovery functionality.
Default	false
Introduced	20.10.R1
Platforms	All

rp-candidate

Synopsis	Enter the **rp-candidate** context
Context	**configure** service vprn *string* pim rp ipv4 rp-candidate
Tree	rp-candidate
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Local RP address
Context	**configure** service vprn *string* pim rp ipv4 rp-candidate address *string*
Tree	address
Description	This command specifies the local RP address that is sent in the RP candidate advertisements to the Bootstrap Router.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the Candidate RP
Context	**configure** service vprn *string* pim rp ipv4 rp-candidate admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1

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Platforms	All

group-range [ipv4-prefix] *string*

Synopsis	Add a list entry for **group-range**
Context	**configure** service vprn *string* pim rp ipv4 rp-candidate group-range *string*
Tree	group-range
Introduced	16.0.R1
Platforms	All

[**ipv4-prefix**] *string*

Synopsis	IPv4 address and prefix length
Context	**configure** service vprn *string* pim rp ipv4 rp-candidate group-range *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

holdtime *number*

Synopsis	Time during which the neighboring router considers this router to be up
Context	**configure** service vprn *string* pim rp ipv4 rp-candidate holdtime *number*
Tree	holdtime
Range	5 to 255
Units	seconds
Default	150
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Candidate RP priority
Context	**configure** service vprn *string* pim rp ipv4 rp-candidate priority *number*
Tree	priority

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Range	0 to 255
Default	192
Introduced	16.0.R1
Platforms	All

static

Synopsis	Enter the **static** context
Context	**configure** service vprn *string* pim rp ipv4 static
Tree	static
Introduced	16.0.R1
Platforms	All

address [ipv4-address] *string*

Synopsis	Enter the **address** list instance
Context	**configure** service vprn *string* pim rp ipv4 static address *string*
Tree	address
Introduced	16.0.R1
Platforms	All

[ipv4-address] *string*

Synopsis	IPv4 address for the static RP
Context	**configure** service vprn *string* pim rp ipv4 static address *string*
Tree	address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

group-prefix [ipv4-prefix] *string*

Synopsis	Add a list entry for **group-prefix**
Context	**configure** service vprn *string* pim rp ipv4 static address *string* group-prefix *string*
Tree	group-prefix

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Introduced	16.0.R1
Platforms	All

[**ipv4-prefix**] *string*

Synopsis	IPv4 address and prefix length
Context	**configure** service vprn *string* pim rp ipv4 static address *string* group-prefix *string*
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

override *boolean*

Synopsis	Change the precedence for static RP over dynamically learnt RP
Context	**configure** service vprn *string* pim rp ipv4 static address *string* override *boolean*
Tree	override
Default	false
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** service vprn *string* pim rp ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

anycast [ipv6-address] *string* rp-set-peer *string*

Synopsis	Add a list entry for **anycast**
Context	**configure** service vprn *string* pim rp ipv6 anycast *string* rp-set-peer *string*
Tree	anycast
Introduced	16.0.R1

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Platforms	All

[**ipv6-address**] *string*

Synopsis	Loopback IP address shared by routes in RP set
Context	**configure** service vprn *string* pim rp ipv6 anycast *string* rp-set-peer *string*
Tree	anycast
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

rp-set-peer *string*

Synopsis	Peer in the anycast RP set
Context	**configure** service vprn *string* pim rp ipv6 anycast *string* rp-set-peer *string*
Tree	anycast
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bsr-candidate

Synopsis	Enter the **bsr-candidate** context
Context	**configure** service vprn *string* pim rp ipv6 bsr-candidate
Tree	bsr-candidate
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Candidate BSR IP address for Bootstrap Router election
Context	**configure** service vprn *string* pim rp ipv6 bsr-candidate address *string*
Tree	address
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the Candidate BSR
Context	**configure** service vprn *string* pim rp ipv6 bsr-candidate admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

hash-mask-len *number*

Synopsis	Length for bootstrap hash mask
Context	**configure** service vprn *string* pim rp ipv6 bsr-candidate hash-mask-len *number*
Tree	hash-mask-len
Range	0 to 128
Default	126
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Bootstrap priority of the router
Context	**configure** service vprn *string* pim rp ipv6 bsr-candidate priority *number*
Tree	priority
Range	0 to 255
Default	0
Introduced	16.0.R1
Platforms	All

embedded-rp

Synopsis	Enable the **embedded-rp** context
Context	**configure** service vprn *string* pim rp ipv6 embedded-rp
Tree	embedded-rp

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Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of embedded RP
Context	**configure** service vprn *string* pim rp ipv6 embedded-rp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

group-range [ipv6-prefix] *string*

Synopsis	Add a list entry for **group-range**
Context	**configure** service vprn *string* pim rp ipv6 embedded-rp group-range *string*
Tree	group-range
Introduced	16.0.R1
Platforms	All

[**ipv6-prefix**] *string*

Synopsis	IPv6 address and prefix length
Context	**configure** service vprn *string* pim rp ipv6 embedded-rp group-range *string*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

rp-candidate

Synopsis	Enter the **rp-candidate** context
Context	**configure** service vprn *string* pim rp ipv6 rp-candidate
Tree	rp-candidate

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Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Local RP address
Context	**configure** service vprn *string* pim rp ipv6 rp-candidate address *string*
Tree	address
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the Candidate RP
Context	**configure** service vprn *string* pim rp ipv6 rp-candidate admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

group-range [ipv6-prefix] *string*

Synopsis	Add a list entry for **group-range**
Context	**configure** service vprn *string* pim rp ipv6 rp-candidate group-range *string*
Tree	group-range
Introduced	16.0.R1
Platforms	All

[**ipv6-prefix**] *string*

Synopsis	IPv6 address and prefix length
Context	**configure** service vprn *string* pim rp ipv6 rp-candidate group-range *string*
Tree	group-range
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	All

holdtime *number*

Synopsis	Time during which the neighboring router considers this router to be up
Context	**configure** service vprn *string* pim rp ipv6 rp-candidate holdtime *number*
Tree	holdtime
Range	5 to 255
Units	seconds
Default	150
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Candidate RP priority
Context	**configure** service vprn *string* pim rp ipv6 rp-candidate priority *number*
Tree	priority
Range	0 to 255
Default	192
Introduced	16.0.R1
Platforms	All

static

Synopsis	Enter the **static** context
Context	**configure** service vprn *string* pim rp ipv6 static
Tree	static
Introduced	16.0.R1
Platforms	All

address [ipv6-address] *string*

Synopsis	Enter the **address** list instance

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Context	**configure** service vprn *string* pim rp ipv6 static address *string*
Tree	address
Introduced	16.0.R1
Platforms	All

[**ipv6-address**] *string*

Synopsis	Static IP address of the RP
Context	**configure** service vprn *string* pim rp ipv6 static address *string*
Tree	address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

group-prefix [ipv6-prefix] *string*

Synopsis	Add a list entry for **group-prefix**
Context	**configure** service vprn *string* pim rp ipv6 static address *string* group-prefix *string*
Tree	group-prefix
Introduced	16.0.R1
Platforms	All

[**ipv6-prefix**] *string*

Synopsis	IPv6 address and prefix length
Context	**configure** service vprn *string* pim rp ipv6 static address *string* group-prefix *string*
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

override *boolean*

Synopsis	Change the precedence for static RP over dynamically learnt RP
Context	**configure** service vprn *string* pim rp ipv6 static address *string* override *boolean*

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Tree	override
Default	false
Introduced	16.0.R1
Platforms	All

spt-switchover [ip-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **spt-switchover** list instance
Context	**configure** service vprn *string* pim spt-switchover *(ipv4-prefix | ipv6-prefix)*
Tree	spt-switchover
Introduced	16.0.R1
Platforms	All

[**ip-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP address and mask length
Context	**configure** service vprn *string* pim spt-switchover *(ipv4-prefix | ipv6-prefix)*
Tree	spt-switchover
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

threshold *(number | keyword)*

Synopsis	SPT switchover threshold
Context	**configure** service vprn *string* pim spt-switchover *(ipv4-prefix | ipv6-prefix)* threshold *(number | keyword)*
Tree	threshold
Range	1 to 4294967294
Units	kilobps
Options	infinity
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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ssm-groups

Synopsis	Enter the **ssm-groups** context
Context	**configure** service vprn *string* pim ssm-groups
Tree	ssm-groups
Introduced	16.0.R1
Platforms	All

group-range [ip-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Add a list entry for **group-range**
Context	**configure** service vprn *string* pim ssm-groups group-range *(ipv4-prefix | ipv6-prefix)*
Tree	group-range
Introduced	16.0.R1
Platforms	All

[**ip-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP address and mask length
Context	**configure** service vprn *string* pim ssm-groups group-range *(ipv4-prefix | ipv6-prefix)*
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

radius

Synopsis	Enter the **radius** context
Context	**configure** service vprn *string* radius
Tree	radius
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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proxy [name] *string*

Synopsis	Enter the **proxy** list instance
Context	**configure** service vprn *string* radius proxy *string*
Tree	proxy
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	RADIUS proxy name
Context	**configure** service vprn *string* radius proxy *string*
Tree	proxy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of RADIUS proxy
Context	**configure** service vprn *string* radius proxy *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-matching

Synopsis	Enter the **attribute-matching** context
Context	**configure** service vprn *string* radius proxy *string* attribute-matching
Tree	attribute-matching
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [index] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** service vprn *string* radius proxy *string* attribute-matching entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**index**] *number*

Synopsis	Index of this entry
Context	**configure** service vprn *string* radius proxy *string* attribute-matching entry *number*
Tree	entry
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-server-policy *string*

Synopsis	Accounting server policy
Context	**configure** service vprn *string* radius proxy *string* attribute-matching entry *number* accounting-server-policy *string*
Tree	accounting-server-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authentication-server-policy *string*

Synopsis	Authentication server policy
Context	**configure** service vprn *string* radius proxy *string* attribute-matching entry *number* authentication-server-policy *string*
Tree	authentication-server-policy

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String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-string *string*

Synopsis	Prefix string
Context	**configure** service vprn *string* radius proxy *string* attribute-matching entry *number* prefix-string *string*
Tree	prefix-string
String Length	1 to 128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suffix-string *string*

Synopsis	Prefix string
Context	**configure** service vprn *string* radius proxy *string* attribute-matching entry *number* suffix-string *string*
Tree	suffix-string
String Length	1 to 128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	Matching attribute type to RADIUS server policy
Context	**configure** service vprn *string* radius proxy *string* attribute-matching type *number*
Tree	type
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor *(number | keyword)*

Synopsis	Matching Vendor ID to RADIUS server policy

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Context	**configure** service vprn *string* radius proxy *string* attribute-matching vendor *(number | keyword)*
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cache

Synopsis	Enter the **cache** context
Context	**configure** service vprn *string* radius proxy *string* cache
Tree	cache
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the RADIUS proxy cache
Context	**configure** service vprn *string* radius proxy *string* cache admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

key

Synopsis	Enable the **key** context
Context	**configure** service vprn *string* radius proxy *string* cache key
Tree	key
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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attribute-type *number*

Synopsis	RADIUS attribute type to cache for this RADIUS proxy server
Context	**configure** service vprn *string* radius proxy *string* cache key attribute-type *number*
Tree	attribute-type
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

packet-type *keyword*

Synopsis	Packet type of the RADIUS messages
Context	**configure** service vprn *string* radius proxy *string* cache key packet-type *keyword*
Tree	packet-type
Options	access-request, access-accept
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor *(number | keyword)*

Synopsis	RADIUS Vendor ID
Context	**configure** service vprn *string* radius proxy *string* cache key vendor *(number | keyword)*
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Idle timeout value
Context	**configure** service vprn *string* radius proxy *string* cache timeout *number*
Tree	timeout
Range	60 to 3600

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Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-accounting

Synopsis	Enter the **track-accounting** context
Context	**configure** service vprn *string* radius proxy *string* cache track-accounting
Tree	track-accounting
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-off *boolean*

Synopsis	Remove all ESM hosts associated with the RADIUS client
Context	**configure** service vprn *string* radius proxy *string* cache track-accounting accounting-off *boolean*
Tree	accounting-off
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-on *boolean*

Synopsis	Remove all ESM hosts associated with the RADIUS client
Context	**configure** service vprn *string* radius proxy *string* cache track-accounting accounting-on *boolean*
Tree	accounting-on
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interim-update *boolean*

Synopsis	Update the ESM host with the RADIUS client that generated the interim update

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Context	**configure** service vprn *string* radius proxy *string* cache track-accounting interim-update *boolean*
Tree	interim-update
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *boolean*

Synopsis	Update host with client that generated accounting-start
Context	**configure** service vprn *string* radius proxy *string* cache track-accounting start *boolean*
Tree	start
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stop *boolean*

Synopsis	Remove ESM host and forward accounting-stop packet
Context	**configure** service vprn *string* radius proxy *string* cache track-accounting stop *boolean*
Tree	stop
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-authentication

Synopsis	Enter the **track-authentication** context
Context	**configure** service vprn *string* radius proxy *string* cache track-authentication
Tree	track-authentication
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accept *boolean*

Synopsis	Track Access-Accept message for mobility

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Context	**configure** service vprn *string* radius proxy *string* cache track-authentication accept *boolean*
Tree	accept
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-delete-hold-time *number*

Synopsis	Delete hold time
Context	**configure** service vprn *string* radius proxy *string* cache track-delete-hold-time *number*
Tree	track-delete-hold-time
Range	0 to 6000
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

defaults

Synopsis	Enter the **defaults** context
Context	**configure** service vprn *string* radius proxy *string* defaults
Tree	defaults
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-server-policy *string*

Synopsis	Default accounting RADIUS server policy
Context	**configure** service vprn *string* radius proxy *string* defaults accounting-server-policy *string*
Tree	accounting-server-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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authentication-server-policy *string*

Synopsis	Default authentication RADIUS server policy
Context	**configure** service vprn *string* radius proxy *string* defaults authentication-server-policy *string*
Tree	authentication-server-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* radius proxy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface [interface-name] *reference*

Synopsis	Add a list entry for **interface**
Context	**configure** service vprn *string* radius proxy *string* interface *reference*
Tree	interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**interface-name**] *reference*

Synopsis	IP interface name
Context	**configure** service vprn *string* radius proxy *string* interface *reference*
Tree	interface
Reference	**configure** service vprn *string* interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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load-balance-key

Synopsis	Enter the **load-balance-key** context
Context	**configure** service vprn *string* radius proxy *string* load-balance-key
Tree	load-balance-key
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-1

Synopsis	Enter the **attribute-1** context
Context	**configure** service vprn *string* radius proxy *string* load-balance-key attribute-1
Tree	attribute-1
Notes	The following elements are part of a choice: (**attribute-1**, **attribute-2**, **attribute-3**, **attribute-4**, and **attribute-5**) or **source-ip-udp**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	**configure** service vprn *string* radius proxy *string* load-balance-key attribute-1 type *number*
Tree	type
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor *(number | keyword)*

Synopsis	Vendor-Id attribute
Context	**configure** service vprn *string* radius proxy *string* load-balance-key attribute-1 vendor *(number | keyword)*
Tree	vendor
Range	1 to 16777215
Options	nokia

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-2

Synopsis	Enter the **attribute-2** context
Context	**configure** service vprn *string* radius proxy *string* load-balance-key attribute-2
Tree	attribute-2
Notes	The following elements are part of a choice: (**attribute-1**, **attribute-2**, **attribute-3**, **attribute-4**, and **attribute-5**) or **source-ip-udp**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	**configure** service vprn *string* radius proxy *string* load-balance-key attribute-2 type *number*
Tree	type
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor *(number | keyword)*

Synopsis	Vendor-Id attribute
Context	**configure** service vprn *string* radius proxy *string* load-balance-key attribute-2 vendor *(number | keyword)*
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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attribute-3

Synopsis	Enter the **attribute-3** context
Context	**configure** service vprn *string* radius proxy *string* load-balance-key attribute-3
Tree	attribute-3
Notes	The following elements are part of a choice: (**attribute-1**, **attribute-2**, **attribute-3**, **attribute-4**, and **attribute-5**) or **source-ip-udp**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	**configure** service vprn *string* radius proxy *string* load-balance-key attribute-3 type *number*
Tree	type
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor *(number | keyword)*

Synopsis	Vendor-Id attribute
Context	**configure** service vprn *string* radius proxy *string* load-balance-key attribute-3 vendor *(number | keyword)*
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-4

Synopsis	Enter the **attribute-4** context
Context	**configure** service vprn *string* radius proxy *string* load-balance-key attribute-4
Tree	attribute-4

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Notes	The following elements are part of a choice: (**attribute-1**, **attribute-2**, **attribute-3**, **attribute-4**, and **attribute-5**) or **source-ip-udp**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	**configure** service vprn *string* radius proxy *string* load-balance-key attribute-4 type *number*
Tree	type
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor *(number | keyword)*

Synopsis	Vendor-Id attribute
Context	**configure** service vprn *string* radius proxy *string* load-balance-key attribute-4 vendor *(number | keyword)*
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-5

Synopsis	Enter the **attribute-5** context
Context	**configure** service vprn *string* radius proxy *string* load-balance-key attribute-5
Tree	attribute-5
Notes	The following elements are part of a choice: (**attribute-1**, **attribute-2**, **attribute-3**, **attribute-4**, and **attribute-5**) or **source-ip-udp**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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type *number*

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	**configure** service vprn *string* radius proxy *string* load-balance-key attribute-5 type *number*
Tree	type
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor *(number | keyword)*

Synopsis	Vendor-Id attribute
Context	**configure** service vprn *string* radius proxy *string* load-balance-key attribute-5 vendor *(number | keyword)*
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-ip-udp

Synopsis	Key to consist of the source IP address and source UDP port of the RADIUS message
Context	**configure** service vprn *string* radius proxy *string* load-balance-key source-ip-udp
Tree	source-ip-udp
Notes	The following elements are part of a choice: (**attribute-1**, **attribute-2**, **attribute-3**, **attribute-4**, and **attribute-5**) or **source-ip-udp**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

purpose *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

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Synopsis	Purpose of the RADIUS proxy
Context	**configure** service vprn *string* radius proxy *string* purpose *keyword*
Tree	purpose
Options	accounting, authentication, accounting-authentication
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy
Context	**configure** service vprn *string* radius proxy *string* python-policy *reference*
Tree	python-policy
Reference	**configure** python python-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

secret *string*

Synopsis	Format of the secret key to access the RADIUS proxy server
Context	**configure** service vprn *string* radius proxy *string* secret *string*
Tree	secret
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

send-accounting-response *boolean*

Synopsis	Allow RADIUS proxy server to respond to Accounting-Response messages
Context	**configure** service vprn *string* radius proxy *string* send-accounting-response *boolean*
Tree	send-accounting-response
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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wlan-gw

Synopsis	Enter the **wlan-gw** context
Context	**configure** service vprn *string* radius proxy *string* wlan-gw
Tree	wlan-gw
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis	IPv4 address of the distributed RADIUS proxy server
Context	**configure** service vprn *string* radius proxy *string* wlan-gw address *string*
Tree	address
Description	This command configures the IPv4 address of the distributed RADIUS proxy server for use by the access points.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis	IPv6 address of the distributed RADIUS proxy server
Context	**configure** service vprn *string* radius proxy *string* wlan-gw ipv6-address *string*
Tree	ipv6-address
Description	This command configures the IPv6 address of the distributed RADIUS proxy server for use by the access points.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	ISA WLAN gateway group
Context	**configure** service vprn *string* radius proxy *string* wlan-gw-group *reference*

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Tree	wlan-gw-group
Reference	**configure** isa wlan-gw-group *number*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

server [name] *string*

Synopsis	Enter the **server** list instance
Context	**configure** service vprn *string* radius server *string*
Tree	server
Max. Instances	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	External RADIUS server name
Context	**configure** service vprn *string* radius server *string*
Tree	server
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accept-coa *boolean*

Synopsis	Process Change of Authorization (CoA) messages
Context	**configure** service vprn *string* radius server *string* accept-coa *boolean*
Tree	accept-coa
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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acct-port *number*

Synopsis	UDP port number of the RADIUS for accounting events
Context	**configure** service vprn *string* radius server *string* acct-port *number*
Tree	acct-port
Range	1 to 65535
Default	1813
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the RADIUS server
Context	**configure** service vprn *string* radius server *string* address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auth-port *number*

Synopsis	UDP port number of the RADIUS to be used as match criteria
Context	**configure** service vprn *string* radius server *string* auth-port *number*
Tree	auth-port
Range	1 to 65535
Default	1812
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* radius server *string* description *string*
Tree	description
String Length	1 to 80

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pending-requests-limit *number*

Synopsis	Limit of the number for pending RADIUS requests
Context	**configure** service vprn *string* radius server *string* pending-requests-limit *number*
Tree	pending-requests-limit
Range	1 to 4096
Default	4096
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python script policy to modify CoA messages
Context	**configure** service vprn *string* radius server *string* python-policy *reference*
Tree	python-policy
Reference	**configure** python python-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

secret *string*

Synopsis	Secret key associated with this RADIUS server
Context	**configure** service vprn *string* radius server *string* secret *string*
Tree	secret
String Length	1 to 115
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reassembly

Synopsis	Enable the **reassembly** context

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Context	**configure** service vprn *string* reassembly
Tree	reassembly
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group (including WLAN Gateway group) that executes the reassembly
Context	**configure** service vprn *string* reassembly nat-group *number*
Tree	nat-group
Max. Range	0 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

to-base-network *boolean*

Synopsis	Allow reassembled traffic sent to network interface
Context	**configure** service vprn *string* reassembly to-base-network *boolean*
Tree	to-base-network
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

redundant-interface [interface-name] *string*

Synopsis	Enter the **redundant-interface** list instance
Context	**configure** service vprn *string* redundant-interface *string*
Tree	redundant-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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[**interface-name**] *string*

Synopsis	Interface name
Context	**configure** service vprn *string* redundant-interface *string*
Tree	redundant-interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	**configure** service vprn *string* redundant-interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* redundant-interface *string* description *string*
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-time

Synopsis	Enter the **hold-time** context
Context	**configure** service vprn *string* redundant-interface *string* hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service vprn *string* redundant-interface *string* hold-time ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

down

Synopsis	Enter the **down** context
Context	**configure** service vprn *string* redundant-interface *string* hold-time ipv4 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the **init-only** command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	**configure** service vprn *string* redundant-interface *string* hold-time ipv4 down init-only *boolean*
Tree	init-only
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Down hold time for the IP interface
Context	**configure** service vprn *string* redundant-interface *string* hold-time ipv4 down seconds *number*

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Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

up

Synopsis	Enter the **up** context
Context	**configure** service vprn *string* redundant-interface *string* hold-time ipv4 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Up hold time for the IP interface
Context	**configure** service vprn *string* redundant-interface *string* hold-time ipv4 up seconds *number*
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis	IP MTU applied to outgoing packets
Context	**configure** service vprn *string* redundant-interface *string* ip-mtu *number*
Tree	ip-mtu
Range	512 to 9786
Units	bytes
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service vprn *string* redundant-interface *string* ipv4
Tree	ipv4
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

primary

Synopsis	Enable the **primary** context
Context	**configure** service vprn *string* redundant-interface *string* ipv4 primary
Tree	primary
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis	IPv4 address to be assigned to the interface
Context	**configure** service vprn *string* redundant-interface *string* ipv4 primary address *string*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	**configure** service vprn *string* redundant-interface *string* ipv4 primary prefix-length *number*
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.

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Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-ip *string*

Synopsis	Remote IP address for the interface
Context	**configure** service vprn *string* redundant-interface *string* ipv4 primary remote-ip *string*
Tree	remote-ip
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

spoke-sdp [sdp-bind-id] *string*

Synopsis	Enter the **spoke-sdp** list instance
Context	**configure** service vprn *string* redundant-interface *string* spoke-sdp *string*
Tree	spoke-sdp
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**sdp-bind-id**] *string*

Synopsis	SDP binding ID
Context	**configure** service vprn *string* redundant-interface *string* spoke-sdp *string*
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the SDP binding to the service
Context	**configure** service vprn *string* redundant-interface *string* spoke-sdp *string* admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

control-word *boolean*

Synopsis	Use the control word as preferred
Context	**configure** service vprn *string* redundant-interface *string* spoke-sdp *string* control-word *boolean*
Tree	control-word
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* redundant-interface *string* spoke-sdp *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the **egress** context
Context	**configure** service vprn *string* redundant-interface *string* spoke-sdp *string* egress
Tree	egress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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filter

Synopsis	Enter the **filter** context
Context	**configure** service vprn *string* redundant-interface *string* spoke-sdp *string* egress filter
Tree	filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service vprn *string* redundant-interface *string* spoke-sdp *string* egress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	**configure** service vprn *string* redundant-interface *string* spoke-sdp *string* egress vc-label *number*
Tree	vc-label
Range	16 to 1048575
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service vprn *string* redundant-interface *string* spoke-sdp *string* ingress
Tree	ingress

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis	Enter the **filter** context
Context	**configure** service vprn *string* redundant-interface *string* spoke-sdp *string* ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service vprn *string* redundant-interface *string* spoke-sdp *string* ingress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vc-label *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
Context	**configure** service vprn *string* redundant-interface *string* spoke-sdp *string* ingress vc-label *number*
Tree	vc-label
Range	1 to 1048575
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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rip

Synopsis	Enable the **rip** context
Context	**configure** service vprn *string* rip
Tree	rip
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the RIP instance
Context	**configure** service vprn *string* rip admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

authentication-key *string*

Synopsis	Authentication password passed between RIP neighbors
Context	**configure** service vprn *string* rip authentication-key *string*
Tree	authentication-key
Description	This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes. The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed. When unconfigured, this command removes the authentication password from the configuration and disables authentication.
String Length	1 to 51
Introduced	16.0.R4
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type used between RIP neighbors

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Context	**configure** service vprn *string* rip authentication-type *keyword*
Tree	authentication-type
Description	This command sets the type of authentication to be used between RIP neighbors. The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed. When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.
Options	none, password, md5, md20
Default	none
Introduced	16.0.R4
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	**configure** service vprn *string* rip bfd-liveness *boolean*
Tree	bfd-liveness
Description	When configured to **true**, this command enables BFD to control the state of the associated protocol adjacency. When configured to **false**, this command removes BFD from the associated protocol adjacency.
Default	false
Introduced	16.0.R4
Platforms	All

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	**configure** service vprn *string* rip check-zero *boolean*
Tree	check-zero
Description	When configured to **true**, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to **false**, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Default	false
Introduced	16.0.R4

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Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* rip description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

export-limit

Synopsis	Enable the **export-limit** context
Context	**configure** service vprn *string* rip export-limit
Tree	export-limit
Introduced	16.0.R4
Platforms	All

log-percent *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	**configure** service vprn *string* rip export-limit log-percent *number*
Tree	log-percent
Range	1 to 100
Introduced	16.0.R4
Platforms	All

number *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	**configure** service vprn *string* rip export-limit number *number*
Tree	number
Range	1 to 4294967295
Notes	This element is mandatory.

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Introduced	16.0.R4
Platforms	All

export-policy *reference*

Synopsis	Policies to determine exported routes
Context	**configure** service vprn *string* rip export-policy *reference*
Tree	export-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

group [group-name] *string*

Synopsis	Enter the **group** list instance
Context	**configure** service vprn *string* rip group *string*
Tree	group
Introduced	16.0.R4
Platforms	All

[**group-name**] *string*

Synopsis	RIP group name
Context	**configure** service vprn *string* rip group *string*
Tree	group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of RIP neighbor interface group
Context	**configure** service vprn *string* rip group *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

authentication-key *string*

Synopsis	Authentication password passed between RIP neighbors
Context	**configure** service vprn *string* rip group *string* authentication-key *string*
Tree	authentication-key
Description	This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes. The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed. When unconfigured, the authentication password is removed from the configuration and authentication is disabled.
String Length	1 to 51
Introduced	16.0.R4
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type
Context	**configure** service vprn *string* rip group *string* authentication-type *keyword*
Tree	authentication-type
Description	This command configures the type of authentication to be used. The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed. When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.
Options	none, password, md5, md20

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Introduced	16.0.R4
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	**configure** service vprn *string* rip group *string* bfd-liveness *boolean*
Tree	bfd-liveness
Description	When configured to **true**, this command enables BFD to control the state of the associated protocol adjacency. When configured to **false**, this command removes BFD from the associated protocol adjacency.
Introduced	16.0.R4
Platforms	All

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	**configure** service vprn *string* rip group *string* check-zero *boolean*
Tree	check-zero
Description	When configured to **true**, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to **false**, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* rip group *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

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export-policy *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	**configure** service vprn *string* rip group *string* export-policy *reference*
Tree	export-policy
Description	This command specifies the export route policies used to determine which routes are exported to RIP. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	**configure** service vprn *string* rip group *string* import-policy *reference*
Tree	import-policy
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

message-size *number*

Synopsis	Maximum number of routes per RIP update message
Context	**configure** service vprn *string* rip group *string* message-size *number*
Tree	message-size

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Range	25 to 255
Introduced	16.0.R4
Platforms	All

metric-in *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	**configure** service vprn *string* rip group *string* metric-in *number*
Tree	metric-in
Range	1 to 16
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIP
Context	**configure** service vprn *string* rip group *string* metric-out *number*
Tree	metric-out
Range	1 to 16
Introduced	16.0.R4
Platforms	All

neighbor [interface-name] *string*

Synopsis	Enter the **neighbor** list instance
Context	**configure** service vprn *string* rip group *string* neighbor *string*
Tree	neighbor
Introduced	16.0.R4
Platforms	All

[**interface-name**] *string*

Synopsis	IP interface name
Context	**configure** service vprn *string* rip group *string* neighbor *string*
Tree	neighbor

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String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the RIP neighbor interface
Context	**configure** service vprn *string* rip group *string* neighbor *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

authentication-key *string*

Synopsis	Authentication password passed between RIP neighbors
Context	**configure** service vprn *string* rip group *string* neighbor *string* authentication-key *string*
Tree	authentication-key
Description	This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, $, spaces, and so on), the entire string must be enclosed within double quotes. The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed. When unconfigured, this command removes the authentication password from the configuration and disables authentication.
String Length	1 to 51
Introduced	16.0.R4
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type
Context	**configure** service vprn *string* rip group *string* neighbor *string* authentication-type *keyword*

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Tree	authentication-type
Description	This command configures the type of authentication to be used. The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed. When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.
Options	none, password, md5, md20
Introduced	16.0.R4
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	**configure** service vprn *string* rip group *string* neighbor *string* bfd-liveness *boolean*
Tree	bfd-liveness
Description	When configured to **true**, this command enables BFD to control the state of the associated protocol adjacency. When configured to **false**, this command removes BFD from the associated protocol adjacency.
Introduced	16.0.R4
Platforms	All

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	**configure** service vprn *string* rip group *string* neighbor *string* check-zero *boolean*
Tree	check-zero
Description	When configured to **true**, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to **false**, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description

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Context	**configure** service vprn *string* rip group *string* neighbor *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

export-policy *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	**configure** service vprn *string* rip group *string* neighbor *string* export-policy *reference*
Tree	export-policy
Description	This command specifies the export route policies used to determine which routes are exported to RIP. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	**configure** service vprn *string* rip group *string* neighbor *string* import-policy *reference*
Tree	import-policy
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4

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Platforms	All

message-size *number*

Synopsis	Maximum number of routes per RIP update message
Context	**configure** service vprn *string* rip group *string* neighbor *string* message-size *number*
Tree	message-size
Range	25 to 255
Introduced	16.0.R4
Platforms	All

metric-in *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	**configure** service vprn *string* rip group *string* neighbor *string* metric-in *number*
Tree	metric-in
Range	1 to 16
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIP
Context	**configure** service vprn *string* rip group *string* neighbor *string* metric-out *number*
Tree	metric-out
Range	1 to 16
Introduced	16.0.R4
Platforms	All

preference *number*

Synopsis	Route preference
Context	**configure** service vprn *string* rip group *string* neighbor *string* preference *number*
Tree	preference
Range	1 to 255

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Introduced	16.0.R4
Platforms	All

receive *keyword*

Synopsis	Accepted version on received packets
Context	**configure** service vprn *string* rip group *string* neighbor *string* receive *keyword*
Tree	receive
Options	version-1, version-2, both, none
Introduced	16.0.R4
Platforms	All

send *keyword*

Synopsis	RIP version and method used to send RIP updates
Context	**configure** service vprn *string* rip group *string* neighbor *string* send *keyword*
Tree	send
Options	none, version-1, broadcast, multicast, unicast
Introduced	16.0.R4
Platforms	All

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	**configure** service vprn *string* rip group *string* neighbor *string* split-horizon *boolean*
Tree	split-horizon
Description	When configured to **true**, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity). When configured to **false**. this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.
Introduced	16.0.R4
Platforms	All

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timers

Synopsis	Enable the **timers** context
Context	**configure** service vprn *string* rip group *string* neighbor *string* timers
Tree	timers
Introduced	16.0.R4
Platforms	All

flush *number*

Synopsis	RIP flush timer
Context	**configure** service vprn *string* rip group *string* neighbor *string* timers flush *number*
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

timeout *number*

Synopsis	RIP timeout timer
Context	**configure** service vprn *string* rip group *string* neighbor *string* timers timeout *number*
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

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update *number*

Synopsis	Timer that controls the frequency of updates
Context	**configure** service vprn *string* rip group *string* neighbor *string* timers update *number*
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

unicast-address [address] *string*

Synopsis	Add a list entry for **unicast-address**
Context	**configure** service vprn *string* rip group *string* neighbor *string* unicast-address *string*
Tree	unicast-address
Introduced	16.0.R4
Platforms	All

[**address**] *string*

Synopsis	Unicast IPv6 address for the neighbor
Context	**configure** service vprn *string* rip group *string* neighbor *string* unicast-address *string*
Tree	unicast-address
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

preference *number*

Synopsis	Route preference
Context	**configure** service vprn *string* rip group *string* preference *number*
Tree	preference
Range	1 to 255
Introduced	16.0.R4

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Platforms	All

receive *keyword*

Synopsis	Accepted version on received packets
Context	**configure** service vprn *string* rip group *string* receive *keyword*
Tree	receive
Options	version-1, version-2, both, none
Introduced	16.0.R4
Platforms	All

send *keyword*

Synopsis	RIP version and method used to send RIP updates
Context	**configure** service vprn *string* rip group *string* send *keyword*
Tree	send
Options	none, version-1, broadcast, multicast
Introduced	16.0.R4
Platforms	All

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	**configure** service vprn *string* rip group *string* split-horizon *boolean*
Tree	split-horizon
Description	When configured to **true**, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity). When configured to **false**. this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.
Introduced	16.0.R4
Platforms	All

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timers

Synopsis	Enable the **timers** context
Context	**configure** service vprn *string* rip group *string* timers
Tree	timers
Introduced	16.0.R4
Platforms	All

flush *number*

Synopsis	RIP flush timer
Context	**configure** service vprn *string* rip group *string* timers flush *number*
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

timeout *number*

Synopsis	RIP timeout timer
Context	**configure** service vprn *string* rip group *string* timers timeout *number*
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

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update *number*

Synopsis	Timer that controls the frequency of updates
Context	**configure** service vprn *string* rip group *string* timers update *number*
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Import policies to decide routes for routing table
Context	**configure** service vprn *string* rip import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

message-size *number*

Synopsis	Maximum number of routes in the RIP message
Context	**configure** service vprn *string* rip message-size *number*
Tree	message-size
Range	25 to 255
Default	25
Introduced	16.0.R4
Platforms	All

metric-in *number*

Synopsis	Metric added to routes received from a RIP neighbor

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Context	**configure** service vprn *string* rip metric-in *number*
Tree	metric-in
Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIP
Context	**configure** service vprn *string* rip metric-out *number*
Tree	metric-out
Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	All

preference *number*

Synopsis	Route preference
Context	**configure** service vprn *string* rip preference *number*
Tree	preference
Range	1 to 255
Default	100
Introduced	16.0.R4
Platforms	All

propagate-metric *boolean*

Synopsis	Enable the BGP MED used to configure the RIP metric
Context	**configure** service vprn *string* rip propagate-metric *boolean*
Tree	propagate-metric
Description	When configured to **true**, this command enables the BGP MED to be used to configure the RIP metric at the BGP to RIP transition on egress routers. When configured to **false**, this command sets the RIP metric to the optional value configured with the **metric-out** command plus one.

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Default	false
Introduced	16.0.R4
Platforms	All

receive *keyword*

Synopsis	Accepted version on received packets
Context	**configure** service vprn *string* rip receive *keyword*
Tree	receive
Options	version-1, version-2, both, none
Default	both
Introduced	16.0.R4
Platforms	All

send *keyword*

Synopsis	RIP version and method used to send RIP updates
Context	**configure** service vprn *string* rip send *keyword*
Tree	send
Options	none, version-1, broadcast, multicast
Default	broadcast
Introduced	16.0.R4
Platforms	All

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	**configure** service vprn *string* rip split-horizon *boolean*
Tree	split-horizon
Description	When configured to **true**, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity). When configured to **false**. this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.

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Default	true
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enable the **timers** context
Context	**configure** service vprn *string* rip timers
Tree	timers
Introduced	16.0.R4
Platforms	All

flush *number*

Synopsis	RIP flush timer
Context	**configure** service vprn *string* rip timers flush *number*
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

timeout *number*

Synopsis	RIP timeout timer
Context	**configure** service vprn *string* rip timers timeout *number*
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds

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Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

update *number*

Synopsis	Timer that controls the frequency of updates
Context	**configure** service vprn *string* rip timers update *number*
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

ripng

Synopsis	Enable the **ripng** context
Context	**configure** service vprn *string* ripng
Tree	ripng
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the RIPng instance
Context	**configure** service vprn *string* ripng admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

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bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	**configure** service vprn *string* ripng bfd-liveness *boolean*
Tree	bfd-liveness
Description	When configured to **true**, this command enables BFD to control the state of the associated protocol adjacency. When configured to **false**, this command removes BFD from the associated protocol adjacency.
Default	false
Introduced	16.0.R4
Platforms	All

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	**configure** service vprn *string* ripng check-zero *boolean*
Tree	check-zero
Description	When configured to **true**, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to **false**, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Default	false
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* ripng description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

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export-limit

Synopsis	Enable the **export-limit** context
Context	**configure** service vprn *string* ripng export-limit
Tree	export-limit
Introduced	16.0.R4
Platforms	All

log-percent *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	**configure** service vprn *string* ripng export-limit log-percent *number*
Tree	log-percent
Range	1 to 100
Introduced	16.0.R4
Platforms	All

number *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	**configure** service vprn *string* ripng export-limit number *number*
Tree	number
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

export-policy *reference*

Synopsis	Policies to determine exported routes
Context	**configure** service vprn *string* ripng export-policy *reference*
Tree	export-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.

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Introduced	16.0.R4
Platforms	All

group [group-name] *string*

Synopsis	Enter the **group** list instance
Context	**configure** service vprn *string* ripng group *string*
Tree	group
Introduced	16.0.R4
Platforms	All

[**group-name**] *string*

Synopsis	RIP group name
Context	**configure** service vprn *string* ripng group *string*
Tree	group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of RIPng neighbor interface group
Context	**configure** service vprn *string* ripng group *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	**configure** service vprn *string* ripng group *string* bfd-liveness *boolean*

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Tree	bfd-liveness
Description	When configured to **true**, this command enables BFD to control the state of the associated protocol adjacency. When configured to **false**, this command removes BFD from the associated protocol adjacency.
Introduced	16.0.R4
Platforms	All

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	**configure** service vprn *string* ripng group *string* check-zero *boolean*
Tree	check-zero
Description	When configured to **true**, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to **false**, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* ripng group *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

export-policy *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	**configure** service vprn *string* ripng group *string* export-policy *reference*
Tree	export-policy
Description	This command specifies the export route policies used to determine which routes are exported to RIP.

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	If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	**configure** service vprn *string* ripng group *string* import-policy *reference*
Tree	import-policy
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

message-size *number*

Synopsis	Maximum number of routes in the message
Context	**configure** service vprn *string* ripng group *string* message-size *number*
Tree	message-size
Range	25 to 255
Introduced	16.0.R4
Platforms	All

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metric-in *number*

Synopsis	Metric added to routes received from the neighbor
Context	**configure** service vprn *string* ripng group *string* metric-in *number*
Tree	metric-in
Range	1 to 16
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIPng
Context	**configure** service vprn *string* ripng group *string* metric-out *number*
Tree	metric-out
Range	1 to 16
Introduced	16.0.R4
Platforms	All

neighbor [interface-name] *reference*

Synopsis	Enter the **neighbor** list instance
Context	**configure** service vprn *string* ripng group *string* neighbor *reference*
Tree	neighbor
Introduced	16.0.R4
Platforms	All

[**interface-name**] *reference*

Synopsis	IP interface name
Context	**configure** service vprn *string* ripng group *string* neighbor *reference*
Tree	neighbor
Reference	**configure** service vprn *string* interface *string*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the RIPng neighbor
Context	**configure** service vprn *string* ripng group *string* neighbor *reference* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	**configure** service vprn *string* ripng group *string* neighbor *reference* bfd-liveness *boolean*
Tree	bfd-liveness
Description	When configured to **true**, this command enables BFD to control the state of the associated protocol adjacency. When configured to **false**, this command removes BFD from the associated protocol adjacency.
Introduced	16.0.R4
Platforms	All

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	**configure** service vprn *string* ripng group *string* neighbor *reference* check-zero *boolean*
Tree	check-zero
Description	When configured to **true**, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to **false**, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	16.0.R4
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** service vprn *string* ripng group *string* neighbor *reference* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

export-policy *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	**configure** service vprn *string* ripng group *string* neighbor *reference* export-policy *reference*
Tree	export-policy
Description	This command specifies the export route policies used to determine which routes are exported to RIP. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	**configure** service vprn *string* ripng group *string* neighbor *reference* import-policy *reference*
Tree	import-policy
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	**configure** policy-options policy-statement *string*

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Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

message-size *number*

Synopsis	Maximum number of routes in the message
Context	**configure** service vprn *string* ripng group *string* neighbor *reference* message-size *number*
Tree	message-size
Range	25 to 255
Introduced	16.0.R4
Platforms	All

metric-in *number*

Synopsis	Metric added to routes received from the neighbor
Context	**configure** service vprn *string* ripng group *string* neighbor *reference* metric-in *number*
Tree	metric-in
Range	1 to 16
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIPng
Context	**configure** service vprn *string* ripng group *string* neighbor *reference* metric-out *number*
Tree	metric-out
Range	1 to 16
Introduced	16.0.R4
Platforms	All

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preference *number*

Synopsis	Route preference
Context	**configure** service vprn *string* ripng group *string* neighbor *reference* preference *number*
Tree	preference
Range	1 to 255
Introduced	16.0.R4
Platforms	All

receive *keyword*

Synopsis	Accepted version on received packets
Context	**configure** service vprn *string* ripng group *string* neighbor *reference* receive *keyword*
Tree	receive
Options	none, ripng
Introduced	16.0.R4
Platforms	All

send *keyword*

Synopsis	RIPng version and method used to send RIPng updates
Context	**configure** service vprn *string* ripng group *string* neighbor *reference* send *keyword*
Tree	send
Options	none, ripng, unicast
Introduced	16.0.R4
Platforms	All

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	**configure** service vprn *string* ripng group *string* neighbor *reference* split-horizon *boolean*
Tree	split-horizon
Description	When configured to **true**, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).

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When configured to **false**. this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.

Introduced 16.0.R4

Platforms All

timers

Synopsis Enable the **timers** context

Context **configure** service vprn *string* ripng group *string* neighbor *reference* timers

Tree timers

Introduced 16.0.R4

Platforms All

flush *number*

Synopsis RIP flush timer

Context **configure** service vprn *string* ripng group *string* neighbor *reference* timers flush *number*

Tree flush

Description This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.

Range 1 to 1200

Units seconds

Notes This element is mandatory.

Introduced 16.0.R4

Platforms All

timeout *number*

Synopsis RIP timeout timer

Context **configure** service vprn *string* ripng group *string* neighbor *reference* timers timeout *number*

Tree timeout

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Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

update *number*

Synopsis	Timer that controls the frequency of updates
Context	**configure** service vprn *string* ripng group *string* neighbor *reference* timers update *number*
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

unicast-address [address] *string*

Synopsis	Add a list entry for **unicast-address**
Context	**configure** service vprn *string* ripng group *string* neighbor *reference* unicast-address *string*
Tree	unicast-address
Introduced	16.0.R4
Platforms	All

[**address**] *string*

Synopsis	Unicast IPv6 address for the neighbor
Context	**configure** service vprn *string* ripng group *string* neighbor *reference* unicast-address *string*
Tree	unicast-address

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Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

preference *number*

Synopsis	Route preference
Context	**configure** service vprn *string* ripng group *string* preference *number*
Tree	preference
Range	1 to 255
Introduced	16.0.R4
Platforms	All

receive *keyword*

Synopsis	Accepted version on received packets
Context	**configure** service vprn *string* ripng group *string* receive *keyword*
Tree	receive
Options	none, ripng
Introduced	16.0.R4
Platforms	All

send *keyword*

Synopsis	RIPng version and method used to send RIPng updates
Context	**configure** service vprn *string* ripng group *string* send *keyword*
Tree	send
Options	none, ripng
Introduced	16.0.R4
Platforms	All

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	**configure** service vprn *string* ripng group *string* split-horizon *boolean*

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Tree	split-horizon
Description	When configured to **true**, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity). When configured to **false**. this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enable the **timers** context
Context	**configure** service vprn *string* ripng group *string* timers
Tree	timers
Introduced	16.0.R4
Platforms	All

flush *number*

Synopsis	RIP flush timer
Context	**configure** service vprn *string* ripng group *string* timers flush *number*
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

timeout *number*

Synopsis	RIP timeout timer

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Context	**configure** service vprn *string* ripng group *string* timers timeout *number*
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

update *number*

Synopsis	Timer that controls the frequency of updates
Context	**configure** service vprn *string* ripng group *string* timers update *number*
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Import policies to decide routes for routing table
Context	**configure** service vprn *string* ripng import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

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message-size *number*

Synopsis	Maximum number of routes in the message
Context	**configure** service vprn *string* ripng message-size *number*
Tree	message-size
Range	25 to 255
Default	25
Introduced	16.0.R4
Platforms	All

metric-in *number*

Synopsis	Metric added to routes received from the neighbor
Context	**configure** service vprn *string* ripng metric-in *number*
Tree	metric-in
Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIPng
Context	**configure** service vprn *string* ripng metric-out *number*
Tree	metric-out
Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	All

preference *number*

Synopsis	Route preference
Context	**configure** service vprn *string* ripng preference *number*
Tree	preference
Range	1 to 255

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Default	100
Introduced	16.0.R4
Platforms	All

receive *keyword*

Synopsis	Accepted version on received packets
Context	**configure** service vprn *string* ripng receive *keyword*
Tree	receive
Options	none, ripng
Default	ripng
Introduced	16.0.R4
Platforms	All

send *keyword*

Synopsis	RIPng version and method used to send RIPng updates
Context	**configure** service vprn *string* ripng send *keyword*
Tree	send
Options	none, ripng
Default	ripng
Introduced	16.0.R4
Platforms	All

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	**configure** service vprn *string* ripng split-horizon *boolean*
Tree	split-horizon
Description	When configured to **true**, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity). When configured to **false**, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.

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Default	true
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enable the **timers** context
Context	**configure** service vprn *string* ripng timers
Tree	timers
Introduced	16.0.R4
Platforms	All

flush *number*

Synopsis	RIP flush timer
Context	**configure** service vprn *string* ripng timers flush *number*
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

timeout *number*

Synopsis	RIP timeout timer
Context	**configure** service vprn *string* ripng timers timeout *number*
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds

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Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

update *number*

Synopsis	Timer that controls the frequency of updates
Context	**configure** service vprn *string* ripng timers update *number*
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

router-id *string*

Synopsis	Unique router ID for the router in the AS
Context	**configure** service vprn *string* router-id *string*
Tree	router-id
Introduced	16.0.R1
Platforms	All

segment-routing-v6 [instance] *number*

Synopsis	Enter the **segment-routing-v6** list instance
Context	**configure** service vprn *string* segment-routing-v6 *number*
Tree	segment-routing-v6
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**instance**] *number*

Synopsis	Segment routing IPv6 instance
Context	**configure** service vprn *string* segment-routing-v6 *number*

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Tree	segment-routing-v6
Range	1 to 2
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

locator [locator-name] *reference*

Synopsis	Enter the **locator** list instance
Context	**configure** service vprn *string* segment-routing-v6 *number* locator *reference*
Tree	locator
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**locator-name**] *reference*

Synopsis	SRv6 locator name
Context	**configure** service vprn *string* segment-routing-v6 *number* locator *reference*
Tree	locator
Reference	**configure** router *string* segment-routing segment-routing-v6 locator *string*
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function

Synopsis	Enter the **function** context
Context	**configure** service vprn *string* segment-routing-v6 *number* locator *reference* function
Tree	function
Description	Commands in this context configure the End SID functions for each SRH mode. The **end-dt4** configuration and the **end-dt46** configuration are mutually exclusive. The **end-dt6** configuration and the **end-dt46** configuration are mutually exclusive.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

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end-dt4

Synopsis	Enable the **end-dt4** context
Context	**configure** service vprn *string* segment-routing-v6 *number* locator *reference* function end-dt4
Tree	end-dt4
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

Synopsis	SRv6 function value
Context	**configure** service vprn *string* segment-routing-v6 *number* locator *reference* function end-dt4 value *number*
Tree	value
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end-dt46

Synopsis	Enable the **end-dt46** context
Context	**configure** service vprn *string* segment-routing-v6 *number* locator *reference* function end-dt46
Tree	end-dt46
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

Synopsis	SRv6 function value
Context	**configure** service vprn *string* segment-routing-v6 *number* locator *reference* function end-dt46 value *number*
Tree	value

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Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end-dt6

Synopsis	Enable the **end-dt6** context
Context	**configure** service vprn *string* segment-routing-v6 *number* locator *reference* function end-dt6
Tree	end-dt6
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

Synopsis	SRv6 function value
Context	**configure** service vprn *string* segment-routing-v6 *number* locator *reference* function end-dt6 value *number*
Tree	value
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

micro-segment-locator [locator-name] *reference*

Synopsis	Enter the **micro-segment-locator** list instance
Context	**configure** service vprn *string* segment-routing-v6 *number* micro-segment-locator *reference*
Tree	micro-segment-locator
Introduced	22.10.R1

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Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**locator-name**] *reference*

Synopsis Micro-segment SRv6 locator name

Context **configure** service vprn *string* segment-routing-v6 *number* micro-segment-locator *reference*

Tree micro-segment-locator

Description This command associates a pre-defined micro-segment SRv6 locator (defined in the **configure router segment-routing segment-routing-v6** context) with the SRv6 instance in the service. The same micro-segment locator can be referenced in multiple BGP instances used by IPVPN or EVPN.

Reference **configure** router *string* segment-routing segment-routing-v6 micro-segment-locator *string*

Notes This element is part of a list key.

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function

Synopsis Enter the **function** context

Context **configure** service vprn *string* segment-routing-v6 *number* micro-segment-locator *reference* function

Tree function

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

udt4

Synopsis Enable the **udt4** context

Context **configure** service vprn *string* segment-routing-v6 *number* micro-segment-locator *reference* function udt4

Tree udt4

Description Commands in this context configure the SRv6 uDT4 behavior and the function value that is associated with the SRv6 instance in the service. When configured, decapsulation and table lookup for IPv4 prefixes occur in the VPRN service.

Introduced 22.10.R1

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Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

Synopsis SRv6 function value

Context **configure** service vprn *string* segment-routing-v6 *number* micro-segment-locator *reference* function udt4 value *number*

Tree value

Description This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.

When unconfigured, the system allocates a value dynamically.

Range 1 to 1048575

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

udt46

Synopsis Enable the **udt46** context

Context **configure** service vprn *string* segment-routing-v6 *number* micro-segment-locator *reference* function udt46

Tree udt46

Description The commands in this context configure the SRv6 uDT46 behavior and the function value that is associated with the SRv6 instance in the service. When configured, decapsulation and table lookup for IPv4 and IPv6 prefixes occur in the VPRN service.

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

Synopsis SRv6 function value

Context **configure** service vprn *string* segment-routing-v6 *number* micro-segment-locator *reference* function udt46 value *number*

Tree value

Description This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.

When unconfigured, the system allocates a value dynamically.

Range 1 to 1048575

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Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

udt6

Synopsis	Enable the **udt6** context
Context	**configure** service vprn *string* segment-routing-v6 *number* micro-segment-locator *reference* function udt6
Tree	udt6
Description	Commands in this context configure the SRv6 uDT6 behavior and the function value that is associated with the SRv6 instance in the service. When configured, decapsulation and table lookup for IPv6 prefixes occur in the VPRN service.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

Synopsis	SRv6 function value
Context	**configure** service vprn *string* segment-routing-v6 *number* micro-segment-locator *reference* function udt6 value *number*
Tree	value
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

selective-fib *boolean*

Synopsis	Enable selective FIB
Context	**configure** service vprn *string* selective-fib *boolean*
Tree	selective-fib
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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service-id *number*

WARNING:
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Synopsis	Service ID
Context	**configure** service vprn *string* service-id *number*
Tree	service-id
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

sfm-overload

Synopsis	Enable the **sfm-overload** context
Context	**configure** service vprn *string* sfm-overload
Tree	sfm-overload
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR

holdoff-time *number*

Synopsis	Delay in detecting SFM failures and setting overload
Context	**configure** service vprn *string* sfm-overload holdoff-time *number*
Tree	holdoff-time
Range	1 to 600
Units	seconds
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR

sgt-qos

Synopsis	Enter the **sgt-qos** context
Context	**configure** service vprn *string* sgt-qos

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Tree	sgt-qos
Introduced	16.0.R1
Platforms	All

dot1p

Synopsis	Enter the **dot1p** context
Context	**configure** service vprn *string* sgt-qos dot1p
Tree	dot1p
Introduced	16.0.R1
Platforms	All

application [dot1p-app-name] *keyword*

Synopsis	Enter the **application** list instance
Context	**configure** service vprn *string* sgt-qos dot1p application *keyword*
Tree	application
Introduced	16.0.R1
Platforms	All

[**dot1p-app-name**] *keyword*

Synopsis	Dot1p application ID that generates control traffic
Context	**configure** service vprn *string* sgt-qos dot1p application *keyword*
Tree	application
Options	arp, isis, pppoe
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

dot1p *(keyword | number)*

Synopsis	Dot1p value to the traffic generated by this application
Context	**configure** service vprn *string* sgt-qos dot1p application *keyword* dot1p *(keyword | number)*

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Tree	dot1p
Range	0 to 7
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

dscp

Synopsis	Enter the **dscp** context
Context	**configure** service vprn *string* sgt-qos dscp
Tree	dscp
Introduced	16.0.R1
Platforms	All

application [dscp-app-name] *keyword*

Synopsis	Enter the **application** list instance
Context	**configure** service vprn *string* sgt-qos dscp application *keyword*
Tree	application
Description	Commands in this context configure DSCP remarking for self-generated application traffic. All packets generated by the configured application instance use the value configured for the DSCP name or value. The instance can be Base, router, VPRN, or management. The system uses the DSCP value configured in this instance to: • set the DSCP bits in the IP packet • signal from the CPM to the egress FC QoS policy to set the Ethernet 802.1p and MPLS EXP bits including, PPPoE, and IS-IS packets that do not carry DSCP bits • configure the DSCP value in the egress IP header (which the egress QoS policy does not overwrite)
Introduced	16.0.R1
Platforms	All

[dscp-app-name] *keyword*

Synopsis	DSCP application ID that generates control traffic
Context	**configure** service vprn *string* sgt-qos dscp application *keyword*

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Tree	application
Description	This command configures the DSCP application ID that generates control traffic.
Options	bgp, dhcp, dns, ftp, icmp, igmp, l2tp, ldp, mld, msdp, ndis, ntp, ospf, pim, radius, rip, rsvp, snmp, snmp-notification, srrp, ssh, syslog, tacplus, telnet, tftp, traceroute, vrrp, ptp, gtp, diameter, pcep, call-trace, bmp, grpc, mtrace2, http, pfcp, ibcp, bfd
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

dscp *(keyword | number)*

Synopsis	DSCP value to the traffic generated by this application
Context	**configure** service vprn *string* sgt-qos dscp application *keyword* dscp *(keyword | number)*
Tree	dscp
Range	0 to 63
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dscp-map [dscp-name] *keyword*

Synopsis	Enter the **dscp-map** list instance
Context	**configure** service vprn *string* sgt-qos dscp dscp-map *keyword*
Tree	dscp-map
Introduced	16.0.R2
Platforms	All

[**dscp-name**] *keyword*

Synopsis	DSCP name mapped to forwarding class
Context	**configure** service vprn *string* sgt-qos dscp dscp-map *keyword*
Tree	dscp-map

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Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

fc *keyword*

Synopsis	Value for the forwarding class for this mapping
Context	**configure** service vprn *string* sgt-qos dscp dscp-map *keyword* fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R2
Platforms	All

snmp

Synopsis	Enter the **snmp** context
Context	**configure** service vprn *string* snmp
Tree	snmp
Introduced	16.0.R5
Platforms	All

access *boolean*

Synopsis	Enable SNMP access for the VPRN service
Context	**configure** service vprn *string* snmp access *boolean*
Tree	access
Default	false
Introduced	16.0.R5
Platforms	All

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community [community-string] *string*

Synopsis	Enter the **community** list instance
Context	**configure** service vprn *string* snmp community *string*
Tree	community
Description	Commands in this context set the SNMP community names to be used with the associated VPRN instance. These VPRN community names are used to associate SNMP v1/v2c requests with a particular VPRN context and to return a reply that contains VPRN-specific data or limit SNMP access to data in a specific VPRN instance. VPRN SNMP communities configured with an access permission of 'r' are automatically associated with the default access group "snmp-vprn-ro" and the “vprn-view” view (read only). VPRN SNMP communities configured with an access permission of 'rw' are automatically associated with the default access group "snmp-vprn” and the “vprn-view” view (read/write). The community in an SNMP v1/v2 request determines the SNMP context (that is, the VPRN number for accessing SNMP tables) and not the VPRN of the incoming interface on which the request was received. For example, when an SNMP request arrives on VPRN 5 interface “ringo” with a destination IP address equal to the “ringo” interface, but the community in the SNMP request is the community configured against VPRN 101, the SNMP request is processed using the VPRN 101 context. (the response contains information about VPRN 101). Nokia recommends avoiding the use of a simple series of VPRN SNMP community values that are similar to each other (for example, avoid my-vprncomm-1, my-vprn-comm-2, and so on).
Introduced	16.0.R5
Platforms	All

[**community-string**] *string*

Synopsis	SNMP v1/v2c community name associated with the VPRN
Context	**configure** service vprn *string* snmp community *string*
Tree	community
String Length	1 to 114
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

access-permissions *keyword*

Synopsis	Access permissions to MIB objects
Context	**configure** service vprn *string* snmp community *string* access-permissions *keyword*

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Tree	access-permissions
Options	r, rw
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

source-access-list *reference*

Synopsis	List name used to validate the source IP address
Context	**configure** service vprn *string* snmp community *string* source-access-list *reference*
Tree	source-access-list
Description	This command specifies the SNMP source access list to use with the SNMP community. The source access list is used to validate the source IP address of all received SNMP requests that use the community.
Reference	**configure** system security snmp source-access-list *string*
Introduced	16.0.R5
Platforms	All

version *keyword*

Synopsis	SNMP version
Context	**configure** service vprn *string* snmp community *string* version *keyword*
Tree	version
Options	v1, v2c, both
Default	both
Introduced	16.0.R5
Platforms	All

source-address

Synopsis	Enter the **source-address** context
Context	**configure** service vprn *string* source-address
Tree	source-address
Description	Commands in this context configure the source address and application to use in all unsolicited packets.

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Introduced	16.0.R1
Platforms	All

ipv4 [application] *keyword*

Synopsis	Enter the **ipv4** list instance
Context	**configure** service vprn *string* source-address ipv4 *keyword*
Tree	ipv4
Introduced	16.0.R1
Platforms	All

[**application**] *keyword*

Synopsis	Application that uses the source IP address
Context	**configure** service vprn *string* source-address ipv4 *keyword*
Tree	ipv4
Options	telnet, ssh, snmptrap, ping, traceroute, ntp, cflowd, ptp, icmp-error
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

address *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Source IPv4 address
Context	**configure** service vprn *string* source-address ipv4 *keyword* address *string*
Tree	address
Notes	The following elements are part of a mandatory choice: **address** or **interface-name**.
Introduced	16.0.R1
Platforms	All

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interface-name *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP interface name
Context	**configure** service vprn *string* source-address ipv4 *keyword* interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: **address** or **interface-name**.
Introduced	16.0.R1
Platforms	All

ipv6 [application] *keyword*

Synopsis	Enter the **ipv6** list instance
Context	**configure** service vprn *string* source-address ipv6 *keyword*
Tree	ipv6
Introduced	16.0.R1
Platforms	All

[**application**] *keyword*

Synopsis	Application that uses the source IP address
Context	**configure** service vprn *string* source-address ipv6 *keyword*
Tree	ipv6
Options	telnet, snmptrap, ping, traceroute, cflowd, ntp, icmp6-error, ssh, ptp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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address *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Source IPv6 address
Context	**configure** service vprn *string* source-address ipv6 *keyword* address *string*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

spoke-sdp [sdp-bind-id] *string*

Synopsis	Enter the **spoke-sdp** list instance
Context	**configure** service vprn *string* spoke-sdp *string*
Tree	spoke-sdp
Introduced	16.0.R1
Platforms	All

[**sdp-bind-id**] *string*

Synopsis	SDP binding ID
Context	**configure** service vprn *string* spoke-sdp *string*
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* spoke-sdp *string* description *string*
Tree	description

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String Length	1 to 80
Introduced	16.0.R1
Platforms	All

static-routes

Synopsis	Enter the **static-routes** context
Context	**configure** service vprn *string* static-routes
Tree	static-routes
Introduced	16.0.R1
Platforms	All

hold-down

Synopsis	Enable the **hold-down** context
Context	**configure** service vprn *string* static-routes hold-down
Tree	hold-down
Introduced	16.0.R1
Platforms	All

initial *number*

Synopsis	Value for the initial hold down time
Context	**configure** service vprn *string* static-routes hold-down initial *number*
Tree	initial
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

max-value *number*

Synopsis	Maximum value of the hold down time
Context	**configure** service vprn *string* static-routes hold-down max-value *number*
Tree	max-value

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Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Value by which the previous hold-down time is multiplied to calculate the new one
Context	**configure** service vprn *string* static-routes hold-down multiplier *number*
Tree	multiplier
Range	1 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

route [ip-prefix] *(ipv4-prefix | ipv6-prefix)* route-type *keyword*

Synopsis	Enter the **route** list instance
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword*
Tree	route
Introduced	16.0.R1
Platforms	All

[**ip-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP prefix and prefix length for the static routes
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword*
Tree	route
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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route-type *keyword*

Synopsis	Static route type
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword*
Tree	route
Options	unicast, multicast
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

backup-tag *number*

Synopsis	Static route backup tag
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* backup-tag *number*
Tree	backup-tag
Description	This command associates a 4-byte backup route tag with the static route when the backup next-hop functionality is activated. The tag value is used in route policies to control distribution of the static route into other protocols when the backup next-hop function is activated for the associated static route. The tag specified at this level of the static route causes the tag values that are configured under the **next-hop**, **black-hole**, and **indirect** contexts of the static route to be ignored.
Range	1 to 4294967295
Introduced	21.2.R1
Platforms	All

blackhole

Synopsis	Enable the **blackhole** context
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* blackhole
Tree	blackhole
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* blackhole admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

community *string*

Synopsis	Community ID associated with the static route
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* blackhole community *string*
Tree	community
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* blackhole description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

generate-icmp *boolean*

Synopsis	Send ICMP unreachable messages when received packets match a static route with black-hole next-hop
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* blackhole generate-icmp *boolean*
Tree	generate-icmp

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Default	false
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	Static route metric
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* blackhole metric *number*
Tree	metric
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Priority of this static route over the routes from different sources
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* blackhole preference *number*
Tree	preference
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

prefix-list

Synopsis	Enter the **prefix-list** context
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* blackhole prefix-list
Tree	prefix-list
Introduced	16.0.R1
Platforms	All

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flag *keyword*

Synopsis	Static route match condition from prefix list
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* blackhole prefix-list flag *keyword*
Tree	flag
Options	any, all, none
Default	any
Introduced	16.0.R1
Platforms	All

name *reference*

Synopsis	Prefix list name
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* blackhole prefix-list name *reference*
Tree	name
Reference	**configure** policy-options prefix-list *string*
Introduced	16.0.R1
Platforms	All

tag *number*

Synopsis	Static route tag
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* blackhole tag *number*
Tree	tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

community *string*

Synopsis	Community ID associated with the static route
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* community *string*
Tree	community

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String Length	1 to 72
Max. Instances	12
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

grt

Synopsis	Enable the **grt** context
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* grt
Tree	grt
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* grt admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* grt description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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metric *number*

Synopsis	Static route metric
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* grt metric *number*
Tree	metric
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Priority of this static route over the routes from different sources
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* grt preference *number*
Tree	preference
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

indirect [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **indirect** list instance
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	indirect
Introduced	16.0.R1
Platforms	All

[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Next-hop IP address used to reach the destination
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	indirect

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

community *string*

Synopsis	Community ID associated with the static route
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* community *string*
Tree	community
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

cpe-check [address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **cpe-check** list instance
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	cpe-check
Description	When configured, this command enables the Customer Premises Equipment (CPE) check feature and specifies the IP address of the target CPE device. This option initiates a background ICMP ping test to the configured target IP address. The IP address can either be an IPv4 address for IPv4 static routes or an IPv6 address for IPv6 static routes. To avoid possible circular references, the target IP address cannot exist in the same subnet as the static route subnet. This command is mutually exclusive with BFD support on a specific static route.

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Note: A node that is sourcing CPE-check packets waits an additional full interval before taking action, which gives the CPE time to respond. For example, with a drop-count of 3 and an interval of 1s, three CPE-check packets are sent out and the node waits for the duration of another interval before acting on the loss. Failure declaration may take extra time depending on the load, interval, and other factors. In line with multitasking, multi-priority operating principles of the node, and the relative priority of **cpe-ping**, the node paces these minor events.

Max. Instances	1
Introduced	16.0.R1
Platforms	All

[**address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the target CPE device
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	cpe-check
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)* drop-count *number*
Tree	drop-count
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Interval between ICMP pings to target CPE IP address

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Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)* interval *number*
Tree	interval
Range	1 to 255
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)* log *boolean*
Tree	log
Default	false
Introduced	16.0.R1
Platforms	All

padding-size *number*

Synopsis	Padding size for CPE connectivity checks
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)* padding-size *number*
Tree	padding-size
Range	0 to 16384
Units	bytes
Default	56
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description

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Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

destination-class *number*

Synopsis	Destination class for this static route
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* destination-class *number*
Tree	destination-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

metric *number*

Synopsis	Static route metric
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* metric *number*
Tree	metric
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Priority of this static route over the routes from different sources
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* preference *number*
Tree	preference
Range	1 to 255
Default	5

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Introduced	16.0.R1
Platforms	All

prefix-list

Synopsis	Enter the **prefix-list** context
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* prefix-list
Tree	prefix-list
Introduced	16.0.R1
Platforms	All

flag *keyword*

Synopsis	Static route match condition from prefix list
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* prefix-list flag *keyword*
Tree	flag
Options	any, all, none
Default	any
Introduced	16.0.R1
Platforms	All

name *reference*

Synopsis	Prefix list name
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* prefix-list name *reference*
Tree	name
Reference	**configure** policy-options prefix-list *string*
Introduced	16.0.R1
Platforms	All

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qos

Synopsis	Enter the **qos** context
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

forwarding-class *keyword*

Synopsis	Forwarding class associated with the static route
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* qos forwarding-class *keyword*
Tree	forwarding-class
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *keyword*

Synopsis	Static route priority
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* qos priority *keyword*
Tree	priority
Options	low, high
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-class *number*

Synopsis	Source class for the static route
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* source-class *number*
Tree	source-class
Range	1 to 255

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

tag *number*

Synopsis	Static route tag
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* indirect *(ipv4-address-no-zone | ipv6-address-no-zone)* tag *number*
Tree	tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

interface [interface-name] *string*

Synopsis	Enter the **interface** list instance
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string*
Tree	interface
Introduced	16.0.R1
Platforms	All

[**interface-name**] *string*

Synopsis	Router interface name.
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string*
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the static route operation

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Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

community *string*

Synopsis	Community ID associated with the static route
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* community *string*
Tree	community
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

cpe-check [address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **cpe-check** list instance
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	cpe-check
Description	When configured, this command enables the Customer Premises Equipment (CPE) check feature and specifies the IP address of the target CPE device. This option initiates a background ICMP ping test to the configured target IP address. The IP address can either be an IPv4 address for IPv4 static routes or an IPv6 address for IPv6 static routes. To avoid possible circular references, the target IP address cannot exist in the same subnet as the static route subnet. This command is mutually exclusive with BFD support on a specific static route. **Note**: A node that is sourcing CPE-check packets waits an additional full interval before taking action, which gives the CPE time to respond. For example, with a drop-count of 3 and an interval of 1s, three CPE-check packets are sent out and the node waits for the duration of another interval before acting on the loss. Failure declaration may take extra time depending on the load, interval, and other factors. In line with multitasking, multi-priority operating principles of the node, and the relative priority of **cpe-ping**, the node paces these minor events.
Max. Instances	1
Introduced	16.0.R1

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Platforms	All

[**address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the target CPE device
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	cpe-check
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)* drop-count *number*
Tree	drop-count
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Interval between ICMP pings to target CPE IP address
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)* interval *number*
Tree	interval
Range	1 to 255
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

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log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)* log *boolean*
Tree	log
Default	false
Introduced	16.0.R1
Platforms	All

padding-size *number*

Synopsis	Padding size for CPE connectivity checks
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)* padding-size *number*
Tree	padding-size
Range	0 to 16384
Units	bytes
Default	56
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

destination-class *number*

Synopsis	Destination class for this static route

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Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* destination-class *number*
Tree	destination-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

load-balancing-weight *number*

Synopsis	Load-balancing weight for all of the ECMP next hops
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* load-balancing-weight *number*
Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	Static route metric
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* metric *number*
Tree	metric
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Priority of this static route over the routes from different sources
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* preference *number*
Tree	preference
Range	1 to 255
Default	5

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Introduced	16.0.R1
Platforms	All

prefix-list

Synopsis	Enter the **prefix-list** context
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* prefix-list
Tree	prefix-list
Introduced	16.0.R1
Platforms	All

flag *keyword*

Synopsis	Static route match condition from prefix list
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* prefix-list flag *keyword*
Tree	flag
Options	any, all, none
Default	any
Introduced	16.0.R1
Platforms	All

name *reference*

Synopsis	Prefix list name
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* prefix-list name *reference*
Tree	name
Reference	**configure** policy-options prefix-list *string*
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the **qos** context

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Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

forwarding-class *keyword*

Synopsis	Forwarding class associated with the static route
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* qos forwarding-class *keyword*
Tree	forwarding-class
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *keyword*

Synopsis	Static route priority
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* qos priority *keyword*
Tree	priority
Options	low, high
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-class *number*

Synopsis	Source class for the static route
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* interface *string* source-class *number*
Tree	source-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

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tag *number*

Synopsis	Static route tag
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix* | *ipv6-prefix)* route-type *keyword* interface *string* tag *number*
Tree	tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

ipsec-tunnel [ipsec-tunnel-name] *string*

Synopsis	Enter the **ipsec-tunnel** list instance
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix* | *ipv6-prefix)* route-type *keyword* ipsec-tunnel *string*
Tree	ipsec-tunnel
Introduced	16.0.R1
Platforms	All

[**ipsec-tunnel-name**] *string*

Synopsis	Ipsec tunnel name.
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix* | *ipv6-prefix)* route-type *keyword* ipsec-tunnel *string*
Tree	ipsec-tunnel
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix* | *ipv6-prefix)* route-type *keyword* ipsec-tunnel *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable

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Introduced	16.0.R1
Platforms	All

community *string*

Synopsis	Community ID associated with the static route
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* ipsec-tunnel *string* community *string*
Tree	community
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* ipsec-tunnel *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

destination-class *number*

Synopsis	Destination class for this static route
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* ipsec-tunnel *string* destination-class *number*
Tree	destination-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

metric *number*

Synopsis	Static route metric

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Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* ipsec-tunnel *string* metric *number*
Tree	metric
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Priority of this static route over the routes from different sources
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* ipsec-tunnel *string* preference *number*
Tree	preference
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* ipsec-tunnel *string* qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

forwarding-class *keyword*

Synopsis	Forwarding class associated with the static route
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* ipsec-tunnel *string* qos forwarding-class *keyword*
Tree	forwarding-class
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *keyword*

Synopsis	Static route priority
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* ipsec-tunnel *string* qos priority *keyword*
Tree	priority
Options	low, high
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-class *number*

Synopsis	Source class for the static route
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* ipsec-tunnel *string* source-class *number*
Tree	source-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

tag *number*

Synopsis	Static route tag
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* ipsec-tunnel *string* tag *number*
Tree	tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

next-hop [ip-address] *(ipv4-address-with-zone | ipv6-address-with-zone)*

Synopsis	Enter the **next-hop** list instance
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)*

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Tree	next-hop
Introduced	16.0.R1
Platforms	All

[**ip-address**] *(ipv4-address-with-zone | ipv6-address-with-zone)*

Synopsis	Next-hop IP address used to reach the destination
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)*
Tree	next-hop
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

backup-next-hop

Synopsis	Enter the **backup-next-hop** context
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* backup-next-hop
Tree	backup-next-hop
Description	Commands in this context configure static route entry fast failover.
Introduced	21.2.R1
Platforms	All

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address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Backup next-hop IP address
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* backup-next-hop address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	address
Description	This command specifies the backup IP forwarding address that is used for static route Fast ReRoute (FRR). The configured address, if reachable, acts as pre-installed backup forwarding information that can be used when the primary IP next-hop suddenly fails. The configured backup next-hop IP address can be directly or indirectly connected (using an IGP or tunnel) to the node. The backup next-hop forwarding information or the Next-hop Label Forwarding Entry (NHLFE) tunnel forwarding information from the IP Routing Table Manager (RTM) is used to preconfigure an IP fast-reroute backup path. One backup next-hop address can protect a single primary static route entry next-hop address without ECMP and it is only activated when the primary next-hop has no active ECMP. The configured IP address can be either on the network or the access side.
Introduced	21.2.R1
Platforms	All

bfd-liveness *boolean*

Synopsis	Use Bidirectional Forwarding Detection on this static route
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* bfd-liveness *boolean*
Tree	bfd-liveness
Default	false
Introduced	16.0.R1
Platforms	All

community *string*

Synopsis	Community ID associated with the static route
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* community *string*
Tree	community
String Length	1 to 72
Introduced	16.0.R1

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Platforms	All

cpe-check [address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **cpe-check** list instance
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	cpe-check
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[**address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the target CPE device
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	cpe-check
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)* drop-count *number*
Tree	drop-count
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

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interval *number*

Synopsis	Interval between ICMP pings to target CPE IP address
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)* interval *number*
Tree	interval
Range	1 to 255
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)* log *boolean*
Tree	log
Default	false
Introduced	16.0.R1
Platforms	All

padding-size *number*

Synopsis	Padding size for CPE connectivity checks
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* cpe-check *(ipv4-address-no-zone | ipv6-address-no-zone)* padding-size *number*
Tree	padding-size
Range	0 to 16384
Units	bytes
Default	56
Introduced	16.0.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

destination-class *number*

Synopsis	Destination class for this static route
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* destination-class *number*
Tree	destination-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

load-balancing-weight *number*

Synopsis	Load-balancing weight for all of the ECMP next hops
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* load-balancing-weight *number*
Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	Static route metric
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* metric *number*
Tree	metric

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Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Priority of this static route over the routes from different sources
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* preference *number*
Tree	preference
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

prefix-list

Synopsis	Enter the **prefix-list** context
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* prefix-list
Tree	prefix-list
Introduced	16.0.R1
Platforms	All

flag *keyword*

Synopsis	Static route match condition from prefix list
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* prefix-list flag *keyword*
Tree	flag
Options	any, all, none
Default	any
Introduced	16.0.R1
Platforms	All

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name *reference*

Synopsis	Prefix list name
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* prefix-list name *reference*
Tree	name
Reference	**configure** policy-options prefix-list *string*
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the **qos** context
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

forwarding-class *keyword*

Synopsis	Forwarding class associated with the static route
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* qos forwarding-class *keyword*
Tree	forwarding-class
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *keyword*

Synopsis	Static route priority
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* qos priority *keyword*

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Tree	priority
Options	low, high
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-class *number*

Synopsis	Source class for the static route
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* source-class *number*
Tree	source-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

tag *number*

Synopsis	Static route tag
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* tag *number*
Tree	tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

validate-next-hop *boolean*

Synopsis	Track the state of the next hop in the IPv4 ARP Cache or the IPv6 Neighbor Cache
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)* validate-next-hop *boolean*
Tree	validate-next-hop
Default	false
Introduced	16.0.R1
Platforms	All

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tag *number*

Synopsis	Static route tag
Context	**configure** service vprn *string* static-routes route *(ipv4-prefix | ipv6-prefix)* route-type *keyword* tag *number*
Tree	tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

subscriber-interface [interface-name] *string*

Synopsis	Enter the **subscriber-interface** list instance
Context	**configure** service vprn *string* subscriber-interface *string*
Tree	subscriber-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**interface-name**] *string*

Synopsis	Subscriber interface name
Context	**configure** service vprn *string* subscriber-interface *string*
Tree	subscriber-interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the subscriber interface
Context	**configure** service vprn *string* subscriber-interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* subscriber-interface *string* description *string*
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fwd-service *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Configure the forwarding service.
Context	**configure** service vprn *string* subscriber-interface *string* fwd-service *reference*
Tree	fwd-service
Reference	**configure** service vprn *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fwd-subscriber-interface *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Forwarding subscriber interface name
Context	**configure** service vprn *string* subscriber-interface *string* fwd-subscriber-interface *reference*
Tree	fwd-subscriber-interface
Reference	**configure** service vprn *string* subscriber-interface *string*
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface [group-interface-name] *string*

Synopsis	Enter the **group-interface** list instance
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string*
Tree	group-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**group-interface-name**] *string*

Synopsis	Group interface name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string*
Tree	group-interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bonding-parameters

Synopsis	Enter the **bonding-parameters** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* bonding-parameters

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Tree	bonding-parameters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of ESM connection bonding
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* bonding-parameters admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

connection [connection-index] *number*

Synopsis	Enter the **connection** list instance
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* bonding-parameters connection *number*
Tree	connection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**connection-index**] *number*

Synopsis	Bonding connection index
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* bonding-parameters connection *number*
Tree	connection
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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service *string*

Synopsis	Connection service
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* bonding-parameters connection *number* service *string*
Tree	service
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fpe *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FPE that provisions bonding functionality
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* bonding-parameters fpe *reference*
Tree	fpe
Reference	**configure** fwd-path-ext fpe *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multicast

Synopsis	Enter the **multicast** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* bonding-parameters multicast
Tree	multicast
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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connection *(number | keyword)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Multicast connection
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* bonding-parameters multicast connection *(number | keyword)*
Tree	connection
Range	1 to 2
Options	use-incoming
Default	use-incoming
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

brg

Synopsis	Enter the **brg** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* brg
Tree	brg
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of BRG
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* brg admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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authenticated-brg-only *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow BRGs that have been pre-authenticated
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* brg authenticated-brg-only *boolean*
Tree	authenticated-brg-only
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-brg-profile *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default BRG profile for new BRGs
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* brg default-brg-profile *reference*
Tree	default-brg-profile
Reference	**configure** subscriber-mgmt vrgw brg-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cflowd-parameters

Synopsis	Enter the **cflowd-parameters** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* cflowd-parameters
Tree	cflowd-parameters
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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sampling [sampling-type] *keyword*

Synopsis	Enter the **sampling** list instance
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* cflowd-parameters sampling *keyword*
Tree	sampling
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**sampling-type**] *keyword*

Synopsis	Traffic sampling type
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* cflowd-parameters sampling *keyword*
Tree	sampling
Description	This command configures the type of traffic to be sampled on the associated IP interface.
Options	unicast, multicast, both
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of traffic for cflowd sampling
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* cflowd-parameters sampling *keyword* direction *keyword*
Tree	direction
Description	This command configures the direction in which sampling occurs on the associated IP interfaces.
Options	ingress-only, egress-only, both
Default	ingress-only
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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sample-profile *(keyword | number)*

Synopsis	Sample profile ID
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* cflowd-parameters sampling *keyword* sample-profile *(keyword | number)*
Tree	sample-profile
Description	This command defines the sampling rate profile associated with this interface.
Max. Range	0 to 4294967295
Options	1
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Type of cflowd analysis
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* cflowd-parameters sampling *keyword* type *keyword*
Tree	type
Description	This command configures the cflowd sampling type on the associated IP interface.
Options	acl, interface
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

data-trigger

Synopsis	Enter the **data-trigger** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* data-trigger
Tree	data-trigger
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of data-triggered host creation

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* data-trigger admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* description *string*
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dynamic-routes-track-srrp

Synopsis	Enable the **dynamic-routes-track-srrp** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* dynamic-routes-track-srrp
Tree	dynamic-routes-track-srrp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-time *number*

Synopsis	Time before route state updated after SRRP transition
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* dynamic-routes-track-srrp hold-time *number*
Tree	hold-time
Range	1 to 50
Units	deciseconds
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gtp-parameters

Synopsis	Enter the **gtp-parameters** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* gtp-parameters
Tree	gtp-parameters
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of GTP access
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* gtp-parameters admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

fpe *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PE that provisions the GTP user interface
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* gtp-parameters fpe *reference*
Tree	fpe
Reference	**configure** fwd-path-ext fpe *number*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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gx-policy *reference*

Synopsis	Diameter application policy
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* gx-policy *reference*
Tree	gx-policy
Reference	**configure** subscriber-mgmt diameter-gx-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ingress
Tree	ingress
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-accounting *reference*

Synopsis	Ingress policy accounting template name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ingress policy-accounting *reference*
Tree	policy-accounting
Reference	**configure** routing-options policy-accounting policy-acct-template *string*
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s

ingress-stats *boolean*

Synopsis	Collect ingress interface statistics
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ingress-stats *boolean*
Tree	ingress-stats
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis	Interface IP MTU
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ip-mtu *number*
Tree	ip-mtu
Range	512 to 9786
Units	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-linking

Synopsis	Enter the **ipoe-linking** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipoe-linking
Tree	ipoe-linking
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of IPoE host linking
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipoe-linking admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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gratuitous-router-advertisement *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send unsolicited router advertisement after DHCP setup
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipoe-linking gratuitous-router-advertisement *boolean*
Tree	gratuitous-router-advertisement
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shared-circuit-id *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable circuit ID in DHCPv4 Option82 to validate DHCPv6
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipoe-linking shared-circuit-id *boolean*
Tree	shared-circuit-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-session

Synopsis	Enter the **ipoe-session** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipoe-session
Tree	ipoe-session
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of IPoE session management
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipoe-session admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipoe-session description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

force-auth

Synopsis	Enter the **force-auth** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipoe-session force-auth
Tree	force-auth
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cid-change *boolean*

Synopsis	Ignore min-auth-interval when circuit ID changed
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipoe-session force-auth cid-change *boolean*
Tree	cid-change
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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rid-change *boolean*

Synopsis	Ignore min-auth-interval when remote ID changed
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipoe-session force-auth rid-change *boolean*
Tree	rid-change
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-session-policy *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPoE Session policy to be used for new sessions
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipoe-session ipoe-session-policy *reference*
Tree	ipoe-session-policy
Reference	**configure** subscriber-mgmt ipoe-session-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-auth-interval *(keyword | number)*

Synopsis	Minimum time between two authentication attempts
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipoe-session min-auth-interval *(keyword | number)*
Tree	min-auth-interval
Range	1 to 32000000
Units	seconds
Options	infinite, always-reauthenticate
Default	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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radius-session-timeout *keyword*

Synopsis	Session timeout attribute to be interpreted
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipoe-session radius-session-timeout *keyword*
Tree	radius-session-timeout
Options	absolute, ignore, backwards-compatible
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-session-limit *number*

Synopsis	Maximum number of sessions per SAP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipoe-session sap-session-limit *number*
Tree	sap-session-limit
Range	1 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *number*

Synopsis	Maximum number of sessions on this group interface
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipoe-session session-limit *number*
Tree	session-limit
Range	1 to 500000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stateless-redundancy *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remove IPoE sessions when the system becomes stand-by in a stateless multi-chassis redundancy setup

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipoe-session stateless-redundancy *boolean*
Tree	stateless-redundancy
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local user database for IPoE session authentication
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipoe-session user-db *reference*
Tree	user-db
Reference	**configure** subscriber-mgmt local-user-db *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arp-host

Synopsis	Enter the **arp-host** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 arp-host
Tree	arp-host
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of ARP hosts
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 arp-host admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-limit *number*

Synopsis	Maximum number of ARP hosts
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 arp-host host-limit *number*
Tree	host-limit
Range	1 to 524287
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-auth-interval *number*

Synopsis	Minimum authentication interval
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 arp-host min-auth-interval *number*
Tree	min-auth-interval
Range	1 to 6000
Units	minutes
Default	15
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-host-limit *number*

Synopsis	Maximum number of ARP hosts per SAP

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 arp-host sap-host-limit *number*
Tree	sap-host-limit
Range	1 to 131071
Default	1
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bfd

Synopsis	Enter the **bfd** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 bfd
Tree	bfd
Description	Commands in this context configure the attributes of bidirectional forwarding detection (BFD) sessions that control the state of ESM dynamic BGP peers.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 bfd admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 bfd echo-receive *number*
Tree	echo-receive
Range	100 to 100000

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Units	milliseconds
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

multiplier *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 bfd multiplier *number*
Tree	multiplier
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

receive *number*

Synopsis	BFD receive interval over this interface
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 bfd receive *number*
Tree	receive
Description	This command specifies the receive interval for the BFD session. On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

transmit-interval *number*

Synopsis	BFD transmit interval over this interface

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 bfd transmit-interval *number*
Tree	transmit-interval
Description	This command configures the transmit intervals. On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Local termination point for the BFD session
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 bfd type *keyword*
Tree	type
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: • **auto** (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the **cpm-np**. • **cpm-np** – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems. • **fp** – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.
Options	cpm-np, auto, fp
Default	auto
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

dhcp

Synopsis	Enter the **dhcp** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp

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Tree	dhcp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of DHCP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the **client-applications** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp *boolean*

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp client-applications dhcp *boolean*
Tree	dhcp
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp *boolean*

Synopsis	Enable PPPoE clients to use DHCP relay or proxy server

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp client-applications ppp *boolean*
Tree	ppp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter *reference*

Synopsis	DHCP filter ID for the group interface
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp filter *reference*
Tree	filter
Reference	**configure** filter dhcp-filter *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gi-address *string*

Synopsis	GI address for the DHCP relay
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp gi-address *string*
Tree	gi-address
Description	This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.

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By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-populate

Synopsis Enter the **lease-populate** context

Context **configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp lease-populate

Tree lease-populate

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2-header

Synopsis Enable the **l2-header** context

Context **configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp lease-populate l2-header

Tree l2-header

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *string*

Synopsis IEEE address used in anti-spoofing entries for the SAP

Context **configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp lease-populate l2-header mac *string*

Tree mac

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-leases *number*

Synopsis Maximum number of DHCPv4 leases

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp lease-populate max-leases *number*
Tree	max-leases
Range	1 to 511999
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match-circuit-id *boolean*

Synopsis	Enable Option 82 circuit ID on relayed DHCP packets
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp match-circuit-id *boolean*
Tree	match-circuit-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

offer-selection

Synopsis	Enter the **offer-selection** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp offer-selection
Tree	offer-selection
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-mac

Synopsis	Enter the **client-mac** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp offer-selection client-mac
Tree	client-mac
Notes	The following elements are part of a choice: **client-mac** or **server**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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discover-delay *number*

Synopsis	Delay before sending DHCP Discover messages
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp offer-selection client-mac discover-delay *number*
Tree	discover-delay
Description	This command configures the time to delay sending DHCP Discover messages from the specified MAC addresses.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-address *keyword*

Synopsis	Designated client MAC addresses for Offer selection
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp offer-selection client-mac mac-address *keyword*
Tree	mac-address
Description	This command specifies the client MAC addresses for which the Discover delay applies.
Options	odd, even
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

discover-delay *number*

Synopsis	Delay before sending DHCP Discover messages
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp offer-selection discover-delay *number*
Tree	discover-delay
Description	This command configures the time to delay sending DHCP Discover messages. The delay is applied to all DHCP Discover messages for which no per DHCP server or per client MAC delay is configured.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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server [ipv4-address] *string*

Synopsis	Enter the **server** list instance
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp offer-selection server *string*
Tree	server
Max. Instances	8
Notes	The following elements are part of a choice: **client-mac** or **server**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**ipv4-address**] *string*

Synopsis	IP address of the DHCP server
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp offer-selection server *string*
Tree	server
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

discover-delay *number*

Synopsis	Delay before sending DHCP Discover messages
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp offer-selection server *string* discover-delay *number*
Tree	discover-delay
Description	This command configures the time to delay DHCP Discover messages sent to the server.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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option-82

Synopsis	Enter the **option-82** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82
Tree	option-82
Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	Action to take with received DHCP Option 82
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 action *keyword*
Tree	action
Options	replace, drop, keep
Default	keep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id

Synopsis	Enter the **circuit-id** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 circuit-id
Tree	circuit-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-tuple

Synopsis	Use the ASCII-encoded tuple for the circuit ID
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 circuit-id ascii-tuple
Tree	ascii-tuple

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Notes	The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ifindex

Synopsis	Use the interface index for the circuit ID
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 circuit-id ifindex
Tree	ifindex
Notes	The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

none

Synopsis	Do not include the circuit ID
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 circuit-id none
Tree	none
Notes	The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id

Synopsis	Use the SAP ID
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 circuit-id sap-id
Tree	sap-id
Notes	The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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vlan-ascii-tuple

Synopsis	Include the VLAN ID and dot1p bits in the ASCII tuple
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 circuit-id vlan-ascii-tuple
Tree	vlan-ascii-tuple
Description	When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet. When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty.
Notes	The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id

Synopsis	Enter the **remote-id** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 remote-id
Tree	remote-id
Description	Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	User-defined ASCII string for the remote ID
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 remote-id ascii-string *string*
Tree	ascii-string
String Length	1 to 32
Notes	The following elements are part of a choice: **ascii-string**, **mac**, or **none**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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mac

Synopsis	Use the MAC address for the remote ID
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 remote-id mac
Tree	mac
Notes	The following elements are part of a choice: **ascii-string**, **mac**, or **none**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

none

Synopsis	Do not include the remote ID
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 remote-id none
Tree	none
Notes	The following elements are part of a choice: **ascii-string**, **mac**, or **none**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor-specific-option

Synopsis	Enter the **vendor-specific-option** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 vendor-specific-option
Tree	vendor-specific-option
Description	Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-mac-address *boolean*

Synopsis	Send the MAC address in the VSO
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 vendor-specific-option client-mac-address *boolean*

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Tree	client-mac-address
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool-name *boolean*

Synopsis	Send the pool name in the VSO
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 vendor-specific-option pool-name *boolean*
Tree	pool-name
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id *boolean*

Synopsis	Send SAP ID in the sub-option of the DHCP relay packet
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 vendor-specific-option sap-id *boolean*
Tree	sap-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-id *boolean*

Synopsis	Send the service ID in the Vendor Specific Option
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 vendor-specific-option service-id *boolean*
Tree	service-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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string *string*

Synopsis	User-defined ASCII string for the VSO
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 vendor-specific-option string *string*
Tree	string
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

system-id *boolean*

Synopsis	Send the system ID in the VSO
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp option-82 vendor-specific-option system-id *boolean*
Tree	system-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy-server

Synopsis	Enter the **proxy-server** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp proxy-server
Tree	proxy-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCP proxy server
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp proxy-server admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

emulated-server *string*

Synopsis	IP address used as DHCP server address in SAP context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp proxy-server emulated-server *string*
Tree	emulated-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-time

Synopsis	Enter the **lease-time** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp proxy-server lease-time
Tree	lease-time
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-override *boolean*

Synopsis	Use lease time information provided by RADIUS server
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp proxy-server lease-time radius-override *boolean*
Tree	radius-override
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	DHCP lease time
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp proxy-server lease-time value *number*
Tree	value

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Range	300 to 315446399
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp python-policy *reference*
Tree	python-policy
Description	This command associates a Python policy name with the interface.
Reference	**configure** python python-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

relay-proxy

Synopsis	Enable the **relay-proxy** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp relay-proxy
Tree	relay-proxy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

release-update-src-ip *boolean*

Synopsis	Update the source IP address of a DHCP RELEASE message
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp relay-proxy release-update-src-ip *boolean*
Tree	release-update-src-ip
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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siaddr-override *string*

Synopsis	DHCP server IP address for address hiding function
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp relay-proxy siaddr-override *string*
Tree	siaddr-override
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

release-include-gi-address *boolean*

Synopsis	Include gateway IP address in DHCP Release messages
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp release-include-gi-address *boolean*
Tree	release-include-gi-address
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *string*

Synopsis	IP addresses for DHCP server requests
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp server *string*
Tree	server
Description	This command configures a list of servers that this interface forwards requests to. The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list.
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

src-ip-addr *keyword*

Synopsis	Type of source address to use for DHCP relay

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp src-ip-addr *keyword*
Tree	src-ip-addr
Options	auto, gi-address
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

trusted *boolean*

Synopsis	Relay untrusted packets
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp trusted *boolean*
Tree	trusted
Description	When configured to **true**, the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request. A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit. This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local user database for authentication
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 dhcp user-db *reference*
Tree	user-db
Reference	**configure** subscriber-mgmt local-user-db *string*
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

icmp

Synopsis	Enter the **icmp** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 icmp
Tree	icmp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mask-reply *boolean*

Synopsis	Allow responses to ICMP mask requests on the interface
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 icmp mask-reply *boolean*
Tree	mask-reply
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

param-problem

Synopsis	Enter the **param-problem** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 icmp param-problem
Tree	param-problem
Description	Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of sent Parameter Problem messages
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 icmp param-problem admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

number *number*

Synopsis	Maximum number of Parameter Problem messages to send
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 icmp param-problem number *number*
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Time used to limit number of Parameter Problem messages
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 icmp param-problem seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

redirects

Synopsis	Enter the **redirects** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 icmp redirects
Tree	redirects

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Description	Commands in this context configure the settings for ICMP redirect messages generated by the interface. The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of sending ICMP redirect messages
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 icmp redirects admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

number *number*

Synopsis	Maximum number of ICMP redirect messages to send
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 icmp redirects number *number*
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Time used to limit the number of ICMP redirect messages
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 icmp redirects seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds

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Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ttl-expired

Synopsis	Enter the **ttl-expired** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 icmp ttl-expired
Tree	ttl-expired
Description	Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of sending TTL expired messages
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 icmp ttl-expired admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

number *number*

Synopsis	Maximum number of TTL expired messages to send
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 icmp ttl-expired number *number*
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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seconds *number*

Synopsis	Time used to limit the number of TTL expired messages
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 icmp ttl-expired seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-matching-address *boolean*

Synopsis	Use the subscriber interface address as source address
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 icmp ttl-expired use-matching-address *boolean*
Tree	use-matching-address
Description	When configured to **true**, the system uses a matching subscriber interface address as the source address of the ICMP TTL expired message. For matching to occur, the source address of the offending packet must be in the same subnet of the subscriber interface address. When configured to **false**, the system uses the first configured address.
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

unreachables

Synopsis	Enter the **unreachables** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 icmp unreachables
Tree	unreachables
Description	Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of sending unreachable messages
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 icmp unreachables admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

number *number*

Synopsis	Maximum number of unreachable messages to send
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 icmp unreachables number *number*
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Time to limit the number of ICMP unreachable messages
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 icmp unreachables seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ignore-df-bit *boolean*

Synopsis	Ignore DF bit in the IPv4 header when fragmenting
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 ignore-df-bit *boolean*
Tree	ignore-df-bit
Description	When configured to **true**, fragmentation is applied according to the applicable egress MTU instead of the DF bit for frames egressing the WLAN-GW group. The DF bit is reset for frames that are fragmented. When configured to **false**, the router fragments a packet larger than the MTU if the DF bit is set to 0 and drops the packet if the DF bit is set to 1.
Default	false
Introduced	20.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

neighbor-discovery

Synopsis	Enter the **neighbor-discovery** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 neighbor-discovery
Tree	neighbor-discovery
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-proxy-arp *boolean*

Synopsis	Enable local proxy ARP on interface
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 neighbor-discovery local-proxy-arp *boolean*
Tree	local-proxy-arp
Description	When configured to **true**, the router enables local proxy ARP on the interface. When configured to **false**, the router does not respond to ARP requests for addresses on the same subnet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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populate *boolean*

Synopsis	Allow population of static and dynamic hosts
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 neighbor-discovery populate *boolean*
Tree	populate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy-arp-policy *reference*

Synopsis	Proxy ARP policy name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 neighbor-discovery proxy-arp-policy *reference*
Tree	proxy-arp-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-proxy-arp *boolean*

Synopsis	Enable remote proxy ARP on the interface
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 neighbor-discovery remote-proxy-arp *boolean*
Tree	remote-proxy-arp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Timeout for an ARP entry learned on the interface
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 neighbor-discovery timeout *number*

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Tree	timeout
Range	0 to 65535
Units	seconds
Default	14400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos-route-lookup *keyword*

Synopsis	QoS route lookup
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 qos-route-lookup *keyword*
Tree	qos-route-lookup
Options	destination
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

urpf-check

Synopsis	Enable the **urpf-check** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 urpf-check
Tree	urpf-check
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mode *keyword*

Synopsis	Unicast RPF check mode
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv4 urpf-check mode *keyword*
Tree	mode
Options	strict, loose, strict-no-ecmp
Default	strict
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ipv6

Synopsis	Enable the **ipv6** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-multiple-wan-addresses *boolean*

Synopsis	Allow multiple WAN addresses
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 allow-multiple-wan-addresses *boolean*
Tree	allow-multiple-wan-addresses
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-reply

Synopsis	Enter the **auto-reply** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 auto-reply
Tree	auto-reply
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-solicitation *boolean*

Synopsis	Enable auto-reply for NS
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 auto-reply neighbor-solicitation *boolean*
Tree	neighbor-solicitation
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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router-solicitation *boolean*

Synopsis	Enable auto-reply for RS
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 auto-reply router-solicitation *boolean*
Tree	router-solicitation
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bfd

Synopsis	Enter the **bfd** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 bfd
Tree	bfd
Description	Commands in this context configure the attributes of bidirectional forwarding detection (BFD) sessions that control the state of ESM dynamic BGP peers.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 bfd admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 bfd echo-receive *number*

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Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

multiplier *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 bfd multiplier *number*
Tree	multiplier
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

receive *number*

Synopsis	BFD receive interval over this interface
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 bfd receive *number*
Tree	receive
Description	This command specifies the receive interval for the BFD session. On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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transmit-interval *number*

Synopsis	BFD transmit interval over this interface
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 bfd transmit-interval *number*
Tree	transmit-interval
Description	This command configures the transmit intervals. On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Local termination point for the BFD session
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 bfd type *keyword*
Tree	type
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: • **auto** (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the **cpm-np**. • **cpm-np** – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems. • **fp** – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.
Options	cpm-np, auto, fp
Default	auto
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

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dhcp6

Synopsis	Enter the **dhcp6** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6
Tree	dhcp6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter *reference*

Synopsis	DHCPv6 filter
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 filter *reference*
Tree	filter
Reference	**configure** filter dhcp6-filter *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option

Synopsis	Enter the **option** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 option
Tree	option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-id

Synopsis	Enter the **interface-id** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 option interface-id
Tree	interface-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ascii-tuple

Synopsis	Use ASCII-encoded concatenated tuple
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 option interface-id ascii-tuple
Tree	ascii-tuple
Notes	The following elements are part of a choice: **ascii-tuple**, **if-index**, **sap-id**, or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

if-index

Synopsis	Use interface index in the DHCPv6 relay packet
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 option interface-id if-index
Tree	if-index
Notes	The following elements are part of a choice: **ascii-tuple**, **if-index**, **sap-id**, or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id

Synopsis	Use SAP ID in interface ID option in relay packet
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 option interface-id sap-id
Tree	sap-id
Notes	The following elements are part of a choice: **ascii-tuple**, **if-index**, **sap-id**, or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	String for interface ID option in DHCPv6 relay packet
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 option interface-id string *string*
Tree	string

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String Length	1 to 80
Notes	The following elements are part of a choice: **ascii-tuple**, **if-index**, **sap-id**, or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id *boolean*

Synopsis	Send remote ID option in the DHCPv6 relay packet
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 option remote-id *boolean*
Tree	remote-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

override-slaac *boolean*

Synopsis	Allow WAN address offered by DHCP to overwrite the WAN address acquired from SLAAC
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 override-slaac *boolean*
Tree	override-slaac
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pd-managed-route

Synopsis	Enable the **pd-managed-route** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 pd-managed-route
Tree	pd-managed-route
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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next-hop *keyword*

Synopsis	Next hop type
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 pd-managed-route next-hop *keyword*
Tree	next-hop
Options	ipv4, ipv6
Default	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy-server

Synopsis	Enter the **proxy-server** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 proxy-server
Tree	proxy-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 proxy server
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 proxy-server admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the **client-applications** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 proxy-server client-applications
Tree	client-applications

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp *boolean*

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 proxy-server client-applications dhcp *boolean*
Tree	dhcp
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp *boolean*

Synopsis	Allow PPPoE clients to use DHCP relay functionality
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 proxy-server client-applications ppp *boolean*
Tree	ppp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime *(number | keyword)*

Synopsis	Time for prefix to remain preferred on this interface
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 proxy-server preferred-lifetime *(number | keyword)*
Tree	preferred-lifetime
Range	300 to 4294967294
Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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rebind-timer *number*

Synopsis	Rebind timer (T2) for this interface
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 proxy-server rebind-timer *number*
Tree	rebind-timer
Range	0 to 1209600
Units	seconds
Default	2880
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

renew-timer *number*

Synopsis	Renew timer (T1)
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 proxy-server renew-timer *number*
Tree	renew-timer
Range	0 to 604800
Units	seconds
Default	1800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server-id

Synopsis	Enter the **server-id** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 proxy-server server-id
Tree	server-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-en-ascii *string*

Synopsis	Vendor-assigned ID based on Enterprise Number (DUID-EN)

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 proxy-server server-id duid-en-ascii *string*
Tree	duid-en-ascii
String Length	1 to 58
Notes	The following elements are part of a choice: **duid-en-ascii**, **duid-en-hex**, or **duid-ll**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-en-hex *string*

Synopsis	DUID system ID in hexadecimal format
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 proxy-server server-id duid-en-hex *string*
Tree	duid-en-hex
String Length	1 to 118
Notes	The following elements are part of a choice: **duid-en-ascii**, **duid-en-hex**, or **duid-ll**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-ll

Synopsis	Use link-layer address (DUID-LL) as DUID
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 proxy-server server-id duid-ll
Tree	duid-ll
Notes	The following elements are part of a choice: **duid-en-ascii**, **duid-en-hex**, or **duid-ll**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *(number | keyword)*

Synopsis	Time for prefix to remain valid on this interface
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 proxy-server valid-lifetime *(number | keyword)*
Tree	valid-lifetime
Range	300 to 4294967294

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Units	seconds
Options	infinite
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 python-policy *reference*
Tree	python-policy
Reference	**configure** python python-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

relay

Synopsis	Enter the **relay** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay
Tree	relay
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of DHCPv6 Relay
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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advertise-selection

Synopsis	Enter the **advertise-selection** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection
Tree	advertise-selection
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-mac

Synopsis	Enter the **client-mac** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection client-mac
Tree	client-mac
Notes	The following elements are part of a choice: **client-mac** or **server**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-address *keyword*

Synopsis	Designated client MAC addresses for Advertise selection
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection client-mac mac-address *keyword*
Tree	mac-address
Options	odd, even
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference-option

Synopsis	Enter the **preference-option** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection client-mac preference-option
Tree	preference-option

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Description	Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Preference option value for DHCPv6 Advertise messages
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection client-mac preference-option value *number*
Tree	value
Range	0 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

solicit-delay *number*

Synopsis	Delay before sending DHCPv6 Solicit messages
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection client-mac solicit-delay *number*
Tree	solicit-delay
Description	This command configures the time to delay DHCPv6 Solicit messages sent from the designated client MAC addresses.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference-option

Synopsis	Enter the **preference-option** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection preference-option
Tree	preference-option
Description	Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced	20.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Preference option value for DHCPv6 Advertise messages
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection preference-option value *number*
Tree	value
Range	0 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server [ipv6-address] *string*

Synopsis	Enter the **server** list instance
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection server *string*
Tree	server
Max. Instances	8
Notes	The following elements are part of a choice: **client-mac** or **server**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**ipv6-address**] *string*

Synopsis	IP address of the DHCPv6 server
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection server *string*
Tree	server
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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preference-option

Synopsis	Enter the **preference-option** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection server *string* preference-option
Tree	preference-option
Description	Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Preference option value for DHCPv6 Advertise messages
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection server *string* preference-option value *number*
Tree	value
Range	0 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

solicit-delay *number*

Synopsis	Delay before sending DHCPv6 Solicit messages
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection server *string* solicit-delay *number*
Tree	solicit-delay
Description	This command configures the time to delay DHCPv6 Solicit messages sent to the server.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

solicit-delay *number*

Synopsis	Delay before sending DHCPv6 Solicit messages

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay advertise-selection solicit-delay *number*
Tree	solicit-delay
Description	This command configures the time to delay DHCPv6 Solicit messages. The delay is applied to DHCPv6 Solicit messages for which no overriding value is configured in the **server** instance or the **client-mac** context.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the **client-applications** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp *boolean*

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay client-applications dhcp *boolean*
Tree	dhcp
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp *boolean*

Synopsis	Allow the PPP application to use DHCP relay functionality
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay client-applications ppp *boolean*
Tree	ppp
Default	false

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-split

Synopsis	Enter the **lease-split** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay lease-split
Tree	lease-split
Description	Commands in this context configure DHCPv6 lease split. DHCPv6 lease split is active when administratively enabled and for all IA_NA and IA_PD options in the transaction, the configured lease split valid lifetime (short lease time) is less than or equal to one of the following: • the renew time T1 committed by the server (long renew time) • half of the preferred lifetime committed by the server when T1 committed by the server equals zero
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of DHCPv6 lease split
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay lease-split admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable

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Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *number*

Synopsis	DHCPv6 lease split valid lifetime (short lease time)
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay lease-split valid-lifetime *number*
Tree	valid-lifetime
Range	300 to 315446399
Units	seconds
Default	3600
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

Synopsis	Link address for the DHCPv6 relay messages
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay link-address *string*
Tree	link-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *string*

Synopsis	DHCP6 server(s) to which the DHCP6 requests are forwarded
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay server *string*
Tree	server
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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source-address *string*

Synopsis	Source IPv6 address for the DHCPv6 relay messages
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 relay source-address *string*
Tree	source-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

snooping

Synopsis	Enter the **snooping** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 snooping
Tree	snooping
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of DHCPv6 snooping
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 snooping admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

user-db *reference*

Synopsis	Local user database used for authentication
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 user-db *reference*
Tree	user-db
Reference	**configure** subscriber-mgmt local-user-db *string*
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-ident *keyword*

Synopsis	DHCP6 user identification for this interface
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 dhcp6 user-ident *keyword*
Tree	user-ident
Options	mac, mac-interface-id
Default	mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-bridged-mode *boolean*

Synopsis	Enable IPv6 IPoE bridged mode
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 ipoe-bridged-mode *boolean*
Tree	ipoe-bridged-mode
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-discovery

Synopsis	Enter the **neighbor-discovery** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 neighbor-discovery
Tree	neighbor-discovery
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dad-snooping *boolean*

Synopsis	Populate table via duplicate address detection packets
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 neighbor-discovery dad-snooping *boolean*

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Tree	dad-snooping
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-limit *number*

Synopsis	Maximum neighbor entries learned per SLAAC host
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 neighbor-discovery neighbor-limit *number*
Tree	neighbor-limit
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos-route-lookup *keyword*

Synopsis	QoS route lookup
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 qos-route-lookup *keyword*
Tree	qos-route-lookup
Options	destination
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

router-advertisements

Synopsis	Enter the **router-advertisements** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements
Tree	router-advertisements
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of router advertisements
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

force-mcast *keyword*

Synopsis	Protocol with forced multicast
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements force-mcast *keyword*
Tree	force-mcast
Options	ip, ip-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-advertisement-interval *number*

Synopsis	Maximum advertisement interval
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements max-advertisement-interval *number*
Tree	max-advertisement-interval
Range	900 to 1800
Units	seconds
Default	1800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-advertisement-interval *number*

Synopsis	Minimum advertisement interval

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements min-advertisement-interval *number*
Tree	min-advertisement-interval
Range	900 to 1350
Units	seconds
Default	900
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the **options** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements options
Tree	options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

current-hop-limit *number*

Synopsis	Hop limit to be advertised
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements options current-hop-limit *number*
Tree	current-hop-limit
Range	0 to 255
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dns

Synopsis	Enter the **dns** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements options dns
Tree	dns
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

include-rdnss *boolean*

Synopsis	Include the RDNSS server option 25
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements options dns include-rdnss *boolean*
Tree	include-rdnss
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rdnss-lifetime *(number | keyword)*

Synopsis	Maximum time for the RDNSS address to remain valid
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements options dns rdnss-lifetime *(number | keyword)*
Tree	rdnss-lifetime
Range	900 to 3600
Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

managed-configuration *boolean*

Synopsis	Managed address configuration flag
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements options managed-configuration *boolean*
Tree	managed-configuration
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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mtu *(number | keyword)*

Synopsis	Advertised MTU value
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements options mtu *(number | keyword)*
Tree	mtu
Range	1280 to 9212
Units	bytes
Options	not-included
Default	not-included
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

other-stateful-configuration *boolean*

Synopsis	Other stateful configuration flag
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements options other-stateful-configuration *boolean*
Tree	other-stateful-configuration
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reachable-time *number*

Synopsis	Reachable time for advertisements
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements options reachable-time *number*
Tree	reachable-time
Range	0 to 3600000
Units	milliseconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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retransmit-timer *number*

Synopsis	Retransmit time in router advertisements from interface
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements options retransmit-timer *number*
Tree	retransmit-timer
Range	0 to 1800000
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-lifetime *(number | keyword)*

Synopsis	Router lifetime
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements options router-lifetime *(number | keyword)*
Tree	router-lifetime
Range	2700 to 9000
Units	seconds
Options	no-default-router
Default	4500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-options

Synopsis	Enter the **prefix-options** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements prefix-options
Tree	prefix-options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

autonomous *boolean*

Synopsis	Value of the autonomous flag

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements prefix-options autonomous *boolean*
Tree	autonomous
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-link *boolean*

Synopsis	Assign the prefix to an interface on the specified link
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements prefix-options on-link *boolean*
Tree	on-link
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime *(number | keyword)*

Synopsis	Time for a prefix to remain preferred
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements prefix-options preferred-lifetime *(number | keyword)*
Tree	preferred-lifetime
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *(number | keyword)*

Synopsis	Time for a prefix to remain valid
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 router-advertisements prefix-options valid-lifetime *(number | keyword)*
Tree	valid-lifetime

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Range	0 to 4294967294
Units	seconds
Options	infinite
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-solicit

Synopsis	Enter the **router-solicit** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 router-solicit
Tree	router-solicit
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of router-solicit authentication
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 router-solicit admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

inactivity-timer *(number | keyword)*

Synopsis	Time before an inactive host is removed
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 router-solicit inactivity-timer *(number | keyword)*
Tree	inactivity-timer
Range	1 to 31536000
Units	seconds
Options	infinite

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Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-auth-interval *number*

Synopsis	Minimum time between successive authentication attempts
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 router-solicit min-auth-interval *number*
Tree	min-auth-interval
Range	1 to 360000
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

Synopsis	Local user database used for authentication
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 router-solicit user-db *reference*
Tree	user-db
Reference	**configure** subscriber-mgmt local-user-db *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

urpf-check

Synopsis	Enable the **urpf-check** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 urpf-check
Tree	urpf-check
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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mode *keyword*

Synopsis	Unicast RPF check mode
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* ipv6 urpf-check mode *keyword*
Tree	mode
Options	strict, loose, strict-no-ecmp
Default	strict
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-address-assignment

Synopsis	Enter the **local-address-assignment** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* local-address-assignment
Tree	local-address-assignment
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of Local Address Assignment
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* local-address-assignment admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* local-address-assignment ipv4
Tree	ipv4

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the **client-applications** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* local-address-assignment ipv4 client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe *boolean*

Synopsis	Request local addresses for non-DHCP/managed IPoE hosts
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* local-address-assignment ipv4 client-applications ipoe *boolean*
Tree	ipoe
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp *boolean*

Synopsis	Request local addresses for PPP IPCP hosts
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* local-address-assignment ipv4 client-applications ppp *boolean*
Tree	ppp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-pool *string*

Synopsis	Default pools
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* local-address-assignment ipv4 default-pool *string*

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Tree	default-pool
String Length	1 to 32
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *reference*

Synopsis	Local DHCPv4 server for local pools management
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* local-address-assignment ipv4 server *reference*
Tree	server
Reference	**configure** service vprn *string* dhcp-server dhcpv4 *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* local-address-assignment ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the **client-applications** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* local-address-assignment ipv6 client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ipoe-slaac *boolean*

Synopsis	Request local addresses for IPoE SLAAC hosts
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* local-address-assignment ipv6 client-applications ipoe-slaac *boolean*
Tree	ipoe-slaac
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-wan *boolean*

Synopsis	Request local addresses for IPoE IA NA hosts
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* local-address-assignment ipv6 client-applications ipoe-wan *boolean*
Tree	ipoe-wan
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-slaac *boolean*

Synopsis	Request local addresses for PPP SLAAC hosts
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* local-address-assignment ipv6 client-applications ppp-slaac *boolean*
Tree	ppp-slaac
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *reference*

Synopsis	Local DHCPv6 server for local pools management
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* local-address-assignment ipv6 server *reference*
Tree	server

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Reference	**configure** service vprn *string* dhcp-server dhcpv6 *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *string*

Synopsis	MAC address for the interface
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* mac *string*
Tree	mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nasreq-auth-policy *reference*

Synopsis	Diameter NASREQ application policy to use for authentication
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* nasreq-auth-policy *reference*
Tree	nasreq-auth-policy
Reference	**configure** subscriber-mgmt diameter-nasreq-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

oper-up-while-empty *boolean*

Synopsis	Enable this group interface without any active SAPs
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* oper-up-while-empty *boolean*
Tree	oper-up-while-empty
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe

Synopsis	Enter the **pppoe** context

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* pppoe
Tree	pppoe
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of PPPoE
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* pppoe admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

anti-spoof *keyword*

Synopsis	PPPoE anti-spoof filtering
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* pppoe anti-spoof *keyword*
Tree	anti-spoof
Options	mac-sid, mac-sid-ip
Default	mac-sid
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* pppoe description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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dhcp-client

Synopsis	Enter the **dhcp-client** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* pppoe dhcp-client
Tree	dhcp-client
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-id *keyword*

Synopsis	Type of information that DHCP option 61 contains
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* pppoe dhcp-client client-id *keyword*
Tree	client-id
Options	mac-pppoe-session-id
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	PPPoE policy
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* pppoe policy *reference*
Tree	policy
Reference	**configure** subscriber-mgmt ppp-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy used to modify PPPoE packets
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* pppoe python-policy *reference*
Tree	python-policy
Reference	**configure** python python-policy *string*

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-session-limit *number*

Synopsis	Maximum PPPoE sessions per SAP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* pppoe sap-session-limit *number*
Tree	sap-session-limit
Range	1 to 131071
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *number*

Synopsis	Maximum PPPoE sessions
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* pppoe session-limit *number*
Tree	session-limit
Range	1 to 333823
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local user database for authentication
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* pppoe user-db *reference*
Tree	user-db
Reference	**configure** subscriber-mgmt local-user-db *string*
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-auth-policy *reference*

Synopsis	RADIUS authentication policy
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* radius-auth-policy *reference*
Tree	radius-auth-policy
Reference	**configure** subscriber-mgmt radius-authentication-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

redundant-interface *reference*

Synopsis	Redundant interface
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* redundant-interface *reference*
Tree	redundant-interface
Reference	**configure** service vprn *string* redundant-interface *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap [sap-id] *string*

Synopsis	Enter the **sap** list instance
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string*
Tree	sap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**sap-id**] *string*

Synopsis	SAP ID
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string*
Tree	sap
String Length	1 to 45

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	Accounting policy
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the SAP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

anti-spoof *keyword*

Synopsis	Type of anti-spoof filtering
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* anti-spoof *keyword*
Tree	anti-spoof
Options	source-ip-addr, source-ip-and-mac-addr, next-hop-ip-and-mac-addr
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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app-profile *reference*

Synopsis	Application profile name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

calling-station-id *string*

Synopsis	Calling station ID
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* calling-station-id *string*
Tree	calling-station-id
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Collect accounting statistics
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cpu-protection

Synopsis	Enter the **cpu-protection** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* cpu-protection
Tree	cpu-protection
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

eth-cfm-monitoring

Synopsis	Enable the **eth-cfm-monitoring** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* cpu-protection eth-cfm-monitoring
Tree	eth-cfm-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

aggregate

Synopsis	Apply rate limit to the sum of the per peer packet rates
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* cpu-protection eth-cfm-monitoring aggregate
Tree	aggregate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

car

Synopsis	Ignore Ethernet CFM packets when enforcing overall rate
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* cpu-protection eth-cfm-monitoring car
Tree	car
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

ip-src-monitoring

Synopsis	Enable IP source monitoring for CPU protection
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* cpu-protection ip-src-monitoring
Tree	ip-src-monitoring

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Notes	The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* cpu-protection mac-monitoring
Tree	mac-monitoring
Notes	The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

policy-id *reference*

Synopsis	CPM protection policy
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* cpu-protection policy-id *reference*
Tree	policy-id
Reference	**configure** system security cpu-protection policy *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

default-host

Synopsis	Enter the **default-host** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* default-host
Tree	default-host
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

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ipv4 [address] *reference* prefix-length *number*

Synopsis	Enter the **ipv4** list instance
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* default-host ipv4 *reference* prefix-length *number*
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

[**address**] *reference*

Synopsis	IPv4 default host address
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* default-host ipv4 *reference* prefix-length *number*
Tree	ipv4
Reference	**configure** service vprn *string* subscriber-interface *string* ipv4 address *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* default-host ipv4 *reference* prefix-length *number*
Tree	ipv4
Range	0 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

next-hop *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

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Synopsis	Next-hop IP address used to forward traffic on the SAP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* default-host ipv4 *reference* prefix-length *number* next-hop *string*
Tree	next-hop
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ipv6 [address] *string* prefix-length *number*

Synopsis	Enter the **ipv6** list instance
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* default-host ipv6 *string* prefix-length *number*
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

[**address**] *string*

Synopsis	IPv6 default host address
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* default-host ipv6 *string* prefix-length *number*
Tree	ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

prefix-length *number*

Synopsis	IPv6 prefix length
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* default-host ipv6 *string* prefix-length *number*
Tree	ipv6
Range	0 to 128
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

next-hop *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Next-hop IP address used to forward traffic on the SAP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* default-host ipv6 *string* prefix-length *number* next-hop *string*
Tree	next-hop
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* description *string*
Tree	description
String Length	1 to 160
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dist-cpu-protection *reference*

Synopsis	Distributed CPU protection policy for SAP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* dist-cpu-protection *reference*
Tree	dist-cpu-protection
Reference	**configure** system security dist-cpu-protection policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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egress

Synopsis	Enter the **egress** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* egress
Tree	egress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

agg-rate

Synopsis	Enter the **agg-rate** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* egress agg-rate
Tree	agg-rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

adaptation-rule *keyword*

Synopsis	Adaptation rule to compute the operational PIR value when an aggregate shaper is used
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* egress agg-rate adaptation-rule *keyword*
Tree	adaptation-rule
Options	max, min, closest
Default	closest
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

burst-limit *(number | keyword)*

Synopsis	Shaping burst size when an aggregate shaper is used
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* egress agg-rate burst-limit *(number | keyword)*
Tree	burst-limit
Range	1 to 14000000
Units	bytes

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Options	auto
Default	auto
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

limit-unused-bandwidth *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* egress agg-rate limit-unused-bandwidth *boolean*
Tree	limit-unused-bandwidth
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

queue-frame-based-accounting *boolean*

Synopsis	Enable frame based accounting on policers and queues
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* egress agg-rate queue-frame-based-accounting *boolean*
Tree	queue-frame-based-accounting
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate *number*

Synopsis	Enforced aggregate rate for all queues
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* egress agg-rate rate *number*
Tree	rate
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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filter

Synopsis	Enter the **filter** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* egress filter
Tree	filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* egress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* egress filter ipv6 *reference*
Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the **qos** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* egress qos
Tree	qos
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer-control-policy

Synopsis	Enter the **policer-control-policy** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* egress qos policer-control-policy
Tree	policer-control-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* egress qos policer-control-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos policer-control-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

qinq-mark-top-only *boolean*

Synopsis	Mark top Q-tags
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* egress qos qinq-mark-top-only *boolean*
Tree	qinq-mark-top-only
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-egress

Synopsis	Enter the **sap-egress** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* egress qos sap-egress

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Tree	sap-egress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* egress qos sap-egress policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-egress *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler-policy

Synopsis	Enter the **scheduler-policy** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* egress qos scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Scheduler policy name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* egress qos scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos scheduler-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

eth-cfm

Synopsis	Enter the **eth-cfm** context

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm
Tree	eth-cfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

collect-lmm-fc-stats

Synopsis	Enter the **collect-lmm-fc-stats** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm collect-lmm-fc-stats
Tree	collect-lmm-fc-stats
Description	Commands in this context configure per forwarding class (FC) LMM information collection. The commands **fc-in-profile** and **fc** in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively. This command and the **collect-lmm-stats** command are mutually exclusive when there is entity resource contention.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

fc *keyword*

Synopsis	Forwarding class name for profile-unaware counter
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm collect-lmm-fc-stats fc *keyword*
Tree	fc
Description	This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter. An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the **fc-in-profile** command under the **collect-lmm-fc-stats** context. When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

fc-in-profile *keyword*

Synopsis	Forwarding class name for profile-aware counter
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm collect-lmm-fc-stats fc-in-profile *keyword*
Tree	fc-in-profile
Description	This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter. An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the **fc** command under the **collect-lmm-fc-stats** context. When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm collect-lmm-stats *boolean*
Tree	collect-lmm-stats
Description	When configured to **true**, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings. The **show eth-cfm collect-lmm-stats** command displays entities that have been enabled to collect transit and receive counters. When configured to **false**, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

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mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*

Synopsis	Enter the **mep** list instance
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep
Reference	**configure** eth-cfm domain *string* association *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*
Tree	mep

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Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ais *boolean*

Synopsis	Enable the generation and the reception of AIS messages
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ais *boolean*
Tree	ais
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

alarm-notification

Synopsis	Enter the **alarm-notification** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification
Tree	alarm-notification
Description	Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.

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Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

fng-alarm-time *number*

Synopsis Time that must expire before an FNG alarm is raised

Context **configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-alarm-time *number*

Tree fng-alarm-time

Range 250 | 500 | 1000

Units centiseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

fng-reset-time *number*

Synopsis Time that must expire before an FNG alarm is reset

Context **configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* alarm-notification fng-reset-time *number*

Tree fng-reset-time

Range 250 | 500 | 1000

Units centiseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ccm *boolean*

Synopsis Generate CCM messages

Context **configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm *boolean*

Tree ccm

Default false

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-ltm-priority *number*
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* ccm-padding-size *number*
Tree	ccm-padding-size
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU. This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through **configure eth-cfm domain association ccm-interval)** is less than 1 second.
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

csf

Synopsis	Enable the **csf** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* csf

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Tree	csf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* csf multiplier *decimal-number*
Tree	multiplier
Range	0.0 | 2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

eth-test

Synopsis	Enable the **eth-test** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the **oam eth-cfm eth-test** command.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test bit-error-threshold *number*
Tree	bit-error-threshold
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

test-pattern

Synopsis	Enter the **test-pattern** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern crc-tlv *boolean*
Tree	crc-tlv
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* eth-test test-pattern pattern *keyword*
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

fault-propagation *keyword*

Synopsis	Fault propagation for the MEP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* fault-propagation *keyword*
Tree	fault-propagation
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

grace

Synopsis	Enter the **grace** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

eth-ed

Synopsis	Enter the **eth-ed** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed max-rx-defect-window *number*
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed priority *number*
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

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rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed rx-eth-ed *boolean*
Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-ed tx-eth-ed *boolean*
Tree	tx-eth-ed
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

eth-vsm-grace

Synopsis	Enter the **eth-vsm-grace** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace rx-eth-vsm-grace *boolean*
Tree	rx-eth-vsm-grace
Description	When configured to **true**, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to **false**, the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* grace eth-vsm-grace tx-eth-vsm-grace *boolean*
Tree	tx-eth-vsm-grace
Description	When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards. The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED). When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* low-priority-defect *keyword*

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Tree	low-priority-defect
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* one-way-delay-threshold *number*
Tree	one-way-delay-threshold
Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

squelch-ingress-levels *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* eth-cfm squelch-ingress-levels *number*
Tree	squelch-ingress-levels
Description	This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option. The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.
Range	0 to 7
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

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fwd-wholesale

Synopsis	Enter the **fwd-wholesale** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* fwd-wholesale
Tree	fwd-wholesale
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe-service *reference*

Synopsis	PPPoE service name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* fwd-wholesale pppoe-service *reference*
Tree	pppoe-service
Reference	**configure** service epipe *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-admin-state *keyword*

Synopsis	Administrative state of the hosts
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* host-admin-state *keyword*
Tree	host-admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-lockout-policy *reference*

Synopsis	Host lockout policy
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* host-lockout-policy *reference*
Tree	host-lockout-policy

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Reference	**configure** subscriber-mgmt host-lockout-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

igmp-host-tracking

Synopsis	Enter the **igmp-host-tracking** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* igmp-host-tracking
Tree	igmp-host-tracking
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

expiry-time *number*

Synopsis	Time that the system continues to track inactive hosts
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* igmp-host-tracking expiry-time *number*
Tree	expiry-time
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* igmp-host-tracking import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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maximum-number-group-sources *number*

Synopsis	Maximum number of multicast groups to track per group
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* igmp-host-tracking maximum-number-group-sources *number*
Tree	maximum-number-group-sources
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of multicast groups to be tracked
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* igmp-host-tracking maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis	Maximum number of multicast sources to be tracked
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* igmp-host-tracking maximum-number-sources *number*
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis	Enable IGMP router alert check option
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* igmp-host-tracking router-alert-check *boolean*
Tree	router-alert-check
Default	true

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* ingress
Tree	ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis	Enter the **filter** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* ingress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6 *reference*

Synopsis	IPv6 filter policy name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* ingress filter ipv6 *reference*

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Tree	ipv6
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the **qos** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match-qinq-dot1p *keyword*

Synopsis	Ingress match QinQ Dot1p
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* ingress qos match-qinq-dot1p *keyword*
Tree	match-qinq-dot1p
Options	top, bottom
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer-control-policy

Synopsis	Enter the **policer-control-policy** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* ingress qos policer-control-policy
Tree	policer-control-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Policer control policy name

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* ingress qos policer-control-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos policer-control-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap-ingress

Synopsis	Enter the **sap-ingress** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* ingress qos sap-ingress
Tree	sap-ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Policy ID
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* ingress qos sap-ingress policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-ingress *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

queuing-type *keyword*

Synopsis	Queuing type
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* ingress qos sap-ingress queuing-type *keyword*
Tree	queuing-type
Options	shared, multipoint-shared
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR

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scheduler-policy

Synopsis	Enter the **scheduler-policy** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* ingress qos scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Scheduler policy name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* ingress qos scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos scheduler-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lag

Synopsis	Enter the **lag** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* lag
Tree	lag
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

link-map-profile *number*

Synopsis	LAG link map profile for a SAP or network interface
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* lag link-map-profile *number*
Tree	link-map-profile
Description	This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator

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assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.

If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.

Range	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

per-link-hash

Synopsis	Enter the **per-link-hash** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* lag per-link-hash
Tree	per-link-hash
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

class *number*

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* lag per-link-hash class *number*
Tree	class
Range	1 to 3
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

weight *number*

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* lag per-link-hash weight *number*
Tree	weight
Range	1 to 1024
Default	1
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

monitor-oper-group *reference*

Synopsis	Monitor operational group
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* monitor-oper-group *reference*
Tree	monitor-oper-group
Reference	**configure** service oper-group *string*
Notes	The following elements are part of a choice: **monitor-oper-group** or **oper-group**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

multi-service-site *reference*

Synopsis	Multi service site name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* multi-service-site *reference*
Tree	multi-service-site
Reference	**configure** service customer *string* multi-service-site *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

oper-group *reference*

Synopsis	Operational group
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* oper-group *reference*
Tree	oper-group
Reference	**configure** service oper-group *string*
Notes	The following elements are part of a choice: **monitor-oper-group** or **oper-group**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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static-host

Synopsis	Enter the **static-host** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host
Tree	static-host
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4 [ip] *string* mac *string*

Synopsis	Enter the **ipv4** list instance
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string*
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**ip**] *string*

Synopsis	IPv4 address used by the static host
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string*
Tree	ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *string*

Synopsis	MAC address used by the static host
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string*
Tree	ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of the static host
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-string *string*

Synopsis	ANCP string
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* ancp-string *string*
Tree	ancp-string
String Length	1 to 63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile

Synopsis	Enter the **app-profile** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* app-profile
Tree	app-profile
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

profile *reference*

Synopsis	Application profile used by the static host
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* app-profile profile *reference*
Tree	profile

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Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

scope *keyword*

Synopsis	Scope of the static host application profile
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* app-profile scope *keyword*
Tree	scope
Options	subscriber, mac
Default	subscriber
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

int-dest-id *string*

Synopsis	Intermediate destination ID
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* int-dest-id *string*
Tree	int-dest-id
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

managed-route [prefix] *string*

Synopsis	Enter the **managed-route** list instance
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string*
Tree	managed-route
Description	Commands in this context configure managed route parameters.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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[**prefix**] *string*

Synopsis	Managed route prefix associated with IPv4 static host
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string*
Tree	managed-route
Description	This command configures the managed route prefix. The prefix length must be in the range of 1 to 32.
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cpe-check

Synopsis	Enable the **cpe-check** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* cpe-check
Tree	cpe-check
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destination-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the target CPE device
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* cpe-check destination-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	destination-ip-address
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* cpe-check drop-count *number*
Tree	drop-count
Range	1 to 255
Default	3
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failed-action

Synopsis	Enter the **failed-action** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* cpe-check failed-action
Tree	failed-action
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

metric *number*

Synopsis	Metric associated with the provisioned managed route
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* cpe-check failed-action metric *number*
Tree	metric
Max. Range	0 to 4294967295
Default	0
Notes	The following elements are part of a choice: (**metric**, **preference**, and **tag**) or **withdraw**.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference *number*

Synopsis	Preference associated to the provisioned managed route
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* cpe-check failed-action preference *number*
Tree	preference

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Range	0 to 255
Notes	The following elements are part of a choice: (**metric**, **preference**, and **tag**) or **withdraw**.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tag *number*

Synopsis	Route tag used if CPE check fails
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* cpe-check failed-action tag *number*
Tree	tag
Max. Range	0 to 4294967295
Default	0
Notes	The following elements are part of a choice: (**metric**, **preference**, and **tag**) or **withdraw**.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

withdraw *boolean*

Synopsis	Withdraw the route when the CPE check fails
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* cpe-check failed-action withdraw *boolean*
Tree	withdraw
Default	false
Notes	The following elements are part of a choice: (**metric**, **preference**, and **tag**) or **withdraw**.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Interval between ICMP pings to target CPE IP address
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* cpe-check interval *number*
Tree	interval

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Range	1 to 255
Units	seconds
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* cpe-check log *boolean*
Tree	log
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

padding-size *number*

Synopsis	Padding size for CPE connectivity checks
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* cpe-check padding-size *number*
Tree	padding-size
Range	0 to 16384
Units	bytes
Default	56
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source IP address used in the ICMP messages
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* cpe-check source-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-ip-address
Introduced	22.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Time interval determining that a ping is missed
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* cpe-check timeout *number*
Tree	timeout
Range	1 to 10
Units	seconds
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

metric *number*

Synopsis	Metric associated with the managed route
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* metric *number*
Tree	metric
Max. Range	0 to 4294967295
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference *number*

Synopsis	Preference associated with the managed route
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* preference *number*
Tree	preference
Range	0 to 255
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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tag *number*

Synopsis	Route tag associated with the managed route
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* managed-route *string* tag *number*
Tree	tag
Max. Range	0 to 4294967295
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rip-policy *reference*

Synopsis	RIP policy name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* rip-policy *reference*
Tree	rip-policy
Reference	**configure** subscriber-mgmt rip-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv

Synopsis	Enter the **shcv** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* shcv
Tree	shcv
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	SLA profile name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* sla-profile *reference*
Tree	sla-profile

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Reference	**configure** subscriber-mgmt sla-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Sub-profile name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* sub-profile *reference*
Tree	sub-profile
Reference	**configure** subscriber-mgmt sub-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id

Synopsis	Enter the **subscriber-id** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* subscriber-id
Tree	subscriber-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Subscriber identification
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* subscriber-id string *string*
Tree	string
String Length	1 to 64
Notes	The following elements are part of a choice: **string** or **use-sap-id**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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use-sap-id

Synopsis	Use the SAP id as subscriber ID
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv4 *string* mac *string* subscriber-id use-sap-id
Tree	use-sap-id
Notes	The following elements are part of a choice: **string** or **use-sap-id**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6 [prefix] *string* mac *string*

Synopsis	Enter the **ipv6** list instance
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string*
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**prefix**] *string*

Synopsis	IPv6 prefix
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string*
Tree	ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *string*

Synopsis	MAC address
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string*
Tree	ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the static host
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-string *string*

Synopsis	ANCP string
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* ancp-string *string*
Tree	ancp-string
String Length	1 to 63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile

Synopsis	Enter the **app-profile** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* app-profile
Tree	app-profile
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

profile *reference*

Synopsis	Application profile used by the static host
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* app-profile profile *reference*

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Tree	profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

scope *keyword*

Synopsis	Scope of the static host application profile
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* app-profile scope *keyword*
Tree	scope
Options	subscriber, mac
Default	subscriber
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

int-dest-id *string*

Synopsis	Intermediate destination ID
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* int-dest-id *string*
Tree	int-dest-id
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-linking *string*

Synopsis	IPv6 host linked with IPv4 host via learned MAC address
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* mac-linking *string*
Tree	mac-linking
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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managed-route [ipv6-prefix] *string*

Synopsis	Enter the **managed-route** list instance
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string*
Tree	managed-route
Description	Commands in this context configure managed route parameters.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**ipv6-prefix**] *string*

Synopsis	Managed route prefix associated with IPv6 static host
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string*
Tree	managed-route
Description	This command configures the managed route prefix. The prefix length must be in the range of 1 to 128.
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cpe-check

Synopsis	Enable the **cpe-check** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* cpe-check
Tree	cpe-check
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destination-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the target CPE device

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* cpe-check destination-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	destination-ip-address
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* cpe-check drop-count *number*
Tree	drop-count
Range	1 to 255
Default	3
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failed-action

Synopsis	Enter the **failed-action** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* cpe-check failed-action
Tree	failed-action
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

metric *number*

Synopsis	Metric associated with the provisioned managed route
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* cpe-check failed-action metric *number*
Tree	metric
Max. Range	0 to 4294967295
Default	0
Notes	The following elements are part of a choice: (**metric**, **preference**, and **tag**) or **withdraw**.

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Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference *number*

Synopsis	Preference associated to the provisioned managed route
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* cpe-check failed-action preference *number*
Tree	preference
Range	0 to 255
Notes	The following elements are part of a choice: (**metric**, **preference**, and **tag**) or **withdraw**.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tag *number*

Synopsis	Route tag used if CPE check fails
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* cpe-check failed-action tag *number*
Tree	tag
Max. Range	0 to 4294967295
Default	0
Notes	The following elements are part of a choice: (**metric**, **preference**, and **tag**) or **withdraw**.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

withdraw *boolean*

Synopsis	Withdraw the route when the CPE check fails
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* cpe-check failed-action withdraw *boolean*
Tree	withdraw
Default	false
Notes	The following elements are part of a choice: (**metric**, **preference**, and **tag**) or **withdraw**.

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Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Interval between ICMP pings to target CPE IP address
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* cpe-check interval *number*
Tree	interval
Range	1 to 255
Units	seconds
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* cpe-check log *boolean*
Tree	log
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

padding-size *number*

Synopsis	Padding size for CPE connectivity checks
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* cpe-check padding-size *number*
Tree	padding-size
Range	0 to 16384
Units	bytes
Default	56
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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source-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source IP address used in the ICMP messages
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* cpe-check source-ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-ip-address
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Time interval determining that a ping is missed
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* cpe-check timeout *number*
Tree	timeout
Range	1 to 10
Units	seconds
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

metric *number*

Synopsis	Metric associated with the managed route
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* metric *number*
Tree	metric
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference *number*

Synopsis	Preference associated with the managed route

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* preference *number*
Tree	preference
Range	0 to 255
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tag *number*

Synopsis	Route tag associated with the managed route
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* managed-route *string* tag *number*
Tree	tag
Max. Range	0 to 4294967295
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retail-svc-id *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Retail service ID
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* retail-svc-id *number*
Tree	retail-svc-id
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv

Synopsis	Enter the **shcv** context

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* shcv
Tree	shcv
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	SLA profile name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* sla-profile *reference*
Tree	sla-profile
Reference	**configure** subscriber-mgmt sla-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Sub-profile name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* sub-profile *reference*
Tree	sub-profile
Reference	**configure** subscriber-mgmt sub-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id

Synopsis	Enter the **subscriber-id** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* subscriber-id
Tree	subscriber-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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string *string*

Synopsis	Subscriber identification
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* subscriber-id string *string*
Tree	string
String Length	1 to 64
Notes	The following elements are part of a choice: **string** or **use-sap-id**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-sap-id

Synopsis	Use the SAP id as subscriber ID
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host ipv6 *string* mac *string* subscriber-id use-sap-id
Tree	use-sap-id
Notes	The following elements are part of a choice: **string** or **use-sap-id**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-learning

Synopsis	Enter the **mac-learning** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host mac-learning
Tree	mac-learning
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

data-triggered *boolean*

Synopsis	Enable learning of MAC addresses from data packets
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host mac-learning data-triggered *boolean*
Tree	data-triggered
Default	false

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Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

single-mac *boolean*

Synopsis	Enforce single MAC address and subscriber for the SAP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* static-host mac-learning single-mac *boolean*
Tree	single-mac
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-sla-mgmt

Synopsis	Enter the **sub-sla-mgmt** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt
Tree	sub-sla-mgmt
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of SAP subscriber management
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

defaults

Synopsis	Enter the **defaults** context

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt defaults
Tree	defaults
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Default application profile name for this SAP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt defaults app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

int-dest-id

Synopsis	Enter the **int-dest-id** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt defaults int-dest-id
Tree	int-dest-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Use the configured string
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt defaults int-dest-id string *string*
Tree	string
String Length	1 to 32
Notes	The following elements are part of a choice: **string** or **top-q-tag**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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top-q-tag

Synopsis	Use the top Q-tag of this SAP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt defaults int-dest-id top-q-tag
Tree	top-q-tag
Notes	The following elements are part of a choice: **string** or **top-q-tag**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	Default SLA profile for hosts on this SAP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt defaults sla-profile *reference*
Tree	sla-profile
Reference	**configure** subscriber-mgmt sla-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Default subscriber profile for the SAP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt defaults sub-profile *reference*
Tree	sub-profile
Reference	**configure** subscriber-mgmt sub-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id

Synopsis	Enter the **subscriber-id** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt defaults subscriber-id
Tree	subscriber-id

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-id

Synopsis	Use auto-generated subscriber identification string
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt defaults subscriber-id auto-id
Tree	auto-id
Notes	The following elements are part of a choice: **auto-id**, **sap-id**, or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id

Synopsis	Use SAP ID as default subscriber identification string
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt defaults subscriber-id sap-id
Tree	sap-id
Notes	The following elements are part of a choice: **auto-id**, **sap-id**, or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Default subscriber identification string for the SAP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt defaults subscriber-id string *string*
Tree	string
String Length	1 to 64
Notes	The following elements are part of a choice: **auto-id**, **sap-id**, or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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single-sub-parameters

Synopsis	Enter the **single-sub-parameters** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt single-sub-parameters
Tree	single-sub-parameters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

non-sub-traffic

Synopsis	Enable the **non-sub-traffic** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt single-sub-parameters non-sub-traffic
Tree	non-sub-traffic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Application profile name for all non-subscriber traffic
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt single-sub-parameters non-sub-traffic app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	SLA profile applicable for all non-subscriber traffic
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt single-sub-parameters non-sub-traffic sla-profile *reference*
Tree	sla-profile
Reference	**configure** subscriber-mgmt sla-profile *string*
Notes	This element is mandatory.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Subscriber profile all non-subscriber traffic
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt single-sub-parameters non-sub-traffic sub-profile *reference*
Tree	sub-profile
Reference	**configure** subscriber-mgmt sub-profile *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Subscriber ID applied for all non-subscriber traffic
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt single-sub-parameters non-sub-traffic subscriber-id *string*
Tree	subscriber-id
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

profiled-traffic-only *boolean*

Synopsis	Include all traffic in subscriber profile
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt single-sub-parameters profiled-traffic-only *boolean*
Tree	profiled-traffic-only
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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sub-ident-policy *reference*

Synopsis	Subscriber identification policy used on this SAP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt sub-ident-policy *reference*
Tree	sub-ident-policy
Reference	**configure** subscriber-mgmt sub-ident-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-limit *(keyword | number)*

Synopsis	Maximum number of subscribers on this SAP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string* sub-sla-mgmt subscriber-limit *(keyword | number)*
Tree	subscriber-limit
Range	1 to 131071
Options	no-limit
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-parameters

Synopsis	Enter the **sap-parameters** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap-parameters
Tree	sap-parameters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

anti-spoof *keyword*

Synopsis	Anti-spoof type of the SAP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap-parameters anti-spoof *keyword*

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Tree	anti-spoof
Options	ip-mac, nh-mac
Default	ip-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap-parameters description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-sla-mgmt

Synopsis	Enter the **sub-sla-mgmt** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap-parameters sub-sla-mgmt
Tree	sub-sla-mgmt
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

defaults

Synopsis	Enter the **defaults** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap-parameters sub-sla-mgmt defaults
Tree	defaults
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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app-profile *reference*

Synopsis	Default application profile name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap-parameters sub-sla-mgmt defaults app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	Default SLA profile
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap-parameters sub-sla-mgmt defaults sla-profile *reference*
Tree	sla-profile
Reference	**configure** subscriber-mgmt sla-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Default subscriber profile
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap-parameters sub-sla-mgmt defaults sub-profile *reference*
Tree	sub-profile
Reference	**configure** subscriber-mgmt sub-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id

Synopsis	Enter the **subscriber-id** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap-parameters sub-sla-mgmt defaults subscriber-id
Tree	subscriber-id
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-id

Synopsis	Subscriber ID that is autogenerated
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap-parameters sub-sla-mgmt defaults subscriber-id auto-id
Tree	auto-id
Notes	The following elements are part of a choice: **auto-id** or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	String to be used as default subscriber ID
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap-parameters sub-sla-mgmt defaults subscriber-id string *string*
Tree	string
String Length	1 to 64
Notes	The following elements are part of a choice: **auto-id** or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-ident-policy *reference*

Synopsis	Subscriber identification policy
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap-parameters sub-sla-mgmt sub-ident-policy *reference*
Tree	sub-ident-policy
Reference	**configure** subscriber-mgmt sub-ident-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv-policy *reference*

Synopsis	SHCV policy for IPv4 and IPv6 subscriber hosts

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* shcv-policy *reference*
Tree	shcv-policy
Reference	**configure** subscriber-mgmt shcv-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv-policy-ipv4 *reference*

Synopsis	SHCV for IPv4 subscriber hosts
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* shcv-policy-ipv4 *reference*
Tree	shcv-policy-ipv4
Reference	**configure** subscriber-mgmt shcv-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv-policy-ipv6 *reference*

Synopsis	SHCV for IPv6 subscriber hosts
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* shcv-policy-ipv6 *reference*
Tree	shcv-policy-ipv6
Reference	**configure** subscriber-mgmt shcv-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

srrp [srrp-id] *number*

Synopsis	Enter the **srrp** list instance
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* srrp *number*
Tree	srrp
Max. Instances	1
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**srrp-id**] *number*

Synopsis	SRRP instance ID
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* srrp *number*
Tree	srrp
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of SRRP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* srrp *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bfd-liveness

Synopsis	Enable the **bfd-liveness** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* srrp *number* bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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dest-ip *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination IPv4 prefix
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* srrp *number* bfd-liveness dest-ip *string*
Tree	dest-ip
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-name *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* srrp *number* bfd-liveness interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-name *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* srrp *number* bfd-liveness service-name *string*
Tree	service-name

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String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* srrp *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gw-mac *string*

Synopsis	Gateway MAC address
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* srrp *number* gw-mac *string*
Tree	gw-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

keep-alive-interval *number*

Synopsis	Interval between SRRP advertisements
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* srrp *number* keep-alive-interval *number*
Tree	keep-alive-interval
Range	1 to 100
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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message-path *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SAP to use as the SRRP message path
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* srrp *number* message-path *reference*
Tree	message-path
Reference	**configure** service vprn *string* subscriber-interface *string* group-interface *string* sap *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

monitor-oper-group

Synopsis	Enter the **monitor-oper-group** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* srrp *number* monitor-oper-group
Tree	monitor-oper-group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-name *reference*

Synopsis	Operational group name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* srrp *number* monitor-oper-group group-name *reference*
Tree	group-name
Reference	**configure** service oper-group *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

priority-step *number*

Synopsis	Step value to change priority of SRRP instance
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* srrp *number* monitor-oper-group priority-step *number*

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Tree	priority-step
Range	1 to 10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

one-garp-per-sap *boolean*

Synopsis	Send one gratuitous ARP to each SAP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* srrp *number* one-garp-per-sap *boolean*
Tree	one-garp-per-sap
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	VRRP priority control policy associated with the SRRP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* srrp *number* policy *reference*
Tree	policy
Reference	**configure** vrrp policy *number*
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preempt *boolean*

Synopsis	Allow the SRRP instance to override an existing master
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* srrp *number* preempt *boolean*
Tree	preempt
Default	true
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

priority *number*

Synopsis	Priority for this interface at this level
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* srrp *number* priority *number*
Tree	priority
Range	1 to 254
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

send-fib-population-packets *keyword*

Synopsis	Mode used to send FIB population packets on switchover
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* srrp *number* send-fib-population-packets *keyword*
Tree	send-fib-population-packets
Options	all, outer-tag-only
Default	all
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suppress-aa-sub *boolean*

Synopsis	Enable application assurance suppression for ESM subscribers
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* suppress-aa-sub *boolean*
Tree	suppress-aa-sub
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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tos-marking-state *keyword*

Synopsis	TOS marking state
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* tos-marking-state *keyword*
Tree	tos-marking-state
Options	trusted, untrusted
Default	trusted
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Group interface type
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* type *keyword*
Tree	type
Options	plain, lns, wlan-gw, gtp, bonding
Default	plain
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wlan-gw

Synopsis	Enter the **wlan-gw** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw
Tree	wlan-gw
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of WLAN Gateway

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

gateway-address [address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **gateway-address** list instance
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw gateway-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	gateway-address
Max. Instances	10
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Gateway endpoint address of the WLAN Gateway tunnel
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw gateway-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	gateway-address
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

purpose

Synopsis	Enter the **purpose** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw gateway-address *(ipv4-address-no-zone | ipv6-address-no-zone)* purpose
Tree	purpose
Introduced	16.0.R4

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Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect *boolean*

Synopsis	Use tunnel IP address for crosse-connect traffic
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw gateway-address *(ipv4-address-no-zone | ipv6-address-no-zone)* purpose xconnect *boolean*
Tree	xconnect
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

gateway-router *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Routing instance the WLAN-GW endpoint resides in
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw gateway-router *string*
Tree	gateway-router
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

group-encryption

Synopsis	Enter the **group-encryption** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw group-encryption
Tree	group-encryption
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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encryption-keygroup-inbound *reference*

Synopsis	Encryption keygroup for inbound traffic
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw group-encryption encryption-keygroup-inbound *reference*
Tree	encryption-keygroup-inbound
Reference	**configure** group-encryption encryption-keygroup *number*
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

encryption-keygroup-outbound *reference*

Synopsis	Encryption keygroup for inbound traffic
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw group-encryption encryption-keygroup-outbound *reference*
Tree	encryption-keygroup-outbound
Reference	**configure** group-encryption encryption-keygroup *number*
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2-ap

Synopsis	Enter the **l2-ap** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw l2-ap
Tree	l2-ap
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

access-point [sap-id] *string*

Synopsis	Enter the **access-point** list instance
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw l2-ap access-point *string*
Tree	access-point
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**sap-id**] *string*

Synopsis	SAP ID for the Layer 2 access point
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw l2-ap access-point *string*
Tree	access-point
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the L2 access points
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw l2-ap access-point *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

encap-type *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Service encapsulation type of this access point
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw l2-ap access-point *string* encap-type *keyword*
Tree	encap-type
Options	null, dot1q, qinq
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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epipe-sap-template *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Parameters template for the L2 access point SAP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw l2-ap access-point *string* epipe-sap-template *reference*
Tree	epipe-sap-template
Reference	**configure** service template epipe-sap-template *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

auto-sub-id-fmt *keyword*

Synopsis	Format of the auto-generated subscriber ID
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw l2-ap auto-sub-id-fmt *keyword*
Tree	auto-sub-id-fmt
Options	include-ap-tags, sap-only
Default	include-ap-tags
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-encap-type *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default encapsulation type for Layer 2 access points
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw l2-ap default-encap-type *keyword*
Tree	default-encap-type
Options	null, dot1q, qinq
Default	null
Introduced	16.0.R1

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Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lanext

WARNING:
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Synopsis	Enable the **lanext** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw lanext
Tree	lanext
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-bd *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of bridge domains
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw lanext max-bd *number*
Tree	max-bd
Range	1 to 131071
Default	131071
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

learn-ap-mac

Synopsis	Enable the **learn-ap-mac** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw learn-ap-mac
Tree	learn-ap-mac
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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delay-auth *boolean*

Synopsis	Delay AP-MAC until after ARP/ND authentication response
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw learn-ap-mac delay-auth *boolean*
Tree	delay-auth
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mobility

Synopsis	Enter the **mobility** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw mobility
Tree	mobility
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-time *number*

Synopsis	Minimum time between two mobility events for single UE
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw mobility hold-time *number*
Tree	hold-time
Range	0 to 255
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

inter-tunnel-type *boolean*

WARNING:
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Synopsis	Enable mobility between terminating tunnel types
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw mobility inter-tunnel-type *boolean*
Tree	inter-tunnel-type
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

inter-vlan *boolean*

Synopsis	Allow mobility within different VLANs of the same range
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw mobility inter-vlan *boolean*
Tree	inter-vlan
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

trigger

Synopsis	Enter the **trigger** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw mobility trigger
Tree	trigger
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

control *boolean*

Synopsis	Use control traffic as a mobility trigger
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw mobility trigger control *boolean*
Tree	control
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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data *boolean*

Synopsis	Use data traffic as mobility trigger
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw mobility trigger data *boolean*
Tree	data
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

iapp *boolean*

Synopsis	Use IAPP messages as a mobility trigger
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw mobility trigger iapp *boolean*
Tree	iapp
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

oper-down-on-group-degrade *boolean*

Synopsis	Bring interface down when the ISA WLAN Gateway degraded
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw oper-down-on-group-degrade *boolean*
Tree	oper-down-on-group-degrade
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-mss-adjust *number*

Synopsis	TCP Maximum Segment Size (MSS) adjustment for gateway
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw tcp-mss-adjust *number*
Tree	tcp-mss-adjust

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Range	160 to 10240
Units	bytes
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-egress-qos

Synopsis	Enter the **tunnel-egress-qos** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw tunnel-egress-qos
Tree	tunnel-egress-qos
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of egress QoS for WLAN-GW tunnels
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw tunnel-egress-qos admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

agg-rate-limit *(number | keyword)*

Synopsis	HQoS aggregate rate limit
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw tunnel-egress-qos agg-rate-limit *(number | keyword)*
Tree	agg-rate-limit
Range	1 to 100000000
Options	max

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Default	max
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

granularity *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Granularity of the egress shaping for WLAN Gateway
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw tunnel-egress-qos granularity *keyword*
Tree	granularity
Options	per-tunnel – Applied to each tunnel per-retailer – Applied to each retailer Mobile Network Operator's fraction of the tunnel payload
Default	per-tunnel
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-time *(number | keyword)*

Synopsis	Minimum time to hold egress shaping resources
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw tunnel-egress-qos hold-time *(number | keyword)*
Tree	hold-time
Range	1 to 86400
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-client-only *boolean*

Synopsis	Allow shaping for tunnel traffic for multiple UEs

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw tunnel-egress-qos multi-client-only *boolean*
Tree	multi-client-only
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

qos *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress QoS policy linked with each interface tunnel
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw tunnel-egress-qos qos *reference*
Tree	qos
Reference	**configure** qos sap-egress *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

scheduler-policy *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress scheduler policy linked with each tunnel
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw tunnel-egress-qos scheduler-policy *reference*
Tree	scheduler-policy
Reference	**configure** qos scheduler-policy *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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tunnel-encaps

Synopsis	Enter the **tunnel-encaps** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw tunnel-encaps
Tree	tunnel-encaps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

learn-l2tp-cookie *(keyword | hex-string)*

Synopsis	System that learns the cookie from L2TP tunnels terminating on this interface
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw tunnel-encaps learn-l2tp-cookie *(keyword | hex-string)*
Tree	learn-l2tp-cookie
String Length	6
Options	never – Never interpret the cookie always – Interpret cookie regardless of first two octets value
Default	never
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

vlan-range [range] *string*

Synopsis	Enter the **vlan-range** list instance
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string*
Tree	vlan-range
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**range**] *string*

Synopsis	IEEE 802.1q VLAN tag range
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string*
Tree	vlan-range

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication

Synopsis	Enter the **authentication** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* authentication
Tree	authentication
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-time *number*

Synopsis	Minimum time UE held down after failed authentication
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* authentication hold-time *number*
Tree	hold-time
Range	0 to 3600
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

local

Synopsis	Enable the **local** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* authentication local
Tree	local
Introduced	22.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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coa-policy *reference*

Synopsis	RADIUS ISA policy applied to CoA or disconnect messages
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* authentication local coa-policy *reference*
Tree	coa-policy
Reference	**configure** aaa radius isa-policy *string*
Introduced	22.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-ue-state *keyword*

Synopsis	UE state accepted for immediate authentication
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* authentication local default-ue-state *keyword*
Tree	default-ue-state
Options	portal – Portal redirect UE using the http-redirect-policy dsm – DSM UE using DSM parameters
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

on-control-plane *boolean*

Synopsis	Allow authentication on first control plane packet
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* authentication on-control-plane *boolean*
Tree	on-control-plane
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	RADIUS policy for authentication
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* authentication policy *reference*

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Tree	policy
Reference	**configure** aaa radius isa-policy *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

vlan-mismatch-timeout *number*

Synopsis	Timeout if packet received with a non-matching VLAN tag
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* authentication vlan-mismatch-timeout *number*
Tree	vlan-mismatch-timeout
Range	5 to 60
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

data-triggered-ue-creation

Synopsis	Enter the **data-triggered-ue-creation** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* data-triggered-ue-creation
Tree	data-triggered-ue-creation
Description	Commands in this context configure data-triggered subscriber creation for Wi-Fi subscribers. Data-triggered UE creation only works upon receipt of TCP and UDP packets.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of data-triggered UE creation
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* data-triggered-ue-creation admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable

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Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

arp *boolean*

Synopsis	Authenticate ARP packets received from an unknown UE
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* data-triggered-ue-creation arp *boolean*
Tree	arp
Default	false
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

create-proxy-cache-entry

Synopsis	Enter the **create-proxy-cache-entry** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* data-triggered-ue-creation create-proxy-cache-entry
Tree	create-proxy-cache-entry
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-format *string*

Synopsis	MAC address format
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* data-triggered-ue-creation create-proxy-cache-entry mac-format *string*
Tree	mac-format
String Length	2 to 7
Default	aa:
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

proxy-server

Synopsis	Enable the **proxy-server** context

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* data-triggered-ue-creation create-proxy-cache-entry proxy-server
Tree	proxy-server
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	RADIUS Proxy server name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* data-triggered-ue-creation create-proxy-cache-entry proxy-server name *string*
Tree	name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Router instance of the RADIUS proxy server
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* data-triggered-ue-creation create-proxy-cache-entry proxy-server router-instance *string*
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ospf *boolean*

Synopsis	Authenticate OSPF packets received from an unknown UE
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* data-triggered-ue-creation ospf *boolean*
Tree	ospf
Description	When configured to **true**, the system triggers UE authentication based on OSPFv2 or OSPFv3 packets. These packets are used with the dynamic VPLS service.

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Default	false
Introduced	23.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp4

Synopsis	Enter the **dhcp4** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp4
Tree	dhcp4
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of DHCPv4
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp4 admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns *string*

Synopsis	DNS servers signaled in DHCP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp4 dns *string*
Tree	dns
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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l2-aware-ip-address *(ipv4-unicast-address | keyword)*

Synopsis	L2-Aware NAT inside IP address
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp4 l2-aware-ip-address *(ipv4-unicast-address | keyword)*
Tree	l2-aware-ip-address
Options	from-pool – IP address allocated from a pool
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lease-time

Synopsis	Enter the **lease-time** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp4 lease-time
Tree	lease-time
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

active *number*

Synopsis	Lease time an authenticated user
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp4 lease-time active *number*
Tree	active
Range	300 to 3600
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial *number*

Synopsis	Lease time for migrant user (unauthenticated)
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp4 lease-time initial *number*
Tree	initial

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Range	300 to 3600
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

nbns *string*

Synopsis	NetBIOS servers signaled in DHCP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp4 nbns *string*
Tree	nbns
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp6

Synopsis	Enter the **dhcp6** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp6
Tree	dhcp6
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the protocol
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp6 admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1

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Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime

Synopsis	Enter the **preferred-lifetime** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp6 preferred-lifetime
Tree	preferred-lifetime
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

active *number*

Synopsis	Preferred signaled lifetime after full authentication
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp6 preferred-lifetime active *number*
Tree	active
Range	300 to 3600
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial *number*

Synopsis	Signaled preferred lifetime after full authentication
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp6 preferred-lifetime initial *number*
Tree	initial
Range	300 to 3600
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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valid-lifetime

Synopsis	Enter the **valid-lifetime** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp6 valid-lifetime
Tree	valid-lifetime
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

active *number*

Synopsis	Signaled valid lifetime after full authentication
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp6 valid-lifetime active *number*
Tree	active
Range	300 to 3600
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial *number*

Synopsis	Valid signaled lifetime UE is not fully authenticated
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dhcp6 valid-lifetime initial *number*
Tree	initial
Range	300 to 3600
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dsm

Synopsis	Enter the **dsm** context

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm
Tree	dsm
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA Radius Policy for accounting
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** aaa radius isa-policy *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-update

Synopsis	Enable the **accounting-update** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm accounting-update
Tree	accounting-update
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Interim accounting update messages interval
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm accounting-update interval *number*
Tree	interval
Range	5 to 259200
Units	minutes

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of DSM
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

application-assurance

Synopsis	Enter the **application-assurance** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm application-assurance
Tree	application-assurance
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-statistics *boolean*

Synopsis	Collect AA statistics
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm application-assurance accounting-statistics *boolean*
Tree	accounting-statistics
Default	false
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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profile *reference*

Synopsis	AA application profile used for portal authentication
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm application-assurance profile *reference*
Tree	profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

url-parameter *string*

Synopsis	AA URL parameter included for HTTP portal redirect
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm application-assurance url-parameter *string*
Tree	url-parameter
String Length	1 to 247
Introduced	22.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the **egress** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm egress
Tree	egress
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer *reference*

Synopsis	Policer for egress traffic
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm egress policer *reference*
Tree	policer
Reference	**configure** subscriber-mgmt isa-policer *string*
Introduced	16.0.R1

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Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm ingress
Tree	ingress
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-filter *reference*

Synopsis	Filter for ingress traffic
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm ingress ip-filter *reference*
Tree	ip-filter
Reference	**configure** subscriber-mgmt isa-filter *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer *reference*

Synopsis	Policer for ingress traffic
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm ingress policer *reference*
Tree	policer
Reference	**configure** subscriber-mgmt isa-policer *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

soft-quota-exhausted-filter *reference*

Synopsis	Filter applied when soft volume quota is reached
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm ingress soft-quota-exhausted-filter *reference*

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Tree	soft-quota-exhausted-filter
Description	This command applies a filter when a soft volume quota is reached. The filter replaces the currently applied filter (which can be preconfigured using the **ip-filter** command in the **configure service vprn subscriber-interface group-interface wlan-gw vlan-range dsm ingress ip-filter** context or be set using a RADIUS CoA message) for the UE upon quota exhaustion. If the quota is extended using a RADIUS CoA message, the filter is automatically reverted. Configuration changes apply only to new DSM UEs and not to existing UEs.
Reference	**configure** subscriber-mgmt isa-filter *string*
Introduced	21.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

one-time-redirect

Synopsis	Enter the **one-time-redirect** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm one-time-redirect
Tree	one-time-redirect
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

port *number*

Synopsis	Destination port of packets for HTTP redirect
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm one-time-redirect port *number*
Tree	port
Range	1 to 65535
Default	80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

url *string*

Synopsis	URL for redirected HTTP protocol packets
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm one-time-redirect url *string*
Tree	url

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String Length	1 to 255
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

volume-quota-direction *keyword*

Synopsis	Volume quota direction for WLAN GW
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dsm volume-quota-direction *keyword*
Tree	volume-quota-direction
Description	This command specifies the direction that volume quotas are applied. Configuration changes apply only to new DSM UEs and not to existing UEs.
Options	both – Both directions ingress – Ingress direction (upstream) egress – Egress direction (downstream)
Default	both
Introduced	21.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic-service *boolean*

Synopsis	Dynamically assign WLAN-GW subscriber to a VPLS service
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* dynamic-service *boolean*
Tree	dynamic-service
Description	When configured to **true**, the WLAN-GW subscriber is dynamically assigned to a VPLS service, based on RADIUS authentication reply attributes. This feature is used in conjunction with the **configure service vpls wlan-gw wlan-gw-group** command. See "Dynamic VPLS service" in the *7450 ESS, 7750 SR, and VSR Triple Play Service Delivery Architecture Guide* for more information about the dynamic VPLS service feature.
Default	false
Introduced	23.3.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

extension [extension-range] *string*

Synopsis	Add a list entry for **extension**

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* extension *string*
Tree	extension
Introduced	21.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**extension-range**] *string*

Synopsis	VLAN tag range used for matching
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* extension *string*
Tree	extension
Description	This command configures the additional VLAN range that is used for matching. Any traffic within the extension range is considered part of the same VLAN range for purposes of intra-SSID mobility.
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect-policy *reference*

Synopsis	Default HTTP redirect policy for portal authentication
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* http-redirect-policy *reference*
Tree	http-redirect-policy
Reference	**configure** subscriber-mgmt http-redirect-policy *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

idle-timeout-action *keyword*

Synopsis	Action to perform when the idle timeout expires
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* idle-timeout-action *keyword*
Tree	idle-timeout-action
Options	remove, shcv
Default	remove

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Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2-service

Synopsis	Enable the **l2-service** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* l2-service
Tree	l2-service
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of Layer 2 service for VLAN range
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* l2-service admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* l2-service description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

service *reference*

Synopsis	Layer 2 service associated with the range

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* l2-service service *reference*
Tree	service
Reference	**configure** service vpls *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*

Synopsis	NAT policy for DSM and ISA portal authentication
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* nat-policy *reference*
Tree	nat-policy
Reference	**configure** service nat nat-policy *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

retail-service *string*

Synopsis	Default retail service for new UEs in this range
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* retail-service *string*
Tree	retail-service
String Length	1 to 64
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

slaac

Synopsis	Enter the **slaac** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* slaac
Tree	slaac
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of the protocol
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* slaac admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime

Synopsis	Enter the **preferred-lifetime** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* slaac preferred-lifetime
Tree	preferred-lifetime
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

active *number*

Synopsis	Preferred signaled lifetime after full authentication
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* slaac preferred-lifetime active *number*
Tree	active
Range	300 to 3600
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial *number*

Synopsis	Signaled preferred lifetime after full authentication

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* slaac preferred-lifetime initial *number*
Tree	initial
Range	300 to 3600
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime

Synopsis	Enter the **valid-lifetime** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* slaac valid-lifetime
Tree	valid-lifetime
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

active *number*

Synopsis	Signaled valid lifetime after full authentication
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* slaac valid-lifetime active *number*
Tree	active
Range	300 to 3600
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial *number*

Synopsis	Valid signaled lifetime UE is not fully authenticated
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* slaac valid-lifetime initial *number*
Tree	initial

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Range	300 to 3600
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

vrgw

Synopsis	Enter the **vrgw** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw
Tree	vrgw
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of vRGW
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

brg

Synopsis	Enter the **brg** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw brg
Tree	brg
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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authenticated-brg-only *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Only allow hosts from BRGs pre-authenticated using the radius-proxy
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw brg authenticated-brg-only *boolean*
Tree	authenticated-brg-only
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-brg-profile *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default BRG profile to use if the AAA server does not specify one
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw brg default-brg-profile *reference*
Tree	default-brg-profile
Reference	**configure** subscriber-mgmt vrgw brg-profile *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lanext

Synopsis	Enter the **lanext** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw lanext
Tree	lanext
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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access

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **access** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw lanext access
Tree	access
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-mac *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of allowed MAC entries on access side
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw lanext access max-mac *number*
Tree	max-mac
Range	1 to 256
Default	20
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-access *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow multiple access points
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw lanext access multi-access *boolean*
Tree	multi-access
Default	false

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Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Policer for ingress home traffic
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw lanext access policer *reference*
Tree	policer
Reference	**configure** subscriber-mgmt isa-policer *string*
Introduced	19.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of HLE
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw lanext admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

assistive-address-resolution *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA assists in address resolution
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw lanext assistive-address-resolution *boolean*
Tree	assistive-address-resolution

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Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bd-mac-prefix *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Prefix of the HLE BD MAC address
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw lanext bd-mac-prefix *string*
Tree	bd-mac-prefix
String Length	8
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-translation *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow MAC address translation for HLE services
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw lanext mac-translation *boolean*
Tree	mac-translation
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

network

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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Synopsis	Enter the **network** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw lanext network
Tree	network
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of the HLE network
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw lanext network admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-mac *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of allowed MAC entries on network side
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw lanext network max-mac *number*
Tree	max-mac
Range	1 to 64
Default	20
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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policer *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Policer for ingress data center traffic
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* vrgw lanext network policer *reference*
Tree	policer
Reference	**configure** subscriber-mgmt isa-policer *string*
Introduced	19.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect

Synopsis	Enter the **xconnect** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* xconnect
Tree	xconnect
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting

Synopsis	Enter the **accounting** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* xconnect accounting
Tree	accounting
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mobility-updates *boolean*

Synopsis	Accounting updates triggered by mobility
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* xconnect accounting mobility-updates *boolean*
Tree	mobility-updates

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Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA RADIUS accounting policy for cross-connected UEs
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* xconnect accounting policy *reference*
Tree	policy
Reference	**configure** aaa radius isa-policy *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

update-interval *number*

Synopsis	Time between successive interim accounting updates
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* xconnect accounting update-interval *number*
Tree	update-interval
Range	5 to 259200
Units	minutes
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the cross-connect
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw vlan-range *string* xconnect admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable

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Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ID of WLAN Gateway ISA group that gateway binds to
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wlan-gw wlan-gw-group *reference*
Tree	wlan-gw-group
Reference	**configure** isa wlan-gw-group *number*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wpp

Synopsis	Enable the **wpp** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wpp
Tree	wpp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of WPP
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wpp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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initial

Synopsis	Enter the **initial** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wpp initial
Tree	initial
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Initial application profile name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wpp initial app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	Initial SLA profile
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wpp initial sla-profile *reference*
Tree	sla-profile
Reference	**configure** subscriber-mgmt sla-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Initial subscriber profile
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wpp initial sub-profile *reference*
Tree	sub-profile
Reference	**configure** subscriber-mgmt sub-profile *string*
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-time *number*

Synopsis	Lease time
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wpp lease-time *number*
Tree	lease-time
Range	10 to 315446399
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

portal

Synopsis	Enter the **portal** context
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wpp portal
Tree	portal
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	Web portal server name
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wpp portal name *string*
Tree	name
String Length	1 to 32
Notes	The following elements are part of a choice: **portal-group** or (**name** and **router-instance**).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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portal-group *reference*

Synopsis	WPP portal group for this interface
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wpp portal portal-group *reference*
Tree	portal-group
Reference	**configure** aaa wpp portal-group *string*
Notes	The following elements are part of a choice: **portal-group** or (**name** and **router-instance**).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Virtual router instance of WPP portal for interface
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wpp portal router-instance *string*
Tree	router-instance
Notes	The following elements are part of a choice: **portal-group** or (**name** and **router-instance**).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

restore-to-initial-on-disconnect *boolean*

Synopsis	Restore initial profiles after a host has disconnected
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wpp restore-to-initial-on-disconnect *boolean*
Tree	restore-to-initial-on-disconnect
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

triggered-hosts *boolean*

Synopsis	Enable/disable triggered hosts

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Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wpp triggered-hosts *boolean*
Tree	triggered-hosts
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

Synopsis	User database
Context	**configure** service vprn *string* subscriber-interface *string* group-interface *string* wpp user-db *reference*
Tree	user-db
Reference	**configure** subscriber-mgmt local-user-db *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-time

Synopsis	Enter the **hold-time** context
Context	**configure** service vprn *string* subscriber-interface *string* hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service vprn *string* subscriber-interface *string* hold-time ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

down

Synopsis	Enter the **down** context

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Context	**configure** service vprn *string* subscriber-interface *string* hold-time ipv4 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the **init-only** command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	**configure** service vprn *string* subscriber-interface *string* hold-time ipv4 down init-only *boolean*
Tree	init-only
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Down hold time for the IP interface
Context	**configure** service vprn *string* subscriber-interface *string* hold-time ipv4 down seconds *number*
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

up

Synopsis	Enter the **up** context
Context	**configure** service vprn *string* subscriber-interface *string* hold-time ipv4 up
Tree	up

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Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Up hold time for the IP interface
Context	**configure** service vprn *string* subscriber-interface *string* hold-time ipv4 up seconds *number*
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** service vprn *string* subscriber-interface *string* hold-time ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

down

Synopsis	Enter the **down** context
Context	**configure** service vprn *string* subscriber-interface *string* hold-time ipv6 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the **init-only** command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	**configure** service vprn *string* subscriber-interface *string* hold-time ipv6 down init-only *boolean*
Tree	init-only
Description	When configured to **true**, the system applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Down hold time for the IP interface
Context	**configure** service vprn *string* subscriber-interface *string* hold-time ipv6 down seconds *number*
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

up

Synopsis	Enter the **up** context
Context	**configure** service vprn *string* subscriber-interface *string* hold-time ipv6 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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seconds *number*

Synopsis	Up hold time for the IP interface
Context	**configure** service vprn *string* subscriber-interface *string* hold-time ipv6 up seconds *number*
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-linking

Synopsis	Enter the **ipoe-linking** context
Context	**configure** service vprn *string* subscriber-interface *string* ipoe-linking
Tree	ipoe-linking
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gratuitous-router-advertisement *boolean*

Synopsis	Send unsolicited router advertisement after DHCP setup
Context	**configure** service vprn *string* subscriber-interface *string* ipoe-linking gratuitous-router-advertisement *boolean*
Tree	gratuitous-router-advertisement
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-session

Synopsis	Enter the **ipoe-session** context
Context	**configure** service vprn *string* subscriber-interface *string* ipoe-session
Tree	ipoe-session
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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session-limit *number*

Synopsis	Maximum number of sessions on this group interface
Context	**configure** service vprn *string* subscriber-interface *string* ipoe-session session-limit *number*
Tree	session-limit
Range	1 to 500000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address [ipv4-address] *string*

Synopsis	Enter the **address** list instance
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 address *string*
Tree	address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**ipv4-address**] *string*

Synopsis	IP address associated with the subscriber subnet
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 address *string*
Tree	address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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gateway *string*

Synopsis	Gateway IP address within the subnet for SRRP routing
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 address *string* gateway *string*
Tree	gateway
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

holdup-time *number*

Synopsis	Wait time before accepting new state attribute
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 address *string* holdup-time *number*
Tree	holdup-time
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

populate-host-routes *boolean*

Synopsis	Populate subscriber host routes in local FIB
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 address *string* populate-host-routes *boolean*
Tree	populate-host-routes
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 address *string* prefix-length *number*
Tree	prefix-length
Range	0 to 32

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-srrp *number*

Synopsis	SRRP instance whose state is tracked on this IP address
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 address *string* track-srrp *number*
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-unmatching-subnets *boolean*

Synopsis	Allow subscriber hosts without a matching subnet
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 allow-unmatching-subnets *boolean*
Tree	allow-unmatching-subnets
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arp-host

Synopsis	Enter the **arp-host** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 arp-host
Tree	arp-host
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of ARP hosts

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Context	**configure** service vprn *string* subscriber-interface *string* ipv4 arp-host admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-limit *number*

Synopsis	Maximum number of ARP hosts
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 arp-host host-limit *number*
Tree	host-limit
Range	1 to 524287
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bfd

Synopsis	Enter the **bfd** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 bfd
Tree	bfd
Description	Commands in this context configure the attributes of bidirectional forwarding detection (BFD) sessions that control the state of ESM dynamic BGP peers.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 bfd admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 bfd echo-receive *number*
Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

multiplier *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 bfd multiplier *number*
Tree	multiplier
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

receive *number*

Synopsis	BFD receive interval over this interface
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 bfd receive *number*
Tree	receive
Description	This command specifies the receive interval for the BFD session. On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

transmit-interval *number*

Synopsis	BFD transmit interval over this interface
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 bfd transmit-interval *number*
Tree	transmit-interval
Description	This command configures the transmit intervals. On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Local termination point for the BFD session
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 bfd type *keyword*
Tree	type
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: • **auto** (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the **cpm-np**. • **cpm-np** – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems. • **fp** – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.
Options	cpm-np, auto, fp
Default	auto
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

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default-dns *string*

Synopsis	Default DNS server addresses
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 default-dns *string*
Tree	default-dns
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp

Synopsis	Enter the **dhcp** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp
Tree	dhcp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of DHCP
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the **client-applications** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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dhcp *boolean*

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp client-applications dhcp *boolean*
Tree	dhcp
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp *boolean*

Synopsis	Enable PPPoE clients to use DHCP relay or proxy server
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp client-applications ppp *boolean*
Tree	ppp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gi-address *string*

Synopsis	GI address for the DHCP relay
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp gi-address *string*
Tree	gi-address

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Description	This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay. By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-populate

Synopsis	Enter the **lease-populate** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp lease-populate
Tree	lease-populate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-leases *number*

Synopsis	Maximum number of DHCPv4 leases
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp lease-populate max-leases *number*
Tree	max-leases
Range	0 to 511999
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

offer-selection

Synopsis	Enter the **offer-selection** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp offer-selection
Tree	offer-selection
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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client-mac

Synopsis	Enter the **client-mac** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp offer-selection client-mac
Tree	client-mac
Notes	The following elements are part of a choice: **client-mac** or **server**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

discover-delay *number*

Synopsis	Delay before sending DHCP Discover messages
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp offer-selection client-mac discover-delay *number*
Tree	discover-delay
Description	This command configures the time to delay sending DHCP Discover messages from the specified MAC addresses.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-address *keyword*

Synopsis	Designated client MAC addresses for Offer selection
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp offer-selection client-mac mac-address *keyword*
Tree	mac-address
Description	This command specifies the client MAC addresses for which the Discover delay applies.
Options	odd, even
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

discover-delay *number*

Synopsis	Delay before sending DHCP Discover messages

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Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp offer-selection discover-delay *number*
Tree	discover-delay
Description	This command configures the time to delay sending DHCP Discover messages. The delay is applied to all DHCP Discover messages for which no per DHCP server or per client MAC delay is configured.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server [ipv4-address] *string*

Synopsis	Enter the **server** list instance
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp offer-selection server *string*
Tree	server
Max. Instances	8
Notes	The following elements are part of a choice: **client-mac** or **server**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**ipv4-address**] *string*

Synopsis	IP address of the DHCP server
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp offer-selection server *string*
Tree	server
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

discover-delay *number*

Synopsis	Delay before sending DHCP Discover messages

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Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp offer-selection server *string* discover-delay *number*
Tree	discover-delay
Description	This command configures the time to delay DHCP Discover messages sent to the server.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option-82

Synopsis	Enter the **option-82** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp option-82
Tree	option-82
Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor-specific-option

Synopsis	Enter the **vendor-specific-option** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp option-82 vendor-specific-option
Tree	vendor-specific-option
Description	Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-mac-address *boolean*

Synopsis	Send the MAC address in the VSO
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp option-82 vendor-specific-option client-mac-address *boolean*
Tree	client-mac-address

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Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id *boolean*

Synopsis	Send SAP ID in the sub-option of the DHCP relay packet
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp option-82 vendor-specific-option sap-id *boolean*
Tree	sap-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-id *boolean*

Synopsis	Send the service ID in the Vendor Specific Option
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp option-82 vendor-specific-option service-id *boolean*
Tree	service-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	User-defined ASCII string for the VSO
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp option-82 vendor-specific-option string *string*
Tree	string
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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system-id *boolean*

Synopsis	Send the system ID in the VSO
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp option-82 vendor-specific-option system-id *boolean*
Tree	system-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy-server

Synopsis	Enter the **proxy-server** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp proxy-server
Tree	proxy-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCP proxy server
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp proxy-server admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

emulated-server *string*

Synopsis	IP address used as DHCP server address in SAP context
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp proxy-server emulated-server *string*
Tree	emulated-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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lease-time

Synopsis	Enter the **lease-time** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp proxy-server lease-time
Tree	lease-time
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-override *boolean*

Synopsis	Use lease time information provided by RADIUS server
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp proxy-server lease-time radius-override *boolean*
Tree	radius-override
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	DHCP lease time
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp proxy-server lease-time value *number*
Tree	value
Range	300 to 315446399
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp python-policy *reference*
Tree	python-policy

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Reference	**configure** python python-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

relay-proxy

Synopsis	Enable the **relay-proxy** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp relay-proxy
Tree	relay-proxy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

release-update-src-ip *boolean*

Synopsis	Update the source IP address of a DHCP RELEASE message
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp relay-proxy release-update-src-ip *boolean*
Tree	release-update-src-ip
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

siaddr-override *string*

Synopsis	DHCP server IP address for address hiding function
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp relay-proxy siaddr-override *string*
Tree	siaddr-override
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

release-include-gi-address *boolean*

Synopsis	Include the GI address in DHCP relay messages
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp release-include-gi-address *boolean*

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Tree	release-include-gi-address
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *string*

Synopsis	DHCP server IP addresses
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp server *string*
Tree	server
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

src-ip-addr *keyword*

Synopsis	Type of source address to use for DHCP relay
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp src-ip-addr *keyword*
Tree	src-ip-addr
Options	auto, gi-address
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

virtual-subnet *boolean*

Synopsis	Enable a virtual subnet for DHCPv4 hosts
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 dhcp virtual-subnet *boolean*
Tree	virtual-subnet
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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export-host-routes *boolean*

Synopsis	Allow export of subscriber management host routes
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 export-host-routes *boolean*
Tree	export-host-routes
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

unnumbered

Synopsis	Enter the **unnumbered** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 unnumbered
Tree	unnumbered
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis	IP address for the subscriber interface
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 unnumbered ip-address *string*
Tree	ip-address
Notes	The following elements are part of a choice: **ip-address** or **ip-int-name**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-int-name *string*

Synopsis	Interface name from which an IPv4 addressed is borrowed
Context	**configure** service vprn *string* subscriber-interface *string* ipv4 unnumbered ip-int-name *string*
Tree	ip-int-name
String Length	1 to 32
Notes	The following elements are part of a choice: **ip-address** or **ip-int-name**.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enable the **ipv6** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address [ipv6-address] *string*

Synopsis	Enter the **address** list instance
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 address *string*
Tree	address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**ipv6-address**] *string*

Synopsis	IPv6 address for the subscriber interface
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 address *string*
Tree	address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Host type for subscriber interface prefixes

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Context	**configure** service vprn *string* subscriber-interface *string* ipv6 address *string* host-type *keyword*
Tree	host-type
Options	pd – IPv6 ESM hosts for DHCPv6 prefix-delegation wan – ESM hosts for DHCPv6 addresses or by WAN interface pd-wan – Both prefix-delegation and ESM hosts
Default	pd
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length *number*

Synopsis	IPv6 address prefix length
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 address *string* prefix-length *number*
Tree	prefix-length
Range	0 to 128
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-multiple-wan-addresses *boolean*

Synopsis	Allow multiple WAN addresses
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 allow-multiple-wan-addresses *boolean*
Tree	allow-multiple-wan-addresses
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-unmatching-prefixes *boolean*

Synopsis	Allow subscriber hosts without a matching prefix
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 allow-unmatching-prefixes *boolean*
Tree	allow-unmatching-prefixes

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Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bfd

Synopsis	Enter the **bfd** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 bfd
Tree	bfd
Description	Commands in this context configure the attributes of bidirectional forwarding detection (BFD) sessions that control the state of ESM dynamic BGP peers.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 bfd admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 bfd echo-receive *number*
Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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multiplier *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 bfd multiplier *number*
Tree	multiplier
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

receive *number*

Synopsis	BFD receive interval over this interface
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 bfd receive *number*
Tree	receive
Description	This command specifies the receive interval for the BFD session. On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

transmit-interval *number*

Synopsis	BFD transmit interval over this interface
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 bfd transmit-interval *number*
Tree	transmit-interval
Description	This command configures the transmit intervals. On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.
Range	10 to 100000

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Units	milliseconds
Default	100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Local termination point for the BFD session
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 bfd type *keyword*
Tree	type
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: • **auto** (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the **cpm-np**. • **cpm-np** – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems. • **fp** – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.
Options	cpm-np, auto, fp
Default	auto
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

default-dns *string*

Synopsis	Default DNS server addresses
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 default-dns *string*
Tree	default-dns
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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delegated-prefix-length *(number | keyword)*

Synopsis	IPv6 delegated prefix length
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 delegated-prefix-length *(number | keyword)*
Tree	delegated-prefix-length
Range	48 to 64
Options	variable
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp6

Synopsis	Enter the **dhcp6** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6
Tree	dhcp6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

override-slaac *boolean*

Synopsis	Allow WAN address offered by DHCP to overwrite the WAN address acquired from SLAAC
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 override-slaac *boolean*
Tree	override-slaac
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pd-managed-route

Synopsis	Enable the **pd-managed-route** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 pd-managed-route
Tree	pd-managed-route
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

next-hop *keyword*

Synopsis	Next hop type
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 pd-managed-route next-hop *keyword*
Tree	next-hop
Options	ipv4, ipv6
Default	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy-server

Synopsis	Enter the **proxy-server** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 proxy-server
Tree	proxy-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 proxy server
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 proxy-server admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the **client-applications** context

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Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 proxy-server client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp *boolean*

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 proxy-server client-applications dhcp *boolean*
Tree	dhcp
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp *boolean*

Synopsis	Allow PPPoE clients to use DHCP relay functionality
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 proxy-server client-applications ppp *boolean*
Tree	ppp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime *(number | keyword)*

Synopsis	Time for prefix to remain preferred on this interface
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 proxy-server preferred-lifetime *(number | keyword)*
Tree	preferred-lifetime
Range	300 to 4294967294
Units	seconds
Options	infinite
Default	3600

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rebind-timer *number*

Synopsis	Rebind timer (T2) for this interface
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 proxy-server rebind-timer *number*
Tree	rebind-timer
Range	0 to 1209600
Units	seconds
Default	2880
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

renew-timer *number*

Synopsis	Renew timer (T1)
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 proxy-server renew-timer *number*
Tree	renew-timer
Range	0 to 604800
Units	seconds
Default	1800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server-id

Synopsis	Enter the **server-id** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 proxy-server server-id
Tree	server-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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duid-en-ascii *string*

Synopsis	Vendor-assigned ID based on Enterprise Number (DUID-EN)
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 proxy-server server-id duid-en-ascii *string*
Tree	duid-en-ascii
String Length	1 to 58
Notes	The following elements are part of a choice: **duid-en-ascii**, **duid-en-hex**, or **duid-ll**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-en-hex *string*

Synopsis	DUID system ID in hexadecimal format
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 proxy-server server-id duid-en-hex *string*
Tree	duid-en-hex
String Length	1 to 118
Notes	The following elements are part of a choice: **duid-en-ascii**, **duid-en-hex**, or **duid-ll**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-ll

Synopsis	Use link-layer address (DUID-LL) as DUID
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 proxy-server server-id duid-ll
Tree	duid-ll
Notes	The following elements are part of a choice: **duid-en-ascii**, **duid-en-hex**, or **duid-ll**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *(number | keyword)*

Synopsis	Time for prefix to remain valid on this interface

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Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 proxy-server valid-lifetime *(number | keyword)*
Tree	valid-lifetime
Range	300 to 4294967294
Units	seconds
Options	infinite
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 python-policy *reference*
Tree	python-policy
Reference	**configure** python python-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

relay

Synopsis	Enter the **relay** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 relay
Tree	relay
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of DHCPv6 Relay
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 relay admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

advertise-selection

Synopsis	Enter the **advertise-selection** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 relay advertise-selection
Tree	advertise-selection
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-mac

Synopsis	Enter the **client-mac** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 relay advertise-selection client-mac
Tree	client-mac
Notes	The following elements are part of a choice: **client-mac** or **server**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-address *keyword*

Synopsis	Designated client MAC addresses for Advertise selection
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 relay advertise-selection client-mac mac-address *keyword*
Tree	mac-address
Options	odd, even
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference-option

Synopsis	Enter the **preference-option** context

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Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 relay advertise-selection client-mac preference-option
Tree	preference-option
Description	Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Preference option value for DHCPv6 Advertise messages
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 relay advertise-selection client-mac preference-option value *number*
Tree	value
Range	0 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

solicit-delay *number*

Synopsis	Delay before sending DHCPv6 Solicit messages
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 relay advertise-selection client-mac solicit-delay *number*
Tree	solicit-delay
Description	This command configures the time to delay DHCPv6 Solicit messages sent from the designated client MAC addresses.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference-option

Synopsis	Enter the **preference-option** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 relay advertise-selection preference-option
Tree	preference-option

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Description	Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Preference option value for DHCPv6 Advertise messages
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 relay advertise-selection preference-option value *number*
Tree	value
Range	0 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server [ipv6-address] *string*

Synopsis	Enter the **server** list instance
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 relay advertise-selection server *string*
Tree	server
Max. Instances	8
Notes	The following elements are part of a choice: **client-mac** or **server**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**ipv6-address**] *string*

Synopsis	IP address of the DHCPv6 server
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 relay advertise-selection server *string*
Tree	server
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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preference-option

Synopsis	Enter the **preference-option** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 relay advertise-selection server *string* preference-option
Tree	preference-option
Description	Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Preference option value for DHCPv6 Advertise messages
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 relay advertise-selection server *string* preference-option value *number*
Tree	value
Range	0 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

solicit-delay *number*

Synopsis	Delay before sending DHCPv6 Solicit messages
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 relay advertise-selection server *string* solicit-delay *number*
Tree	solicit-delay
Description	This command configures the time to delay DHCPv6 Solicit messages sent to the server.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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solicit-delay *number*

Synopsis	Delay before sending DHCPv6 Solicit messages
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 relay advertise-selection solicit-delay *number*
Tree	solicit-delay
Description	This command configures the time to delay DHCPv6 Solicit messages. The delay is applied to DHCPv6 Solicit messages for which no overriding value is configured in the **server** instance or the **client-mac** context.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the **client-applications** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 relay client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp *boolean*

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 relay client-applications dhcp *boolean*
Tree	dhcp
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp *boolean*

Synopsis	Allow PPPoE clients to use DHCP relay functionality
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 relay client-applications ppp *boolean*

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Tree	ppp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 relay description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-split

Synopsis	Enter the **lease-split** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 relay lease-split
Tree	lease-split
Description	Commands in this context configure DHCPv6 lease split. DHCPv6 lease split is active when administratively enabled and for all IA_NA and IA_PD options in the transaction, the configured lease split valid lifetime (short lease time) is less than or equal to one of the following: • the renew time T1 committed by the server (long renew time) • half of the preferred lifetime committed by the server when T1 committed by the server equals zero
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of DHCPv6 lease split
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 relay lease-split admin-state *keyword*
Tree	admin-state
Options	enable, disable

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Default	disable
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *number*

Synopsis	DHCPv6 lease split valid lifetime (short lease time)
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 relay lease-split valid-lifetime *number*
Tree	valid-lifetime
Range	300 to 315446399
Units	seconds
Default	3600
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

Synopsis	Link address for the DHCPv6 relay messages
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 relay link-address *string*
Tree	link-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *string*

Synopsis	DHCP6 server(s) to which the DHCP6 requests are forwarded
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 relay server *string*
Tree	server
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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source-address *string*

Synopsis	Source IPv6 address for the DHCPv6 relay messages
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 dhcp6 relay source-address *string*
Tree	source-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-bridged-mode *boolean*

Synopsis	Enable IPv6 IPoE bridged mode
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 ipoe-bridged-mode *boolean*
Tree	ipoe-bridged-mode
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

link-local-address

Synopsis	Enter the **link-local-address** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 link-local-address
Tree	link-local-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis	IPv6 link local address
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 link-local-address address *string*
Tree	address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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prefix [ipv6-prefix] *string*

Synopsis	Enter the **prefix** list instance
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 prefix *string*
Tree	prefix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**ipv6-prefix**] *string*

Synopsis	IPv6 address for a router interface
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 prefix *string*
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

holdup-time *number*

Synopsis	Time to wait before route accepts new state attribute
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 prefix *string* holdup-time *number*
Tree	holdup-time
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Host type for subscriber interface prefixes

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Context	**configure** service vprn *string* subscriber-interface *string* ipv6 prefix *string* host-type *keyword*
Tree	host-type
Options	pd – IPv6 ESM hosts for DHCPv6 prefix-delegation wan – ESM hosts for DHCPv6 addresses or by WAN interface pd-wan – Both prefix-delegation and ESM hosts
Default	pd
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-srrp *number*

Synopsis	SRRP instance whose state is tracked on this IP address
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 prefix *string* track-srrp *number*
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-advertisements

Synopsis	Enter the **router-advertisements** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 router-advertisements
Tree	router-advertisements
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of router advertisements
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 router-advertisements admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

force-mcast *keyword*

Synopsis	Protocol with forced multicast
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 router-advertisements force-mcast *keyword*
Tree	force-mcast
Options	ip, ip-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-advertisement-interval *number*

Synopsis	Maximum advertisement interval
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 router-advertisements max-advertisement-interval *number*
Tree	max-advertisement-interval
Range	900 to 1800
Units	seconds
Default	1800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-advertisement-interval *number*

Synopsis	Minimum advertisement interval
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 router-advertisements min-advertisement-interval *number*
Tree	min-advertisement-interval
Range	900 to 1350
Units	seconds
Default	900
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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options

Synopsis	Enter the **options** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 router-advertisements options
Tree	options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

current-hop-limit *number*

Synopsis	Hop limit to be advertised
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 router-advertisements options current-hop-limit *number*
Tree	current-hop-limit
Range	0 to 255
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dns

Synopsis	Enter the **dns** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 router-advertisements options dns
Tree	dns
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

include-rdnss *boolean*

Synopsis	Include the RDNSS server option 25
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 router-advertisements options dns include-rdnss *boolean*
Tree	include-rdnss
Default	false

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rdnss-lifetime *(number | keyword)*

Synopsis	Maximum time for the RDNSS address to remain valid
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 router-advertisements options dns rdnss-lifetime *(number | keyword)*
Tree	rdnss-lifetime
Range	900 to 3600
Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

managed-configuration *boolean*

Synopsis	Managed address configuration flag
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 router-advertisements options managed-configuration *boolean*
Tree	managed-configuration
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mtu *(number | keyword)*

Synopsis	Advertised MTU value
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 router-advertisements options mtu *(number | keyword)*
Tree	mtu
Range	1280 to 9212
Units	bytes
Options	not-included
Default	not-included

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

other-stateful-configuration *boolean*

Synopsis	Other stateful configuration flag
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 router-advertisements options other-stateful-configuration *boolean*
Tree	other-stateful-configuration
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reachable-time *number*

Synopsis	Reachable time for advertisements
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 router-advertisements options reachable-time *number*
Tree	reachable-time
Range	0 to 3600000
Units	milliseconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retransmit-timer *number*

Synopsis	Retransmit time in router advertisements from interface
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 router-advertisements options retransmit-timer *number*
Tree	retransmit-timer
Range	0 to 1800000
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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router-lifetime *(number | keyword)*

Synopsis	Router lifetime
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 router-advertisements options router-lifetime *(number | keyword)*
Tree	router-lifetime
Range	2700 to 9000
Units	seconds
Options	no-default-router
Default	4500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-options

Synopsis	Enter the **prefix-options** context
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 router-advertisements prefix-options
Tree	prefix-options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

autonomous *boolean*

Synopsis	Value of the autonomous flag
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 router-advertisements prefix-options autonomous *boolean*
Tree	autonomous
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-link *boolean*

Synopsis	Assign the prefix to an interface on the specified link

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Context	**configure** service vprn *string* subscriber-interface *string* ipv6 router-advertisements prefix-options on-link *boolean*
Tree	on-link
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime *(number | keyword)*

Synopsis	Time for a prefix to remain preferred
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 router-advertisements prefix-options preferred-lifetime *(number | keyword)*
Tree	preferred-lifetime
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *(number | keyword)*

Synopsis	Time for a prefix to remain valid
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 router-advertisements prefix-options valid-lifetime *(number | keyword)*
Tree	valid-lifetime
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-solicit

Synopsis	Enter the **router-solicit** context

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Context	**configure** service vprn *string* subscriber-interface *string* ipv6 router-solicit
Tree	router-solicit
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

inactivity-timer *(number | keyword)*

Synopsis	Time before an inactive host is removed
Context	**configure** service vprn *string* subscriber-interface *string* ipv6 router-solicit inactivity-timer *(number | keyword)*
Tree	inactivity-timer
Range	1 to 31536000
Units	seconds
Options	infinite
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-address-assignment

Synopsis	Enter the **local-address-assignment** context
Context	**configure** service vprn *string* subscriber-interface *string* local-address-assignment
Tree	local-address-assignment
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of Local Address Assignment
Context	**configure** service vprn *string* subscriber-interface *string* local-address-assignment admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** service vprn *string* subscriber-interface *string* local-address-assignment ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the **client-applications** context
Context	**configure** service vprn *string* subscriber-interface *string* local-address-assignment ipv4 client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp *boolean*

Synopsis	Request local addresses for PPP IPCP hosts
Context	**configure** service vprn *string* subscriber-interface *string* local-address-assignment ipv4 client-applications ppp *boolean*
Tree	ppp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-pool *string*

Synopsis	Default pools
Context	**configure** service vprn *string* subscriber-interface *string* local-address-assignment ipv4 default-pool *string*
Tree	default-pool
String Length	1 to 32

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Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *reference*

Synopsis	Local DHCPv4 server for local pools management
Context	**configure** service vprn *string* subscriber-interface *string* local-address-assignment ipv4 server *reference*
Tree	server
Reference	**configure** service vprn *string* dhcp-server dhcpv4 *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** service vprn *string* subscriber-interface *string* local-address-assignment ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis	Enter the **client-applications** context
Context	**configure** service vprn *string* subscriber-interface *string* local-address-assignment ipv6 client-applications
Tree	client-applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-slaac *boolean*

Synopsis	Request local addresses for IPoE SLAAC hosts

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Context	**configure** service vprn *string* subscriber-interface *string* local-address-assignment ipv6 client-applications ipoe-slaac *boolean*
Tree	ipoe-slaac
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-wan *boolean*

Synopsis	Request local addresses for IPoE IA NA hosts
Context	**configure** service vprn *string* subscriber-interface *string* local-address-assignment ipv6 client-applications ipoe-wan *boolean*
Tree	ipoe-wan
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-slaac *boolean*

Synopsis	Request local addresses for PPP SLAAC hosts
Context	**configure** service vprn *string* subscriber-interface *string* local-address-assignment ipv6 client-applications ppp-slaac *boolean*
Tree	ppp-slaac
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *reference*

Synopsis	Local DHCPv6 server for local pools management
Context	**configure** service vprn *string* subscriber-interface *string* local-address-assignment ipv6 server *reference*
Tree	server
Reference	**configure** service vprn *string* dhcp-server dhcpv6 *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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pppoe

Synopsis	Enter the **pppoe** context
Context	**configure** service vprn *string* subscriber-interface *string* pppoe
Tree	pppoe
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* subscriber-interface *string* pppoe description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *number*

Synopsis	Maximum PPPoE sessions
Context	**configure** service vprn *string* subscriber-interface *string* pppoe session-limit *number*
Tree	session-limit
Range	1 to 333823
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

private-retail-subnets *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Export subnets to the forwarding service
Context	**configure** service vprn *string* subscriber-interface *string* private-retail-subnets *boolean*
Tree	private-retail-subnets

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Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-mode *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Mode of operation for hosts with /128 WAN IPv6 address
Context	**configure** service vprn *string* subscriber-interface *string* wan-mode *keyword*
Tree	wan-mode
Options	mode64, mode128
Default	mode64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wlan-gw

Synopsis	Enable the **wlan-gw** context
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw
Tree	wlan-gw
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool-manager

Synopsis	Enter the **pool-manager** context
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw pool-manager
Tree	pool-manager
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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dhcp6-client

Synopsis	Enter the **dhcp6-client** context
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client
Tree	dhcp6-client
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcpv4-nat

Synopsis	Enter the **dhcpv4-nat** context
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client dhcpv4-nat
Tree	dhcpv4-nat
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 client entity
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client dhcpv4-nat admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

Synopsis	IPv6 address in the link address field of relay header
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client dhcpv4-nat link-address *string*
Tree	link-address
Default	::
Introduced	16.0.R4

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Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool-name *string*

Synopsis	Pool name to be sent in the DHCPv6 messages
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client dhcpv4-nat pool-name *string*
Tree	pool-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ia-na

Synopsis	Enter the **ia-na** context
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client ia-na
Tree	ia-na
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 client entity
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client ia-na admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

Synopsis	IPv6 address in the link address field of relay header
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client ia-na link-address *string*

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Tree	link-address
Default	::
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool-name *string*

Synopsis	Pool name to be sent in the DHCPv6 messages
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client ia-na pool-name *string*
Tree	pool-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lease-query

Synopsis	Enable the **lease-query** context
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client lease-query
Tree	lease-query
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-retries *number*

Synopsis	Retries before lease query assumes no allocated subnets
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client lease-query max-retries *number*
Tree	max-retries
Range	0 to 10
Default	2
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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servers *string*

Synopsis	DHCPv6 servers that are used for requesting addresses
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client servers *string*
Tree	servers
Max. Instances	8
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

slaac

Synopsis	Enter the **slaac** context
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client slaac
Tree	slaac
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 client entity
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client slaac admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

Synopsis	IPv6 address in the link address field of relay header
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client slaac link-address *string*
Tree	link-address

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Default	::
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool-name *string*

Synopsis	Pool name to be sent in the DHCPv6 messages
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client slaac pool-name *string*
Tree	pool-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

source-ip *(keyword | ipv6-address)*

Synopsis	Source IP address that is used by the DHCPv6 client
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw pool-manager dhcp6-client source-ip *(keyword | ipv6-address)*
Tree	source-ip
Options	use-interface-ip
Default	use-interface-ip
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enter the **watermarks** context
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw pool-manager watermarks
Tree	watermarks
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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high *number*

Synopsis	High watermark when new prefix is allocated
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw pool-manager watermarks high *number*
Tree	high
Range	51 to 99
Default	95
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

low *number*

Synopsis	Low watermark when unused prefix is released
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw pool-manager watermarks low *number*
Tree	low
Range	50 to 98
Default	90
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*

Synopsis	ID of WLAN gateway group where prefixes are installed
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw pool-manager wlan-gw-group *reference*
Tree	wlan-gw-group
Reference	**configure** isa wlan-gw-group *number*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

redundancy

Synopsis	Enter the **redundancy** context
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw redundancy
Tree	redundancy

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Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of WLAN-GW redundancy
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw redundancy admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

export *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Route to export to peer
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw redundancy export *string*
Tree	export
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

monitor *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Peer route to monitor
Context	**configure** service vprn *string* subscriber-interface *string* wlan-gw redundancy monitor *string*
Tree	monitor
Introduced	16.0.R1

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Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-mgmt

Synopsis	Enter the **subscriber-mgmt** context
Context	**configure** service vprn *string* subscriber-mgmt
Tree	subscriber-mgmt
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcpv4

Synopsis	Enter the **dhcpv4** context
Context	**configure** service vprn *string* subscriber-mgmt dhcpv4
Tree	dhcpv4
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

routed-subnet-transparent-forward *boolean*

Synopsis	Transparently forward DHCPv4 from CPE LAN over IPoE
Context	**configure** service vprn *string* subscriber-mgmt dhcpv4 routed-subnet-transparent-forward *boolean*
Tree	routed-subnet-transparent-forward
Description	When configured to **true**, the router transparently forwards DHCPv4 packets received on a subscriber interface with a source IP in a routed subnet that is associated with a routed IPoE session or host. Supported routed subnets are: • RADIUS and NASREQ framed routes • routes learned via an ESM dynamic BGP peer • managed routes that are associated with a static IPv4 host When configured to **false**, the system disables transparent forwarding of DHCPv4 packets.
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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multi-chassis-shunt-id *number*

Synopsis	Shunt ID for a pair of resilient nodes
Context	**configure** service vprn *string* subscriber-mgmt multi-chassis-shunt-id *number*
Tree	multi-chassis-shunt-id
Description	This command configures the shunt ID that is used to shunt downstream traffic from a standby node to an active node. Because this ID identifies the traffic service on the standby node, the same ID must be configured per service on each node. This configuration is required for BNG CUPS inter-UPF resiliency shunting, but not for non-BNG CUPS shunting. However, when configured, it is also used for shunting non-BNG CUPS sessions in the same service.
Range	1 to 8191
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

up-resiliency

Synopsis	Enter the **up-resiliency** context
Context	**configure** service vprn *string* subscriber-mgmt up-resiliency
Tree	up-resiliency
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

monitor-oper-group [oper-group] *reference*

Synopsis	Enter the **monitor-oper-group** list instance
Context	**configure** service vprn *string* subscriber-mgmt up-resiliency monitor-oper-group *reference*
Tree	monitor-oper-group
Description	Commands in this context define parameters to derive the service health based on monitored operational groups. The BNG UPF sends the health value to the BNG CPF. The BNG CPF uses the value to determine the need for a BNG UPF status change (active or standby). **Note:** The following is only applicable for the **configure service vpls capture-sap** context.If the configured groups are not the same for all capture SAPs sharing the same underlying port or LAG, the configuration of a Layer 2 access ID alias is required, or else the system chooses arbitrarily one set of configured groups.

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Max. Instances	2
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**oper-group**] *reference*

Synopsis	Operational group name
Context	**configure** service vprn *string* subscriber-mgmt up-resiliency monitor-oper-group *reference*
Tree	monitor-oper-group
Reference	**configure** service oper-group *string*
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

health-drop *number*

Synopsis	Number subtracted from the health value per failure
Context	**configure** service vprn *string* subscriber-mgmt up-resiliency monitor-oper-group *reference* health-drop *number*
Tree	health-drop
Description	This command configures the drop in the health value for every operational group member failure. Every failure of an operational group member decreases the base health value to a possible minimum of 0.
Range	1 to 255
Default	1
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ttl-propagate

Synopsis	Enter the **ttl-propagate** context
Context	**configure** service vprn *string* ttl-propagate
Tree	ttl-propagate
Introduced	16.0.R1

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Platforms	All

local *keyword*

Synopsis	Local TTL propagation control for the VPRN
Context	**configure** service vprn *string* ttl-propagate local *keyword*
Tree	local
Description	This command specifies the local TTL propagation control for the VPRN and overrides the global configuration of the TTL propagation for locally generated packets that are forwarded over MPLS LSPs in a given VPRN service context.
Options	none, all, vc-only, use-base
Default	use-base
Introduced	16.0.R1
Platforms	All

transit *keyword*

Synopsis	Transit TTL propagation control for the VPRN
Context	**configure** service vprn *string* ttl-propagate transit *keyword*
Tree	transit
Description	This command overrides the global configuration of the TTL propagation for in transit packets that are forwarded over MPLS LSPs in a given VPRN service context.
Options	none, all, vc-only, use-base
Default	use-base
Introduced	16.0.R1
Platforms	All

twamp-light

Synopsis	Enter the **twamp-light** context
Context	**configure** service vprn *string* twamp-light
Tree	twamp-light
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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reflector

Synopsis	Enable the **reflector** context
Context	**configure** service vprn *string* twamp-light reflector
Tree	reflector
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of TWAMP Light functionality
Context	**configure** service vprn *string* twamp-light reflector admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

allow-ipv6-udp-checksum-zero *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Process IPv6 packets with a zero UDP checksum
Context	**configure** service vprn *string* twamp-light reflector allow-ipv6-udp-checksum-zero *boolean*
Tree	allow-ipv6-udp-checksum-zero
Description	When configured to **true**, this command allows the processing of IPv6 packets that arrive with a UDP checksum of zero. The destination UDP ports that are registered as TWAMP Test packets as part of this template allow this behavior. When configured to **false**, IPv6 packets that arrive with a UDP checksum of zero are discarded.
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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description *string*

Synopsis	Text description
Context	**configure** service vprn *string* twamp-light reflector description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

prefix [ip-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **prefix** list instance
Context	**configure** service vprn *string* twamp-light reflector prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Max. Instances	50
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**ip-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Source prefix for the TWAMP-Light reflector
Context	**configure** service vprn *string* twamp-light reflector prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* twamp-light reflector prefix *(ipv4-prefix | ipv6-prefix)* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type *keyword*

Synopsis	Processing behavior type for the reflector
Context	**configure** service vprn *string* twamp-light reflector type *keyword*
Tree	type
Description	This command configures the processing behavior of the TWAMP Light reflector. When the value is **twamp-light** the reflector does not check the received PDU as a traditional base TWAMP Light packet without TLV processing. When the value is **stamp**, the reflector attempts to find and process supported STAMP TLVs that follow the base STAMP packet. In mixed environments where different types of Session-Senders may be targeting a common TWAMP Light reflector, set the value to **stamp**. When the reflector is operating in **stamp** mode, the primary parsing is based on STAMP, checking and processing known TLVs, or determining if the arriving PDU is a TWAMP Light PDU. A Session-Sender launching a TWAMP Light-based packet must use all zeros padding pattern when the pad size is non zero.
Options	stamp, twamp-light
Default	twamp-light
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

udp-port *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	UDP port on which the specified TWAMP-Light reflector listens for TWAMP PDUs
Context	**configure** service vprn *string* twamp-light reflector udp-port *number*
Tree	udp-port
Range	862 | 64364 to 64373
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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video-interface [interface-name] *string*

Synopsis	Enter the **video-interface** list instance
Context	**configure** service vprn *string* video-interface *string*
Tree	video-interface
Max. Instances	9
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[**interface-name**] *string*

Synopsis	Video interface name
Context	**configure** service vprn *string* video-interface *string*
Tree	video-interface
String Length	1 to 29
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

accounting-policy *reference*

Synopsis	Accounting Policy
Context	**configure** service vprn *string* video-interface *string* accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

address [ip-address] *string*

Synopsis	Add a list entry for **address**
Context	**configure** service vprn *string* video-interface *string* address *string*
Tree	address

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[**ip-address**] *string*

Synopsis	IPv4 address for the video interface within the service
Context	**configure** service vprn *string* video-interface *string* address *string*
Tree	address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

admin-state *keyword*

Synopsis	Administrative state of the video interface
Context	**configure** service vprn *string* video-interface *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

channel [mcast-address] *string* source *string*

Synopsis	Enter the **channel** list instance
Context	**configure** service vprn *string* video-interface *string* channel *string* source *string*
Tree	channel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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[**mcast-address**] *string*

Synopsis	Multicast channel address
Context	**configure** service vprn *string* video-interface *string* channel *string* source *string*
Tree	channel
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

source *string*

Synopsis	Unicast source address
Context	**configure** service vprn *string* video-interface *string* channel *string* source *string*
Tree	channel
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

channel-name *string*

Synopsis	Channel name
Context	**configure** service vprn *string* video-interface *string* channel *string* source *string* channel-name *string*
Tree	channel-name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	**configure** service vprn *string* video-interface *string* channel *string* source *string* description *string*

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Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

scte35-action *keyword*

Synopsis	Enable downstream forwarding of SCTE 35 cue avails
Context	**configure** service vprn *string* video-interface *string* channel *string* source *string* scte35-action *keyword*
Tree	scte35-action
Options	forward, drop
Default	forward
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

zone-channel [zone-mcast-address] *string* zone-source *string*

Synopsis	Enter the **zone-channel** list instance
Context	**configure** service vprn *string* video-interface *string* channel *string* source *string* zone-channel *string* zone-source *string*
Tree	zone-channel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[**zone-mcast-address**] *string*

Synopsis	Multicast zone channel address
Context	**configure** service vprn *string* video-interface *string* channel *string* source *string* zone-channel *string* zone-source *string*
Tree	zone-channel
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

zone-source *string*

Synopsis	Unicast source address
Context	**configure** service vprn *string* video-interface *string* channel *string* source *string* zone-channel *string* zone-source *string*
Tree	zone-channel
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

adi-channel-name *string*

Synopsis	Zone channel name
Context	**configure** service vprn *string* video-interface *string* channel *string* source *string* zone-channel *string* zone-source *string* adi-channel-name *string*
Tree	adi-channel-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

cpu-protection *reference*

Synopsis	CPU protection policy
Context	**configure** service vprn *string* video-interface *string* cpu-protection *reference*
Tree	cpu-protection
Reference	**configure** system security cpu-protection policy *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description

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Context	**configure** service vprn *string* video-interface *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

multicast-service *number*

Synopsis	Associated multicast service ID
Context	**configure** service vprn *string* video-interface *string* multicast-service *number*
Tree	multicast-service
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

output-format *keyword*

Synopsis	Output format
Context	**configure** service vprn *string* video-interface *string* output-format *keyword*
Tree	output-format
Options	udp, rtp-udp
Default	rtp-udp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

video-sap

Synopsis	Enable the **video-sap** context
Context	**configure** service vprn *string* video-interface *string* video-sap
Tree	video-sap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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egress

Synopsis	Enter the **egress** context
Context	**configure** service vprn *string* video-interface *string* video-sap egress
Tree	egress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

filter

Synopsis	Enter the **filter** context
Context	**configure** service vprn *string* video-interface *string* video-sap egress filter
Tree	filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service vprn *string* video-interface *string* video-sap egress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos

Synopsis	Enter the **qos** context
Context	**configure** service vprn *string* video-interface *string* video-sap egress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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policy-name *reference*

Synopsis	SAP egress QoS policy ID
Context	**configure** service vprn *string* video-interface *string* video-sap egress qos policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-egress *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ingress

Synopsis	Enter the **ingress** context
Context	**configure** service vprn *string* video-interface *string* video-sap ingress
Tree	ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

filter

Synopsis	Enter the **filter** context
Context	**configure** service vprn *string* video-interface *string* video-sap ingress filter
Tree	filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ip *reference*

Synopsis	IPv4 filter policy name
Context	**configure** service vprn *string* video-interface *string* video-sap ingress filter ip *reference*
Tree	ip
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos

Synopsis	Enter the **qos** context
Context	**configure** service vprn *string* video-interface *string* video-sap ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

policy-name *reference*

Synopsis	SAP ingress QoS policy ID
Context	**configure** service vprn *string* video-interface *string* video-sap ingress qos policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-ingress *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

video-group-id *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Video group ID
Context	**configure** service vprn *string* video-interface *string* video-sap video-group-id *reference*
Tree	video-group-id
Reference	**configure** isa video-group *number*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

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vprn-type *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VPRN type
Context	**configure** service vprn *string* vprn-type *keyword*
Tree	vprn-type
Options	regular, hub, spoke, subscriber-split-horizon
Default	regular
Introduced	16.0.R1
Platforms	All

vxlan

Synopsis	Enter the **vxlan** context
Context	**configure** service vprn *string* vxlan
Tree	vxlan
Introduced	16.0.R1
Platforms	All

tunnel-termination [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **tunnel-termination** list instance
Context	**configure** service vprn *string* vxlan tunnel-termination *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	tunnel-termination
Introduced	16.0.R1
Platforms	All

[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Non-system IP address that terminates the VXLAN
Context	**configure** service vprn *string* vxlan tunnel-termination *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	tunnel-termination

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fpe-id *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	FPE id for this entry
Context	**configure** service vprn *string* vxlan tunnel-termination *(ipv4-address-no-zone | ipv6-address-no-zone)* fpe-id *reference*
Tree	fpe-id
Reference	**configure** fwd-path-ext fpe *number*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

weighted-ecmp *keyword*

Synopsis	Weighted load-balancing capability for ECMP routes
Context	**configure** service vprn *string* weighted-ecmp *keyword*
Tree	weighted-ecmp
Options	false, true, strict
Default	false
Introduced	16.0.R1
Platforms	All

wlan-gw

Synopsis	Enable the **wlan-gw** context
Context	**configure** service vprn *string* wlan-gw
Tree	wlan-gw
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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distributed-subscriber-mgmt

Synopsis	Enter the **distributed-subscriber-mgmt** context
Context	**configure** service vprn *string* wlan-gw distributed-subscriber-mgmt
Tree	distributed-subscriber-mgmt
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-tcp-mss-adjust *number*

Synopsis	TCP-MSS adjustment value in upstream direction for DSM
Context	**configure** service vprn *string* wlan-gw distributed-subscriber-mgmt ipv6-tcp-mss-adjust *number*
Tree	ipv6-tcp-mss-adjust
Range	160 to 10240
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mobility-triggered-accounting

Synopsis	Enter the **mobility-triggered-accounting** context
Context	**configure** service vprn *string* wlan-gw mobility-triggered-accounting
Tree	mobility-triggered-accounting
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of mobility triggered accounting
Context	**configure** service vprn *string* wlan-gw mobility-triggered-accounting admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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hold-down *number*

Synopsis	Hold additional mobility-triggered update until this timer expires
Context	**configure** service vprn *string* wlan-gw mobility-triggered-accounting hold-down *number*
Tree	hold-down
Range	60 to 86400
Units	seconds
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

include-counters *boolean*

Synopsis	Include counters in interim updates
Context	**configure** service vprn *string* wlan-gw mobility-triggered-accounting include-counters *boolean*
Tree	include-counters
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect

Synopsis	Enter the **xconnect** context
Context	**configure** service vprn *string* wlan-gw xconnect
Tree	xconnect
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the WLAN-GW cross-connect
Context	**configure** service vprn *string* wlan-gw xconnect admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable

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Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-source-ip *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 address and prefix for the tunnel source
Context	**configure** service vprn *string* wlan-gw xconnect tunnel-source-ip *string*
Tree	tunnel-source-ip
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA WLAN-GW Group
Context	**configure** service vprn *string* wlan-gw xconnect wlan-gw-group *reference*
Tree	wlan-gw-group
Reference	**configure** isa wlan-gw-group *number*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wpp

Synopsis	Enable the **wpp** context
Context	**configure** service vprn *string* wpp
Tree	wpp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of WPP
Context	**configure** service vprn *string* wpp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

portal [name] *string*

Synopsis	Enter the **portal** list instance
Context	**configure** service vprn *string* wpp portal *string*
Tree	portal
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Web portal name
Context	**configure** service vprn *string* wpp portal *string*
Tree	portal
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ack-auth-retry-count *number*

Synopsis	Number of retransmissions of an ACK_OUT message
Context	**configure** service vprn *string* wpp portal *string* ack-auth-retry-count *number*
Tree	ack-auth-retry-count
Range	0 to 5
Default	5
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	WPP portal address
Context	**configure** service vprn *string* wpp portal *string* address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the WPP portal server
Context	**configure** service vprn *string* wpp portal *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ntf-logout-retry-count *number*

Synopsis	Number of retransmissions of an NTF_LOGOUT message
Context	**configure** service vprn *string* wpp portal *string* ntf-logout-retry-count *number*
Tree	ntf-logout-retry-count
Range	0 to 5
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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port-format *keyword*

Synopsis	Format of the port in the ACK_INO message
Context	**configure** service vprn *string* wpp portal *string* port-format *keyword*
Tree	port-format
Options	standard, vendor-specific
Default	standard
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retry-interval *number*

Synopsis	Time between two consecutive retransmissions
Context	**configure** service vprn *string* wpp portal *string* retry-interval *number*
Tree	retry-interval
Range	10 to 2000
Units	milliseconds
Default	2000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

secret *string*

Synopsis	Message authentication between portal and BRAS by applying the secret used by WPPv2
Context	**configure** service vprn *string* wpp portal *string* secret *string*
Tree	secret
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *number*

Synopsis	Protocol version to be expected by the WPP portal
Context	**configure** service vprn *string* wpp portal *string* version *number*

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Tree	version
Range	1 | 2
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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3.44 sfm commands

```
configure
   -  sfm number
      -  admin-state keyword
      -  apply-groups reference
      -  apply-groups-exclude reference
      -  sfm-type keyword
```


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3.44.1 sfm command descriptions

sfm [sfm-slot] *number*

Synopsis	Enter the **sfm** list instance
Context	**configure** sfm *number*
Tree	sfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

[**sfm-slot**] *number*

Synopsis	Unique value to identify this SFM slot within a chassis in the system
Context	**configure** sfm *number*
Tree	sfm
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of SFM
Context	**configure** sfm *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

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sfm-type *keyword*

WARNING:
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Synopsis	Provision the SFM type
Context	**configure** sfm *number* sfm-type *keyword*
Tree	sfm-type
Options	sfm-x20, sfm-x20-b, m-sfm5-7, m-sfm5-12, m-sfm5-12e, sfm-x20s-b, sfm-ixr-6, sfm-ixr-10, sfm-s, m-sfm6-12e, sfm2-x20s, sfm-2s, m-sfm6-7/12, sfm-2se, sfm2-s
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

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3.45 subscriber-mgmt commands

```
configure
   –  subscriber-mgmt
      –  accu-stats-policy string
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  description string
         –  egress keyword id number
         –  ingress keyword id number
      –  ancp
         –  ancp-policy string
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  egress
               –  rate-adjustment number
               –  rate-modify
                  –  agg-rate
                  –  scheduler string
               –  rate-monitor
                  –  alarm boolean
                  –  rate number
               –  rate-reduction number
            –  ingress
               –  rate-adjustment number
               –  rate-modify
                  –  scheduler string
               –  rate-monitor
                  –  alarm boolean
                  –  rate number
               –  rate-reduction number
            –  port-down
               –  suspend-shcv
                  –  alarm boolean
                  –  hold-time number
         –  ancp-static-map
            –  multi-service-site-entry string customer-name reference customer-site-
name reference
               –  ancp-policy reference
               –  apply-groups reference
               –  apply-groups-exclude reference
            –  sap-entry string sap-id string
               –  ancp-policy reference
               –  apply-groups reference
               –  apply-groups-exclude reference
         –  apply-groups reference
         –  apply-groups-exclude reference
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  authentication-origin
         –  overrides
            –  priority number
               –  apply-groups reference
               –  apply-groups-exclude reference
               –  source keyword
      –  auto-sub-id
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  implicit-generation boolean
         –  ipoe-key keyword
         –  ppp-key keyword
```


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```
    - bgp-peering-policy string
      - advertise-inactive boolean
      - aggregator-id-zero boolean
      - apply-groups reference
      - apply-groups-exclude reference
      - as-override boolean
      - asn-4-byte boolean
      - authentication-key string
      - authentication-keychain reference
      - bfd-liveness boolean
      - client-reflect boolean
      - cluster string
      - connect-retry number
      - damping boolean
      - description string
      - export reference
      - family
        - ipv4 boolean
        - ipv6 boolean
      - fast-external-failover boolean
      - hold-time number
      - import reference
      - keepalive number
      - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - local-as
        - as-number number
        - private boolean
      - local-preference number
      - loop-detect keyword
      - med-out (number | keyword)
      - min-route-advertisement number
      - multihop number
      - next-hop-self boolean
      - passive boolean
      - peer-as number
      - preference number
      - prefix-limits keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - idle-timeout number
        - log-only boolean
        - maximum number
        - post-import boolean
        - threshold number
      - remove-private
        - limited boolean
      - send-communities
        - extended boolean
        - standard boolean
      - ttl-security number
      - type keyword
    - category-map string
      - activity-threshold number
      - apply-groups reference
      - apply-groups-exclude reference
      - category string
        - apply-groups reference
        - apply-groups-exclude reference
        - credit-type-override keyword
        - default-credit
          - time number
          - volume
            - unit keyword
            - value number
```


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configure subscriber-mgmt category-map category description

```
            - description string
            - egress
               - policer number
               - queue number
            - exhausted-credit-service-level
               - egress
                  - ip-filter
                     - entry number
                        - action
                           - drop
                           - forward
                           - http-redirect
                              - allow-override boolean
                              - url string
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - description string
                        - match
                           - dscp keyword
                           - dst-port
                              - eq number
                              - gt number
                              - lt number
                              - range
                                 - end number
                                 - start number
                           - fragment keyword
                           - icmp
                              - code number
                              - type number
                           - ip-option
                              - mask number
                              - type number
                           - multiple-option boolean
                           - option-present boolean
                           - protocol (number | keyword)
                           - src-ip string
                           - src-port
                              - eq number
                              - gt number
                              - lt number
                              - range
                                 - end number
                                 - start number
                           - tcp-flags
                              - ack boolean
                              - syn boolean
                  - ipv6-filter
                     - entry number
                        - action
                           - drop
                           - forward
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - description string
                        - match
                           - dscp keyword
                           - dst-port
                              - eq number
                              - gt number
                              - lt number
                              - range
                                 - end number
                                 - start number
```


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configure subscriber-mgmt category-map category exhausted-credit-service-level egress ipv6-filter entry match icmp

```
                        - icmp
                          - code number
                          - type number
                        - next-header (number | keyword)
                        - src-ip string
                        - src-port
                          - eq number
                          - gt number
                          - lt number
                          - range
                            - end number
                            - start number
                        - tcp-flags
                          - ack boolean
                          - syn boolean
            - ingress
              - ip-filter
                - entry number
                  - action
                    - drop
                    - forward
                    - http-redirect
                      - allow-override boolean
                      - url string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - description string
                  - match
                    - dscp keyword
                    - dst-ip string
                    - dst-port
                      - eq number
                      - gt number
                      - lt number
                      - range
                        - end number
                        - start number
                    - fragment keyword
                    - icmp
                      - code number
                      - type number
                    - ip-option
                      - mask number
                      - type number
                    - multiple-option boolean
                    - option-present boolean
                    - protocol (number | keyword)
                    - src-port
                      - eq number
                      - gt number
                      - lt number
                      - range
                        - end number
                        - start number
                    - tcp-flags
                      - ack boolean
                      - syn boolean
              - ipv6-filter
                - entry number
                  - action
                    - drop
                    - forward
                  - apply-groups reference
                  - apply-groups-exclude reference
```


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configure subscriber-mgmt category-map category exhausted-credit-service-level ingress ipv6-filter entry description

```
                        – description string
                        – match
                           – dscp keyword
                           – dst-ip string
                           – dst-port
                              – eq number
                              – gt number
                              – lt number
                              – range
                                 – end number
                                 – start number
                           – icmp
                              – code number
                              – type number
                           – next-header (number | keyword)
                           – src-port
                              – eq number
                              – gt number
                              – lt number
                              – range
                                 – end number
                                 – start number
                           – tcp-flags
                              – ack boolean
                              – syn boolean
            – pir (number | keyword)
         – ingress
            – policer number
            – queue number
         – out-of-credit-action-override keyword
         – rating-group number
      – credit-exhaust-threshold number
      – credit-type keyword
      – description string
      – gx-session-level-usage boolean
   – credit-control-policy string
      – apply-groups reference
      – apply-groups-exclude reference
      – default-category-map reference
      – description string
      – error-handling-action keyword
      – out-of-credit-action keyword
      – server
         – diameter reference
         – radius
   – diameter-gx-policy string
      – apply-groups reference
      – apply-groups-exclude reference
      – description string
      – gx
         – avp-subscription-id
            – origin keyword
            – type keyword
         – ccrt-replay
            – interval number
            – max-lifetime number
         – credit-mcs-interval number
         – destination-realm-learning boolean
         – features
            – extended-bandwidth boolean
         – include-avp
            – an-gw-address boolean
            – apn-ambr boolean
            – called-station-id boolean
```


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configure subscriber-mgmt diameter-gx-policy gx include-avp calling-station-id

```
                - calling-station-id
                  - type keyword
                - ip-can-type boolean
                - logical-access-id boolean
                - nas-port
                  - bit-spec string
                - nas-port-id
                  - prefix-string string
                  - suffix
                    - circuit-id
                    - not-included
                    - remote-id
                    - user-string string
                - nas-port-type
                  - type number
                - pdn-connection-id boolean
                - physical-access-id boolean
                - rai boolean
                - rat-type boolean
                - sgsn-mcc-mnc boolean
                - supported-features boolean
                - user-equipment-info
                  - type keyword
                - user-location-info boolean
            - mac-format string
            - report-ip-address-event boolean
            - three-gpp-qos-mapping
                - apn-ambr-dl
                  - aggregate-rate
                  - arbiter string
                  - hs-sla-agg-rate
                  - ignore-override
                  - policer number
                  - queue number
                  - scheduler string
                - apn-ambr-ul
                  - arbiter string
                  - ignore-override
                  - policer number
                  - queue number
                  - scheduler string
        - node
            - destination-realm string
            - origin-host reference
        - on-failure
            - failover boolean
            - handling keyword
        - tx-timer number
    - diameter-gy-policy string
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
        - gy
            - avp-subscription-id
                - origin keyword
                - type keyword
            - ccrt-replay
                - interval number
                - max-lifetime number
            - destination-realm-learning boolean
            - extended-failure-handling
                - admin-state keyword
                - interim-credit
                  - max-attempts (number | keyword)
```


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configure subscriber-mgmt diameter-gy-policy gy extended-failure-handling interim-credit reporting

```
                  - reporting boolean
                  - validity-time (number | keyword)
                  - volume
                     - credits number
                     - units keyword
               - new-session-id boolean
            - include-avp
               - aaa-user-name boolean
               - address-avp boolean
               - called-station-id
                  - id string
               - charging-rule-base-name
                  - category-map
                  - not-included
                  - user-string string
               - ggsn-address
                  - type keyword
               - pdp-context-type boolean
               - ps-information boolean
               - service-context-id
                  - id string
               - three-gpp-charging-characteristics boolean
               - three-gpp-charging-id keyword
               - three-gpp-ggsn-ipv4-address boolean
               - three-gpp-ggsn-ipv6-address boolean
               - three-gpp-gprs-negotiated-qos-profile boolean
               - three-gpp-imsi keyword
               - three-gpp-nsapi boolean
               - three-gpp-rat-type
                  - type number
               - three-gpp-selection-mode boolean
               - three-gpp-session-stop-indicator boolean
               - three-gpp-user-location-info boolean
               - user-equipment-info-type
                  - type keyword
            - mac-format string
            - out-of-credit-reporting keyword
            - vendor-support keyword
         - node
            - destination-realm string
            - origin-host reference
         - on-failure
            - failover boolean
            - handling keyword
         - tx-timer number
      - diameter-nasreq-policy string
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - nasreq
            - include-avp
               - called-station-id boolean
               - calling-station-id
                  - type keyword
               - circuit-id boolean
               - imei boolean
               - nas-port
                  - bit-spec string
               - nas-port-id
                  - prefix-string string
                  - suffix
                     - circuit-id
                     - not-included
                     - remote-id
```


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configure subscriber-mgmt diameter-nasreq-policy nasreq include-avp nas-port-id suffix user-string

```
                  - user-string string
            - nas-port-type
               - type (keyword | number)
            - rat-type boolean
            - remote-id boolean
            - user-location-info boolean
         - mac-format string
         - password string
         - user-name
            - domain-name string
            - format keyword
            - operation keyword
      - node
         - destination-realm string
         - origin-host reference
      - on-failure
         - failover boolean
         - handling keyword
      - tx-timer number
   - explicit-subscriber-map
      - entry string
         - alias string
         - app-profile reference
         - apply-groups reference
         - apply-groups-exclude reference
         - sla-profile reference
         - sub-profile reference
   - group-interface-statistics
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
   - group-interface-template string
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - ip-mtu number
      - ipv4
         - icmp
            - mask-reply boolean
            - param-problem
               - admin-state keyword
               - number number
               - seconds number
            - redirects
               - admin-state keyword
               - number number
               - seconds number
            - ttl-expired
               - admin-state keyword
               - number number
               - seconds number
            - unreachables
               - admin-state keyword
               - number number
               - seconds number
         - neighbor-discovery
            - proxy-arp-policy reference
            - remote-proxy-arp boolean
         - urpf-check
            - mode keyword
      - ipv6
         - urpf-check
            - mode keyword
      - trigger-packet
```


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configure subscriber-mgmt group-interface-template trigger-packet data

```
            - data boolean
      - gtp
         - apn-policy string
            - apn string
               - ambr-qos-mapping
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - downlink
                     - aggregate-rate
                     - arbiter string
                     - policer number
                     - queue number
                     - scheduler string
                  - uplink
                     - arbiter string
                     - policer number
                     - queue number
                     - scheduler string
               - apply-groups reference
               - apply-groups-exclude reference
               - defaults
                  - group-interface
                     - name string
                     - svc-name string
               - diameter-nasreq-policy reference
               - radius-auth-policy reference
               - skip-gtp-ipv4-allocation boolean
               - user-db reference
            - apply-groups reference
            - apply-groups-exclude reference
         - apply-groups reference
         - apply-groups-exclude reference
         - max-held-uplink-sessions number
         - peer-profile string
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - interface-type keyword
            - ip-ttl number
            - keep-alive
               - admin-state keyword
               - interval number
               - retry-count number
               - timeout number
            - message-retransmit
               - retry-count number
               - timeout number
            - python-policy reference
            - s11
               - change-reporting-action (number | keyword)
               - end-marker-count number
               - ipv4-mtu number
               - qos
                  - ambr
                     - down-link number
                     - up-link number
                  - arp number
                  - down-link
                     - gbr number
                     - mbr number
                  - qci number
                  - up-link
                     - gbr number
                     - mbr number
```


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```
            – uplink
              – charging-characteristics
                – home
                  – bit0 boolean
                  – bit1 boolean
                  – bit10 boolean
                  – bit11 boolean
                  – bit12 boolean
                  – bit13 boolean
                  – bit14 boolean
                  – bit15 boolean
                  – bit2 boolean
                  – bit3 boolean
                  – bit4 boolean
                  – bit5 boolean
                  – bit6 boolean
                  – bit7 boolean
                  – bit8 boolean
                  – bit9 boolean
                – roaming
                  – bit0 boolean
                  – bit1 boolean
                  – bit10 boolean
                  – bit11 boolean
                  – bit12 boolean
                  – bit13 boolean
                  – bit14 boolean
                  – bit15 boolean
                  – bit2 boolean
                  – bit3 boolean
                  – bit4 boolean
                  – bit5 boolean
                  – bit6 boolean
                  – bit7 boolean
                  – bit8 boolean
                  – bit9 boolean
              – ggsn
                – qos
                  – ambr
                    – down-link number
                    – up-link number
                  – arp number
                  – down-link
                    – gbr number
                    – mbr number
                  – up-link
                    – gbr number
                    – mbr number
              – pgw
                – qos
                  – ambr
                    – down-link number
                    – up-link number
                  – arp number
                  – down-link
                    – gbr number
                    – mbr number
                  – qci number
                  – up-link
                    – gbr number
                    – mbr number
              – protocol-configuration-options keyword
              – rat-type (number | keyword)
              – report-wlan-location boolean
```


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configure subscriber-mgmt gtp peer-profile uplink session-hold-time

```
            - session-hold-time (number | keyword)
         - serving-network
            - mcc string
            - mnc string
      - host-lockout-policy string
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - host-key keyword
         - lockout-reset-time number
         - lockout-time
            - max number
            - min number
         - max-lockout-hosts number
      - host-tracking-policy string
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - egress-rate-modify
            - agg-rate
            - scheduler string
      - http-redirect-policy string
         - aa-url-parameter string
         - application-assurance reference
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - dst-port number
         - forward-entry dst-ip (ipv4-prefix | ipv6-prefix) protocol keyword dst-port number
         - ignore-app-profile boolean
         - portal-hold-time number
         - url string
      - igmp-policy string
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - egress-rate-modify
            - agg-rate
            - scheduler string
         - fast-leave boolean
         - import-policy reference
         - maximum-number-group-sources number
         - maximum-number-groups number
         - maximum-number-sources number
         - multicast-reporter
            - admin-state keyword
            - destination reference
            - optional-fields
               - host-mac boolean
               - pppoe-session-id boolean
               - sap-id boolean
               - svc-id boolean
         - query-interval number
         - query-last-member-interval number
         - query-response-interval number
         - redirection-policy reference
         - replication keyword
         - router-alert-check boolean
         - static
            - group string
               - apply-groups reference
               - apply-groups-exclude reference
               - source string
               - starg
```


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```
        - use-multicast-destination-mac boolean
        - version keyword
    - ipoe-session-policy string
        - apply-groups reference
        - apply-groups-exclude reference
        - circuit-id-from-auth boolean
        - description string
        - session-key
            - cid boolean
            - mac boolean
            - rid boolean
            - sap boolean
        - session-timeout (number | keyword)
    - isa-filter string
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
        - ipv4
            - default-action keyword
            - entry number
                - action
                    - drop
                    - forward
                    - http-redirect
                        - url string
                - apply-groups reference
                - apply-groups-exclude reference
                - description string
                - match
                    - dst-ip string
                    - dst-port
                        - equals number
                    - protocol keyword
        - ipv6
            - default-action keyword
            - entry number
                - action
                    - drop
                    - forward
                    - http-redirect
                        - url string
                - apply-groups reference
                - apply-groups-exclude reference
                - description string
                - match
                    - dst-ip string
                    - dst-port
                        - equals number
                    - protocol keyword
        - type keyword
    - isa-policer string
        - action keyword
        - adaptation-rule
            - cir keyword
            - pir keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - cbs number
        - description string
        - mbs number
        - rate
            - cir (number | keyword)
            - pir (number | keyword)
        - type keyword
```


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```
      – isa-service-chaining
         – apply-groups reference
         – apply-groups-exclude reference
         – evpn string
            – admin-state keyword
            – apply-groups reference
            – apply-groups-exclude reference
            – bgp
               – route-distinguisher
                  – rd (keyword | vpn-route-distinguisher)
               – route-target
                  – export string
                  – import string
            – description string
            – export
               – advertise-pools
                  – admin-state keyword
                  – pool router-instance string name string
               – gateway-address-range
                  – end string
                  – start string
               – vxlan
                  – vni number
            – import-mode keyword
            – prefix-route-resolution keyword
         – mac-prefix string
         – vas-filter string
            – apply-groups reference
            – apply-groups-exclude reference
            – description string
            – entry number
               – action keyword
                  – apply-groups reference
                  – apply-groups-exclude reference
                  – fail-action keyword
                  – forward
                     – esi string
                     – sf-ip (ipv4-address-no-zone | ipv6-address-no-zone)
                     – svc reference
                  – insert-nsh
                     – meta-data
                        – insert-subscriber-id
                        – opaque-data string
                     – svc-path
                        – path-id number
                        – svc-index number
               – admin-state keyword
               – apply-groups reference
               – apply-groups-exclude reference
               – description string
               – match
                  – foreign-ip (ipv4-unicast-prefix | ipv4-unicast-address)
                  – foreign-port number
                  – protocol keyword
      – local-user-db string
         – admin-state keyword
         – apply-groups reference
         – apply-groups-exclude reference
         – description string
         – ipoe
            – host string
               – admin-state keyword
               – apply-groups reference
               – apply-groups-exclude reference
```


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```
                - authentication
                  - auth-domain-name string
                  - gx-policy string
                  - nasreq-auth-policy string
                  - radius-auth-policy string
                - gtp-interface
                  - name string
                  - service-id number
                - host-identification
                  - circuit-id
                    - ascii-string string
                    - hex-string string
                  - derived-id string
                  - encap-tag-range
                    - from string
                    - to string
                  - encap-tag-separate-range
                    - inner
                      - end number
                      - start number
                    - outer
                      - end number
                      - start number
                  - ip-prefix (ipv4-prefix-with-host-bits | ipv6-prefix-with-host-bits)
                  - mac string
                  - option60
                    - ascii-string string
                    - hex-string string
                  - remote-id
                    - ascii-string string
                    - hex-string string
                  - sap-id string
                  - service-id number
                  - string string
                  - system-id string
                - identification
                  - ancp-string string
                  - app-profile-string string
                  - category-map-name string
                  - int-dest-id string
                  - option-number number
                  - sla-profile-string string
                  - spi-sharing-group-id number
                  - sub-profile-string string
                  - subscriber-id string
                - ipv4
                  - address
                    - gi-address keyword
                    - ip-address string
                    - pool
                      - delimiter string
                      - primary string
                      - secondary string
                    - use-pool-from-client
                      - delimiter string
                  - gi-address string
                  - option (number | keyword)
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - ascii-string string
                    - duration number
                    - empty
                    - hex-string string
                    - ipv4-address string
```


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configure subscriber-mgmt local-user-db ipoe host ipv4 option netbios-node-type

```
                  - netbios-node-type keyword
               - server string
            - ipv6
               - address string
               - address-pool string
               - delegated-prefix string
               - delegated-prefix-length number
               - delegated-prefix-pool string
               - link-address string
               - option (number | keyword)
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - hex-string string
                  - ipv6-address string
               - router-advertisement-policy string
               - server string
               - slaac-prefix string
               - slaac-prefix-pool string
               - timers
                  - preferred-lifetime (number | keyword)
                  - rebind number
                  - renew number
                  - valid-lifetime (number | keyword)
            - match-radius-proxy-cache
               - fail-action keyword
               - mac-format string
               - match
                  - circuit-id boolean
                  - ipv4-option number
                  - ipv6-option number
                  - mac boolean
                  - remote-id boolean
               - server
                  - name string
                  - service number
            - mld-import string
            - msap-defaults
               - group-interface
                  - name string
                  - prefix keyword
                  - suffix keyword
               - policy string
               - service number
            - radius-accounting-policy
               - duplicate string
               - name string
            - retail-service-id number
            - rip-policy string
            - to-client-options
               - ipv4-option (number | keyword)
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - ascii-string string
                  - duration number
                  - empty
                  - hex-string string
                  - ipv4-address string
                  - netbios-node-type keyword
               - ipv6-option (number | keyword)
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - ascii-string string
                  - domain-string string
                  - empty
```


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configure subscriber-mgmt local-user-db ipoe host to-client-options ipv6-option hex-string

```
                    - hex-string string
                    - ipv6-address string
            - to-server-options
                - ipv6-option (number | keyword)
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - ascii-string string
                    - domain-string string
                    - empty
                    - hex-string string
                    - ipv6-address string
            - wpp
                - initial
                    - app-profile string
                    - sla-profile string
                    - sub-profile string
                - portal
                    - name string
                    - portal-group string
                    - router-instance (keyword | number)
                - restore-to-initial-on-disconnect keyword
        - mask type keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - prefix
                - length number
                - string string
            - suffix
                - length number
                - string string
        - match-list keyword
    - ppp
        - host string
            - access-loop-encapsulation
                - apply-groups reference
                - apply-groups-exclude reference
                - encap-offset
                    - type keyword
                - rate-down number
            - access-loop-information
                - circuit-id
                    - ascii-string string
                    - use-sap-id
                - remote-id
                    - ascii-string string
                    - use-mac-address
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - authentication
                - gx-policy string
                - nasreq-auth-policy string
                - padi-auth-policy string
                - pre-auth-policy string
                - radius-auth-policy string
                - user-db string
            - host-identification
                - circuit-id
                    - ascii-string string
                    - hex-string string
                - derived-id string
                - encap-tag-range
                    - from string
                    - to string
```


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configure subscriber-mgmt local-user-db ppp host host-identification encap-tag-separate-range

```
                  - encap-tag-separate-range
                     - inner
                        - end number
                        - start number
                     - outer
                        - end number
                        - start number
                  - mac string
                  - remote-id
                     - ascii-string string
                     - hex-string string
                  - sap-id string
                  - service-name string
                  - user-name
                     - format keyword
                     - name string
               - identification
                  - ancp-string string
                  - app-profile-string string
                  - category-map-name string
                  - int-dest-id string
                  - option-number number
                  - sla-profile-string string
                  - spi-sharing-group-id number
                  - sub-profile-string string
                  - subscriber-id string
               - ipv4
                  - address
                     - gi-address keyword
                     - ip-address string
                     - pool
                        - delimiter string
                        - primary string
                        - secondary string
                     - prefix-length number
                     - use-pool-from-client
                        - delimiter string
                  - ignore-df-bit boolean
                  - option (number | keyword)
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - ascii-string string
                     - duration number
                     - empty
                     - hex-string string
                     - ipv4-address string
                     - netbios-node-type keyword
               - ipv6
                  - address string
                  - address-pool string
                  - delegated-prefix string
                  - delegated-prefix-length number
                  - delegated-prefix-pool string
                  - force-ipv6cp boolean
                  - option (number | keyword)
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - hex-string string
                     - ipv6-address string
                  - router-advertisement-policy string
                  - slaac-prefix string
                  - slaac-prefix-pool string
                  - timers
                     - preferred-lifetime (number | keyword)
```


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```
                    - rebind number
                    - renew number
                    - valid-lifetime (number | keyword)
                - l2tp
                  - group
                    - name string
                    - service-id number
                - lns-interface
                  - name string
                  - service-id number
                - mld-import string
                - msap-defaults
                  - group-interface
                    - name string
                    - prefix keyword
                    - suffix keyword
                  - policy string
                  - service number
                - pado-delay number
                - password
                  - chap string
                  - ignore
                  - pap string
                - ppp-policy-parameters
                  - keepalive
                    - hold-up-multiplier number
                    - interval number
                  - max-sessions-per-mac number
                - radius-accounting-policy
                  - duplicate string
                  - name string
                - retail-service-id number
                - rip-policy string
                - steering-profile string
                - to-client-options
                  - ipv6-option (number | keyword)
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - ascii-string string
                    - domain-string string
                    - empty
                    - hex-string string
                    - ipv6-address string
            - mask type keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - prefix
                  - length number
                  - string string
                - suffix
                  - length number
                  - string string
            - match-list keyword
    - mld-policy string
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
        - egress-rate-modify
            - agg-rate
            - scheduler string
        - fast-leave boolean
        - import-policy reference
        - maximum-number-group-sources number
        - maximum-number-groups number
```


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configure subscriber-mgmt mld-policy maximum-number-sources

```
        - maximum-number-sources number
        - query-interval number
        - query-last-member-interval number
        - query-response-interval number
        - redirection-policy reference
        - replication keyword
        - router-alert-check boolean
        - static
          - group string
            - apply-groups reference
            - apply-groups-exclude reference
            - source string
            - starg
        - use-multicast-destination-mac boolean
        - version keyword
    - msap-policy string
        - apply-groups reference
        - apply-groups-exclude reference
        - cpu-protection
          - ip-src-monitoring
          - mac-monitoring
          - policy-id reference
        - description string
        - dist-cpu-protection string
        - ies-vprn-only-sap-parameters
          - anti-spoof keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - egress
            - qos
              - policy-name reference
          - ingress
            - qos
              - policy-name reference
              - queuing-type keyword
        - igmp-host-tracking
          - expiry-time number
          - import-policy reference
          - maximum-number-group-sources number
          - maximum-number-groups number
          - maximum-number-sources number
        - lag-link-map-profile number
        - sticky-msaps boolean
        - sticky-msaps-idle-timeout number
        - sub-sla-mgmt
          - defaults
            - app-profile reference
            - int-dest-id
              - string string
              - top-q-tag
            - sla-profile reference
            - sub-profile reference
            - subscriber-id
              - auto-id
              - sap-id
              - string string
          - single-sub-parameters
            - non-sub-traffic-profiles
              - app-profile reference
              - sla-profile reference
              - sub-profile reference
              - subscriber-id string
            - profiled-traffic-only boolean
          - sub-ident-policy reference
```


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configure subscriber-mgmt msap-policy sub-sla-mgmt subscriber-limit

```
            - subscriber-limit (keyword | number)
        - vpls-only-sap-parameters
            - apply-groups reference
            - apply-groups-exclude reference
            - arp-host
                - host-limit number
                - min-auth-interval number
            - arp-reply-agent keyword
            - dhcp
                - lease-populate number
                - option-82
                    - action keyword
                    - circuit-id keyword
                    - remote-id
                        - mac
                        - string string
                    - vendor-specific-option
                        - client-mac-address boolean
                        - sap-id boolean
                        - service-id boolean
                        - string string
                        - system-id boolean
                - proxy-server
                    - admin-state keyword
                    - emulated-server string
                    - lease-time
                        - radius-override boolean
                        - value number
            - egress
                - qos
                    - policy-name reference
            - igmp-snooping
                - fast-leave boolean
                - import-policy reference
                - maximum-number-groups (keyword | number)
                - mcac
                    - bandwidth
                        - mandatory (number | keyword)
                        - total (number | keyword)
                    - interface-policy reference
                    - mc-constraints
                        - level number
                            - apply-groups reference
                            - apply-groups-exclude reference
                            - bandwidth number
                        - number-down number
                            - apply-groups reference
                            - apply-groups-exclude reference
                            - level number
                        - use-lag-port-weight boolean
                    - policy reference
                - mvr
                    - from-vpls reference
                - query-interval number
                - query-last-member-interval number
                - query-response-interval number
                - robust-count number
                - send-queries boolean
                - version keyword
            - ingress
                - qos
                    - policy-name reference
                    - queuing-type keyword
            - mac-da-hashing boolean
```


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configure subscriber-mgmt msap-policy vpls-only-sap-parameters split-horizon-group

```
            - split-horizon-group string
      - pfcp
         - association string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - association-release-timeout (keyword | number)
            - bfd-expedited-path-down boolean
            - description string
            - heartbeat
               - interval number
               - retries number
               - timeout number
            - interface
               - name string
               - router-instance string
            - nat
               - nat-group reference
               - wlan-gw-group reference
            - node-id
               - fqdn string
               - use-ip-address
            - path-restoration-time number
            - peer
               - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
            - python-policy reference
            - tx
               - retries number
               - timeout number
               - ttl number
      - pim-policy string
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
      - ppp-policy string
         - allow-same-circuit-id-for-dhcp boolean
         - apply-groups reference
         - apply-groups-exclude reference
         - cookies boolean
         - default-pap-password string
         - default-user-name string
         - description string
         - force-ppp-mtu-gt-1492 boolean
         - ipcp-subnet-negotiation boolean
         - keepalive
            - hold-up-multiplier number
            - interval number
         - lcp-ignore-identifier boolean
         - lcp-ignore-magic-numbers boolean
         - max-sessions-per-cid
            - allow-sessions-without-cid boolean
            - limit number
         - max-sessions-per-mac number
         - mlppp
            - accept-mrru boolean
            - apply-groups reference
            - apply-groups-exclude reference
            - endpoint
               - ip (ipv4-address | keyword)
               - mac (mac-address | keyword)
            - short-sequence-numbers boolean
         - ncp-renegotiation keyword
         - pado-ac-name string
         - pado-delay number
```


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configure subscriber-mgmt ppp-policy ppp-authentication

```
        - ppp-authentication keyword
        - ppp-chap-challenge-length
          - max number
          - min number
        - ppp-initial-delay boolean
        - ppp-mtu number
        - ppp-options
          - custom-option protocol keyword option-number number
            - address string
            - apply-groups reference
            - apply-groups-exclude reference
            - ascii-string string
            - empty
            - hex-string string
        - re-establish-session boolean
        - reject-unconfigured-ncp boolean
        - reply-on-padt boolean
        - session-timeout number
        - sid-allocation keyword
        - unique-sid keyword
    - pppoe-client-policy string
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
        - keepalive
          - hold-up-multiplier number
          - interval number
        - mru number
        - mtu number
        - python-policy reference
        - restart-backoff
          - initial-time number
          - max-time number
        - stack
          - ipv4 boolean
          - ipv6-slaac boolean
    - radius-accounting-policy string
        - acct-tunnel-connection-fmt string
        - apply-groups reference
        - apply-groups-exclude reference
        - custom-record
          - apply-groups reference
          - apply-groups-exclude reference
          - queue number
            - apply-groups reference
            - apply-groups-exclude reference
            - e-counters
              - in-profile-octets-discarded-count boolean
              - in-profile-octets-forwarded-count boolean
              - in-profile-packets-discarded-count boolean
              - in-profile-packets-forwarded-count boolean
              - out-profile-octets-discarded-count boolean
              - out-profile-octets-forwarded-count boolean
              - out-profile-packets-discarded-count boolean
              - out-profile-packets-forwarded-count boolean
            - i-counters
              - all-octets-offered-count boolean
              - all-packets-offered-count boolean
              - high-octets-discarded-count boolean
              - high-octets-offered-count boolean
              - high-packets-discarded-count boolean
              - high-packets-offered-count boolean
              - in-profile-octets-forwarded-count boolean
              - in-profile-packets-forwarded-count boolean
```


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configure subscriber-mgmt radius-accounting-policy custom-record queue i-counters low-octets-discarded-count

```
                - low-octets-discarded-count boolean
                - low-octets-offered-count boolean
                - low-packets-discarded-count boolean
                - low-packets-offered-count boolean
                - out-profile-octets-forwarded-count boolean
                - out-profile-packets-forwarded-count boolean
                - uncoloured-octets-offered-count boolean
                - uncoloured-packets-offered-count boolean
            - ref-queue
              - all
              - e-counters
                - in-profile-octets-discarded-count boolean
                - in-profile-octets-forwarded-count boolean
                - in-profile-packets-discarded-count boolean
                - in-profile-packets-forwarded-count boolean
                - out-profile-octets-discarded-count boolean
                - out-profile-octets-forwarded-count boolean
                - out-profile-packets-discarded-count boolean
                - out-profile-packets-forwarded-count boolean
              - i-counters
                - all-octets-offered-count boolean
                - all-packets-offered-count boolean
                - high-octets-discarded-count boolean
                - high-octets-offered-count boolean
                - high-packets-discarded-count boolean
                - high-packets-offered-count boolean
                - in-profile-octets-forwarded-count boolean
                - in-profile-packets-forwarded-count boolean
                - low-octets-discarded-count boolean
                - low-octets-offered-count boolean
                - low-packets-discarded-count boolean
                - low-packets-offered-count boolean
                - out-profile-octets-forwarded-count boolean
                - out-profile-packets-forwarded-count boolean
                - uncoloured-octets-offered-count boolean
                - uncoloured-packets-offered-count boolean
              - id reference
            - significant-change number
        - delay-start-time number
        - description string
        - host-accounting
            - admin-state keyword
            - interim-update boolean
        - include-radius-attribute
            - access-loop-options boolean
            - acct-authentic boolean
            - acct-delay-time boolean
            - acct-triggered-reason boolean
            - all-authorized-session-addresses boolean
            - apn boolean
            - bearer-fteid boolean
            - bonding-active-connections boolean
            - bonding-id boolean
            - brg-num-active-sessions boolean
            - called-station-id boolean
            - calling-station-id
              - type keyword
            - circuit-id boolean
            - delegated-ipv6-prefix boolean
            - detailed-acct-attributes boolean
            - dhcp-vendor-class-id boolean
            - error-code boolean
            - firewall-info boolean
            - framed-interface-id boolean
```


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configure subscriber-mgmt radius-accounting-policy include-radius-attribute framed-ip-address

```
            - framed-ip-address boolean
            - framed-ip-netmask boolean
            - framed-ipv6-prefix boolean
            - framed-ipv6-route boolean
            - framed-route boolean
            - imei boolean
            - imsi boolean
            - ipv6-address boolean
            - lanext-bridge-id boolean
            - lanext-device-type boolean
            - lanext-route-distinguisher boolean
            - lanext-route-target boolean
            - lanext-vni boolean
            - mac-address boolean
            - msisdn boolean
            - nas-identifier boolean
            - nas-port
              - bit-spec string
            - nas-port-id
              - prefix-string string
              - suffix keyword
            - nas-port-type
              - type (keyword | number)
            - nat-port-range boolean
            - remote-id boolean
            - sla-profile boolean
            - spi-sharing-id boolean
            - std-acct-attributes boolean
            - steering-profile boolean
            - sub-profile boolean
            - subscriber-id boolean
            - tunnel-client-attrs boolean
            - tunnel-server-attrs boolean
            - uli boolean
            - user-name boolean
            - v6-aggregate-stats boolean
            - wifi-num-attached-ues boolean
            - wifi-rssi boolean
            - wifi-ssid-vlan boolean
            - xconnect-tunnel-home-address boolean
        - mcs-interval
            - interval (keyword | number)
        - queue-instance-accounting
            - admin-state keyword
            - interim-update boolean
        - radius-server-policy reference
        - session-accounting
            - admin-state keyword
            - host-update boolean
            - interim-update boolean
        - session-id-format keyword
        - triggered-updates
            - gtp-change
              - s1-release boolean
              - service-request boolean
              - teidc-change boolean
              - teidu-change boolean
              - uli-change boolean
            - gtp-mobility boolean
        - update-interval
            - interval number
            - jitter (keyword | number)
    - radius-authentication-policy string
        - apply-groups reference
```


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configure subscriber-mgmt radius-authentication-policy apply-groups-exclude

```
        - apply-groups-exclude reference
        - description string
        - fallback
          - action
            - accept
            - user-db string
          - force-probing boolean
        - include-radius-attribute
          - access-loop-options boolean
          - acct-session-id
            - type keyword
          - apn boolean
          - called-station-id boolean
          - calling-station-id
            - type keyword
          - circuit-id boolean
          - dhcp-options boolean
          - dhcp-vendor-class-id boolean
          - dhcp6-options boolean
          - gprs-negotiated-qos-profile boolean
          - imei boolean
          - imsi boolean
          - mac-address boolean
          - msisdn boolean
          - nas-identifier boolean
          - nas-port
            - bit-spec string
          - nas-port-id
            - prefix-string string
            - suffix keyword
          - nas-port-type
            - type (keyword | number)
          - pppoe-service-name boolean
          - rat-type boolean
          - remote-id boolean
          - sap-session-index boolean
          - tunnel-server-attrs boolean
          - uli boolean
          - wifi-num-attached-ues boolean
          - wifi-ssid-vlan boolean
          - xconnect-tunnel-home-address boolean
        - password string
        - ppp-user-name
          - domain-name string
          - domain-operation keyword
        - pppoe-access-method keyword
        - radius-server-policy reference
        - re-authentication boolean
        - send-acct-stop-on-fail
          - on-accept-failure boolean
          - on-reject boolean
          - on-request-failure boolean
        - user-name
          - domain-name string
          - domain-operation keyword
          - format keyword
          - gtp-format keyword
          - mac-format string
      - rip-policy string
        - apply-groups reference
        - apply-groups-exclude reference
        - authentication-key string
        - authentication-type keyword
        - description string
```


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```
    - router-advertisement-policy string
      - apply-groups reference
      - apply-groups-exclude reference
      - force-mcast keyword
      - max-advertisement-interval number
      - min-advertisement-interval number
      - options
        - current-hop-limit number
        - dns
          - include-rdnss boolean
          - rdnss-lifetime (number | keyword)
        - managed-configuration boolean
        - mtu (number | keyword)
        - other-stateful-configuration boolean
        - reachable-time number
        - retransmit-timer number
        - router-lifetime (number | keyword)
      - prefix-options
        - stateful
          - auto-lifetimes boolean
          - on-link boolean
          - preferred-lifetime (number | keyword)
          - valid-lifetime (number | keyword)
        - stateless
          - on-link boolean
          - preferred-lifetime (number | keyword)
          - valid-lifetime (number | keyword)
    - sap-template string
      - apply-groups reference
      - apply-groups-exclude reference
      - cpu-protection
        - ip-src-monitoring
        - mac-monitoring
        - policy-id reference
      - description string
      - dist-cpu-protection reference
      - hold-time (number | keyword)
    - shcv-policy string
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - layer-3
        - source-ip-origin keyword
        - unnumbered-source-ip string
      - periodic
        - action keyword
        - admin-state keyword
        - interval number
        - retry-count number
        - timeout number
      - trigger
        - host-limit-exceeded
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - retry-count number
          - timeout number
        - inactivity
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - retry-count number
          - timeout number
        - ip-conflict
```


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configure subscriber-mgmt shcv-policy trigger ip-conflict admin-state

```
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - retry-count number
            - timeout number
         - mac-learning
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - retry-count number
            - timeout number
         - mobility
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - retry-count number
            - timeout number
      - vpls
         - source-ip string
         - source-mac string
   - sla-profile string
      - apply-groups reference
      - apply-groups-exclude reference
      - control
         - cups boolean
         - local boolean
      - credit-control-policy reference
      - def-instance-sharing keyword
      - description string
      - egress
         - bonding-selection
            - apply-groups reference
            - apply-groups-exclude reference
            - rate-thresholds
               - high number
               - low number
            - weight
               - change number
               - initial number
         - ip-filter reference
         - ipv6-filter reference
         - qos
            - hs-agg-rate number
            - qos-marking-from-sap boolean
            - sap-egress
               - overrides
                  - hs-queue-stat-mode keyword
                  - hs-wrr-group reference
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - hs-class-weight number
                     - rate (number | keyword)
                  - policer reference
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - cbs (number | keyword)
                     - mbs (number | keyword)
                     - packet-byte-offset number
                     - rate
                        - cir (number | keyword)
                        - pir (number | keyword)
                     - stat-mode keyword
                  - queue reference
                     - apply-groups reference
```


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configure subscriber-mgmt sla-profile egress qos sap-egress overrides queue apply-groups-exclude

```
                    - apply-groups-exclude reference
                    - avg-frame-overhead decimal-number
                    - cbs (number | keyword)
                    - high-prio-only (number | keyword)
                    - hs-class-weight number
                    - hs-wred-queue
                      - policy reference
                    - hs-wrr-weight number
                    - mbs (number | keyword)
                    - rate
                      - cir (number | keyword)
                      - pir (number | keyword)
                    - stat-mode keyword
                - policy-name reference
                - port-parent-location keyword
            - scheduler-policy
                - overrides
                  - scheduler reference
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - rate
                      - cir (number | keyword)
                      - pir (number | keyword)
                - policy-name reference
            - use-ingress-l2tp-dscp boolean
        - report-rate
            - agg-rate
            - policer number
            - pppoe-actual-rate
            - rfc5515-actual-rate
            - scheduler string
    - host-limits
        - ipv4
            - arp number
            - dhcp number
            - overall number
            - ppp number
        - ipv6
            - overall number
            - pd-ipoe-dhcp number
            - pd-overall number
            - pd-ppp-dhcp number
            - wan-ipoe-dhcp number
            - wan-ipoe-slaac number
            - wan-overall number
            - wan-ppp-dhcp number
            - wan-ppp-slaac number
        - lac-overall number
        - overall number
        - remove-oldest boolean
    - idle-timeout
        - apply-groups reference
        - apply-groups-exclude reference
        - category reference
            - action keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - timeout number
        - category-map-name reference
    - ingress
        - ip-filter reference
        - ipv6-filter reference
        - qos
            - sap-ingress
```


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configure subscriber-mgmt sla-profile ingress qos sap-ingress overrides

```
                  - overrides
                     - policer reference
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - cbs (number | keyword)
                        - mbs (number | keyword)
                        - packet-byte-offset number
                        - rate
                           - cir (number | keyword)
                           - pir (number | keyword)
                        - stat-mode keyword
                     - queue reference
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - cbs (number | keyword)
                        - high-prio-only (number | keyword)
                        - mbs (number | keyword)
                        - rate
                           - cir (number | keyword)
                           - pir (number | keyword)
                        - stat-mode keyword
                  - policy-name reference
                  - queuing-type keyword
            - report-rate
               - agg-rate
               - policer number
               - pppoe-actual-rate
               - rfc5515-actual-rate
               - scheduler string
         - one-time-http-redirection
            - ip-filter reference
         - pfcp-mappings
            - second-level-flow-rate keyword
            - session-qer
               - downlink
                  - aggregate-rate
                  - arbiter string
                  - policer number
                  - queue number
                  - scheduler string
               - uplink
                  - arbiter string
                  - policer number
                  - queue number
                  - scheduler string
         - session-limits
            - ipoe number
            - l2tp
               - lns number
               - lts number
               - overall number
            - overall number
            - pppoe
               - lac number
               - local number
               - overall number
      - steering-profile string
         - access
            - router-instance string
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - network
            - next-hop string
```


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configure subscriber-mgmt steering-profile network router-instance

```
            - router-instance string
      - sub-ident-policy string
         - app-profile-map
            - entry string
               - app-profile reference
               - apply-groups reference
               - apply-groups-exclude reference
            - use-direct-map-as-default boolean
         - apply-groups reference
         - apply-groups-exclude reference
         - description string
         - primary
            - admin-state keyword
            - script-url string
         - secondary
            - admin-state keyword
            - script-url string
         - sla-profile-map
            - entry string
               - apply-groups reference
               - apply-groups-exclude reference
               - sla-profile reference
            - use-direct-map-as-default boolean
         - strings-from-option number
         - sub-profile-map
            - entry string
               - apply-groups reference
               - apply-groups-exclude reference
               - sub-profile reference
            - use-direct-map-as-default boolean
         - tertiary
            - admin-state keyword
            - script-url string
      - sub-mcac-policy string
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
         - bandwidth
            - mandatory (number | keyword)
            - total (number | keyword)
         - description string
      - sub-profile string
         - accounting-policy reference
         - accu-stats-policy reference
         - ancp
            - ancp-policy reference
            - apply-groups reference
            - apply-groups-exclude reference
         - apply-groups reference
         - apply-groups-exclude reference
         - collect-stats boolean
         - control
            - cups boolean
            - local boolean
         - description string
         - egress
            - lag-per-link-hash
               - apply-groups reference
               - apply-groups-exclude reference
               - class number
               - weight number
            - qos
               - agg-rate
                  - adaptation-rule keyword
```


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configure subscriber-mgmt sub-profile egress qos agg-rate burst-limit

```
                  - burst-limit (number | keyword)
                  - min-resv-bw number
                  - queue-frame-based-accounting boolean
                  - rate number
               - encap-offset
                  - type keyword
               - hs-agg-rate number
               - hs-low-burst-max-class number
               - hs-min-resv-bw number
               - policer-control-policy
                  - overrides
                     - root
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - max-rate (number | keyword)
                        - priority-mbs-thresholds
                           - min-thresh-separation (number | keyword)
                           - priority number
                              - apply-groups reference
                              - apply-groups-exclude reference
                              - mbs-contribution (number | keyword)
                  - policy-name reference
               - scheduler-policy
                  - overrides
                     - scheduler reference
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - rate
                           - cir (number | keyword)
                           - pir (number | keyword)
                  - policy-name reference
         - firewall-policy reference
         - host-limits
            - ipv4
               - arp number
               - dhcp number
               - overall number
               - ppp number
            - ipv6
               - overall number
               - pd-ipoe-dhcp number
               - pd-overall number
               - pd-ppp-dhcp number
               - wan-ipoe-dhcp number
               - wan-ipoe-slaac number
               - wan-overall number
               - wan-ppp-dhcp number
               - wan-ppp-slaac number
            - lac-overall number
            - overall number
         - host-tracking-policy reference
         - hs-sla-mode keyword
         - igmp-policy reference
         - ingress
            - qos
               - policer-control-policy
                  - overrides
                     - root
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - max-rate (number | keyword)
                        - priority-mbs-thresholds
                           - min-thresh-separation (number | keyword)
                           - priority number
```


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configure subscriber-mgmt sub-profile ingress qos policer-control-policy overrides root priority-mbs-thresholds priority apply-groups

```
                                  - apply-groups reference
                                  - apply-groups-exclude reference
                                  - mbs-contribution (number | keyword)
                        - policy-name reference
                     - scheduler-policy
                        - overrides
                           - scheduler reference
                              - apply-groups reference
                              - apply-groups-exclude reference
                              - rate
                                 - cir (number | keyword)
                                 - pir (number | keyword)
                        - policy-name reference
                  - mld-policy reference
                  - nat
                     - access-mode keyword
                     - allow-bypass boolean
                     - policy reference
                     - prefix-list reference
                  - pim-policy reference
                  - preference number
                  - radius-accounting
                     - policy reference
                     - session-optimized-stop boolean
                  - secondary-shaper-hashing boolean
                  - session-limits
                     - ipoe number
                     - l2tp
                        - lns number
                        - lts number
                        - overall number
                     - overall number
                     - pppoe
                        - lac number
                        - local number
                        - overall number
                  - sla-profile-map
                     - entry string
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - sla-profile reference
                     - use-direct-map-as-default boolean
                  - sub-mcac-policy reference
                  - upnp-policy reference
                  - volume-stats-type keyword
                  - vport-hashing boolean
               - subscriber-interface-statistics
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
               - svlan-statistics
                  - admin-state keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
               - system-behavior
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - legacy-dns-nbns boolean
               - up-resiliency
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - fate-sharing-group-template string
                     - apply-groups reference
                     - apply-groups-exclude reference
```


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```
            - description string
            - gratuitous-arp keyword
            - path-restoration-state keyword
            - redundant-interface
               - name string
               - service string
            - uplink-forwarding-while-standby boolean
      - vrgw
         - apply-groups reference
         - apply-groups-exclude reference
         - brg-profile string
            - apply-groups reference
            - apply-groups-exclude reference
            - connectivity-verification
               - admin-state keyword
               - count number
               - retry-time number
               - timeout number
            - description string
            - hold-time number
            - home-pool
               - lease-time number
               - option (number | keyword)
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - ascii-string string
                  - duration number
                  - empty
                  - hex-string string
                  - ipv4-address string
                  - netbios-node-type keyword
               - standby-ip-lifetime number
               - subnet
                  - end string
                  - prefix string
                  - start string
            - initial-hold-time number
            - radius-authentication
               - password string
               - server-policy reference
            - radius-proxy-server string name string
            - sla-profile-string string
            - sub-profile-string string
            - uplink-initial-wait number
         - lanext
            - apply-groups reference
            - apply-groups-exclude reference
            - router-target-as-number number
      - wlan-gw
         - apply-groups reference
         - apply-groups-exclude reference
         - queries
            - apply-groups reference
            - apply-groups-exclude reference
            - tunnel string
               - access-point-mac-address-learning-status keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - calculate-counts boolean
               - encapsulation
                  - gre boolean
                  - l2 boolean
                  - l2tp boolean
                  - vxlan boolean
```


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```
            - l2
              - inner-vlan number
              - outer-vlan number
              - sap string
            - l3
              - address-type keyword
              - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
              - remote-address (ipv4-address-no-zone | ipv6-address-no-zone)
              - router-instance string
            - ues
              - maximum number
              - minimum number
              - state
                - cross-connect boolean
                - dsm boolean
                - esm boolean
                - l2 boolean
                - migrant boolean
        - ue string
            - address
              - dhcp6-na string
              - ipv4 string
              - slaac string
              - type keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - bridge-domain number
            - connection-state
              - already-signed-in boolean
              - authorized-only boolean
              - cross-connect boolean
              - data-triggered boolean
              - delete-pending boolean
              - dhcp-triggered boolean
              - dsm boolean
              - esm boolean
              - gtp-authorized boolean
              - ip-assigned boolean
              - ip-assigned-authorized boolean
              - l2 boolean
              - portal boolean
            - mac-address string
            - soft-quota-exhausted boolean
            - tunnel
              - encapsulation keyword
              - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
              - remote-address (ipv4-address-no-zone | ipv6-address-no-zone)
              - router-instance string
            - vlan number
            - wlan-gw-group
              - id number
              - member number
    - virtual-chassis-identifier string
```


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3.45.1 subscriber-mgmt command descriptions

subscriber-mgmt

Synopsis	Enter the **subscriber-mgmt** context
Context	**configure** subscriber-mgmt
Tree	subscriber-mgmt
Description	Commands in this context configure subscriber management attributes, policies, and profiles.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accu-stats-policy [name] *string*

Synopsis	Enter the **accu-stats-policy** list instance
Context	**configure** subscriber-mgmt accu-stats-policy *string*
Tree	accu-stats-policy
Description	Commands in this context configure a storage policy for cumulative statistics for subscribers. The policy defines the direction for the policer or the queue to be stored. The policy stores subscriber statistics even if the subscriber session has ended. The subscriber statistics can be viewed even if the subscriber is offline. When the subscriber session ends, the statistics are added to the past statistics stored in memory so that all previous session statistics are accumulated. The accumulated statistics are not persistent; they are only stored in memory and reset to zero when the chassis reboots.
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Policy name
Context	**configure** subscriber-mgmt accu-stats-policy *string*
Tree	accu-stats-policy
String Length	1 to 32

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt accu-stats-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress [type] *keyword* id *number*

Synopsis	Add a list entry for **egress**
Context	**configure** subscriber-mgmt accu-stats-policy *string* egress *keyword* id *number*
Tree	egress
Max. Instances	4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**type**] *keyword*

Synopsis	Type
Context	**configure** subscriber-mgmt accu-stats-policy *string* egress *keyword* id *number*
Tree	egress
Options	queue, policer
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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id *number*

Synopsis	Queue or policer ID
Context	**configure** subscriber-mgmt accu-stats-policy *string* egress *keyword* id *number*
Tree	egress
Range	1 to 63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress [type] *keyword* id *number*

Synopsis	Add a list entry for **ingress**
Context	**configure** subscriber-mgmt accu-stats-policy *string* ingress *keyword* id *number*
Tree	ingress
Max. Instances	4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**type**] *keyword*

Synopsis	Type
Context	**configure** subscriber-mgmt accu-stats-policy *string* ingress *keyword* id *number*
Tree	ingress
Options	queue, policer
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

id *number*

Synopsis	Queue or policer ID
Context	**configure** subscriber-mgmt accu-stats-policy *string* ingress *keyword* id *number*
Tree	ingress
Range	1 to 63

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp

Synopsis	Enter the **ancp** context
Context	**configure** subscriber-mgmt ancp
Tree	ancp
Description	Commands in this context configure Access Node Control Protocol (ANCP) settings.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-policy [name] *string*

Synopsis	Enter the **ancp-policy** list instance
Context	**configure** subscriber-mgmt ancp ancp-policy *string*
Tree	ancp-policy
Description	Commands in this context configure the specified ANCP policy, which can be associated with either an ANCP string (static) or a subscriber-profile (dynamic), and define the behavior of hosts belonging to these profiles. ANCP policies control rates and subscribers based on port-up/port-down messages from the access node. When configured, the node stops SHCV to a host that is part of a port that is down (by port-down message). When a port-up message is received for the port that was down, the node initiates the SHCV process immediately to verify connectivity. When ANCP is used with ESM, all hosts of a subscriber are updated with the ANCP string last associated with the subscriber.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Policy name
Context	**configure** subscriber-mgmt ancp ancp-policy *string*
Tree	ancp-policy
String Length	1 to 32

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the **egress** context
Context	**configure** subscriber-mgmt ancp ancp-policy *string* egress
Tree	egress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate-adjustment *number*

Synopsis	Rate adjustment for the scheduler
Context	**configure** subscriber-mgmt ancp ancp-policy *string* egress rate-adjustment *number*
Tree	rate-adjustment
Description	This command configures the rate adjustment for the scheduler. This setting is used when the rate returned by the DSLAM is calculated with a different encapsulation than the SR node. The node adjusts the rate by the percentage specified as: DSLAM_RATE * (adjustment rate)/100 — (rate reduction)
Range	1 to 200
Units	percent
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate-modify

Synopsis	Enter the **rate-modify** context
Context	**configure** subscriber-mgmt ancp ancp-policy *string* egress rate-modify
Tree	rate-modify
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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agg-rate

Synopsis	Maximum total rate for all subscriber egress queues
Context	**configure** subscriber-mgmt ancp ancp-policy *string* egress rate-modify agg-rate
Tree	agg-rate
Description	This command specifies the maximum total rate for all subscriber egress queues for each subscriber associated with the policy.
Notes	The following elements are part of a choice: **agg-rate** or **scheduler**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler *string*

Synopsis	Scheduler to be applied for rate modification
Context	**configure** subscriber-mgmt ancp ancp-policy *string* egress rate-modify scheduler *string*
Tree	scheduler
String Length	1 to 32
Notes	The following elements are part of a choice: **agg-rate** or **scheduler**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate-monitor

Synopsis	Enter the **rate-monitor** context
Context	**configure** subscriber-mgmt ancp ancp-policy *string* egress rate-monitor
Tree	rate-monitor
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

alarm *boolean*

Synopsis	Generate SNMP notification when monitor event is raised
Context	**configure** subscriber-mgmt ancp ancp-policy *string* egress rate-monitor alarm *boolean*
Tree	alarm
Description	When configured to **true**, the system generates an alarm (trap) to the management system including the rate, the ANCP policy name, and the ANCP string when the monitored rate is below the configured rate.

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When configured to **false**, no alarm is generated.

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate *number*

Synopsis	Rate below which the system generates an event
Context	**configure** subscriber-mgmt ancp ancp-policy *string* egress rate-monitor rate *number*
Tree	rate
Range	1 to 4294967295
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate-reduction *number*

Synopsis	Constant rate reduction to specified DSLAM rate
Context	**configure** subscriber-mgmt ancp ancp-policy *string* egress rate-reduction *number*
Tree	rate-reduction
Description	This command configures a constant rate reduction to the rate specified by the DSLAM. This setting is used if the node must adjust the rate to a value that is offset (for example by a fixed multicast dedicated bandwidth) compared to the total available on the DSLAM. The rate is calculated as: DSLAM_RATE * (adjustment rate)/100 — (rate reduction)
Range	1 to 4294967295
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the **ingress** context
Context	**configure** subscriber-mgmt ancp ancp-policy *string* ingress
Tree	ingress
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate-adjustment *number*

Synopsis	Rate adjustment for the scheduler
Context	**configure** subscriber-mgmt ancp ancp-policy *string* ingress rate-adjustment *number*
Tree	rate-adjustment
Description	This command configures the rate adjustment for the scheduler. This setting is used when the rate returned by the DSLAM is calculated with a different encapsulation than the SR node. The node adjusts the rate by the percentage specified as: DSLAM_RATE * (adjustment rate)/100 — (rate reduction)
Range	1 to 200
Units	percent
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate-modify

Synopsis	Enter the **rate-modify** context
Context	**configure** subscriber-mgmt ancp ancp-policy *string* ingress rate-modify
Tree	rate-modify
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler *string*

Synopsis	Scheduler to be applied for rate modification
Context	**configure** subscriber-mgmt ancp ancp-policy *string* ingress rate-modify scheduler *string*
Tree	scheduler
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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rate-monitor

Synopsis	Enter the **rate-monitor** context
Context	**configure** subscriber-mgmt ancp ancp-policy *string* ingress rate-monitor
Tree	rate-monitor
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

alarm *boolean*

Synopsis	Generate SNMP notification when monitor event is raised
Context	**configure** subscriber-mgmt ancp ancp-policy *string* ingress rate-monitor alarm *boolean*
Tree	alarm
Description	When configured to **true**, the system generates an alarm (trap) to the management system including the rate, the ANCP policy name, and the ANCP string when the monitored rate is below the configured rate. When configured to **false**, no alarm is generated.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate *number*

Synopsis	Rate below which the system generates an event
Context	**configure** subscriber-mgmt ancp ancp-policy *string* ingress rate-monitor rate *number*
Tree	rate
Range	1 to 4294967295
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate-reduction *number*

Synopsis	Constant rate reduction to specified DSLAM rate
Context	**configure** subscriber-mgmt ancp ancp-policy *string* ingress rate-reduction *number*
Tree	rate-reduction

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Description	This command configures a constant rate reduction to the rate specified by the DSLAM. This setting is used if the node must adjust the rate to a value that is offset (for example by a fixed multicast dedicated bandwidth) compared to the total available on the DSLAM. The rate is calculated as: DSLAM_RATE * (adjustment rate)/100 — (rate reduction)
Range	1 to 4294967295
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

port-down

Synopsis	Enter the **port-down** context
Context	**configure** subscriber-mgmt ancp ancp-policy *string* port-down
Tree	port-down
Description	Commands in this context configure the actions taken on port-down.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suspend-shcv

Synopsis	Enable the **suspend-shcv** context
Context	**configure** subscriber-mgmt ancp ancp-policy *string* port-down suspend-shcv
Tree	suspend-shcv
Description	Commands in this context specify the configuration to suspend SHCV for the hosts defined with the ANCP policy.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

alarm *boolean*

Synopsis	Send an alarm before suspending SHCV
Context	**configure** subscriber-mgmt ancp ancp-policy *string* port-down suspend-shcv alarm *boolean*
Tree	alarm
Default	false

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-time *number*

Synopsis	Time that SHCV is suspended
Context	**configure** subscriber-mgmt ancp ancp-policy *string* port-down suspend-shcv hold-time *number*
Tree	hold-time
Description	This command configures the time that the node suspends SHCV. When unconfigured, SHCV is suspended until a port-up message is received.
Range	1 to 7200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-static-map

Synopsis	Enter the **ancp-static-map** context
Context	**configure** subscriber-mgmt ancp ancp-static-map
Tree	ancp-static-map
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

multi-service-site-entry [ancp-string] *string* customer-name *reference* customer-site-name *reference*

Synopsis	Enter the **multi-service-site-entry** list instance
Context	**configure** subscriber-mgmt ancp ancp-static-map multi-service-site-entry *string* customer-name *reference* customer-site-name *reference*
Tree	multi-service-site-entry
Description	Commands in this context configure the ANCP key mapping (usually the circuit ID of the DSLAM port) to a customer, site, and scheduler name when Multi-Service site (MSS) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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[**ancp-string**] *string*

Synopsis	ANCP string
Context	**configure** subscriber-mgmt ancp ancp-static-map multi-service-site-entry *string* customer-name *reference* customer-site-name *reference*
Tree	multi-service-site-entry
String Length	1 to 63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

customer-name *reference*

Synopsis	Customer ID
Context	**configure** subscriber-mgmt ancp ancp-static-map multi-service-site-entry *string* customer-name *reference* customer-site-name *reference*
Tree	multi-service-site-entry
Reference	**configure** service customer *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

customer-site-name *reference*

Synopsis	Service customer multi-service site name
Context	**configure** subscriber-mgmt ancp ancp-static-map multi-service-site-entry *string* customer-name *reference* customer-site-name *reference*
Tree	multi-service-site-entry
Reference	**configure** service customer *string* multi-service-site *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ancp-policy *reference*

Synopsis	ANCP policy name
Context	**configure** subscriber-mgmt ancp ancp-static-map multi-service-site-entry *string* customer-name *reference* customer-site-name *reference* ancp-policy *reference*
Tree	ancp-policy
Reference	**configure** subscriber-mgmt ancp ancp-policy *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-entry [ancp-string] *string* sap-id *string*

Synopsis	Enter the **sap-entry** list instance
Context	**configure** subscriber-mgmt ancp ancp-static-map sap-entry *string* sap-id *string*
Tree	sap-entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**ancp-string**] *string*

Synopsis	ANCP key name
Context	**configure** subscriber-mgmt ancp ancp-static-map sap-entry *string* sap-id *string*
Tree	sap-entry
String Length	1 to 63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id *string*

Synopsis	SAP ID
Context	**configure** subscriber-mgmt ancp ancp-static-map sap-entry *string* sap-id *string*
Tree	sap-entry
String Length	1 to 45
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-policy *reference*

Synopsis	ANCP policy name
Context	**configure** subscriber-mgmt ancp ancp-static-map sap-entry *string* sap-id *string* ancp-policy *reference*
Tree	ancp-policy
Reference	**configure** subscriber-mgmt ancp ancp-policy *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authentication-origin

Synopsis	Enter the **authentication-origin** context
Context	**configure** subscriber-mgmt authentication-origin
Tree	authentication-origin
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overrides

Synopsis	Enter the **overrides** context
Context	**configure** subscriber-mgmt authentication-origin overrides
Tree	overrides
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

priority [id] *number*

Synopsis	Enter the **priority** list instance
Context	**configure** subscriber-mgmt authentication-origin overrides priority *number*
Tree	priority

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Description	Commands in this context arrange the relative order of authentication priorities.
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	Authentication origin priority override
Context	**configure** subscriber-mgmt authentication-origin overrides priority *number*
Tree	priority
Description	This command configures the insert position of the authentication origin priority override.
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source *keyword*

Synopsis	Source of authentication priority
Context	**configure** subscriber-mgmt authentication-origin overrides priority *number* source *keyword*
Tree	source
Description	This command specifies the prioritization of authentication sources.
Options	python, diameter-gx, ludb, radius, diameter-nasreq, gtp, dhcp, local-address-assignment, pfcp, config
Notes	This element is mandatory.
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-sub-id

Synopsis	Enter the **auto-sub-id** context
Context	**configure** subscriber-mgmt auto-sub-id
Tree	auto-sub-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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implicit-generation *boolean*

Synopsis	Generate implicitly a subscriber ID when not provided
Context	**configure** subscriber-mgmt auto-sub-id implicit-generation *boolean*
Tree	implicit-generation
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-key *keyword*

Synopsis	Auto-generated subscriber ID key1 for IPoE hosts
Context	**configure** subscriber-mgmt auto-sub-id ipoe-key *keyword*
Tree	ipoe-key
Options	mac, sap-id, circuit-id, remote-id, dual-stack-remote-id, service-name
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-key *keyword*

Synopsis	Auto-generated subscriber identifier key1 for PPP hosts
Context	**configure** subscriber-mgmt auto-sub-id ppp-key *keyword*
Tree	ppp-key
Options	mac, sap-id, circuit-id, remote-id, session-id
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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bgp-peering-policy [name] *string*

Synopsis	Enter the **bgp-peering-policy** list instance
Context	**configure** subscriber-mgmt bgp-peering-policy *string*
Tree	bgp-peering-policy
Max. Instances	255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	BGP peer policy name
Context	**configure** subscriber-mgmt bgp-peering-policy *string*
Tree	bgp-peering-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

advertise-inactive *boolean*

Synopsis	Advertise inactive BGP routes to other BGP peers
Context	**configure** subscriber-mgmt bgp-peering-policy *string* advertise-inactive *boolean*
Tree	advertise-inactive
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

aggregator-id-zero *boolean*

Synopsis	Add router ID to BGP aggregator path attribute
Context	**configure** subscriber-mgmt bgp-peering-policy *string* aggregator-id-zero *boolean*
Tree	aggregator-id-zero
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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as-override *boolean*

Synopsis	Replace the peer ASN with the local ASN in AS Path
Context	**configure** subscriber-mgmt bgp-peering-policy *string* as-override *boolean*
Tree	as-override
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

asn-4-byte *boolean*

Synopsis	Enable the use of 4-byte ASNs
Context	**configure** subscriber-mgmt bgp-peering-policy *string* asn-4-byte *boolean*
Tree	asn-4-byte
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authentication-key *string*

Synopsis	BGP authentication key for all peers
Context	**configure** subscriber-mgmt bgp-peering-policy *string* authentication-key *string*
Tree	authentication-key
String Length	1 to 370
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authentication-keychain *reference*

Synopsis	Keychain name used for the TCP session
Context	**configure** subscriber-mgmt bgp-peering-policy *string* authentication-keychain *reference*
Tree	authentication-keychain
Reference	**configure** system security keychains keychain *string*
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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bfd-liveness *boolean*

Synopsis	Enable BFD
Context	**configure** subscriber-mgmt bgp-peering-policy *string* bfd-liveness *boolean*
Tree	bfd-liveness
Description	When configured to **true**, this command enables the use of Bi-directional Forwarding Detection (BFD) to control the state of an ESM dynamic BGP peer that is set up with the BGP peering policy. The parameters used for the BFD session are configured in the BFD context of the group interface or retail subscriber interface. When configured to **false**, this command disables the use of BFD for new ESM dynamic BGP peers that are set up with the BGP peering policy.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-reflect *boolean*

Synopsis	Enable client reflection of routes to all client peers
Context	**configure** subscriber-mgmt bgp-peering-policy *string* client-reflect *boolean*
Tree	client-reflect
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cluster *string*

Synopsis	Cluster ID for route reflector server
Context	**configure** subscriber-mgmt bgp-peering-policy *string* cluster *string*
Tree	cluster
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

connect-retry *number*

Synopsis	BGP connect retry timer value
Context	**configure** subscriber-mgmt bgp-peering-policy *string* connect-retry *number*
Tree	connect-retry
Range	1 to 65535

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Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

damping *boolean*

Synopsis	Use BGP route damping for learned routes
Context	**configure** subscriber-mgmt bgp-peering-policy *string* damping *boolean*
Tree	damping
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt bgp-peering-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

export *reference*

Synopsis	Export route policies to control advertised routes
Context	**configure** subscriber-mgmt bgp-peering-policy *string* export *reference*
Tree	export
Reference	**configure** policy-options policy-statement *string*
Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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family

Synopsis	Enter the **family** context
Context	**configure** subscriber-mgmt bgp-peering-policy *string* family
Tree	family
Description	Commands in this context specify the BGP address families supported by the ESM dynamic BGP peers. When no address family is configured, the IPv4 address family is supported on BGPv4 peers and the IPv6 address family is supported on BGPv6 peers.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4 *boolean*

Synopsis	Advertise MP-BGP support for the IPv4 address family
Context	**configure** subscriber-mgmt bgp-peering-policy *string* family ipv4 *boolean*
Tree	ipv4
Default	false
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the IPv6 address family
Context	**configure** subscriber-mgmt bgp-peering-policy *string* family ipv6 *boolean*
Tree	ipv6
Default	false
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fast-external-failover *boolean*

Synopsis	Enable/disable BGP fast external failover.
Context	**configure** subscriber-mgmt bgp-peering-policy *string* fast-external-failover *boolean*
Tree	fast-external-failover
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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hold-time *number*

Synopsis	BGP hold time before closing connection
Context	**configure** subscriber-mgmt bgp-peering-policy *string* hold-time *number*
Tree	hold-time
Range	0 | 3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import *reference*

Synopsis	Import route policies to control advertised routes
Context	**configure** subscriber-mgmt bgp-peering-policy *string* import *reference*
Tree	import
Reference	**configure** policy-options policy-statement *string*
Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

keepalive *number*

Synopsis	BGP keepalive timer
Context	**configure** subscriber-mgmt bgp-peering-policy *string* keepalive *number*
Tree	keepalive
Range	0 to 21845
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Local IP address used when communicating with BGP peers

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Context	**configure** subscriber-mgmt bgp-peering-policy *string* local-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	local-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-as

Synopsis	Enter the **local-as** context
Context	**configure** subscriber-mgmt bgp-peering-policy *string* local-as
Tree	local-as
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

as-number *number*

Synopsis	AS number to be advertised to peer
Context	**configure** subscriber-mgmt bgp-peering-policy *string* local-as as-number *number*
Tree	as-number
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

private *boolean*

Synopsis	Hide local AS number in paths learned from peering
Context	**configure** subscriber-mgmt bgp-peering-policy *string* local-as private *boolean*
Tree	private
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-preference *number*

Synopsis	Local preference for incoming routes if not specified
Context	**configure** subscriber-mgmt bgp-peering-policy *string* local-preference *number*

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Tree	local-preference
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

loop-detect *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	**configure** subscriber-mgmt bgp-peering-policy *string* loop-detect *keyword*
Tree	loop-detect
Options	drop-peer, ignore-loop, off, discard-route
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

med-out *(number | keyword)*

Synopsis	Multi-Exit Discriminator (MED) advertising
Context	**configure** subscriber-mgmt bgp-peering-policy *string* med-out *(number | keyword)*
Tree	med-out
Max. Range	0 to 4294967295
Options	igp-cost
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-route-advertisement *number*

Synopsis	Minimum interval for prefix to be advertised to a peer
Context	**configure** subscriber-mgmt bgp-peering-policy *string* min-route-advertisement *number*
Tree	min-route-advertisement
Range	1 to 255
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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multihop *number*

Synopsis	TTL value entered in IP header of packets sent to peer
Context	**configure** subscriber-mgmt bgp-peering-policy *string* multihop *number*
Tree	multihop
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

next-hop-self *boolean*

Synopsis	Set net hop path attribute to self when advertising
Context	**configure** subscriber-mgmt bgp-peering-policy *string* next-hop-self *boolean*
Tree	next-hop-self
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

passive *boolean*

Synopsis	Wait passively for BGP peer to connect
Context	**configure** subscriber-mgmt bgp-peering-policy *string* passive *boolean*
Tree	passive
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer-as *number*

Synopsis	AS number for remote peer
Context	**configure** subscriber-mgmt bgp-peering-policy *string* peer-as *number*
Tree	peer-as
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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preference *number*

Synopsis	Route preference for routes learned via configured peer
Context	**configure** subscriber-mgmt bgp-peering-policy *string* preference *number*
Tree	preference
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-limits [family] *keyword*

Synopsis	Enter the **prefix-limits** list instance
Context	**configure** subscriber-mgmt bgp-peering-policy *string* prefix-limits *keyword*
Tree	prefix-limits
Description	Commands in this context limit the number of BGP routes per address family received from a BGP peer and define the actions when crossing the configured maximum.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**family**] *keyword*

Synopsis	Address family to which the limit applies
Context	**configure** subscriber-mgmt bgp-peering-policy *string* prefix-limits *keyword*
Tree	prefix-limits
Options	ipv4, ipv6
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

idle-timeout *number*

Synopsis	Time BGP peering remains idle before reconnecting
Context	**configure** subscriber-mgmt bgp-peering-policy *string* prefix-limits *keyword* idle-timeout *number*
Tree	idle-timeout
Description	This command configures the time in minutes before a BGP peer is automatically re-established after reaching the prefix limit.

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When unconfigured, the BGP peer stays down until the operator performs a reset. This command and **log-only** cannot be configured simultaneously.

Range	1 to 1024
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

log-only *boolean*

Synopsis	Send warning message at threshold instead of take-down
Context	**configure** subscriber-mgmt bgp-peering-policy *string* prefix-limits *keyword* log-only *boolean*
Tree	log-only
Description	When configured to **true**, the router disables the BGP session from being taken down upon reaching the prefix limit. Instead, only a warning message is sent when the limit is reached. A warning message is also sent when the configured threshold percentage of the limit is reached. This command and **idle-timeout** cannot be configured simultaneously. When configured to **false**, the router generates a log event and takes the BGP session down upon reaching the prefix limit.
Default	false
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum *number*

Synopsis	Maximum number of routes to be learned from a peer
Context	**configure** subscriber-mgmt bgp-peering-policy *string* prefix-limits *keyword* maximum *number*
Tree	maximum
Description	This command configures the maximum number of BGP routes of the specified address family that can be received from a peer before administrative action is taken. When **log-only** is unconfigured, the BGP session is taken down whenever the limit of any family is exceeded even if the limits of the other family has not been exceeded.
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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post-import *boolean*

Synopsis	Apply limit only to routes accepted by import policies
Context	**configure** subscriber-mgmt bgp-peering-policy *string* prefix-limits *keyword* post-import *boolean*
Tree	post-import
Description	When configured to **true**, the system limits the number of routes that are accepted by import policies. Routes rejected by import policies are not counted against the configured limit. When configured to **false**, the system limits the number of routes to all routes received from the peer.
Default	false
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

threshold *number*

Synopsis	Percentage threshold that triggers a warning message
Context	**configure** subscriber-mgmt bgp-peering-policy *string* prefix-limits *keyword* threshold *number*
Tree	threshold
Range	1 to 100
Default	90
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remove-private

Synopsis	Enable the **remove-private** context
Context	**configure** subscriber-mgmt bgp-peering-policy *string* remove-private
Tree	remove-private
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

limited *boolean*

Synopsis	Remove private AS numbers up to first public ASN encountered

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Context	**configure** subscriber-mgmt bgp-peering-policy *string* remove-private limited *boolean*
Tree	limited
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

send-communities

Synopsis	Enter the **send-communities** context
Context	**configure** subscriber-mgmt bgp-peering-policy *string* send-communities
Tree	send-communities
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

extended *boolean*

Synopsis	Send communities which includes VRF target handling
Context	**configure** subscriber-mgmt bgp-peering-policy *string* send-communities extended *boolean*
Tree	extended
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

standard *boolean*

Synopsis	Send standard communities that existed before VPRNs
Context	**configure** subscriber-mgmt bgp-peering-policy *string* send-communities standard *boolean*
Tree	standard
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ttl-security *number*

Synopsis	Minimum TTL value for incoming BGP packet
Context	**configure** subscriber-mgmt bgp-peering-policy *string* ttl-security *number*

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Tree	ttl-security
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Peer type
Context	**configure** subscriber-mgmt bgp-peering-policy *string* type *keyword*
Tree	type
Options	no-type, internal, external
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

category-map [category-map-name] *string*

Synopsis	Enter the **category-map** list instance
Context	**configure** subscriber-mgmt category-map *string*
Tree	category-map
Max. Instances	255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**category-map-name**] *string*

Synopsis	Category map name
Context	**configure** subscriber-mgmt category-map *string*
Tree	category-map
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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activity-threshold *number*

Synopsis	Threshold to determine whether an activity is ongoing
Context	**configure** subscriber-mgmt category-map *string* activity-threshold *number*
Tree	activity-threshold
Range	1 to 100000000
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

category [category-name] *string*

Synopsis	Enter the **category** list instance
Context	**configure** subscriber-mgmt category-map *string* category *string*
Tree	category
Max. Instances	16
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**category-name**] *string*

Synopsis	Category name
Context	**configure** subscriber-mgmt category-map *string* category *string*
Tree	category
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

credit-type-override *keyword*

Synopsis	Credit type override in category map
Context	**configure** subscriber-mgmt category-map *string* category *string* credit-type-override *keyword*
Tree	credit-type-override

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Options	volume, time
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-credit

Synopsis	Enter the **default-credit** context
Context	**configure** subscriber-mgmt category-map *string* category *string* default-credit
Tree	default-credit
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis	Default time credit
Context	**configure** subscriber-mgmt category-map *string* category *string* default-credit time *number*
Tree	time
Range	1 to 4294967295
Units	seconds
Notes	The following elements are part of a choice: **time** or **volume**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

volume

Synopsis	Enable the **volume** context
Context	**configure** subscriber-mgmt category-map *string* category *string* default-credit volume
Tree	volume
Notes	The following elements are part of a choice: **time** or **volume**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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unit *keyword*

Synopsis	Unit for the default volume credit
Context	**configure** subscriber-mgmt category-map *string* category *string* default-credit volume unit *keyword*
Tree	unit
Options	bytes, kilobytes, megabytes, gigabytes
Default	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Default volume credit
Context	**configure** subscriber-mgmt category-map *string* category *string* default-credit volume value *number*
Tree	value
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt category-map *string* category *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the **egress** context
Context	**configure** subscriber-mgmt category-map *string* category *string* egress
Tree	egress

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer *number*

Synopsis	Egress policers for this category
Context	**configure** subscriber-mgmt category-map *string* category *string* egress policer *number*
Tree	policer
Range	1 to 63
Max. Instances	63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue *number*

Synopsis	Egress queues for this category
Context	**configure** subscriber-mgmt category-map *string* category *string* egress queue *number*
Tree	queue
Range	1 to 8
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

exhausted-credit-service-level

Synopsis	Enter the **exhausted-credit-service-level** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level
Tree	exhausted-credit-service-level
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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egress

Synopsis	Enter the **egress** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress
Tree	egress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-filter

Synopsis	Enter the **ip-filter** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter
Tree	ip-filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number*
Tree	entry
Max. Instances	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	IP filter entry ID
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number*
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action

Synopsis	Enter the **action** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* action
Tree	action
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drop

Synopsis	Packets matching the filter entry are dropped
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* action drop
Tree	drop
Notes	The following elements are part of a choice: **drop**, **forward**, or **http-redirect**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

forward

Synopsis	Packets matching the filter entry are forwarded
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* action forward
Tree	forward
Notes	The following elements are part of a choice: **drop**, **forward**, or **http-redirect**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

http-redirect

Synopsis	Enable the **http-redirect** context

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Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* action http-redirect
Tree	http-redirect
Notes	The following elements are part of a choice: **drop**, **forward**, or **http-redirect**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-override *boolean*

Synopsis	Allow URL to be overridden by RADIUS/Diameter
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* action http-redirect allow-override *boolean*
Tree	allow-override
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

url *string*

Synopsis	URL that is used to redirect the packets
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* action http-redirect url *string*
Tree	url
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis	Enter the **match** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match
Tree	match
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dscp *keyword*

Synopsis	DSCP to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dst-port

Synopsis	Enter the **dst-port** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match dst-port
Tree	dst-port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

eq *number*

Synopsis	Port equal

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Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match dst-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gt *number*

Synopsis	Port greater than
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match dst-port gt *number*
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lt *number*

Synopsis	Port less than
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match dst-port lt *number*
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the **range** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match dst-port range
Tree	range

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Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the port range to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match dst-port range end *number*
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of the port range to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match dst-port range start *number*
Tree	start
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fragment *keyword*

Synopsis	Fragmentation to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match fragment *keyword*
Tree	fragment
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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icmp

Synopsis	Enter the **icmp** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match icmp
Tree	icmp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

code *number*

Synopsis	ICMP code to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match icmp code *number*
Tree	code
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	ICMP type to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match icmp type *number*
Tree	type
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-option

Synopsis	Enter the **ip-option** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match ip-option
Tree	ip-option
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mask *number*

Synopsis	IP option mask
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match ip-option mask *number*
Tree	mask
Range	0 to 255
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	First IP option value for the IP header
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match ip-option type *number*
Tree	type
Range	0 to 255
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

multiple-option *boolean*

Synopsis	Match the multiple option
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match multiple-option *boolean*
Tree	multiple-option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option-present *boolean*

Synopsis	Match the present option

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Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match option-present *boolean*
Tree	option-present
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

protocol *(number | keyword)*

Synopsis	IPv4 protocol to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match protocol *(number | keyword)*
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

src-ip *string*

Synopsis	Source IP address and mask to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match src-ip *string*
Tree	src-ip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

src-port

Synopsis	Enter the **src-port** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match src-port
Tree	src-port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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eq *number*

Synopsis	Port equal
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match src-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gt *number*

Synopsis	Port greater than
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match src-port gt *number*
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lt *number*

Synopsis	Port less than
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match src-port lt *number*
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the **range** context

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Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match src-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the port range to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match src-port range end *number*
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of the port range to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match src-port range start *number*
Tree	start
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tcp-flags

Synopsis	Enter the **tcp-flags** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match tcp-flags
Tree	tcp-flags
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ack *boolean*

Synopsis	Check for ACK bit
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match tcp-flags ack *boolean*
Tree	ack
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

syn *boolean*

Synopsis	Check for SYN bit
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ip-filter entry *number* match tcp-flags syn *boolean*
Tree	syn
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-filter

Synopsis	Enter the **ipv6-filter** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter
Tree	ipv6-filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number*
Tree	entry
Max. Instances	10

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	IP filter entry ID
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number*
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action

Synopsis	Enter the **action** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* action
Tree	action
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drop

Synopsis	Packets matching the filter entry are dropped
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* action drop
Tree	drop
Notes	The following elements are part of a choice: **drop** or **forward**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

forward

Synopsis	Packets matching the filter entry are forwarded

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Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* action forward
Tree	forward
Notes	The following elements are part of a choice: **drop** or **forward**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis	Enter the **match** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* match
Tree	match
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dscp *keyword*

Synopsis	DSCP to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* match dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dst-port

Synopsis	Enter the **dst-port** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* match dst-port
Tree	dst-port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

eq *number*

Synopsis	Port equal
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* match dst-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gt *number*

Synopsis	Port greater than
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* match dst-port gt *number*
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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lt *number*

Synopsis	Port less than
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* match dst-port lt *number*
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the **range** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* match dst-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the port range to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* match dst-port range end *number*
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of the port range to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* match dst-port range start *number*

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Tree	start
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

icmp

Synopsis	Enter the **icmp** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* match icmp
Tree	icmp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

code *number*

Synopsis	ICMP code to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* match icmp code *number*
Tree	code
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	ICMP type to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* match icmp type *number*
Tree	type
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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next-header *(number | keyword)*

Synopsis	IP protocol to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* match next-header *(number | keyword)*
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

src-ip *string*

Synopsis	Source IP address and mask as the match condition
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* match src-ip *string*
Tree	src-ip
Default	0::0 0::0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

src-port

Synopsis	Enter the **src-port** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* match src-port
Tree	src-port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

eq *number*

Synopsis	Port equal
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* match src-port eq *number*
Tree	eq

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Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gt *number*

Synopsis	Port greater than
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* match src-port gt *number*
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lt *number*

Synopsis	Port less than
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* match src-port lt *number*
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the **range** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* match src-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the port range to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* match src-port range end *number*
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of the port range to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* match src-port range start *number*
Tree	start
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tcp-flags

Synopsis	Enter the **tcp-flags** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* match tcp-flags
Tree	tcp-flags
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ack *boolean*

Synopsis	Check for ACK bit

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Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* match tcp-flags ack *boolean*
Tree	ack
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

syn *boolean*

Synopsis	Check for SYN bit
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level egress ipv6-filter entry *number* match tcp-flags syn *boolean*
Tree	syn
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the **ingress** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress
Tree	ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-filter

Synopsis	Enter the **ip-filter** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter
Tree	ip-filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [id] *number*

Synopsis	Enter the **entry** list instance

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Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number*
Tree	entry
Max. Instances	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	IP filter entry ID
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number*
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action

Synopsis	Enter the **action** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* action
Tree	action
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drop

Synopsis	Packets matching the filter entry are dropped
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* action drop
Tree	drop
Notes	The following elements are part of a choice: **drop**, **forward**, or **http-redirect**.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

forward

Synopsis	Packets matching the filter entry are forwarded
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* action forward
Tree	forward
Notes	The following elements are part of a choice: **drop**, **forward**, or **http-redirect**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

http-redirect

Synopsis	Enable the **http-redirect** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* action http-redirect
Tree	http-redirect
Notes	The following elements are part of a choice: **drop**, **forward**, or **http-redirect**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-override *boolean*

Synopsis	Allow URL to be overridden by RADIUS/Diameter
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* action http-redirect allow-override *boolean*
Tree	allow-override
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

url *string*

Synopsis	URL that is used to redirect the packets

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Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* action http-redirect url *string*
Tree	url
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis	Enter the **match** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match
Tree	match
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dscp *keyword*

Synopsis	DSCP to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef,

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	cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dst-ip *string*

Synopsis	Destination IP address and mask to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match dst-ip *string*
Tree	dst-ip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dst-port

Synopsis	Enter the **dst-port** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match dst-port
Tree	dst-port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

eq *number*

Synopsis	Port equal
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match dst-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gt *number*

Synopsis	Port greater than

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Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match dst-port gt *number*
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lt *number*

Synopsis	Port less than
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match dst-port lt *number*
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the **range** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match dst-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the port range to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match dst-port range end *number*
Tree	end
Range	0 to 65535

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of the port range to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match dst-port range start *number*
Tree	start
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fragment *keyword*

Synopsis	Fragmentation to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match fragment *keyword*
Tree	fragment
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

icmp

Synopsis	Enter the **icmp** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match icmp
Tree	icmp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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code *number*

Synopsis	ICMP code to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match icmp code *number*
Tree	code
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	ICMP type to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match icmp type *number*
Tree	type
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-option

Synopsis	Enter the **ip-option** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match ip-option
Tree	ip-option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mask *number*

Synopsis	IP option mask
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match ip-option mask *number*
Tree	mask
Range	0 to 255
Default	0

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	First IP option value for the IP header
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match ip-option type *number*
Tree	type
Range	0 to 255
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

multiple-option *boolean*

Synopsis	Match the multiple option
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match multiple-option *boolean*
Tree	multiple-option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option-present *boolean*

Synopsis	Match the present option
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match option-present *boolean*
Tree	option-present
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

protocol *(number | keyword)*

Synopsis	IPv4 protocol to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match protocol *(number | keyword)*

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Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

src-port

Synopsis	Enter the **src-port** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match src-port
Tree	src-port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

eq *number*

Synopsis	Port equal
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match src-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gt *number*

Synopsis	Port greater than
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match src-port gt *number*
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lt *number*

Synopsis	Port less than
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match src-port lt *number*
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the **range** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match src-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the port range to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match src-port range end *number*
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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start *number*

Synopsis	Lower bound of the port range to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match src-port range start *number*
Tree	start
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tcp-flags

Synopsis	Enter the **tcp-flags** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match tcp-flags
Tree	tcp-flags
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ack *boolean*

Synopsis	Check for ACK bit
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match tcp-flags ack *boolean*
Tree	ack
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

syn *boolean*

Synopsis	Check for SYN bit
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ip-filter entry *number* match tcp-flags syn *boolean*
Tree	syn
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ipv6-filter

Synopsis	Enter the **ipv6-filter** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter
Tree	ipv6-filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number*
Tree	entry
Max. Instances	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	IP filter entry ID
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number*
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action

Synopsis	Enter the **action** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* action
Tree	action

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drop

Synopsis	Packets matching the filter entry are dropped
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* action drop
Tree	drop
Notes	The following elements are part of a choice: **drop** or **forward**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

forward

Synopsis	Packets matching the filter entry are forwarded
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* action forward
Tree	forward
Notes	The following elements are part of a choice: **drop** or **forward**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis	Enter the **match** context

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Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* match
Tree	match
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dscp *keyword*

Synopsis	DSCP to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* match dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dst-ip *string*

Synopsis	Destination IP address and mask to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* match dst-ip *string*
Tree	dst-ip
Default	0::0 0::0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dst-port

Synopsis	Enter the **dst-port** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* match dst-port
Tree	dst-port
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

eq *number*

Synopsis	Port equal
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* match dst-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gt *number*

Synopsis	Port greater than
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* match dst-port gt *number*
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lt *number*

Synopsis	Port less than
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* match dst-port lt *number*
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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range

Synopsis	Enable the **range** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* match dst-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the port range to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* match dst-port range end *number*
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of the port range to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* match dst-port range start *number*
Tree	start
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

icmp

Synopsis	Enter the **icmp** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* match icmp

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Tree	icmp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

code *number*

Synopsis	ICMP code to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* match icmp code *number*
Tree	code
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	ICMP type to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* match icmp type *number*
Tree	type
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

next-header *(number | keyword)*

Synopsis	IP protocol to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* match next-header *(number | keyword)*
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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src-port

Synopsis	Enter the **src-port** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* match src-port
Tree	src-port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

eq *number*

Synopsis	Port equal
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* match src-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gt *number*

Synopsis	Port greater than
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* match src-port gt *number*
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lt *number*

Synopsis	Port less than
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* match src-port lt *number*

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Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the **range** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* match src-port range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the port range to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* match src-port range end *number*
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of the port range to match
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* match src-port range start *number*
Tree	start
Range	0 to 65535
Notes	This element is mandatory.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tcp-flags

Synopsis	Enter the **tcp-flags** context
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* match tcp-flags
Tree	tcp-flags
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ack *boolean*

Synopsis	Check for ACK bit
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* match tcp-flags ack *boolean*
Tree	ack
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

syn *boolean*

Synopsis	Check for SYN bit
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level ingress ipv6-filter entry *number* match tcp-flags syn *boolean*
Tree	syn
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pir *(number | keyword)*

Synopsis	PIR
Context	**configure** subscriber-mgmt category-map *string* category *string* exhausted-credit-service-level pir *(number | keyword)*
Tree	pir
Range	1 to 100000000

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Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the **ingress** context
Context	**configure** subscriber-mgmt category-map *string* category *string* ingress
Tree	ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer *number*

Synopsis	Ingress policers used in this category
Context	**configure** subscriber-mgmt category-map *string* category *string* ingress policer *number*
Tree	policer
Range	1 to 63
Max. Instances	63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue *number*

Synopsis	Ingress queues used in this category
Context	**configure** subscriber-mgmt category-map *string* category *string* ingress queue *number*
Tree	queue
Range	1 to 32
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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out-of-credit-action-override *keyword*

Synopsis	Out of credit action that is overridden in category map
Context	**configure** subscriber-mgmt category-map *string* category *string* out-of-credit-action-override *keyword*
Tree	out-of-credit-action-override
Options	continue, disconnect-host, block-category, change-service-level
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rating-group *number*

Synopsis	Rating group for this category
Context	**configure** subscriber-mgmt category-map *string* category *string* rating-group *number*
Tree	rating-group
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

credit-exhaust-threshold *number*

Synopsis	Percentage for credit exhaust threshold
Context	**configure** subscriber-mgmt category-map *string* credit-exhaust-threshold *number*
Tree	credit-exhaust-threshold
Range	50 to 100
Units	percent
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

credit-type *keyword*

Synopsis	Credit type
Context	**configure** subscriber-mgmt category-map *string* credit-type *keyword*
Tree	credit-type
Options	volume, time

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Default	volume
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt category-map *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gx-session-level-usage *boolean*

Synopsis	Allow Gx session level Usage Monitoring
Context	**configure** subscriber-mgmt category-map *string* gx-session-level-usage *boolean*
Tree	gx-session-level-usage
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

credit-control-policy [name] *string*

Synopsis	Enter the **credit-control-policy** list instance
Context	**configure** subscriber-mgmt credit-control-policy *string*
Tree	credit-control-policy
Max. Instances	255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Credit control policy name
Context	**configure** subscriber-mgmt credit-control-policy *string*

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Tree	credit-control-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-category-map *reference*

Synopsis	Default category map for this policy
Context	**configure** subscriber-mgmt credit-control-policy *string* default-category-map *reference*
Tree	default-category-map
Reference	**configure** subscriber-mgmt category-map *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt credit-control-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

error-handling-action *keyword*

Synopsis	Error handling action for the policy
Context	**configure** subscriber-mgmt credit-control-policy *string* error-handling-action *keyword*
Tree	error-handling-action
Options	continue, block
Default	continue
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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out-of-credit-action *keyword*

Synopsis	Action when out of credit is reached
Context	**configure** subscriber-mgmt credit-control-policy *string* out-of-credit-action *keyword*
Tree	out-of-credit-action
Options	continue, disconnect-host, block-category, change-service-level
Default	continue
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server

Synopsis	Enter the **server** context
Context	**configure** subscriber-mgmt credit-control-policy *string* server
Tree	server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

diameter *reference*

Synopsis	Diameter policy that specifies Diameter peers to use
Context	**configure** subscriber-mgmt credit-control-policy *string* server diameter *reference*
Tree	diameter
Reference	**configure** subscriber-mgmt diameter-gy-policy *string*
Notes	The following elements are part of a choice: **diameter** or **radius**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius

Synopsis	Use RADIUS servers in the authentication policy
Context	**configure** subscriber-mgmt credit-control-policy *string* server radius
Tree	radius
Notes	The following elements are part of a choice: **diameter** or **radius**.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

diameter-gx-policy [name] *string*

Synopsis	Enter the **diameter-gx-policy** list instance
Context	**configure** subscriber-mgmt diameter-gx-policy *string*
Tree	diameter-gx-policy
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Diameter application policy name
Context	**configure** subscriber-mgmt diameter-gx-policy *string*
Tree	diameter-gx-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt diameter-gx-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gx

Synopsis	Enter the **gx** context
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx

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Tree	gx
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

avp-subscription-id

Synopsis	Enter the **avp-subscription-id** context
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx avp-subscription-id
Tree	avp-subscription-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

origin *keyword*

Synopsis	Format of the Subscription-Id-Data AVP
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx avp-subscription-id origin *keyword*
Tree	origin
Options	subscriber-id, circuit-id, imsi, msisdn, imei, dual-stack-remote-id, mac, username, nas-port-id
Default	subscriber-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Format of the Subscription-Id-Type AVP
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx avp-subscription-id type *keyword*
Tree	type
Options	e164, imsi, nai, private
Default	private
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ccrt-replay

Synopsis	Enable the **ccrt-replay** context
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx ccrt-replay
Tree	ccrt-replay
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Time between consecutive CCR-T replay attempts
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx ccrt-replay interval *number*
Tree	interval
Range	60 to 86400
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-lifetime *number*

Synopsis	Maximum time that CCR-t messages are replayed
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx ccrt-replay max-lifetime *number*
Tree	max-lifetime
Description	This command specifies the maximum time that CCR-t messages for Diameter Gx sessions that belong to the Diameter application policy are replayed.
Range	1 to 24
Units	hours
Default	24
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

credit-mcs-interval *number*

Synopsis	Volume syncing interval for usage monitoring
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx credit-mcs-interval *number*
Tree	credit-mcs-interval

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Description	This command configures the MCS interval at which the accounting data of subscriber hosts is updated.
Range	5 to 60
Units	minutes
Default	10
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destination-realm-learning *boolean*

Synopsis	Learn the destination realm from the incoming messages
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx destination-realm-learning *boolean*
Tree	destination-realm-learning
Description	When configured to **true**, destination realm learning is enabled on the application level. The destination realm is a mandatory configuration parameter used in outgoing Credit Control Request messages (CCR). The configured destination realm is always used in the initial request (CCR-I) message. The consecutive request message of a Gx session can use the destination realm learned from the replies. When configured to **false**, destination realm learning is disabled and the configured destination realm is used in outgoing request messages.
Default	true
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

features

Synopsis	Enter the **features** context
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx features
Tree	features
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

extended-bandwidth *boolean*

Synopsis	Negotiate support for extended bandwidth AVPs

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Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx features extended-bandwidth *boolean*
Tree	extended-bandwidth
Description	When configured to **true**, negotiation occurs for the support of extended AVPs that are capable of supporting bandwidth values greater than (2^32 –1) b/s. The extended AVPs allow bitrates in kb/s and are as follows: • Extended-GBR-DL (AVP code 2850) • Extended-GBR-UL (AVP code 2851) • Extended-Max-Requested-BW-DL (AVP code 554) • Extended-Max-Requested-BW-UL (AVP code 555) • Extended-APN-AMBR-DL (AVP code 2848) • Extended-APN-AMBR-UL (AVP code 2849) When configured to **false**, the extended AVPs are not supported.
Default	false
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

include-avp

Synopsis	Enter the **include-avp** context
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp
Tree	include-avp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

an-gw-address *boolean*

Synopsis	Include the IP address of this gateway
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp an-gw-address *boolean*
Tree	an-gw-address
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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apn-ambr *boolean*

Synopsis	Include the APN aggregate maximum bitrate
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp apn-ambr *boolean*
Tree	apn-ambr
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

called-station-id *boolean*

Synopsis	Include the called station ID
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp called-station-id *boolean*
Tree	called-station-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

calling-station-id

Synopsis	Enable the **calling-station-id** context
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp calling-station-id
Tree	calling-station-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Format of the Calling-Station-ID AVP
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp calling-station-id type *keyword*
Tree	type
Options	sap-string, mac, sap-id, remote-id, llid
Default	sap-string
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-can-type *boolean*

Synopsis	Include the IP CAN type
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp ip-can-type *boolean*
Tree	ip-can-type
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

logical-access-id *boolean*

Synopsis	Include the logical access id
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp logical-access-id *boolean*
Tree	logical-access-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port

Synopsis	Enable the **nas-port** context
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp nas-port
Tree	nas-port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bit-spec *string*

Synopsis	NAS-Port AVP format
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp nas-port bit-spec *string*
Tree	bit-spec

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String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port-id

Synopsis	Enable the **nas-port-id** context
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp nas-port-id
Tree	nas-port-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-string *string*

Synopsis	Prefix string for NAS-Port-Id AVP
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp nas-port-id prefix-string *string*
Tree	prefix-string
String Length	1 to 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suffix

Synopsis	Enter the **suffix** context
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp nas-port-id suffix
Tree	suffix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id

Synopsis	Add Circuit ID as suffix
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp nas-port-id suffix circuit-id

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Tree	circuit-id
Notes	The following elements are part of a choice: **circuit-id**, **not-included**, **remote-id**, or **user-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

not-included

Synopsis	Do not add a suffix
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp nas-port-id suffix not-included
Tree	not-included
Notes	The following elements are part of a choice: **circuit-id**, **not-included**, **remote-id**, or **user-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id

Synopsis	Add Remote ID as suffix
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp nas-port-id suffix remote-id
Tree	remote-id
Notes	The following elements are part of a choice: **circuit-id**, **not-included**, **remote-id**, or **user-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-string *string*

Synopsis	Add a user configurable string as suffix
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp nas-port-id suffix user-string *string*
Tree	user-string
String Length	1 to 64
Notes	The following elements are part of a choice: **circuit-id**, **not-included**, **remote-id**, or **user-string**.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port-type

Synopsis	Enable the **nas-port-type** context
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp nas-port-type
Tree	nas-port-type
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	NAS-Port-Type AVP value
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp nas-port-type type *number*
Tree	type
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pdn-connection-id *boolean*

Synopsis	Include the PDN connection id
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp pdn-connection-id *boolean*
Tree	pdn-connection-id
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

physical-access-id *boolean*

Synopsis	Include the physical access ID
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp physical-access-id *boolean*

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Tree	physical-access-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rai *boolean*

Synopsis	Include the routing area identity
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp rai *boolean*
Tree	rai
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

rat-type *boolean*

Synopsis	Include the RAT type
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp rat-type *boolean*
Tree	rat-type
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sgsn-mcc-mnc *boolean*

Synopsis	Include the 3GPP-SGSN-MCC-MNC AVP
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp sgsn-mcc-mnc *boolean*
Tree	sgsn-mcc-mnc
Description	When configured to **true**, this command enables the inclusion of the 3GPP-SGSN-MCC-MNC AVP, which contains the MCC and MNC as configured under **configure subscriber-mgmt gtp serving-network**.
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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supported-features *boolean*

Synopsis	Include the supported features
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp supported-features *boolean*
Tree	supported-features
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-equipment-info

Synopsis	Enable the **user-equipment-info** context
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp user-equipment-info
Tree	user-equipment-info
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Information for User-Equipment-Info attribute
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp user-equipment-info type *keyword*
Tree	type
Options	imeisv, mac, eui64, modified-eui64
Default	mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-location-info *boolean*

Synopsis	Include the 3GPP-User-Location-Information AVP
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx include-avp user-location-info *boolean*
Tree	user-location-info

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Description	When configured to **true**, this command enables the inclusion of the 3GPP-User-Location-Information AVP as signaled in the incoming GTP setup message.
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-format *string*

Synopsis	MAC address format
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx mac-format *string*
Tree	mac-format
String Length	2 to 7
Default	aa:
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

report-ip-address-event *boolean*

Synopsis	Enable CCR-u messages on IP address allocation events
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx report-ip-address-event *boolean*
Tree	report-ip-address-event
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-qos-mapping

Synopsis	Enter the **three-gpp-qos-mapping** context
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx three-gpp-qos-mapping
Tree	three-gpp-qos-mapping
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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apn-ambr-dl

Synopsis	Enter the **apn-ambr-dl** context
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx three-gpp-qos-mapping apn-ambr-dl
Tree	apn-ambr-dl
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

aggregate-rate

Synopsis	Map to an aggregate rate
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx three-gpp-qos-mapping apn-ambr-dl aggregate-rate
Tree	aggregate-rate
Notes	The following elements are part of a choice: **aggregate-rate**, **arbiter**, **hs-sla-agg-rate**, **ignore-override**, **policer**, **queue**, or **scheduler**.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

arbiter *string*

Synopsis	Arbiter name to be overridden
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx three-gpp-qos-mapping apn-ambr-dl arbiter *string*
Tree	arbiter
String Length	1 to 32
Notes	The following elements are part of a choice: **aggregate-rate**, **arbiter**, **hs-sla-agg-rate**, **ignore-override**, **policer**, **queue**, or **scheduler**.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

hs-sla-agg-rate

Synopsis	Map to an HS SLA aggregate rate
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx three-gpp-qos-mapping apn-ambr-dl hs-sla-agg-rate
Tree	hs-sla-agg-rate

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Notes	The following elements are part of a choice: **aggregate-rate**, **arbiter**, **hs-sla-agg-rate**, **ignore-override**, **policer**, **queue**, or **scheduler**.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ignore-override

Synopsis	no override on apn-ambr-dl
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx three-gpp-qos-mapping apn-ambr-dl ignore-override
Tree	ignore-override
Notes	The following elements are part of a choice: **aggregate-rate**, **arbiter**, **hs-sla-agg-rate**, **ignore-override**, **policer**, **queue**, or **scheduler**.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer *number*

Synopsis	Policer ID to be overidden
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx three-gpp-qos-mapping apn-ambr-dl policer *number*
Tree	policer
Range	1 to 63
Notes	The following elements are part of a choice: **aggregate-rate**, **arbiter**, **hs-sla-agg-rate**, **ignore-override**, **policer**, **queue**, or **scheduler**.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue *number*

Synopsis	Queue ID to be overridden
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx three-gpp-qos-mapping apn-ambr-dl queue *number*
Tree	queue
Range	1 to 8
Notes	The following elements are part of a choice: **aggregate-rate**, **arbiter**, **hs-sla-agg-rate**, **ignore-override**, **policer**, **queue**, or **scheduler**.

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Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

scheduler *string*

Synopsis	Name of the scheduler to be overridden
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx three-gpp-qos-mapping apn-ambr-dl scheduler *string*
Tree	scheduler
String Length	1 to 32
Notes	The following elements are part of a choice: **aggregate-rate**, **arbiter**, **hs-sla-agg-rate**, **ignore-override**, **policer**, **queue**, or **scheduler**.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

apn-ambr-ul

Synopsis	Enter the **apn-ambr-ul** context
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx three-gpp-qos-mapping apn-ambr-ul
Tree	apn-ambr-ul
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

arbiter *string*

Synopsis	Arbiter name to be overridden
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx three-gpp-qos-mapping apn-ambr-ul arbiter *string*
Tree	arbiter
String Length	1 to 32
Notes	The following elements are part of a choice: **arbiter**, **ignore-override**, **policer**, **queue**, or **scheduler**.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ignore-override

Synopsis	no override on apn-ambr-ul
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx three-gpp-qos-mapping apn-ambr-ul ignore-override
Tree	ignore-override
Notes	The following elements are part of a choice: **arbiter**, **ignore-override**, **policer**, **queue**, or **scheduler**.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer *number*

Synopsis	Policer ID to be overridden
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx three-gpp-qos-mapping apn-ambr-ul policer *number*
Tree	policer
Range	1 to 63
Notes	The following elements are part of a choice: **arbiter**, **ignore-override**, **policer**, **queue**, or **scheduler**.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue *number*

Synopsis	Queue ID to be overridden
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx three-gpp-qos-mapping apn-ambr-ul queue *number*
Tree	queue
Range	1 to 32
Notes	The following elements are part of a choice: **arbiter**, **ignore-override**, **policer**, **queue**, or **scheduler**.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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scheduler *string*

Synopsis	Name of the scheduler to be overridden
Context	**configure** subscriber-mgmt diameter-gx-policy *string* gx three-gpp-qos-mapping apn-ambr-ul scheduler *string*
Tree	scheduler
String Length	1 to 32
Notes	The following elements are part of a choice: **arbiter**, **ignore-override**, **policer**, **queue**, or **scheduler**.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

node

Synopsis	Enter the **node** context
Context	**configure** subscriber-mgmt diameter-gx-policy *string* node
Tree	node
Notes	The following elements are part of a choice: **node** or **peer-policy**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destination-realm *string*

Synopsis	Destination-Realm AVP used by the Diameter peer policy
Context	**configure** subscriber-mgmt diameter-gx-policy *string* node destination-realm *string*
Tree	destination-realm
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

origin-host *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Origin-Host AVP used by the Diameter policy

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Context	**configure** subscriber-mgmt diameter-gx-policy *string* node origin-host *reference*
Tree	origin-host
Reference	**configure** aaa diameter node *string*
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-failure

Synopsis	Enter the **on-failure** context
Context	**configure** subscriber-mgmt diameter-gx-policy *string* on-failure
Tree	on-failure
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover *boolean*

Synopsis	Session peer failover
Context	**configure** subscriber-mgmt diameter-gx-policy *string* on-failure failover *boolean*
Tree	failover
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

handling *keyword*

Synopsis	Session peer failure handling
Context	**configure** subscriber-mgmt diameter-gx-policy *string* on-failure handling *keyword*
Tree	handling
Options	terminate, continue, retry-and-terminate
Default	terminate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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tx-timer *number*

Synopsis	Maximum wait time for a pending session request
Context	**configure** subscriber-mgmt diameter-gx-policy *string* tx-timer *number*
Tree	tx-timer
Range	10 to 1000
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

diameter-gy-policy [name] *string*

Synopsis	Enter the **diameter-gy-policy** list instance
Context	**configure** subscriber-mgmt diameter-gy-policy *string*
Tree	diameter-gy-policy
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Diameter application policy name
Context	**configure** subscriber-mgmt diameter-gy-policy *string*
Tree	diameter-gy-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt diameter-gy-policy *string* description *string*
Tree	description

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String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gy

Synopsis	Enter the **gy** context
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy
Tree	gy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

avp-subscription-id

Synopsis	Enter the **avp-subscription-id** context
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy avp-subscription-id
Tree	avp-subscription-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

origin *keyword*

Synopsis	Origin for the Subscription-Id-Data AVP
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy avp-subscription-id origin *keyword*
Tree	origin
Options	subscriber-id, circuit-id, imsi, msisdn, imei, dual-stack-remote-id, mac, username, nas-port-id
Default	subscriber-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Origin for the Subscription-Id-Type AVP

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Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy avp-subscription-id type *keyword*
Tree	type
Options	e164, imsi, nai, private
Default	private
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ccrt-replay

Synopsis	Enable the **ccrt-replay** context
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy ccrt-replay
Tree	ccrt-replay
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Interval at which CCR-t messages are replayed
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy ccrt-replay interval *number*
Tree	interval
Description	This command specifies the interval at which CCR-t messages for Diameter Gy sessions that belong to the Diameter application policy are replayed, until a valid CCA-t response is received or until the configured maximum lifetime period expires.
Range	60 to 86400
Default	3600
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-lifetime *number*

Synopsis	Maximum time that CCR-t messages are replayed
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy ccrt-replay max-lifetime *number*
Tree	max-lifetime
Description	This command specifies the maximum period of time that CCR-t messages for Diameter Gy sessions that belong to the Diameter application policy are replayed.

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Range	1 to 24
Units	hours
Default	24
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destination-realm-learning *boolean*

Synopsis	Learn the destination realm from the incoming messages
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy destination-realm-learning *boolean*
Tree	destination-realm-learning
Description	When configured to **true**, destination realm learning is enabled on the application level. The destination realm is a mandatory configuration parameter used in outgoing Credit Control Request messages (CCR). The configured destination realm is always used in the initial request (CCR-I) message. The consecutive request message of a Gy session can use the destination realm learned from the replies. When configured to **false**, destination realm learning is disabled and the configured destination realm is used in outgoing request messages.
Default	true
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

extended-failure-handling

Synopsis	Enter the **extended-failure-handling** context
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy extended-failure-handling
Tree	extended-failure-handling
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of Extended Failure Handling
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy extended-failure-handling admin-state *keyword*
Tree	admin-state

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Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interim-credit

Synopsis	Enter the **interim-credit** context
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy extended-failure-handling interim-credit
Tree	interim-credit
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-attempts *(number | keyword)*

Synopsis	Attempts to retry setting up a session to the OCS
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy extended-failure-handling interim-credit max-attempts *(number | keyword)*
Tree	max-attempts
Range	1 to 4294967295
Options	infinite
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reporting *boolean*

Synopsis	Report interim Credit
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy extended-failure-handling interim-credit reporting *boolean*
Tree	reporting
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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validity-time *(number | keyword)*

Synopsis	Validity time for interim credit
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy extended-failure-handling interim-credit validity-time *(number | keyword)*
Tree	validity-time
Range	1 to 4294967295
Units	seconds
Options	none
Default	1800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

volume

Synopsis	Enter the **volume** context
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy extended-failure-handling interim-credit volume
Tree	volume
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

credits *number*

Synopsis	Default volume credit value
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy extended-failure-handling interim-credit volume credits *number*
Tree	credits
Range	1 to 4294967295
Default	500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

units *keyword*

Synopsis	Default volume credit units

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Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy extended-failure-handling interim-credit volume units *keyword*
Tree	units
Options	bytes, kilobytes, megabytes, gigabytes
Default	megabytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

new-session-id *boolean*

Synopsis	Enable use of a new session ID for CCR-i messages
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy extended-failure-handling new-session-id *boolean*
Tree	new-session-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

include-avp

Synopsis	Enter the **include-avp** context
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp
Tree	include-avp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

aaa-user-name *boolean*

Synopsis	Include RADIUS user name AVP in Diameter Gy messages
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp aaa-user-name *boolean*
Tree	aaa-user-name
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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address-avp *boolean*

Synopsis	DCCA AVPs that contain the host address or prefix
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp address-avp *boolean*
Tree	address-avp
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

called-station-id

Synopsis	Enable the **called-station-id** context
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp called-station-id
Tree	called-station-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

id *string*

Synopsis	Called station ID
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp called-station-id id *string*
Tree	id
String Length	1 to 64
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

charging-rule-base-name

Synopsis	Enter the **charging-rule-base-name** context
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp charging-rule-base-name
Tree	charging-rule-base-name
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

category-map

Synopsis	Use the category map name in use for this session
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp charging-rule-base-name category-map
Tree	category-map
Notes	The following elements are part of a choice: **category-map**, **not-included**, or **user-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

not-included

Synopsis	Do not include Charging-Rule-Base-Name AVP in Diameter DCCA CCR messages
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp charging-rule-base-name not-included
Tree	not-included
Notes	The following elements are part of a choice: **category-map**, **not-included**, or **user-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-string *string*

Synopsis	String for charging rule base name
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp charging-rule-base-name user-string *string*
Tree	user-string
String Length	1 to 64
Notes	The following elements are part of a choice: **category-map**, **not-included**, or **user-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ggsn-address

Synopsis	Enable the **ggsn-address** context
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp ggsn-address
Tree	ggsn-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Address type of GGSN address AVP
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp ggsn-address type *keyword*
Tree	type
Options	ipv4, ipv6
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pdp-context-type *boolean*

Synopsis	Include the DCCA PDP-Context-Type AVP Parameter
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp pdp-context-type *boolean*
Tree	pdp-context-type
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ps-information *boolean*

Synopsis	Enable reporting of AVPs in grouped PS-Information AVP
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp ps-information *boolean*
Tree	ps-information
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-context-id

Synopsis	Enable the **service-context-id** context
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp service-context-id
Tree	service-context-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

id *string*

Synopsis	Name for the service context ID AVP
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp service-context-id id *string*
Tree	id
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-charging-characteristics *boolean*

Synopsis	DCCA 3GPP charging characteristics AVP parameter
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp three-gpp-charging-characteristics *boolean*
Tree	three-gpp-charging-characteristics
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-charging-id *keyword*

Synopsis	DCCA 3GPP charging ID AVP parameter
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp three-gpp-charging-id *keyword*

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Tree	three-gpp-charging-id
Options	false, auto, esm-info, id
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-ggsn-ipv4-address *boolean*

Synopsis	Include the 3GPP-GGSN Address in Diameter Gy messages
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp three-gpp-ggsn-ipv4-address *boolean*
Tree	three-gpp-ggsn-ipv4-address
Description	When configured to **true**, this command includes the 3GPP GGSN Address AVP in the Diameter Gy messages. The value is set to the source IPv4 address that is used for outgoing diameter messages.
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-ggsn-ipv6-address *boolean*

Synopsis	Include the 3GPP-GGSN-Ipv6 address
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp three-gpp-ggsn-ipv6-address *boolean*
Tree	three-gpp-ggsn-ipv6-address
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-gprs-negotiated-qos-profile *boolean*

Synopsis	Include the 3GPP GPRS-QoS-Negotiated-Profile AVP
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp three-gpp-gprs-negotiated-qos-profile *boolean*
Tree	three-gpp-gprs-negotiated-qos-profile
Default	true

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-imsi *keyword*

Synopsis	Origin of the information to send in the IMSI AVP
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp three-gpp-imsi *keyword*
Tree	three-gpp-imsi
Options	false, subscriber-id, circuit-id, imsi
Default	subscriber-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-nsapi *boolean*

Synopsis	Include the 3GPP-NSAPI
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp three-gpp-nsapi *boolean*
Tree	three-gpp-nsapi
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-rat-type

Synopsis	Enable the **three-gpp-rat-type** context
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp three-gpp-rat-type
Tree	three-gpp-rat-type
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	Value for 3GPP-RAT-Type AVP

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Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp three-gpp-rat-type type *number*
Tree	type
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-selection-mode *boolean*

Synopsis	DCCA 3GPP selection mode AVP parameter
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp three-gpp-selection-mode *boolean*
Tree	three-gpp-selection-mode
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-session-stop-indicator *boolean*

Synopsis	DCCA 3GPP session stop indicator AVP parameter
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp three-gpp-session-stop-indicator *boolean*
Tree	three-gpp-session-stop-indicator
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-user-location-info *boolean*

Synopsis	DCCA 3GPP session stop indicator AVP parameter
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp three-gpp-user-location-info *boolean*
Tree	three-gpp-user-location-info
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-equipment-info-type

Synopsis	Enable the **user-equipment-info-type** context
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp user-equipment-info-type
Tree	user-equipment-info-type
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Information to include in User-Equipment-Info attribute
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy include-avp user-equipment-info-type type *keyword*
Tree	type
Options	imeisv
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-format *string*

Synopsis	MAC address format
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy mac-format *string*
Tree	mac-format
String Length	2 to 7
Default	aa:
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-of-credit-reporting *keyword*

Synopsis	Reporting reason when final granted units are consumed
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy out-of-credit-reporting *keyword*

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Tree	out-of-credit-reporting
Options	final, quota-exhausted
Default	final
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor-support *keyword*

Synopsis	Vendor support type announced in capability exchange
Context	**configure** subscriber-mgmt diameter-gy-policy *string* gy vendor-support *keyword*
Tree	vendor-support
Options	vodafone, three-gpp
Default	three-gpp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

node

Synopsis	Enter the **node** context
Context	**configure** subscriber-mgmt diameter-gy-policy *string* node
Tree	node
Notes	The following elements are part of a choice: **node** or **peer-policy**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destination-realm *string*

Synopsis	Destination-Realm AVP used by the Diameter peer policy
Context	**configure** subscriber-mgmt diameter-gy-policy *string* node destination-realm *string*
Tree	destination-realm
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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origin-host *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Origin-Host AVP used by the Diameter policy
Context	**configure** subscriber-mgmt diameter-gy-policy *string* node origin-host *reference*
Tree	origin-host
Reference	**configure** aaa diameter node *string*
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-failure

Synopsis	Enter the **on-failure** context
Context	**configure** subscriber-mgmt diameter-gy-policy *string* on-failure
Tree	on-failure
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover *boolean*

Synopsis	Session peer failover
Context	**configure** subscriber-mgmt diameter-gy-policy *string* on-failure failover *boolean*
Tree	failover
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

handling *keyword*

Synopsis	Session peer failure handling
Context	**configure** subscriber-mgmt diameter-gy-policy *string* on-failure handling *keyword*
Tree	handling
Options	terminate, continue, retry-and-terminate
Default	terminate

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tx-timer *number*

Synopsis	Maximum wait time for a pending session request
Context	**configure** subscriber-mgmt diameter-gy-policy *string* tx-timer *number*
Tree	tx-timer
Range	10 to 1000
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

diameter-nasreq-policy [name] *string*

Synopsis	Enter the **diameter-nasreq-policy** list instance
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string*
Tree	diameter-nasreq-policy
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Diameter application policy name
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string*
Tree	diameter-nasreq-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nasreq

Synopsis	Enter the **nasreq** context
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq
Tree	nasreq
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

include-avp

Synopsis	Enter the **include-avp** context
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq include-avp
Tree	include-avp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

called-station-id *boolean*

Synopsis	Include the called station ID AVP
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq include-avp called-station-id *boolean*
Tree	called-station-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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calling-station-id

Synopsis	Enable the **calling-station-id** context
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq include-avp calling-station-id
Tree	calling-station-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Format of the Calling-Station-ID AVP
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq include-avp calling-station-id type *keyword*
Tree	type
Options	sap-string, mac, sap-id, remote-id, llid
Default	sap-string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id *boolean*

Synopsis	Include the Agent-Circuit-ID AVP
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq include-avp circuit-id *boolean*
Tree	circuit-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

imei *boolean*

Synopsis	Include the IMEI
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq include-avp imei *boolean*
Tree	imei
Default	false

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Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-port

Synopsis	Enable the **nas-port** context
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq include-avp nas-port
Tree	nas-port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bit-spec *string*

Synopsis	NAS-Port AVP format
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq include-avp nas-port bit-spec *string*
Tree	bit-spec
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port-id

Synopsis	Enable the **nas-port-id** context
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq include-avp nas-port-id
Tree	nas-port-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-string *string*

Synopsis	Prefix string for NAS-Port-Id AVP
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq include-avp nas-port-id prefix-string *string*

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Tree	prefix-string
String Length	1 to 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suffix

Synopsis	Enter the **suffix** context
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq include-avp nas-port-id suffix
Tree	suffix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id

Synopsis	Add Circuit ID as suffix
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq include-avp nas-port-id suffix circuit-id
Tree	circuit-id
Notes	The following elements are part of a choice: **circuit-id**, **not-included**, **remote-id**, or **user-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

not-included

Synopsis	Do not add a suffix
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq include-avp nas-port-id suffix not-included
Tree	not-included
Notes	The following elements are part of a choice: **circuit-id**, **not-included**, **remote-id**, or **user-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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remote-id

Synopsis	Add Remote ID as suffix
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq include-avp nas-port-id suffix remote-id
Tree	remote-id
Notes	The following elements are part of a choice: **circuit-id**, **not-included**, **remote-id**, or **user-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-string *string*

Synopsis	Add a user configurable string as suffix
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq include-avp nas-port-id suffix user-string *string*
Tree	user-string
String Length	1 to 64
Notes	The following elements are part of a choice: **circuit-id**, **not-included**, **remote-id**, or **user-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port-type

Synopsis	Enable the **nas-port-type** context
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq include-avp nas-port-type
Tree	nas-port-type
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *(keyword | number)*

Synopsis	NAS-Port-Type AVP value
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq include-avp nas-port-type type *(keyword | number)*
Tree	type

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Range	0 to 255
Options	rfc-aligned
Default	rfc-aligned
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rat-type *boolean*

Synopsis	Include the Radio Access Technology (RAT) type AVP
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq include-avp rat-type *boolean*
Tree	rat-type
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-id *boolean*

Synopsis	Include the agent remote ID AVP
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq include-avp remote-id *boolean*
Tree	remote-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-location-info *boolean*

Synopsis	Include the 3GPP-User-Location-Information AVP
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq include-avp user-location-info *boolean*
Tree	user-location-info
Description	When configured to **true**, this command enables the inclusion of the 3GPP-User-Location-Information AVP as signaled in the incoming GTP setup message.
Default	false
Introduced	16.0.R1

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Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-format *string*

Synopsis	MAC address format
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq mac-format *string*
Tree	mac-format
String Length	2 to 7
Default	aa:
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	AA-request password
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq password *string*
Tree	password
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-name

Synopsis	Enter the **user-name** context
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq user-name
Tree	user-name
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-name *string*

Synopsis	Domain name
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq user-name domain-name *string*
Tree	domain-name
String Length	1 to 128

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

format *keyword*

Synopsis	Format type for username
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq user-name format *keyword*
Tree	format
Options	mac, circuit-id, tuple, ascii-converted-circuit-id, ascii-converted-tuple, dhcp-client-vendor-opts, mac-giaddr, nas-port-id
Default	mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

operation *keyword*

Synopsis	Operation to perform
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* nasreq user-name operation *keyword*
Tree	operation
Options	append, strip, replace, default
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

node

Synopsis	Enter the **node** context
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* node
Tree	node
Notes	The following elements are part of a choice: **node** or **peer-policy**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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destination-realm *string*

Synopsis	Destination-Realm AVP used by the Diameter peer policy
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* node destination-realm *string*
Tree	destination-realm
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

origin-host *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Origin-Host AVP used by the Diameter policy
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* node origin-host *reference*
Tree	origin-host
Reference	**configure** aaa diameter node *string*
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-failure

Synopsis	Enter the **on-failure** context
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* on-failure
Tree	on-failure
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover *boolean*

Synopsis	Session peer failover
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* on-failure failover *boolean*
Tree	failover
Default	true
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

handling *keyword*

Synopsis	Session peer failure handling
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* on-failure handling *keyword*
Tree	handling
Options	terminate, continue, retry-and-terminate
Default	terminate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tx-timer *number*

Synopsis	Maximum wait time for a pending session request
Context	**configure** subscriber-mgmt diameter-nasreq-policy *string* tx-timer *number*
Tree	tx-timer
Range	10 to 1000
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

explicit-subscriber-map

Synopsis	Enter the **explicit-subscriber-map** context
Context	**configure** subscriber-mgmt explicit-subscriber-map
Tree	explicit-subscriber-map
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [subscriber-id] *string*

Synopsis	Enter the **entry** list instance
Context	**configure** subscriber-mgmt explicit-subscriber-map entry *string*

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Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**subscriber-id**] *string*

Synopsis	Subscriber Identification string
Context	**configure** subscriber-mgmt explicit-subscriber-map entry *string*
Tree	entry
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

alias *string*

Synopsis	Alias for subscriber identification string
Context	**configure** subscriber-mgmt explicit-subscriber-map entry *string* alias *string*
Tree	alias
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Application profile name
Context	**configure** subscriber-mgmt explicit-subscriber-map entry *string* app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	SLA profile name

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Context	**configure** subscriber-mgmt explicit-subscriber-map entry *string* sla-profile *reference*
Tree	sla-profile
Reference	**configure** subscriber-mgmt sla-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Subscriber profile name
Context	**configure** subscriber-mgmt explicit-subscriber-map entry *string* sub-profile *reference*
Tree	sub-profile
Reference	**configure** subscriber-mgmt sub-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface-statistics

Synopsis	Enter the **group-interface-statistics** context
Context	**configure** subscriber-mgmt group-interface-statistics
Tree	group-interface-statistics
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state for statistics collection
Context	**configure** subscriber-mgmt group-interface-statistics admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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group-interface-template [name] *string*

Synopsis	Enter the **group-interface-template** list instance
Context	**configure** subscriber-mgmt group-interface-template *string*
Tree	group-interface-template
Description	Commands in this context configure a template for automatically-generated group interfaces that is used when creating CUPS sessions. A template with the name "default" is used when no other instance is created, however, the "default" template must be explicitly provisioned.
Max. Instances	256
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Identifies this group interface template template
Context	**configure** subscriber-mgmt group-interface-template *string*
Tree	group-interface-template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt group-interface-template *string* description *string*
Tree	description
String Length	1 to 80
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis	IP MTU applied to outgoing packets
Context	**configure** subscriber-mgmt group-interface-template *string* ip-mtu *number*

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Tree	ip-mtu
Range	512 to 9786
Units	bytes
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** subscriber-mgmt group-interface-template *string* ipv4
Tree	ipv4
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

icmp

Synopsis	Enter the **icmp** context
Context	**configure** subscriber-mgmt group-interface-template *string* ipv4 icmp
Tree	icmp
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mask-reply *boolean*

Synopsis	Allow responses to ICMP mask requests on the interface
Context	**configure** subscriber-mgmt group-interface-template *string* ipv4 icmp mask-reply *boolean*
Tree	mask-reply
Default	true
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

param-problem

Synopsis	Enter the **param-problem** context
Context	**configure** subscriber-mgmt group-interface-template *string* ipv4 icmp param-problem

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Tree	param-problem
Description	Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of sent Parameter Problem messages
Context	**configure** subscriber-mgmt group-interface-template *string* ipv4 icmp param-problem admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

number *number*

Synopsis	Maximum number of Parameter Problem messages to send
Context	**configure** subscriber-mgmt group-interface-template *string* ipv4 icmp param-problem number *number*
Tree	number
Range	10 to 1000
Default	100
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Time used to limit number of Parameter Problem messages
Context	**configure** subscriber-mgmt group-interface-template *string* ipv4 icmp param-problem seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds

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Default	10
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

redirects

Synopsis	Enter the **redirects** context
Context	**configure** subscriber-mgmt group-interface-template *string* ipv4 icmp redirects
Tree	redirects
Description	Commands in this context configure the settings for ICMP redirect messages generated by the interface. The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of sending ICMP redirect messages
Context	**configure** subscriber-mgmt group-interface-template *string* ipv4 icmp redirects admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

number *number*

Synopsis	Maximum number of ICMP redirect messages to send
Context	**configure** subscriber-mgmt group-interface-template *string* ipv4 icmp redirects number *number*
Tree	number
Range	10 to 1000
Default	100
Introduced	20.5.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Time used to limit the number of ICMP redirect messages
Context	**configure** subscriber-mgmt group-interface-template *string* ipv4 icmp redirects seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ttl-expired

Synopsis	Enter the **ttl-expired** context
Context	**configure** subscriber-mgmt group-interface-template *string* ipv4 icmp ttl-expired
Tree	ttl-expired
Description	Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of sending TTL expired messages
Context	**configure** subscriber-mgmt group-interface-template *string* ipv4 icmp ttl-expired admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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number *number*

Synopsis	Maximum number of TTL expired messages to send
Context	**configure** subscriber-mgmt group-interface-template *string* ipv4 icmp ttl-expired number *number*
Tree	number
Range	10 to 2000
Default	100
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Time used to limit the number of TTL expired messages
Context	**configure** subscriber-mgmt group-interface-template *string* ipv4 icmp ttl-expired seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

unreachables

Synopsis	Enter the **unreachables** context
Context	**configure** subscriber-mgmt group-interface-template *string* ipv4 icmp unreachables
Tree	unreachables
Description	Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of sending unreachable messages

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Context	**configure** subscriber-mgmt group-interface-template *string* ipv4 icmp unreachables admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

number *number*

Synopsis	Maximum number of unreachable messages to send
Context	**configure** subscriber-mgmt group-interface-template *string* ipv4 icmp unreachables number *number*
Tree	number
Range	10 to 2000
Default	100
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis	Time to limit the number of ICMP unreachable messages
Context	**configure** subscriber-mgmt group-interface-template *string* ipv4 icmp unreachables seconds *number*
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-discovery

Synopsis	Enter the **neighbor-discovery** context
Context	**configure** subscriber-mgmt group-interface-template *string* ipv4 neighbor-discovery
Tree	neighbor-discovery

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Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy-arp-policy *reference*

Synopsis	Proxy ARP policy name
Context	**configure** subscriber-mgmt group-interface-template *string* ipv4 neighbor-discovery proxy-arp-policy *reference*
Tree	proxy-arp-policy
Reference	**configure** policy-options policy-statement *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-proxy-arp *boolean*

Synopsis	Enable remote proxy ARP on the interface
Context	**configure** subscriber-mgmt group-interface-template *string* ipv4 neighbor-discovery remote-proxy-arp *boolean*
Tree	remote-proxy-arp
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

urpf-check

Synopsis	Enable the **urpf-check** context
Context	**configure** subscriber-mgmt group-interface-template *string* ipv4 urpf-check
Tree	urpf-check
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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mode *keyword*

Synopsis	Unicast RPF check mode
Context	**configure** subscriber-mgmt group-interface-template *string* ipv4 urpf-check mode *keyword*
Tree	mode
Options	strict, loose, strict-no-ecmp
Default	strict
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** subscriber-mgmt group-interface-template *string* ipv6
Tree	ipv6
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

urpf-check

Synopsis	Enable the **urpf-check** context
Context	**configure** subscriber-mgmt group-interface-template *string* ipv6 urpf-check
Tree	urpf-check
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mode *keyword*

Synopsis	Unicast RPF check mode
Context	**configure** subscriber-mgmt group-interface-template *string* ipv6 urpf-check mode *keyword*
Tree	mode
Options	strict, loose, strict-no-ecmp
Default	strict
Introduced	20.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

trigger-packet

Synopsis	Enter the **trigger-packet** context
Context	**configure** subscriber-mgmt group-interface-template *string* trigger-packet
Tree	trigger-packet
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

data *boolean*

Synopsis	Sample and forward data packets
Context	**configure** subscriber-mgmt group-interface-template *string* trigger-packet data *boolean*
Tree	data
Description	When configured to **true**, the router processes data-trigger packets on dynamic SAPs. Data-trigger packets must also be enabled on the capture SAP.
Default	false
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gtp

Synopsis	Enter the **gtp** context
Context	**configure** subscriber-mgmt gtp
Tree	gtp
Description	This command enables the context to configure box-wide GTP parameters and profiles.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

apn-policy [name] *string*

Synopsis	Enter the **apn-policy** list instance
Context	**configure** subscriber-mgmt gtp apn-policy *string*
Tree	apn-policy

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Max. Instances	128
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	APN policy name for a new incoming GTP connection
Context	**configure** subscriber-mgmt gtp apn-policy *string*
Tree	apn-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

apn [apn-name] *string*

Synopsis	Enter the **apn** list instance
Context	**configure** subscriber-mgmt gtp apn-policy *string* apn *string*
Tree	apn
Max. Instances	1024
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**apn-name**] *string*

Synopsis	GTP APN name
Context	**configure** subscriber-mgmt gtp apn-policy *string* apn *string*
Tree	apn
String Length	1 to 80
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ambr-qos-mapping

Synopsis	Enter the **ambr-qos-mapping** context
Context	**configure** subscriber-mgmt gtp apn-policy *string* apn *string* ambr-qos-mapping
Tree	ambr-qos-mapping
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

downlink

Synopsis	Enable the **downlink** context
Context	**configure** subscriber-mgmt gtp apn-policy *string* apn *string* ambr-qos-mapping downlink
Tree	downlink
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

aggregate-rate

Synopsis	Map the downlink APN-AMBR rate to an aggregate rate
Context	**configure** subscriber-mgmt gtp apn-policy *string* apn *string* ambr-qos-mapping downlink aggregate-rate
Tree	aggregate-rate
Notes	The following elements are part of a mandatory choice: **aggregate-rate**, **arbiter**, **policer**, **queue**, or **scheduler**.
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

arbiter *string*

Synopsis	Name of arbiter to be overridden
Context	**configure** subscriber-mgmt gtp apn-policy *string* apn *string* ambr-qos-mapping downlink arbiter *string*
Tree	arbiter
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: **aggregate-rate**, **arbiter**, **policer**, **queue**, or **scheduler**.
Introduced	16.0.R7

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Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer *number*

Synopsis	ID of policer to be overridden
Context	**configure** subscriber-mgmt gtp apn-policy *string* apn *string* ambr-qos-mapping downlink policer *number*
Tree	policer
Range	1 to 63
Notes	The following elements are part of a mandatory choice: **aggregate-rate**, **arbiter**, **policer**, **queue**, or **scheduler**.
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue *number*

Synopsis	Map the downlink APN-AMBR rate to a queue PIR override
Context	**configure** subscriber-mgmt gtp apn-policy *string* apn *string* ambr-qos-mapping downlink queue *number*
Tree	queue
Range	1 to 8
Notes	The following elements are part of a mandatory choice: **aggregate-rate**, **arbiter**, **policer**, **queue**, or **scheduler**.
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

scheduler *string*

Synopsis	Name of the scheduler to be overridden
Context	**configure** subscriber-mgmt gtp apn-policy *string* apn *string* ambr-qos-mapping downlink scheduler *string*
Tree	scheduler
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: **aggregate-rate**, **arbiter**, **policer**, **queue**, or **scheduler**.
Introduced	16.0.R7

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Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

uplink

Synopsis	Enable the **uplink** context
Context	**configure** subscriber-mgmt gtp apn-policy *string* apn *string* ambr-qos-mapping uplink
Tree	uplink
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

arbiter *string*

Synopsis	Name of arbiter to be overridden
Context	**configure** subscriber-mgmt gtp apn-policy *string* apn *string* ambr-qos-mapping uplink arbiter *string*
Tree	arbiter
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: **arbiter**, **policer**, **queue**, or **scheduler**.
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer *number*

Synopsis	Map the uplink APN-AMBR rate to a policer PIR override
Context	**configure** subscriber-mgmt gtp apn-policy *string* apn *string* ambr-qos-mapping uplink policer *number*
Tree	policer
Range	1 to 63
Notes	The following elements are part of a mandatory choice: **arbiter**, **policer**, **queue**, or **scheduler**.
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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queue *number*

Synopsis	Map the uplink APN-AMBR rate to a queue PIR override
Context	**configure** subscriber-mgmt gtp apn-policy *string* apn *string* ambr-qos-mapping uplink queue *number*
Tree	queue
Range	1 to 32
Notes	The following elements are part of a mandatory choice: **arbiter**, **policer**, **queue**, or **scheduler**.
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

scheduler *string*

Synopsis	Name of scheduler to be overridden
Context	**configure** subscriber-mgmt gtp apn-policy *string* apn *string* ambr-qos-mapping uplink scheduler *string*
Tree	scheduler
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: **arbiter**, **policer**, **queue**, or **scheduler**.
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

defaults

Synopsis	Enter the **defaults** context
Context	**configure** subscriber-mgmt gtp apn-policy *string* apn *string* defaults
Tree	defaults
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

group-interface

Synopsis	Enable the **group-interface** context
Context	**configure** subscriber-mgmt gtp apn-policy *string* apn *string* defaults group-interface
Tree	group-interface

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Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	Group interface name
Context	**configure** subscriber-mgmt gtp apn-policy *string* apn *string* defaults group-interface name *string*
Tree	name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

svc-name *string*

Synopsis	Service name where the group interface resides
Context	**configure** subscriber-mgmt gtp apn-policy *string* apn *string* defaults group-interface svc-name *string*
Tree	svc-name
String Length	1 to 64
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

diameter-nasreq-policy *reference*

Synopsis	NASREQ authentication policy name
Context	**configure** subscriber-mgmt gtp apn-policy *string* apn *string* diameter-nasreq-policy *reference*
Tree	diameter-nasreq-policy
Reference	**configure** subscriber-mgmt diameter-nasreq-policy *string*
Notes	The following elements are part of a choice: **diameter-nasreq-policy**, **radius-auth-policy**, or **user-db**.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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radius-auth-policy *reference*

Synopsis	RADIUS authentication policy name
Context	**configure** subscriber-mgmt gtp apn-policy *string* apn *string* radius-auth-policy *reference*
Tree	radius-auth-policy
Reference	**configure** subscriber-mgmt radius-authentication-policy *string*
Notes	The following elements are part of a choice: **diameter-nasreq-policy**, **radius-auth-policy**, or **user-db**.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

skip-gtp-ipv4-allocation *boolean*

Synopsis	defer IPv4 address allocation to DHCP
Context	**configure** subscriber-mgmt gtp apn-policy *string* apn *string* skip-gtp-ipv4-allocation *boolean*
Tree	skip-gtp-ipv4-allocation
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

Synopsis	Local user database name
Context	**configure** subscriber-mgmt gtp apn-policy *string* apn *string* user-db *reference*
Tree	user-db
Reference	**configure** subscriber-mgmt local-user-db *string*
Notes	The following elements are part of a choice: **diameter-nasreq-policy**, **radius-auth-policy**, or **user-db**.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-held-uplink-sessions *number*

Synopsis	Maximum GTP sessions held while UE is disconnected
Context	**configure** subscriber-mgmt gtp max-held-uplink-sessions *number*

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Tree	max-held-uplink-sessions
Range	0 to 500000
Default	2000
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile [name] *string*

Synopsis	Enter the **peer-profile** list instance
Context	**configure** subscriber-mgmt gtp peer-profile *string*
Tree	peer-profile
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Peer profile name
Context	**configure** subscriber-mgmt gtp peer-profile *string*
Tree	peer-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt gtp peer-profile *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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interface-type *keyword*

Synopsis	3GPP interface type for connections toward this peer
Context	**configure** subscriber-mgmt gtp peer-profile *string* interface-type *keyword*
Tree	interface-type
Options	gn, s2a, s2b, s11
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-ttl *number*

Synopsis	IP header TTL value for GTP control messages
Context	**configure** subscriber-mgmt gtp peer-profile *string* ip-ttl *number*
Tree	ip-ttl
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

keep-alive

Synopsis	Enter the **keep-alive** context
Context	**configure** subscriber-mgmt gtp peer-profile *string* keep-alive
Tree	keep-alive
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of GTP-C echo request messages
Context	**configure** subscriber-mgmt gtp peer-profile *string* keep-alive admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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interval *number*

Synopsis	Frequency for sending keepalives
Context	**configure** subscriber-mgmt gtp peer-profile *string* keep-alive interval *number*
Tree	interval
Range	60 to 180
Units	seconds
Default	60
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

retry-count *number*

Synopsis	Time between echo retries toward the same peer
Context	**configure** subscriber-mgmt gtp peer-profile *string* keep-alive retry-count *number*
Tree	retry-count
Range	1 to 15
Default	4
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Timeout after which echo request is deemed unanswered
Context	**configure** subscriber-mgmt gtp peer-profile *string* keep-alive timeout *number*
Tree	timeout
Range	1 to 20
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

message-retransmit

Synopsis	Enter the **message-retransmit** context

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Context	**configure** subscriber-mgmt gtp peer-profile *string* message-retransmit
Tree	message-retransmit
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

retry-count *number*

Synopsis	Maximum unanswered retries before message deemed failed
Context	**configure** subscriber-mgmt gtp peer-profile *string* message-retransmit retry-count *number*
Tree	retry-count
Range	1 to 8
Default	3
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Timeout after which a message is considered unanswered
Context	**configure** subscriber-mgmt gtp peer-profile *string* message-retransmit timeout *number*
Tree	timeout
Range	1 to 30
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy for MGW profile packets sent or received
Context	**configure** subscriber-mgmt gtp peer-profile *string* python-policy *reference*
Tree	python-policy
Reference	**configure** python python-policy *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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s11

Synopsis	Enter the **s11** context
Context	**configure** subscriber-mgmt gtp peer-profile *string* s11
Tree	s11
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

change-reporting-action *(number | keyword)*

Synopsis	Value of change reporting action IE sends to the peer
Context	**configure** subscriber-mgmt gtp peer-profile *string* s11 change-reporting-action *(number | keyword)*
Tree	change-reporting-action
Description	This command specifies the value of the change reporting action IE sends to the peer in applicable messages. The peer needs to indicate support first using the appropriate flag in the indication IE. This can be overridden by AAA, if AAA explicitly request notification changes for either ECGI, TAI or both. If AAA does not request any notification changes or only the generic location changes, the configured value is used. When unconfigured, this command indicates that the IE is not sent, unless specified by AAA.
Range	0 to 255
Options	cgi-sai, rai, tai, ecgi, cgi-sai-rai, tai-ecgi
Introduced	16.0.R5
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

end-marker-count *number*

Synopsis	Number of GTP-U end marker packets that are sent
Context	**configure** subscriber-mgmt gtp peer-profile *string* s11 end-marker-count *number*
Tree	end-marker-count
Description	This command specifies the number of end marker packets that are sent when it is certain no more packets will be sent over the corresponding GTP-U tunnel, such as after a completed mobility event.
Range	0 to 5
Default	1

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Introduced	16.0.R5
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4-mtu *number*

Synopsis	IPv4-MTU PCO sent in S11 GTP messages
Context	**configure** subscriber-mgmt gtp peer-profile *string* s11 ipv4-mtu *number*
Tree	ipv4-mtu
Range	512 to 9000
Default	1400
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the **qos** context
Context	**configure** subscriber-mgmt gtp peer-profile *string* s11 qos
Tree	qos
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ambr

Synopsis	Enter the **ambr** context
Context	**configure** subscriber-mgmt gtp peer-profile *string* s11 qos ambr
Tree	ambr
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

down-link *number*

Synopsis	Downlink Aggregated Maximum Bit Rate (AMBR)
Context	**configure** subscriber-mgmt gtp peer-profile *string* s11 qos ambr down-link *number*
Tree	down-link
Range	0 to 10000000

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Units	kilobps
Default	20000
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

up-link *number*

Synopsis	Uplink Aggregated Maximum Bit Rate (AMBR)
Context	**configure** subscriber-mgmt gtp peer-profile *string* s11 qos ambr up-link *number*
Tree	up-link
Range	0 to 10000000
Units	kilobps
Default	10000
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

arp *number*

Synopsis	Allocation or retention priority
Context	**configure** subscriber-mgmt gtp peer-profile *string* s11 qos arp *number*
Tree	arp
Range	1 to 15
Default	1
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

down-link

Synopsis	Enter the **down-link** context
Context	**configure** subscriber-mgmt gtp peer-profile *string* s11 qos down-link
Tree	down-link
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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gbr *number*

Synopsis	Guaranteed Bit Rate (GBR)
Context	**configure** subscriber-mgmt gtp peer-profile *string* s11 qos down-link gbr *number*
Tree	gbr
Range	0 to 100000
Units	kilobps
Default	0
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbr *number*

Synopsis	Maximum Bit Rate (MBR)
Context	**configure** subscriber-mgmt gtp peer-profile *string* s11 qos down-link mbr *number*
Tree	mbr
Range	0 to 100000
Units	kilobps
Default	0
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

qci *number*

Synopsis	QoS Class Identifier (QCI) to send in GTP messages
Context	**configure** subscriber-mgmt gtp peer-profile *string* s11 qos qci *number*
Tree	qci
Range	1 to 9
Default	8
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

up-link

Synopsis	Enter the **up-link** context
Context	**configure** subscriber-mgmt gtp peer-profile *string* s11 qos up-link

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Tree	up-link
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

gbr *number*

Synopsis	Guaranteed Bit Rate (GBR)
Context	**configure** subscriber-mgmt gtp peer-profile *string* s11 qos up-link gbr *number*
Tree	gbr
Range	0 to 100000
Units	kilobps
Default	0
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbr *number*

Synopsis	Maximum Bit Rate (MBR)
Context	**configure** subscriber-mgmt gtp peer-profile *string* s11 qos up-link mbr *number*
Tree	mbr
Range	0 to 100000
Units	kilobps
Default	0
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

uplink

Synopsis	Enter the **uplink** context
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink
Tree	uplink
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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charging-characteristics

Synopsis	Enter the **charging-characteristics** context
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics
Tree	charging-characteristics
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

home

Synopsis	Enter the **home** context
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics home
Tree	home
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit0 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics home bit0 *boolean*
Tree	bit0
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit1 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics home bit1 *boolean*
Tree	bit1
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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bit10 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics home bit10 *boolean*
Tree	bit10
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit11 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics home bit11 *boolean*
Tree	bit11
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit12 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics home bit12 *boolean*
Tree	bit12
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit13 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics home bit13 *boolean*
Tree	bit13
Default	false

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Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit14 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics home bit14 *boolean*
Tree	bit14
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit15 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics home bit15 *boolean*
Tree	bit15
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit2 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics home bit2 *boolean*
Tree	bit2
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit3 *boolean*

Synopsis	Set bit in charging characteristics information element

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Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics home bit3 *boolean*
Tree	bit3
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit4 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics home bit4 *boolean*
Tree	bit4
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit5 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics home bit5 *boolean*
Tree	bit5
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit6 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics home bit6 *boolean*
Tree	bit6
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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bit7 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics home bit7 *boolean*
Tree	bit7
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit8 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics home bit8 *boolean*
Tree	bit8
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit9 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics home bit9 *boolean*
Tree	bit9
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

roaming

Synopsis	Enter the **roaming** context
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics roaming
Tree	roaming

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Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit0 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics roaming bit0 *boolean*
Tree	bit0
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit1 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics roaming bit1 *boolean*
Tree	bit1
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit10 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics roaming bit10 *boolean*
Tree	bit10
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit11 *boolean*

Synopsis	Set bit in charging characteristics information element

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Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics roaming bit11 *boolean*
Tree	bit11
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit12 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics roaming bit12 *boolean*
Tree	bit12
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit13 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics roaming bit13 *boolean*
Tree	bit13
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit14 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics roaming bit14 *boolean*
Tree	bit14
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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bit15 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics roaming bit15 *boolean*
Tree	bit15
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit2 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics roaming bit2 *boolean*
Tree	bit2
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit3 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics roaming bit3 *boolean*
Tree	bit3
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit4 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics roaming bit4 *boolean*
Tree	bit4

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Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit5 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics roaming bit5 *boolean*
Tree	bit5
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit6 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics roaming bit6 *boolean*
Tree	bit6
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit7 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics roaming bit7 *boolean*
Tree	bit7
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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bit8 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics roaming bit8 *boolean*
Tree	bit8
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit9 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink charging-characteristics roaming bit9 *boolean*
Tree	bit9
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ggsn

Synopsis	Enter the **ggsn** context
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink ggsn
Tree	ggsn
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the **qos** context
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink ggsn qos
Tree	qos
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ambr

Synopsis	Enable the **ambr** context
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink ggsn qos ambr
Tree	ambr
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

down-link *number*

Synopsis	Downlink Aggregated Maximum Bit Rate (AMBR)
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink ggsn qos ambr down-link *number*
Tree	down-link
Range	0 to 10000000
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

up-link *number*

Synopsis	Uplink Aggregated Maximum Bit Rate (AMBR)
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink ggsn qos ambr up-link *number*
Tree	up-link
Range	0 to 10000000
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

arp *number*

Synopsis	Allocation or retention priority
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink ggsn qos arp *number*
Tree	arp

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Range	1 to 3
Default	1
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

down-link

Synopsis	Enter the **down-link** context
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink ggsn qos down-link
Tree	down-link
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

gbr *number*

Synopsis	Guaranteed Bit Rate (GBR)
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink ggsn qos down-link gbr *number*
Tree	gbr
Range	0 to 100000
Units	kilobps
Default	2000
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbr *number*

Synopsis	Maximum Bit Rate (MBR)
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink ggsn qos down-link mbr *number*
Tree	mbr
Range	0 to 100000
Units	kilobps
Default	2000
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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up-link

Synopsis	Enter the **up-link** context
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink ggsn qos up-link
Tree	up-link
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

gbr *number*

Synopsis	Guaranteed Bit Rate (GBR)
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink ggsn qos up-link gbr *number*
Tree	gbr
Range	0 to 100000
Units	kilobps
Default	5000
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbr *number*

Synopsis	Maximum Bit Rate (MBR)
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink ggsn qos up-link mbr *number*
Tree	mbr
Range	0 to 100000
Units	kilobps
Default	5000
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

pgw

Synopsis	Enter the **pgw** context
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink pgw
Tree	pgw

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Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the **qos** context
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink pgw qos
Tree	qos
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ambr

Synopsis	Enter the **ambr** context
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink pgw qos ambr
Tree	ambr
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

down-link *number*

Synopsis	Downlink Aggregated Maximum Bit Rate (AMBR)
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink pgw qos ambr down-link *number*
Tree	down-link
Range	0 to 10000000
Units	kilobps
Default	20000
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

up-link *number*

Synopsis	Uplink Aggregated Maximum Bit Rate (AMBR)
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink pgw qos ambr up-link *number*
Tree	up-link

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Range	0 to 10000000
Units	kilobps
Default	10000
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

arp *number*

Synopsis	Allocation or retention priority
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink pgw qos arp *number*
Tree	arp
Range	1 to 15
Default	1
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

down-link

Synopsis	Enter the **down-link** context
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink pgw qos down-link
Tree	down-link
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

gbr *number*

Synopsis	Guaranteed Bit Rate (GBR)
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink pgw qos down-link gbr *number*
Tree	gbr
Range	0 to 100000
Units	kilobps
Default	0
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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mbr *number*

Synopsis	Maximum Bit Rate (MBR)
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink pgw qos down-link mbr *number*
Tree	mbr
Range	0 to 100000
Units	kilobps
Default	0
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

qci *number*

Synopsis	QoS Class Identifier (QCI) to send in GTP messages
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink pgw qos qci *number*
Tree	qci
Range	1 to 9
Default	8
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

up-link

Synopsis	Enter the **up-link** context
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink pgw qos up-link
Tree	up-link
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

gbr *number*

Synopsis	Guaranteed Bit Rate (GBR)
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink pgw qos up-link gbr *number*
Tree	gbr
Range	0 to 100000

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Units	kilobps
Default	0
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbr *number*

Synopsis	Maximum Bit Rate (MBR)
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink pgw qos up-link mbr *number*
Tree	mbr
Range	0 to 100000
Units	kilobps
Default	0
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocol-configuration-options *keyword*

Synopsis	Information Element for Protocol Configuration Options
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink protocol-configuration-options *keyword*
Tree	protocol-configuration-options
Options	pco, apco
Default	pco
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

rat-type *(number | keyword)*

Synopsis	Default Radio Access Type (RAT) signaled in GTP setup
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink rat-type *(number | keyword)*
Tree	rat-type
Description	This command configures the default Radio Access Technology (RAT) type signaled during GTP setup. RAT identifies the underlying physical connection method for a radio-based communication network. This can be overridden by RADIUS.
Range	0 to 255

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Options	utran, geran, wlan, gan, hspa, eutran, virtual
Default	wlan
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

report-wlan-location *boolean*

Synopsis	Report WLAN or cellular location of UE during setup
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink report-wlan-location *boolean*
Tree	report-wlan-location
Description	When configured to **true**, this command enables reporting of the WLAN location or cellular location of the UE in the signaling interface (S2a or Gn) between the WLAN GW and the mobile gateway (PGW or GGSN). When configured to **false**, this command disables location reporting.
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-hold-time *(number | keyword)*

Synopsis	Time to hold a GTP session after its UE is disconnected
Context	**configure** subscriber-mgmt gtp peer-profile *string* uplink session-hold-time *(number | keyword)*
Tree	session-hold-time
Range	0 to 3600
Units	seconds
Options	remaining-lease-time
Default	30
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

serving-network

Synopsis	Enable the **serving-network** context
Context	**configure** subscriber-mgmt gtp serving-network
Tree	serving-network

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Description	Commands in this context configure the 3GPP serving network that the node is part of.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mcc *string*

Synopsis	Mobile Country Code (MCC) portion of serving network
Context	**configure** subscriber-mgmt gtp serving-network mcc *string*
Tree	mcc
String Length	3
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mnc *string*

Synopsis	Mobile Network Code (MNC) portion of serving network
Context	**configure** subscriber-mgmt gtp serving-network mnc *string*
Tree	mnc
String Length	2 to 3
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

host-lockout-policy [name] *string*

Synopsis	Enter the **host-lockout-policy** list instance
Context	**configure** subscriber-mgmt host-lockout-policy *string*
Tree	host-lockout-policy
Max. Instances	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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[**name**] *string*

Synopsis	Host lockout policy name to associate with the SAP
Context	**configure** subscriber-mgmt host-lockout-policy *string*
Tree	host-lockout-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt host-lockout-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-key *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Parameters in host identification for lockout on a SAP
Context	**configure** subscriber-mgmt host-lockout-policy *string* host-key *keyword*
Tree	host-key
Options	all, mac
Default	all
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lockout-reset-time *number*

Synopsis	Lockout reset time settings
Context	**configure** subscriber-mgmt host-lockout-policy *string* lockout-reset-time *number*

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Tree	lockout-reset-time
Range	1 to 86400
Units	seconds
Default	60
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lockout-time

Synopsis	Enter the **lockout-time** context
Context	**configure** subscriber-mgmt host-lockout-policy *string* lockout-time
Tree	lockout-time
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max *number*

Synopsis	Maximum lockout time
Context	**configure** subscriber-mgmt host-lockout-policy *string* lockout-time max *number*
Tree	max
Range	1 to 86400
Units	seconds
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min *number*

Synopsis	Minimum lockout time
Context	**configure** subscriber-mgmt host-lockout-policy *string* lockout-time min *number*
Tree	min
Range	1 to 86400
Units	seconds
Default	10
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-lockout-hosts *number*

Synopsis	Max lockout hosts
Context	**configure** subscriber-mgmt host-lockout-policy *string* max-lockout-hosts *number*
Tree	max-lockout-hosts
Range	1 to 32000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-tracking-policy [name] *string*

Synopsis	Enter the **host-tracking-policy** list instance
Context	**configure** subscriber-mgmt host-tracking-policy *string*
Tree	host-tracking-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Host tracking policy name
Context	**configure** subscriber-mgmt host-tracking-policy *string*
Tree	host-tracking-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt host-tracking-policy *string* description *string*
Tree	description

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String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress-rate-modify

Synopsis	Enter the **egress-rate-modify** context
Context	**configure** subscriber-mgmt host-tracking-policy *string* egress-rate-modify
Tree	egress-rate-modify
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

agg-rate

Synopsis	Maximum total rate for all subscriber egress queues
Context	**configure** subscriber-mgmt host-tracking-policy *string* egress-rate-modify agg-rate
Tree	agg-rate
Description	This command specifies the maximum total rate for all subscriber egress queues for each subscriber associated with the policy.
Notes	The following elements are part of a choice: **agg-rate** or **scheduler**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler *string*

Synopsis	Scheduler to be applied for rate modification
Context	**configure** subscriber-mgmt host-tracking-policy *string* egress-rate-modify scheduler *string*
Tree	scheduler
String Length	1 to 32
Notes	The following elements are part of a choice: **agg-rate** or **scheduler**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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http-redirect-policy [name] *string*

Synopsis	Enter the **http-redirect-policy** list instance
Context	**configure** subscriber-mgmt http-redirect-policy *string*
Tree	http-redirect-policy
Max. Instances	16
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	HTTP redirect policy name
Context	**configure** subscriber-mgmt http-redirect-policy *string*
Tree	http-redirect-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-url-parameter *string*

Synopsis	AA URL parameter included for HTTP portal redirect
Context	**configure** subscriber-mgmt http-redirect-policy *string* aa-url-parameter *string*
Tree	aa-url-parameter
String Length	1 to 247
Introduced	22.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

application-assurance *reference*

Synopsis	AA application profile used for portal authentication
Context	**configure** subscriber-mgmt http-redirect-policy *string* application-assurance *reference*
Tree	application-assurance
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	22.2.R1

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Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt http-redirect-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dst-port *number*

Synopsis	Destination port number of the HTTP request to match
Context	**configure** subscriber-mgmt http-redirect-policy *string* dst-port *number*
Tree	dst-port
Range	1 to 65535
Default	80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

forward-entry dst-ip *(ipv4-prefix | ipv6-prefix)* protocol *keyword* dst-port *number*

Synopsis	Add a list entry for **forward-entry**
Context	**configure** subscriber-mgmt http-redirect-policy *string* forward-entry dst-ip *(ipv4-prefix | ipv6-prefix)* protocol *keyword* dst-port *number*
Tree	forward-entry
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dst-ip *(ipv4-prefix | ipv6-prefix)*

Synopsis	Destination address
Context	**configure** subscriber-mgmt http-redirect-policy *string* forward-entry dst-ip *(ipv4-prefix | ipv6-prefix)* protocol *keyword* dst-port *number*
Tree	forward-entry

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocol *keyword*

Synopsis	Destination protocol
Context	**configure** subscriber-mgmt http-redirect-policy *string* forward-entry dst-ip *(ipv4-prefix | ipv6-prefix)* protocol *keyword* dst-port *number*
Tree	forward-entry
Options	tcp, udp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dst-port *number*

Synopsis	Destination port
Context	**configure** subscriber-mgmt http-redirect-policy *string* forward-entry dst-ip *(ipv4-prefix | ipv6-prefix)* protocol *keyword* dst-port *number*
Tree	forward-entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ignore-app-profile *boolean*

Synopsis	Ignore application profile attribute in the RADIUS Access-Accept message
Context	**configure** subscriber-mgmt http-redirect-policy *string* ignore-app-profile *boolean*
Tree	ignore-app-profile
Default	false
Introduced	19.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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portal-hold-time *number*

Synopsis	Time to hold redirect forwarding resources
Context	**configure** subscriber-mgmt http-redirect-policy *string* portal-hold-time *number*
Tree	portal-hold-time
Range	1 to 60
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

url *string*

Synopsis	HTTP URL to which the matching traffic is redirected
Context	**configure** subscriber-mgmt http-redirect-policy *string* url *string*
Tree	url
Description	This command configures the HTTP redirect URL to which the matching traffic is redirected. Use the following variables to insert subscriber session data in the URL: • $URL (Request-URI in the HTTP GET Request received) • $MAC (a string that represents the MAC address of the subscriber host) • $IP (a string that represents the IP address of the subscriber host) • $NASIP (a string that represents the RADIUS IP address of the ISA/ESA-VM)
String Length	1 to 255
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

igmp-policy [name] *string*

Synopsis	Enter the **igmp-policy** list instance
Context	**configure** subscriber-mgmt igmp-policy *string*
Tree	igmp-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Policy name

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Context	**configure** subscriber-mgmt igmp-policy *string*
Tree	igmp-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt igmp-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress-rate-modify

Synopsis	Enter the **egress-rate-modify** context
Context	**configure** subscriber-mgmt igmp-policy *string* egress-rate-modify
Tree	egress-rate-modify
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

agg-rate

Synopsis	Maximum total rate for all subscriber egress queues
Context	**configure** subscriber-mgmt igmp-policy *string* egress-rate-modify agg-rate
Tree	agg-rate
Description	This command specifies the maximum total rate for all subscriber egress queues for each subscriber associated with the policy.
Notes	The following elements are part of a choice: **agg-rate** or **scheduler**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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scheduler *string*

Synopsis	Scheduler to be applied for rate modification
Context	**configure** subscriber-mgmt igmp-policy *string* egress-rate-modify scheduler *string*
Tree	scheduler
String Length	1 to 32
Notes	The following elements are part of a choice: **agg-rate** or **scheduler**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fast-leave *boolean*

Synopsis	Enable fast leave
Context	**configure** subscriber-mgmt igmp-policy *string* fast-leave *boolean*
Tree	fast-leave
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	**configure** subscriber-mgmt igmp-policy *string* import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	**configure** subscriber-mgmt igmp-policy *string* maximum-number-group-sources *number*
Tree	maximum-number-group-sources
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than

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the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.

Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	**configure** subscriber-mgmt igmp-policy *string* maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	**configure** subscriber-mgmt igmp-policy *string* maximum-number-sources *number*
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

multicast-reporter

Synopsis	Enter the **multicast-reporter** context
Context	**configure** subscriber-mgmt igmp-policy *string* multicast-reporter
Tree	multicast-reporter
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the multicast reporter
Context	**configure** subscriber-mgmt igmp-policy *string* multicast-reporter admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destination *reference*

Synopsis	Multicast reporter destination
Context	**configure** subscriber-mgmt igmp-policy *string* multicast-reporter destination *reference*
Tree	destination
Reference	**configure** multicast-management multicast-reporting-destination *string*
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

optional-fields

Synopsis	Enter the **optional-fields** context
Context	**configure** subscriber-mgmt igmp-policy *string* multicast-reporter optional-fields
Tree	optional-fields
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-mac *boolean*

Synopsis	Include host mac address
Context	**configure** subscriber-mgmt igmp-policy *string* multicast-reporter optional-fields host-mac *boolean*
Tree	host-mac
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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pppoe-session-id *boolean*

Synopsis	Include PPPoE session ID in multicast reporting message
Context	**configure** subscriber-mgmt igmp-policy *string* multicast-reporter optional-fields pppoe-session-id *boolean*
Tree	pppoe-session-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id *boolean*

Synopsis	Include sap ID
Context	**configure** subscriber-mgmt igmp-policy *string* multicast-reporter optional-fields sap-id *boolean*
Tree	sap-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

svc-id *boolean*

Synopsis	Include service ID
Context	**configure** subscriber-mgmt igmp-policy *string* multicast-reporter optional-fields svc-id *boolean*
Tree	svc-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** subscriber-mgmt igmp-policy *string* query-interval *number*
Tree	query-interval
Range	2 to 1024
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	**configure** subscriber-mgmt igmp-policy *string* query-last-member-interval *number*
Tree	query-last-member-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	**configure** subscriber-mgmt igmp-policy *string* query-response-interval *number*
Tree	query-response-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

redirection-policy *reference*

Synopsis	Multicast redirection action applied to the subscriber
Context	**configure** subscriber-mgmt igmp-policy *string* redirection-policy *reference*
Tree	redirection-policy
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

replication *keyword*

Synopsis	Multicast replication mode for subscriber multicast
Context	**configure** subscriber-mgmt igmp-policy *string* replication *keyword*
Tree	replication
Options	per-sap, per-host, per-spi

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Default	per-sap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	**configure** subscriber-mgmt igmp-policy *string* router-alert-check *boolean*
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

static

Synopsis	Enter the **static** context
Context	**configure** subscriber-mgmt igmp-policy *string* static
Tree	static
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group [group-address] *string*

Synopsis	Enter the **group** list instance
Context	**configure** subscriber-mgmt igmp-policy *string* static group *string*
Tree	group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**group-address**] *string*

Synopsis	Group address of static IGMP multicast channel
Context	**configure** subscriber-mgmt igmp-policy *string* static group *string*
Tree	group

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Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source [source-address] *string*

Synopsis	Add a list entry for **source**
Context	**configure** subscriber-mgmt igmp-policy *string* static group *string* source *string*
Tree	source
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**source-address**] *string*

Synopsis	Source IP address of multicast channel sending data
Context	**configure** subscriber-mgmt igmp-policy *string* static group *string* source *string*
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

starg

Synopsis	any source address (*,G)
Context	**configure** subscriber-mgmt igmp-policy *string* static group *string* starg
Tree	starg
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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use-multicast-destination-mac *boolean*

Synopsis	Use multicast destination mac address for outgoing traffic.
Context	**configure** subscriber-mgmt igmp-policy *string* use-multicast-destination-mac *boolean*
Tree	use-multicast-destination-mac
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis	IGMP protocol version
Context	**configure** subscriber-mgmt igmp-policy *string* version *keyword*
Tree	version
Options	1, 2, 3
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-session-policy [name] *string*

Synopsis	Enter the **ipoe-session-policy** list instance
Context	**configure** subscriber-mgmt ipoe-session-policy *string*
Tree	ipoe-session-policy
Max. Instances	256
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	IPoE session policy name
Context	**configure** subscriber-mgmt ipoe-session-policy *string*
Tree	ipoe-session-policy
String Length	1 to 32
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id-from-auth *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Use circuit ID from authentication server to identify session
Context	**configure** subscriber-mgmt ipoe-session-policy *string* circuit-id-from-auth *boolean*
Tree	circuit-id-from-auth
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt ipoe-session-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-key

Synopsis	Enter the **session-key** context
Context	**configure** subscriber-mgmt ipoe-session-policy *string* session-key
Tree	session-key
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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cid *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Use the Circuit ID as part of the index
Context	**configure** subscriber-mgmt ipoe-session-policy *string* session-key cid *boolean*
Tree	cid
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *boolean*

Synopsis	Use the MAC address as part of the index
Context	**configure** subscriber-mgmt ipoe-session-policy *string* session-key mac *boolean*
Tree	mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rid *boolean*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Use the remote ID as part of the index
Context	**configure** subscriber-mgmt ipoe-session-policy *string* session-key rid *boolean*
Tree	rid
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap *boolean*

Synopsis	Use the SAP ID as part of the index
Context	**configure** subscriber-mgmt ipoe-session-policy *string* session-key sap *boolean*
Tree	sap
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-timeout *(number | keyword)*

Synopsis	Timeout for IPoE sessions
Context	**configure** subscriber-mgmt ipoe-session-policy *string* session-timeout *(number | keyword)*
Tree	session-timeout
Range	1 to 31104000
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

isa-filter [name] *string*

Synopsis	Enter the **isa-filter** list instance
Context	**configure** subscriber-mgmt isa-filter *string*
Tree	isa-filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	ISA filter name
Context	**configure** subscriber-mgmt isa-filter *string*
Tree	isa-filter
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description

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Context	**configure** subscriber-mgmt isa-filter *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** subscriber-mgmt isa-filter *string* ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-action *keyword*

Synopsis	Action for non-matching entry
Context	**configure** subscriber-mgmt isa-filter *string* ipv4 default-action *keyword*
Tree	default-action
Options	drop – Drop packets forward – Forward packets
Default	drop
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** subscriber-mgmt isa-filter *string* ipv4 entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	ISA filter entry ID

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Context	**configure** subscriber-mgmt isa-filter *string* ipv4 entry *number*
Tree	entry
Range	1 to 1024
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action

Synopsis	Enable the **action** context
Context	**configure** subscriber-mgmt isa-filter *string* ipv4 entry *number* action
Tree	action
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drop

Synopsis	A packet matching the entry will be dropped
Context	**configure** subscriber-mgmt isa-filter *string* ipv4 entry *number* action drop
Tree	drop
Notes	The following elements are part of a mandatory choice: **drop**, **forward**, or **http-redirect**.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

forward

Synopsis	A packet matching the entry will be forwarded
Context	**configure** subscriber-mgmt isa-filter *string* ipv4 entry *number* action forward
Tree	forward
Notes	The following elements are part of a mandatory choice: **drop**, **forward**, or **http-redirect**.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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http-redirect

Synopsis	Enable the **http-redirect** context
Context	**configure** subscriber-mgmt isa-filter *string* ipv4 entry *number* action http-redirect
Tree	http-redirect
Notes	The following elements are part of a mandatory choice: **drop**, **forward**, or **http-redirect**.
Introduced	20.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

url *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	HTTP URL to which the matching traffic is redirected
Context	**configure** subscriber-mgmt isa-filter *string* ipv4 entry *number* action http-redirect url *string*
Tree	url
Description	This command specifies the URL to which HTTP flows matching the entry are redirected. The URL can be overridden by AAA. Only macros $URL, $MAC, $IP are supported. For unsupported macros, the string is not modified.
String Length	1 to 255
Notes	This element is mandatory.
Introduced	20.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt isa-filter *string* ipv4 entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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match

Synopsis	Enter the **match** context
Context	**configure** subscriber-mgmt isa-filter *string* ipv4 entry *number* match
Tree	match
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dst-ip *string*

Synopsis	Destination IPv4 prefix
Context	**configure** subscriber-mgmt isa-filter *string* ipv4 entry *number* match dst-ip *string*
Tree	dst-ip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dst-port

Synopsis	Enter the **dst-port** context
Context	**configure** subscriber-mgmt isa-filter *string* ipv4 entry *number* match dst-port
Tree	dst-port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

equals *number*

Synopsis	Exact port number
Context	**configure** subscriber-mgmt isa-filter *string* ipv4 entry *number* match dst-port equals *number*
Tree	equals
Range	0 | 1 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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protocol *keyword*

Synopsis	Protocol
Context	**configure** subscriber-mgmt isa-filter *string* ipv4 entry *number* match protocol *keyword*
Tree	protocol
Options	icmp – Match only ICMP packets tcp – Match only TCP packets udp – Match only UDP packets gre – Match only GRE packets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** subscriber-mgmt isa-filter *string* ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-action *keyword*

Synopsis	Action for non-matching entry
Context	**configure** subscriber-mgmt isa-filter *string* ipv6 default-action *keyword*
Tree	default-action
Options	drop – Drop packets forward – Forward packets
Default	drop
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** subscriber-mgmt isa-filter *string* ipv6 entry *number*
Tree	entry
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	ISA filter entry ID
Context	**configure** subscriber-mgmt isa-filter *string* ipv6 entry *number*
Tree	entry
Range	1 to 1024
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action

Synopsis	Enable the **action** context
Context	**configure** subscriber-mgmt isa-filter *string* ipv6 entry *number* action
Tree	action
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drop

Synopsis	A packet matching the entry will be dropped
Context	**configure** subscriber-mgmt isa-filter *string* ipv6 entry *number* action drop
Tree	drop
Notes	The following elements are part of a mandatory choice: **drop**, **forward**, or **http-redirect**.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

forward

Synopsis	A packet matching the entry will be forwarded
Context	**configure** subscriber-mgmt isa-filter *string* ipv6 entry *number* action forward
Tree	forward
Notes	The following elements are part of a mandatory choice: **drop**, **forward**, or **http-redirect**.

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Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

http-redirect

Synopsis	Enable the **http-redirect** context
Context	**configure** subscriber-mgmt isa-filter *string* ipv6 entry *number* action http-redirect
Tree	http-redirect
Notes	The following elements are part of a mandatory choice: **drop**, **forward**, or **http-redirect**.
Introduced	20.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

url *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	HTTP URL to which the matching traffic is redirected
Context	**configure** subscriber-mgmt isa-filter *string* ipv6 entry *number* action http-redirect url *string*
Tree	url
Description	This command specifies the URL to which HTTP flows matching the entry are redirected. The URL can be overridden by AAA. Only macros $URL, $MAC, $IP are supported. For unsupported macros, the string is not modified.
String Length	1 to 255
Notes	This element is mandatory.
Introduced	20.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt isa-filter *string* ipv6 entry *number* description *string*
Tree	description
String Length	1 to 80

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis	Enter the **match** context
Context	**configure** subscriber-mgmt isa-filter *string* ipv6 entry *number* match
Tree	match
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dst-ip *string*

Synopsis	Destination IPv6 prefix
Context	**configure** subscriber-mgmt isa-filter *string* ipv6 entry *number* match dst-ip *string*
Tree	dst-ip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dst-port

Synopsis	Enter the **dst-port** context
Context	**configure** subscriber-mgmt isa-filter *string* ipv6 entry *number* match dst-port
Tree	dst-port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

equals *number*

Synopsis	Exact port number
Context	**configure** subscriber-mgmt isa-filter *string* ipv6 entry *number* match dst-port equals *number*
Tree	equals
Range	0 | 1 to 65535
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

protocol *keyword*

Synopsis	Protocol
Context	**configure** subscriber-mgmt isa-filter *string* ipv6 entry *number* match protocol *keyword*
Tree	protocol
Options	icmp – Match only ICMP packets tcp – Match only TCP packets udp – Match only UDP packets gre – Match only GRE packets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Limit what the ISA filter can be used for
Context	**configure** subscriber-mgmt isa-filter *string* type *keyword*
Tree	type
Options	dsm – Limited to DSM applications
Default	dsm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

isa-policer [name] *string*

Synopsis	Enter the **isa-policer** list instance
Context	**configure** subscriber-mgmt isa-policer *string*
Tree	isa-policer
Max. Instances	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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[**name**] *string*

Synopsis	ISA policer name
Context	**configure** subscriber-mgmt isa-policer *string*
Tree	isa-policer
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	Action for in-profile and out-of-profile packets
Context	**configure** subscriber-mgmt isa-policer *string* action *keyword*
Tree	action
Options	permit-deny – Permit or deny packets based on policer outcome priority-mark – Mark packets as in or out of profile based on policer outcome
Default	permit-deny
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

adaptation-rule

Synopsis	Enter the **adaptation-rule** context
Context	**configure** subscriber-mgmt isa-policer *string* adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cir *keyword*

Synopsis	Committed information rate
Context	**configure** subscriber-mgmt isa-policer *string* adaptation-rule cir *keyword*
Tree	cir
Options	max, min, closest

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Default	closest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pir *keyword*

Synopsis	Peak Information Rate
Context	**configure** subscriber-mgmt isa-policer *string* adaptation-rule pir *keyword*
Tree	pir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cbs *number*

Synopsis	Committed burst size
Context	**configure** subscriber-mgmt isa-policer *string* cbs *number*
Tree	cbs
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt isa-policer *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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mbs *number*

Synopsis	Maximum Burst Size
Context	**configure** subscriber-mgmt isa-policer *string* mbs *number*
Tree	mbs
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate

Synopsis	Enter the **rate** context
Context	**configure** subscriber-mgmt isa-policer *string* rate
Tree	rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cir *(number | keyword)*

Synopsis	Committed information rate
Context	**configure** subscriber-mgmt isa-policer *string* rate cir *(number | keyword)*
Tree	cir
Range	0 to 100000000
Units	kilobps
Options	max
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pir *(number | keyword)*

Synopsis	Peak Information Rate
Context	**configure** subscriber-mgmt isa-policer *string* rate pir *(number | keyword)*
Tree	pir

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Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Policing technique
Context	**configure** subscriber-mgmt isa-policer *string* type *keyword*
Tree	type
Options	single-bucket-bandwidth – Police traffic using a single bucket dual-bucket-bandwidth – Police traffic using dual buckets
Default	single-bucket-bandwidth
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

isa-service-chaining

Synopsis	Enter the **isa-service-chaining** context
Context	**configure** subscriber-mgmt isa-service-chaining
Tree	isa-service-chaining
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

evpn [id] *string*

Synopsis	Enter the **evpn** list instance
Context	**configure** subscriber-mgmt isa-service-chaining evpn *string*
Tree	evpn

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Max. Instances	1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**id**] *string*

Synopsis	EVPN service ID
Context	**configure** subscriber-mgmt isa-service-chaining evpn *string*
Tree	evpn
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of EVPN
Context	**configure** subscriber-mgmt isa-service-chaining evpn *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bgp

Synopsis	Enter the **bgp** context
Context	**configure** subscriber-mgmt isa-service-chaining evpn *string* bgp
Tree	bgp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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route-distinguisher

Synopsis	Enter the **route-distinguisher** context
Context	**configure** subscriber-mgmt isa-service-chaining evpn *string* bgp route-distinguisher
Tree	route-distinguisher
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rd *(keyword | vpn-route-distinguisher)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	RD component for NLRI
Context	**configure** subscriber-mgmt isa-service-chaining evpn *string* bgp route-distinguisher rd *(keyword | vpn-route-distinguisher)*
Tree	rd
Options	auto-rd
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

route-target

Synopsis	Enable the **route-target** context
Context	**configure** subscriber-mgmt isa-service-chaining evpn *string* bgp route-target
Tree	route-target
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Extended community name for default export policy

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Context	**configure** subscriber-mgmt isa-service-chaining evpn *string* bgp route-target export *string*
Tree	export
String Length	10 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

import *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Extended community name for default import policy
Context	**configure** subscriber-mgmt isa-service-chaining evpn *string* bgp route-target import *string*
Tree	import
String Length	10 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt isa-service-chaining evpn *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export

Synopsis	Enter the **export** context
Context	**configure** subscriber-mgmt isa-service-chaining evpn *string* export

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Tree	export
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

advertise-pools

Synopsis	Enter the **advertise-pools** context
Context	**configure** subscriber-mgmt isa-service-chaining evpn *string* export advertise-pools
Tree	advertise-pools
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of NAT pool route advertisement
Context	**configure** subscriber-mgmt isa-service-chaining evpn *string* export advertise-pools admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool router-instance *string* name *string*

Synopsis	Add a list entry for **pool**
Context	**configure** subscriber-mgmt isa-service-chaining evpn *string* export advertise-pools pool router-instance *string* name *string*
Tree	pool
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Router-instance of the NAT pool

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Context	**configure** subscriber-mgmt isa-service-chaining evpn *string* export advertise-pools pool router-instance *string* name *string*
Tree	pool
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	NAT pool name
Context	**configure** subscriber-mgmt isa-service-chaining evpn *string* export advertise-pools pool router-instance *string* name *string*
Tree	pool
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gateway-address-range

Synopsis	Enable the **gateway-address-range** context
Context	**configure** subscriber-mgmt isa-service-chaining evpn *string* export gateway-address-range
Tree	gateway-address-range
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *string*

Synopsis	Upper bound of the gateway address range
Context	**configure** subscriber-mgmt isa-service-chaining evpn *string* export gateway-address-range end *string*
Tree	end
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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start *string*

Synopsis	Lower bound of the gateway address range
Context	**configure** subscriber-mgmt isa-service-chaining evpn *string* export gateway-address-range start *string*
Tree	start
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vxlan

Synopsis	Enter the **vxlan** context
Context	**configure** subscriber-mgmt isa-service-chaining evpn *string* export vxlan
Tree	vxlan
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vni *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VNI of the VXLAN created by the EVPN service
Context	**configure** subscriber-mgmt isa-service-chaining evpn *string* export vxlan vni *number*
Tree	vni
Range	1 to 16777215
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

import-mode *keyword*

WARNING:
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Synopsis	Import mode for the EVPN
Context	**configure** subscriber-mgmt isa-service-chaining evpn *string* import-mode *keyword*
Tree	import-mode
Options	none, bridged, routed
Default	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix-route-resolution *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	How prefix routes should be resolved
Context	**configure** subscriber-mgmt isa-service-chaining evpn *string* prefix-route-resolution *keyword*
Tree	prefix-route-resolution
Options	recursive, non-recursive
Default	recursive
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-prefix *string*

Synopsis	MAC prefix for all NAT groups for Service Chaining
Context	**configure** subscriber-mgmt isa-service-chaining mac-prefix *string*
Tree	mac-prefix
String Length	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vas-filter [name] *string*

Synopsis	Enter the **vas-filter** list instance
Context	**configure** subscriber-mgmt isa-service-chaining vas-filter *string*

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Tree	vas-filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	VAS filter name
Context	**configure** subscriber-mgmt isa-service-chaining vas-filter *string*
Tree	vas-filter
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt isa-service-chaining vas-filter *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** subscriber-mgmt isa-service-chaining vas-filter *string* entry *number*
Tree	entry
Max. Instances	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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[**id**] *number*

Synopsis	VAS filter entry ID
Context	**configure** subscriber-mgmt isa-service-chaining vas-filter *string* entry *number*
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action [direction] *keyword*

Synopsis	Enter the **action** list instance
Context	**configure** subscriber-mgmt isa-service-chaining vas-filter *string* entry *number* action *keyword*
Tree	action
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**direction**] *keyword*

Synopsis	Direction for the action in a VAS filter entry
Context	**configure** subscriber-mgmt isa-service-chaining vas-filter *string* entry *number* action *keyword*
Tree	action
Options	upstream, downstream
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fail-action *keyword*

Synopsis	Action for unresolved SF-IP or ESI
Context	**configure** subscriber-mgmt isa-service-chaining vas-filter *string* entry *number* action *keyword* fail-action *keyword*
Tree	fail-action
Options	drop, accept

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Default	accept
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

forward

Synopsis	Enable the **forward** context
Context	**configure** subscriber-mgmt isa-service-chaining vas-filter *string* entry *number* action *keyword* forward
Tree	forward
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esi *string*

Synopsis	ESI for the action in the VAS filter entry
Context	**configure** subscriber-mgmt isa-service-chaining vas-filter *string* entry *number* action *keyword* forward esi *string*
Tree	esi
Default	00:00:00:00:00:00:00:00:00:00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sf-ip *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Forwarding SF IP address for the action
Context	**configure** subscriber-mgmt isa-service-chaining vas-filter *string* entry *number* action *keyword* forward sf-ip *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	sf-ip
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

svc *reference*

Synopsis	EVPN service used for forwarding packets

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Context	**configure** subscriber-mgmt isa-service-chaining vas-filter *string* entry *number* action *keyword* forward svc *reference*
Tree	svc
Reference	**configure** subscriber-mgmt isa-service-chaining evpn *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

insert-nsh

Synopsis	Enter the **insert-nsh** context
Context	**configure** subscriber-mgmt isa-service-chaining vas-filter *string* entry *number* action *keyword* insert-nsh
Tree	insert-nsh
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

meta-data

Synopsis	Enter the **meta-data** context
Context	**configure** subscriber-mgmt isa-service-chaining vas-filter *string* entry *number* action *keyword* insert-nsh meta-data
Tree	meta-data
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

insert-subscriber-id

Synopsis	Insert the subscriber-id in the NSH
Context	**configure** subscriber-mgmt isa-service-chaining vas-filter *string* entry *number* action *keyword* insert-nsh meta-data insert-subscriber-id
Tree	insert-subscriber-id
Notes	The following elements are part of a choice: **insert-subscriber-id** or **opaque-data**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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opaque-data *string*

Synopsis	Opaque meta-data for the NSH
Context	**configure** subscriber-mgmt isa-service-chaining vas-filter *string* entry *number* action *keyword* insert-nsh meta-data opaque-data *string*
Tree	opaque-data
String Length	10|18|26|34
Notes	The following elements are part of a choice: **insert-subscriber-id** or **opaque-data**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

svc-path

Synopsis	Enable the **svc-path** context
Context	**configure** subscriber-mgmt isa-service-chaining vas-filter *string* entry *number* action *keyword* insert-nsh svc-path
Tree	svc-path
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

path-id *number*

Synopsis	Path ID in the base part of NSH
Context	**configure** subscriber-mgmt isa-service-chaining vas-filter *string* entry *number* action *keyword* insert-nsh svc-path path-id *number*
Tree	path-id
Range	1 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

svc-index *number*

Synopsis	Service index inserted in the base part of NSH
Context	**configure** subscriber-mgmt isa-service-chaining vas-filter *string* entry *number* action *keyword* insert-nsh svc-path svc-index *number*

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Tree	svc-index
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the VAS filter
Context	**configure** subscriber-mgmt isa-service-chaining vas-filter *string* entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt isa-service-chaining vas-filter *string* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

match

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **match** context
Context	**configure** subscriber-mgmt isa-service-chaining vas-filter *string* entry *number* match
Tree	match

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

foreign-ip *(ipv4-unicast-prefix | ipv4-unicast-address)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Foreign IP address or prefix for match criterion
Context	**configure** subscriber-mgmt isa-service-chaining vas-filter *string* entry *number* match foreign-ip *(ipv4-unicast-prefix | ipv4-unicast-address)*
Tree	foreign-ip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

foreign-port *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Foreign TCP or UDP port as the match criterion
Context	**configure** subscriber-mgmt isa-service-chaining vas-filter *string* entry *number* match foreign-port *number*
Tree	foreign-port
Range	1 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocol *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP protocol to match the VAS filter
Context	**configure** subscriber-mgmt isa-service-chaining vas-filter *string* entry *number* match protocol *keyword*

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Tree	protocol
Options	tcp-udp – TCP and UDP none – Matching disabled by the IP protocol icmp – ICMP tcp – TCP udp – UDP
Default	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-user-db [name] *string*

Synopsis	Enter the **local-user-db** list instance
Context	**configure** subscriber-mgmt local-user-db *string*
Tree	local-user-db
Max. Instances	127
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Local user database name
Context	**configure** subscriber-mgmt local-user-db *string*
Tree	local-user-db
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the local user database
Context	**configure** subscriber-mgmt local-user-db *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable

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Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt local-user-db *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe

Synopsis	Enter the **ipoe** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe
Tree	ipoe
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host [host-name] *string*

Synopsis	Enter the **host** list instance
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string*
Tree	host
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**host-name**] *string*

Synopsis	Host name
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string*
Tree	host
String Length	1 to 32

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the host
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authentication

Synopsis	Enter the **authentication** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* authentication
Tree	authentication
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auth-domain-name *string*

Synopsis	Domain name appended to the username for the host
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* authentication auth-domain-name *string*
Tree	auth-domain-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gx-policy *string*

Synopsis	Diameter application policy

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Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* authentication gx-policy *string*
Tree	gx-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nasreq-auth-policy *string*

Synopsis	Diameter NASREQ application policy for authentication
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* authentication nasreq-auth-policy *string*
Tree	nasreq-auth-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-auth-policy *string*

Synopsis	Host authentication policy
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* authentication radius-auth-policy *string*
Tree	radius-auth-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gtp-interface

Synopsis	Enable the **gtp-interface** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* gtp-interface
Tree	gtp-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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name *string*

Synopsis	IP interface name
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* gtp-interface name *string*
Tree	name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-id *number*

Synopsis	Service ID
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* gtp-interface service-id *number*
Tree	service-id
Range	1 to 2147483647 | 2147483648 | 2147483649 | 2147483650 | 2147483651 to 2147483690 | 2147483691 to 2148007980 | 2148007981 to 2148012076 | 2148012077 to 2148016172 | 2148016173 to 2148278316 | 2148278317 | 2148278318 to 2148278381 | 2148278382 | 2148278383 to 2148278386
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-identification

Synopsis	Enter the **host-identification** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification
Tree	host-identification
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id

Synopsis	Enter the **circuit-id** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification circuit-id

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Tree	circuit-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Circuit ID as ASCII string
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification circuit-id ascii-string *string*
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a choice: **ascii-string** or **hex-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Circuit ID as hexadecimal string
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification circuit-id hex-string *string*
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a choice: **ascii-string** or **hex-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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derived-id *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Derived ID string
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification derived-id *string*
Tree	derived-id
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

encap-tag-range

Synopsis	Enable the **encap-tag-range** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification encap-tag-range
Tree	encap-tag-range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

from *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Start tag
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification encap-tag-range from *string*
Tree	from
String Length	1 to 11
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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to *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	End tag
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification encap-tag-range to *string*
Tree	to
String Length	1 to 11
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

encap-tag-separate-range

Synopsis	Enter the **encap-tag-separate-range** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification encap-tag-separate-range
Tree	encap-tag-separate-range
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

inner

Synopsis	Enter the **inner** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification encap-tag-separate-range inner
Tree	inner
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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end *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the inner encapsulation tag range
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification encap-tag-separate-range inner end *number*
Tree	end
Description	This command configures an inner end tag for the range of encapsulation tags used for host identification.
Range	0 to 4094
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the inner encapsulation tag range
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification encap-tag-separate-range inner start *number*
Tree	start
Description	This command configures an inner start tag for the range of encapsulation tags used for host identification.
Range	0 to 4094
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

outer

Synopsis	Enter the **outer** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification encap-tag-separate-range outer
Tree	outer
Introduced	20.5.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the outer encapsulation tag range
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification encap-tag-separate-range outer end *number*
Tree	end
Description	This command configures an outer end tag for the range of encapsulation tags used for host identification.
Range	0 to 4094
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the outer encapsulation tag range
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification encap-tag-separate-range outer start *number*
Tree	start
Description	This command configures an outer start tag for the range of encapsulation tags used for host identification.
Range	0 to 4094
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ip-prefix *(ipv4-prefix-with-host-bits | ipv6-prefix-with-host-bits)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP interface name
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification ip-prefix *(ipv4-prefix-with-host-bits | ipv6-prefix-with-host-bits)*
Tree	ip-prefix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MAC address
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification mac *string*
Tree	mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option60

Synopsis	Enter the **option60** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification option60
Tree	option60
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ascii-string *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Option 60 as ASCII string
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification option60 ascii-string *string*
Tree	ascii-string
String Length	1 to 32
Notes	The following elements are part of a choice: **ascii-string** or **hex-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Option as a hexadecimal string
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification option60 hex-string *string*
Tree	hex-string
String Length	1 to 64
Notes	The following elements are part of a choice: **ascii-string** or **hex-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id

Synopsis	Enter the **remote-id** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification remote-id
Tree	remote-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ascii-string *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote ID as ASCII string
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification remote-id ascii-string *string*
Tree	ascii-string
String Length	1 to 255
Notes	The following elements are part of a choice: **ascii-string** or **hex-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote ID as hexadecimal string
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification remote-id hex-string *string*
Tree	hex-string
String Length	1 to 512
Notes	The following elements are part of a choice: **ascii-string** or **hex-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SAP ID

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Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification sap-id *string*
Tree	sap-id
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-id *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification service-id *number*
Tree	service-id
Range	1 to 2147483647 | 2147483648 | 2147483649 | 2147483650 | 2147483651 to 2147483690 | 2147483691 to 2148007980 | 2148007981 to 2148012076 | 2148012077 to 2148016172 | 2148016173 to 2148278316 | 2148278317 | 2148278318 to 2148278381 | 2148278382 | 2148278383 to 2148278386
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VSO string
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification string *string*
Tree	string
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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system-id *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System ID
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* host-identification system-id *string*
Tree	system-id
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

identification

Synopsis	Enable the **identification** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* identification
Tree	identification
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-string *string*

Synopsis	ANCP string
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* identification ancp-string *string*
Tree	ancp-string
String Length	1 to 63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile-string *string*

Synopsis	Application profile string
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* identification app-profile-string *string*
Tree	app-profile-string

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String Length	1 to 16
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

category-map-name *string*

Synopsis	Category map name
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* identification category-map-name *string*
Tree	category-map-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

int-dest-id *string*

Synopsis	Intermediate destination ID
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* identification int-dest-id *string*
Tree	int-dest-id
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option-number *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Identification strings for the subscriber
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* identification option-number *number*
Tree	option-number
Range	1 to 254
Default	254
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile-string *string*

Synopsis	SLA profile string
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* identification sla-profile-string *string*
Tree	sla-profile-string
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

spi-sharing-group-id *number*

Synopsis	SPI sharing group ID
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* identification spi-sharing-group-id *number*
Tree	spi-sharing-group-id
Range	0 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile-string *string*

Synopsis	Sub profile string
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* identification sub-profile-string *string*
Tree	sub-profile-string
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id *string*

Synopsis	Subscriber ID
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* identification subscriber-id *string*

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Tree	subscriber-id
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address

Synopsis	Enter the **address** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv4 address
Tree	address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gi-address *keyword*

Synopsis	Use gi-address to select a pool with the given scope
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv4 address gi-address *keyword*
Tree	gi-address
Options	subnet-scope, pool-scope
Notes	The following elements are part of a choice: **gi-address**, **ip-address**, **pool**, or **use-pool-from-client**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis	Fixed IPv4 address of the host

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Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv4 address ip-address *string*
Tree	ip-address
Notes	The following elements are part of a choice: **gi-address**, **ip-address**, **pool**, or **use-pool-from-client**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool

Synopsis	Enable the **pool** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv4 address pool
Tree	pool
Notes	The following elements are part of a choice: **gi-address**, **ip-address**, **pool**, or **use-pool-from-client**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delimiter *string*

Synopsis	Delimiter separating primary and secondary pool names
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv4 address pool delimiter *string*
Tree	delimiter
String Length	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

primary *string*

Synopsis	Primary pool name
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv4 address pool primary *string*
Tree	primary
String Length	1 to 32
Notes	This element is mandatory.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

secondary *string*

Synopsis	Secondary pool name
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv4 address pool secondary *string*
Tree	secondary
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-pool-from-client

Synopsis	Enable the **use-pool-from-client** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv4 address use-pool-from-client
Tree	use-pool-from-client
Notes	The following elements are part of a choice: **gi-address**, **ip-address**, **pool**, or **use-pool-from-client**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delimiter *string*

Synopsis	Delimiter character to combine primary and secondary pool names
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv4 address use-pool-from-client delimiter *string*
Tree	delimiter
String Length	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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gi-address *string*

Synopsis	GI addresses based on the host entry in the LUDB
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv4 gi-address *string*
Tree	gi-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [number] *(number | keyword)*

Synopsis	Enter the **option** list instance
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv4 option *(number | keyword)*
Tree	option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**number**] *(number | keyword)*

Synopsis	DHCP option to send identification strings to client
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv4 option *(number | keyword)*
Tree	option
Range	1 to 254
Options	subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv4 option *(number | keyword)* ascii-string *string*
Tree	ascii-string
String Length	1 to 127

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Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option as time duration
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv4 option *(number | keyword)* duration *number*
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option.
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv4 option *(number | keyword)* empty
Tree	empty
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv4 option *(number | keyword)* hex-string *string*
Tree	hex-string
String Length	1 to 256

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Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4-address *string*

Synopsis	DHCP option as a list of IPv4 addresses
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv4 option *(number | keyword)* ipv4-address *string*
Tree	ipv4-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**. This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

netbios-node-type *keyword*

Synopsis	DHCP option as NetBIOS node type
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv4 option *(number | keyword)* netbios-node-type *keyword*
Tree	netbios-node-type
Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *string*

Synopsis	IPv4 address of the DHCP server
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv4 server *string*
Tree	server
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis	Fixed IPv6 address of the host
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv6 address *string*
Tree	address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address-pool *string*

Synopsis	IPv6 address pool name
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv6 address-pool *string*
Tree	address-pool
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delegated-prefix *string*

Synopsis	IPv6 delegated prefix of this host
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv6 delegated-prefix *string*
Tree	delegated-prefix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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delegated-prefix-length *number*

Synopsis	Delegated prefix length
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv6 delegated-prefix-length *number*
Tree	delegated-prefix-length
Range	48 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delegated-prefix-pool *string*

Synopsis	Delegated prefix pool
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv6 delegated-prefix-pool *string*
Tree	delegated-prefix-pool
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

Synopsis	Link address used for prefix selection at DHCP server
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv6 link-address *string*
Tree	link-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [number] *(number | keyword)*

Synopsis	Enter the **option** list instance
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv6 option *(number | keyword)*
Tree	option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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[**number**] *(number | keyword)*

Synopsis	The number of the DHCPv6 option.
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv6 option *(number | keyword)*
Tree	option
Range	23
Options	dns-server
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv6 option *(number | keyword)* hex-string *string*
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: **hex-string** or **ipv6-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv6 option *(number | keyword)* ipv6-address *string*
Tree	ipv6-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: **hex-string** or **ipv6-address**. This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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router-advertisement-policy *string*

Synopsis	IPv6 router advertisement policy
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv6 router-advertisement-policy *string*
Tree	router-advertisement-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *string*

Synopsis	IPv6 address of the DHCP server
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv6 server *string*
Tree	server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

slaac-prefix *string*

Synopsis	IPv6 SLAAC prefix of this host
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv6 slaac-prefix *string*
Tree	slaac-prefix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

slaac-prefix-pool *string*

Synopsis	IPv6 SLAAC prefix pool of this host
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv6 slaac-prefix-pool *string*
Tree	slaac-prefix-pool
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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timers

Synopsis	Enter the **timers** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv6 timers
Tree	timers
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime *(number | keyword)*

Synopsis	Time for a lease to remain preferred
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv6 timers preferred-lifetime *(number | keyword)*
Tree	preferred-lifetime
Range	300 to 315446399
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rebind *number*

Synopsis	Rebind timer (T2)
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv6 timers rebind *number*
Tree	rebind
Range	0 to 1209600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

renew *number*

Synopsis	Renew timer (T1)
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv6 timers renew *number*

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Tree	renew
Range	0 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *(number | keyword)*

Synopsis	Time for a lease to remain valid
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* ipv6 timers valid-lifetime *(number | keyword)*
Tree	valid-lifetime
Range	300 to 315446399
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match-radius-proxy-cache

Synopsis	Enter the **match-radius-proxy-cache** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* match-radius-proxy-cache
Tree	match-radius-proxy-cache
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fail-action *keyword*

Synopsis	Action when no match is found
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* match-radius-proxy-cache fail-action *keyword*
Tree	fail-action
Options	continue, drop
Default	drop
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-format *string*

Synopsis	MAC address format
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* match-radius-proxy-cache mac-format *string*
Tree	mac-format
String Length	2 to 7
Default	aa:
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis	Enter the **match** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* match-radius-proxy-cache match
Tree	match
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id *boolean*

Synopsis	Match circuit ID in DHCP Option 82
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* match-radius-proxy-cache match circuit-id *boolean*
Tree	circuit-id
Notes	The following elements are part of a choice: **circuit-id**, (**ipv4-option** and **ipv6-option**), **mac**, or **remote-id**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4-option *number*

Synopsis	DHCP option number

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Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* match-radius-proxy-cache match ipv4-option *number*
Tree	ipv4-option
Range	1 to 254
Notes	The following elements are part of a choice: **circuit-id**, (**ipv4-option** and **ipv6-option**), **mac**, or **remote-id**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-option *number*

Synopsis	DHCPv6 option number
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* match-radius-proxy-cache match ipv6-option *number*
Tree	ipv6-option
Range	1 to 65535
Notes	The following elements are part of a choice: **circuit-id**, (**ipv4-option** and **ipv6-option**), **mac**, or **remote-id**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *boolean*

Synopsis	Match MAC address of DHCP client
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* match-radius-proxy-cache match mac *boolean*
Tree	mac
Default	true
Notes	The following elements are part of a choice: **circuit-id**, (**ipv4-option** and **ipv6-option**), **mac**, or **remote-id**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id *boolean*

Synopsis	Match remote ID in DHCP Option 82

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Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* match-radius-proxy-cache match remote-id *boolean*
Tree	remote-id
Notes	The following elements are part of a choice: **circuit-id**, (**ipv4-option** and **ipv6-option**), **mac**, or **remote-id**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server

Synopsis	Enable the **server** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* match-radius-proxy-cache server
Tree	server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	Local user database server name
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* match-radius-proxy-cache server name *string*
Tree	name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service *number*

Synopsis	Service ID
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* match-radius-proxy-cache server service *number*
Tree	service
Range	1 to 2147483647
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mld-import [policy-name] *string*

Synopsis	Add a list entry for **mld-import**
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* mld-import *string*
Tree	mld-import
Max. Instances	14
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**policy-name**] *string*

Synopsis	MLD import policy used to control the multicast group
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* mld-import *string*
Tree	mld-import
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

msap-defaults

Synopsis	Enter the **msap-defaults** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* msap-defaults
Tree	msap-defaults
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface

Synopsis	Enable the **group-interface** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* msap-defaults group-interface
Tree	group-interface

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	IP interface name
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* msap-defaults group-interface name *string*
Tree	name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix *keyword*

Synopsis	Prefix to the IP interface name
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* msap-defaults group-interface prefix *keyword*
Tree	prefix
Options	port-id
Notes	The following elements are part of a choice: **prefix** or **suffix**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suffix *keyword*

Synopsis	Suffix for the group interface
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* msap-defaults group-interface suffix *keyword*
Tree	suffix
Options	port-id
Notes	The following elements are part of a choice: **prefix** or **suffix**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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policy *string*

Synopsis	MSAP policy
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* msap-defaults policy *string*
Tree	policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service *number*

Synopsis	Service ID
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* msap-defaults service *number*
Tree	service
Range	1 to 2147483647 | 2147483648 | 2147483649 | 2147483650 | 2147483651 to 2147483690 | 2147483691 to 2148007980 | 2148007981 to 2148012076 | 2148012077 to 2148016172 | 2148016173 to 2148278316 | 2148278317 | 2148278318 to 2148278381 | 2148278382 | 2148278383 to 2148278386
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy

Synopsis	Enter the **radius-accounting-policy** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* radius-accounting-policy
Tree	radius-accounting-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duplicate *string*

Synopsis	RADIUS accounting policy for generating duplicate accounting information
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* radius-accounting-policy duplicate *string*

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Tree	duplicate
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	RADIUS accounting policy name
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* radius-accounting-policy name *string*
Tree	name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retail-service-id *number*

Synopsis	Configure the retail service-id
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* retail-service-id *number*
Tree	retail-service-id
Range	1 to 2147483647 | 2147483648 | 2147483649 | 2147483650 | 2147483651 to 2147483690 | 2147483691 to 2148007980 | 2148007981 to 2148012076 | 2148012077 to 2148016172 | 2148016173 to 2148278316 | 2148278317 | 2148278318 to 2148278381 | 2148278382 | 2148278383 to 2148278386
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rip-policy *string*

Synopsis	RIP policy
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* rip-policy *string*
Tree	rip-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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to-client-options

Synopsis	Enter the **to-client-options** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* to-client-options
Tree	to-client-options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4-option [number] *(number | keyword)*

Synopsis	Enter the **ipv4-option** list instance
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* to-client-options ipv4-option *(number | keyword)*
Tree	ipv4-option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**number**] *(number | keyword)*

Synopsis	DHCP option to send identification strings to client
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* to-client-options ipv4-option *(number | keyword)*
Tree	ipv4-option
Range	1 to 254
Options	subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* to-client-options ipv4-option *(number | keyword)* ascii-string *string*
Tree	ascii-string
String Length	1 to 127

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Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option as time duration
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* to-client-options ipv4-option *(number | keyword)* duration *number*
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* to-client-options ipv4-option *(number | keyword)* empty
Tree	empty
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* to-client-options ipv4-option *(number | keyword)* hex-string *string*
Tree	hex-string
String Length	1 to 256

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Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4-address *string*

Synopsis	DHCP option as a list of IPv4 addresses
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* to-client-options ipv4-option *(number | keyword)* ipv4-address *string*
Tree	ipv4-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**. This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

netbios-node-type *keyword*

Synopsis	DHCP option as NetBIOS node type
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* to-client-options ipv4-option *(number | keyword)* netbios-node-type *keyword*
Tree	netbios-node-type
Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-option [number] *(number | keyword)*

Synopsis	Enter the **ipv6-option** list instance
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* to-client-options ipv6-option *(number | keyword)*
Tree	ipv6-option

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**number**] *(number | keyword)*

Synopsis	DHCP option to send as identification string
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* to-client-options ipv6-option *(number | keyword)*
Tree	ipv6-option
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* to-client-options ipv6-option *(number | keyword)* ascii-string *string*
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-string *string*

Synopsis	DHCP option specified as a domain name
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* to-client-options ipv6-option *(number | keyword)* domain-string *string*
Tree	domain-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **empty**, **hex-string**, or **ipv6-address**.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* to-client-options ipv6-option *(number | keyword)* empty
Tree	empty
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* to-client-options ipv6-option *(number | keyword)* hex-string *string*
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* to-client-options ipv6-option *(number | keyword)* ipv6-address *string*
Tree	ipv6-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **empty**, **hex-string**, or **ipv6-address**. This element is ordered by the user.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

to-server-options

Synopsis	Enter the **to-server-options** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* to-server-options
Tree	to-server-options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-option [number] *(number | keyword)*

Synopsis	Enter the **ipv6-option** list instance
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* to-server-options ipv6-option *(number | keyword)*
Tree	ipv6-option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**number**] *(number | keyword)*

Synopsis	DHCP option to send as identification string
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* to-server-options ipv6-option *(number | keyword)*
Tree	ipv6-option
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string

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Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* to-server-options ipv6-option *(number | keyword)* ascii-string *string*
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-string *string*

Synopsis	DHCP option specified as a domain name
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* to-server-options ipv6-option *(number | keyword)* domain-string *string*
Tree	domain-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* to-server-options ipv6-option *(number | keyword)* empty
Tree	empty
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* to-server-options ipv6-option *(number | keyword)* hex-string *string*

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Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* to-server-options ipv6-option *(number | keyword)* ipv6-address *string*
Tree	ipv6-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **empty**, **hex-string**, or **ipv6-address**. This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wpp

Synopsis	Enter the **wpp** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* wpp
Tree	wpp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

initial

Synopsis	Enter the **initial** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* wpp initial
Tree	initial
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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app-profile *string*

Synopsis	Initial application profile name
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* wpp initial app-profile *string*
Tree	app-profile
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sla-profile *string*

Synopsis	Initial SLA profile
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* wpp initial sla-profile *string*
Tree	sla-profile
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *string*

Synopsis	Initial subscriber profile
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* wpp initial sub-profile *string*
Tree	sub-profile
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

portal

Synopsis	Enter the **portal** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* wpp portal
Tree	portal
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	Web portal server name
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* wpp portal name *string*
Tree	name
String Length	1 to 32
Notes	The following elements are part of a choice: **portal-group** or (**name** and **router-instance**).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

portal-group *string*

Synopsis	WPP portal group for this interface
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* wpp portal portal-group *string*
Tree	portal-group
String Length	1 to 32
Notes	The following elements are part of a choice: **portal-group** or (**name** and **router-instance**).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-instance *(keyword | number)*

Synopsis	Virtual router instance of the WPP portal for the host
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* wpp portal router-instance *(keyword | number)*
Tree	router-instance
Range	1 to 2147483647
Options	base
Default	base
Notes	The following elements are part of a choice: **portal-group** or (**name** and **router-instance**).

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Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

restore-to-initial-on-disconnect *keyword*

Synopsis	Restore initial profiles after a host has disconnected
Context	**configure** subscriber-mgmt local-user-db *string* ipoe host *string* wpp restore-to-initial-on-disconnect *keyword*
Tree	restore-to-initial-on-disconnect
Options	restore, no-restore
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mask type *keyword*

Synopsis	Enter the **mask** list instance
Context	**configure** subscriber-mgmt local-user-db *string* ipoe mask type *keyword*
Tree	mask
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Matching type to identify a host
Context	**configure** subscriber-mgmt local-user-db *string* ipoe mask type *keyword*
Tree	mask
Options	circuit-id, remote-id, sap-id, string, system-id, option60
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix

Synopsis	Enable the **prefix** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe mask type *keyword* prefix

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Tree	prefix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

length *number*

Synopsis	PPP mask prefix length
Context	**configure** subscriber-mgmt local-user-db *string* ipoe mask type *keyword* prefix length *number*
Tree	length
Range	1 to 127
Notes	The following elements are part of a mandatory choice: **length** or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Prefix string
Context	**configure** subscriber-mgmt local-user-db *string* ipoe mask type *keyword* prefix string *string*
Tree	string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **length** or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suffix

Synopsis	Enable the **suffix** context
Context	**configure** subscriber-mgmt local-user-db *string* ipoe mask type *keyword* suffix
Tree	suffix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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length *number*

Synopsis	PPP mask suffix length
Context	**configure** subscriber-mgmt local-user-db *string* ipoe mask type *keyword* suffix length *number*
Tree	length
Range	1 to 127
Notes	The following elements are part of a mandatory choice: **length** or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Suffix string
Context	**configure** subscriber-mgmt local-user-db *string* ipoe mask type *keyword* suffix string *string*
Tree	string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **length** or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match-list *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPoE host match type
Context	**configure** subscriber-mgmt local-user-db *string* ipoe match-list *keyword*
Tree	match-list
Options	circuit-id, mac, remote-id, sap-id, service-id, string, system-id, option60, encap-tag-range, dual-stack-remote-id, derived-id, ip, encap-tag-separate-range
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp

Synopsis	Enter the **ppp** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp
Tree	ppp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host [host-name] *string*

Synopsis	Enter the **host** list instance
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string*
Tree	host
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**host-name**] *string*

Synopsis	Host name
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string*
Tree	host
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

access-loop-encapsulation

Synopsis	Enable the **access-loop-encapsulation** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* access-loop-encapsulation
Tree	access-loop-encapsulation
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

encap-offset

Synopsis	Enter the **encap-offset** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* access-loop-encapsulation encap-offset
Tree	encap-offset
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Egress encapsulation type
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* access-loop-encapsulation encap-offset type *keyword*
Tree	type
Options	pppoa-llc, pppoa-null, pppoeoa-llc, pppoeoa-llc-fcs, pppoeoa-llc-tagged, pppoeoa-llc-tagged-fcs, pppoeoa-null, pppoeoa-null-fcs, pppoeoa-null-tagged, pppoeoa-null-tagged-fcs, ipoa-llc, ipoa-null, ipoeoa-llc, ipoeoa-llc-fcs, ipoeoa-llc-tagged, ipoeoa-llc-tagged-fcs, ipoeoa-null, ipoeoa-null-fcs, ipoeoa-null-tagged, ipoeoa-null-tagged-fcs, pppoe, pppoe-tagged, ipoe, ipoe-tagged
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate-down *number*

Synopsis	Last mile link downstream rate in the access loop
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* access-loop-encapsulation rate-down *number*
Tree	rate-down
Range	1 to 100000
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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access-loop-information

Synopsis	Enter the **access-loop-information** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* access-loop-information
Tree	access-loop-information
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id

Synopsis	Enable the **circuit-id** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* access-loop-information circuit-id
Tree	circuit-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	Circuit ID as an ASCII string
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* access-loop-information circuit-id ascii-string *string*
Tree	ascii-string
String Length	1 to 63
Notes	The following elements are part of a mandatory choice: **ascii-string**, **sap-id**, or **use-sap-id**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-sap-id

Synopsis	Use sap-id as circuit-id.
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* access-loop-information circuit-id use-sap-id
Tree	use-sap-id
Notes	The following elements are part of a mandatory choice: **ascii-string**, **sap-id**, or **use-sap-id**.

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Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id

Synopsis	Enable the **remote-id** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* access-loop-information remote-id
Tree	remote-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	String format for the remote ID
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* access-loop-information remote-id ascii-string *string*
Tree	ascii-string
String Length	1 to 63
Notes	The following elements are part of a mandatory choice: **ascii-string**, **mac**, or **use-mac-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-mac-address

Synopsis	Use MAC address as remote-id.
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* access-loop-information remote-id use-mac-address
Tree	use-mac-address
Notes	The following elements are part of a mandatory choice: **ascii-string**, **mac**, or **use-mac-address**.
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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admin-state *keyword*

Synopsis	Administrative state of the host
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authentication

Synopsis	Enter the **authentication** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* authentication
Tree	authentication
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gx-policy *string*

Synopsis	Diameter application policy
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* authentication gx-policy *string*
Tree	gx-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nasreq-auth-policy *string*

Synopsis	Diameter NASREQ application policy for authentication
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* authentication nasreq-auth-policy *string*
Tree	nasreq-auth-policy
String Length	1 to 32
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

padi-auth-policy *string*

Synopsis	Authentication policy name
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* authentication padi-auth-policy *string*
Tree	padi-auth-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pre-auth-policy *string*

Synopsis	Pre-authentication policy of this host
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* authentication pre-auth-policy *string*
Tree	pre-auth-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-auth-policy *string*

Synopsis	Host authentication policy
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* authentication radius-auth-policy *string*
Tree	radius-auth-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *string*

Synopsis	Local user DB to use for PPP PAP/CHAP authentication
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* authentication user-db *string*

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Tree	user-db
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-identification

Synopsis	Enter the **host-identification** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* host-identification
Tree	host-identification
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id

Synopsis	Enter the **circuit-id** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* host-identification circuit-id
Tree	circuit-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Circuit ID as ASCII string
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* host-identification circuit-id ascii-string *string*
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a choice: **ascii-string** or **hex-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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hex-string *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Circuit ID as hexadecimal string
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* host-identification circuit-id hex-string *string*
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a choice: **ascii-string** or **hex-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

derived-id *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Derived ID string
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* host-identification derived-id *string*
Tree	derived-id
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

encap-tag-range

Synopsis	Enable the **encap-tag-range** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* host-identification encap-tag-range
Tree	encap-tag-range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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from *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Start tag
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* host-identification encap-tag-range from *string*
Tree	from
String Length	1 to 11
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

to *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	End tag
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* host-identification encap-tag-range to *string*
Tree	to
String Length	1 to 11
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

encap-tag-separate-range

Synopsis	Enter the **encap-tag-separate-range** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* host-identification encap-tag-separate-range
Tree	encap-tag-separate-range
Introduced	20.5.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

inner

Synopsis	Enter the **inner** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* host-identification encap-tag-separate-range inner
Tree	inner
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the inner encapsulation tag range
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* host-identification encap-tag-separate-range inner end *number*
Tree	end
Description	This command configures an inner end tag for the range of encapsulation tags used for host identification.
Range	0 to 4094
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the inner encapsulation tag range
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* host-identification encap-tag-separate-range inner start *number*
Tree	start

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Description	This command configures an inner start tag for the range of encapsulation tags used for host identification.
Range	0 to 4094
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

outer

Synopsis	Enter the **outer** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* host-identification encap-tag-separate-range outer
Tree	outer
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the outer encapsulation tag range
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* host-identification encap-tag-separate-range outer end *number*
Tree	end
Description	This command configures an outer end tag for the range of encapsulation tags used for host identification.
Range	0 to 4094
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the outer encapsulation tag range

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Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* host-identification encap-tag-separate-range outer start *number*
Tree	start
Description	This command configures an outer start tag for the range of encapsulation tags used for host identification.
Range	0 to 4094
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MAC address
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* host-identification mac *string*
Tree	mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id

Synopsis	Enter the **remote-id** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* host-identification remote-id
Tree	remote-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote ID as ASCII string

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Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* host-identification remote-id ascii-string *string*
Tree	ascii-string
String Length	1 to 255
Notes	The following elements are part of a choice: **ascii-string** or **hex-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote ID as hexadecimal string
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* host-identification remote-id hex-string *string*
Tree	hex-string
String Length	1 to 512
Notes	The following elements are part of a choice: **ascii-string** or **hex-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SAP ID
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* host-identification sap-id *string*
Tree	sap-id
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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service-name *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* host-identification service-name *string*
Tree	service-name
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-name

Synopsis	Enable the **user-name** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* host-identification user-name
Tree	user-name
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

format *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Username format
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* host-identification user-name format *keyword*
Tree	format
Options	full, no-domain, domain-only
Default	full
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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name *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Host username
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* host-identification user-name name *string*
Tree	name
String Length	1 to 253
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

identification

Synopsis	Enable the **identification** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* identification
Tree	identification
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-string *string*

Synopsis	ANCP string
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* identification ancp-string *string*
Tree	ancp-string
String Length	1 to 63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile-string *string*

Synopsis	Application profile string
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* identification app-profile-string *string*

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Tree	app-profile-string
String Length	1 to 16
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

category-map-name *string*

Synopsis	Category map name
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* identification category-map-name *string*
Tree	category-map-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

int-dest-id *string*

Synopsis	Intermediate destination ID
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* identification int-dest-id *string*
Tree	int-dest-id
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option-number *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Identification strings for the subscriber
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* identification option-number *number*
Tree	option-number
Range	1 to 254
Default	254

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile-string *string*

Synopsis	SLA profile string
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* identification sla-profile-string *string*
Tree	sla-profile-string
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

spi-sharing-group-id *number*

Synopsis	SPI sharing group ID
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* identification spi-sharing-group-id *number*
Tree	spi-sharing-group-id
Range	0 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile-string *string*

Synopsis	Sub profile string
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* identification sub-profile-string *string*
Tree	sub-profile-string
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id *string*

Synopsis	Subscriber ID

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Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* identification subscriber-id *string*
Tree	subscriber-id
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address

Synopsis	Enter the **address** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv4 address
Tree	address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gi-address *keyword*

Synopsis	Use gi-address to select a pool with the given scope
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv4 address gi-address *keyword*
Tree	gi-address
Options	subnet-scope, pool-scope
Notes	The following elements are part of a choice: **gi-address**, (**ip-address** and **prefix-length**), **pool**, or **use-pool-from-client**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ip-address *string*

Synopsis	Fixed IPv4 address of the host
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv4 address ip-address *string*
Tree	ip-address
Notes	The following elements are part of a choice: **gi-address**, (**ip-address** and **prefix-length**), **pool**, or **use-pool-from-client**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool

Synopsis	Enable the **pool** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv4 address pool
Tree	pool
Notes	The following elements are part of a choice: **gi-address**, (**ip-address** and **prefix-length**), **pool**, or **use-pool-from-client**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delimiter *string*

Synopsis	Delimiter separating primary and secondary pool names
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv4 address pool delimiter *string*
Tree	delimiter
String Length	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

primary *string*

Synopsis	Primary pool name
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv4 address pool primary *string*
Tree	primary

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String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

secondary *string*

Synopsis	Secondary pool name
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv4 address pool secondary *string*
Tree	secondary
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length *number*

Synopsis	IPv4 host address prefix length
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv4 address prefix-length *number*
Tree	prefix-length
Range	1 to 32
Default	32
Notes	The following elements are part of a choice: **gi-address**, (**ip-address** and **prefix-length**), **pool**, or **use-pool-from-client**.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-pool-from-client

Synopsis	Enable the **use-pool-from-client** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv4 address use-pool-from-client
Tree	use-pool-from-client
Notes	The following elements are part of a choice: **gi-address**, (**ip-address** and **prefix-length**), **pool**, or **use-pool-from-client**.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delimiter *string*

Synopsis	Delimiter character to combine primary and secondary pool names
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv4 address use-pool-from-client delimiter *string*
Tree	delimiter
String Length	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-df-bit *boolean*

Synopsis	Ignore the DF bit in the IPv4 header when fragmenting
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv4 ignore-df-bit *boolean*
Tree	ignore-df-bit
Description	When configured to **true**, the router ignores the DF bit in the IPv4 header for frames egressing the subscriber interface. The frames are fragmented according the applicable egress MTU. The DF bit is reset for frames that are fragmented. This command applies to PPPoE PTA and L2TP LNS frames only. It is not applicable for L2TP LAC frames. When configured to **false**, the router does not ignore the DF bit in the IPv4 header for frames egressing the subscriber interface.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [number] *(number | keyword)*

Synopsis	Enter the **option** list instance
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv4 option *(number | keyword)*
Tree	option
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**number**] *(number | keyword)*

Synopsis	DHCP option to send identification strings to client
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv4 option *(number | keyword)*
Tree	option
Range	1 to 254
Options	subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv4 option *(number | keyword)* ascii-string *string*
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option as time duration
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv4 option *(number | keyword)* duration *number*
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option.
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv4 option *(number | keyword)* empty
Tree	empty
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv4 option *(number | keyword)* hex-string *string*
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4-address *string*

Synopsis	DHCP option as a list of IPv4 addresses
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv4 option *(number | keyword)* ipv4-address *string*
Tree	ipv4-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**. This element is ordered by the user.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

netbios-node-type *keyword*

Synopsis	DHCP option as NetBIOS node type
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv4 option *(number | keyword)* netbios-node-type *keyword*
Tree	netbios-node-type
Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis	Fixed IPv6 address of the host
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv6 address *string*
Tree	address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address-pool *string*

Synopsis	IPv6 address pool name
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv6 address-pool *string*
Tree	address-pool

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String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delegated-prefix *string*

Synopsis	IPv6 delegated prefix of this host
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv6 delegated-prefix *string*
Tree	delegated-prefix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delegated-prefix-length *number*

Synopsis	Delegated prefix length
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv6 delegated-prefix-length *number*
Tree	delegated-prefix-length
Range	48 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delegated-prefix-pool *string*

Synopsis	Delegated prefix pool
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv6 delegated-prefix-pool *string*
Tree	delegated-prefix-pool
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

force-ipv6cp *boolean*

Synopsis	Force IPv6 control protocol

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Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv6 force-ipv6cp *boolean*
Tree	force-ipv6cp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [number] *(number | keyword)*

Synopsis	Enter the **option** list instance
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv6 option *(number | keyword)*
Tree	option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**number**] *(number | keyword)*

Synopsis	The number of the DHCPv6 option.
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv6 option *(number | keyword)*
Tree	option
Range	23
Options	dns-server
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv6 option *(number | keyword)* hex-string *string*
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: **hex-string** or **ipv6-address**.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv6 option *(number | keyword)* ipv6-address *string*
Tree	ipv6-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: **hex-string** or **ipv6-address**. This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-advertisement-policy *string*

Synopsis	IPv6 router advertisement policy
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv6 router-advertisement-policy *string*
Tree	router-advertisement-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

slaac-prefix *string*

Synopsis	IPv6 SLAAC prefix of this host
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv6 slaac-prefix *string*
Tree	slaac-prefix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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slaac-prefix-pool *string*

Synopsis	IPv6 SLAAC prefix pool of this host
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv6 slaac-prefix-pool *string*
Tree	slaac-prefix-pool
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timers

Synopsis	Enter the **timers** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv6 timers
Tree	timers
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime *(number | keyword)*

Synopsis	Time for a lease to remain preferred
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv6 timers preferred-lifetime *(number | keyword)*
Tree	preferred-lifetime
Range	300 to 315446399
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rebind *number*

Synopsis	Rebind timer (T2)
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv6 timers rebind *number*
Tree	rebind
Range	0 to 1209600

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Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

renew *number*

Synopsis	Renew timer (T1)
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv6 timers renew *number*
Tree	renew
Range	0 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *(number | keyword)*

Synopsis	Time for a lease to remain valid
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ipv6 timers valid-lifetime *(number | keyword)*
Tree	valid-lifetime
Range	300 to 315446399
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2tp

Synopsis	Enter the **l2tp** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* l2tp
Tree	l2tp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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group

Synopsis	Enable the **group** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* l2tp group
Tree	group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	L2TP tunnel group name
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* l2tp group name *string*
Tree	name
String Length	1 to 63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-id *number*

Synopsis	Service ID for the L2TP tunnel group
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* l2tp group service-id *number*
Tree	service-id
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lns-interface

Synopsis	Enable the **lns-interface** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* lns-interface
Tree	lns-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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name *string*

Synopsis	IP interface name
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* lns-interface name *string*
Tree	name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-id *number*

Synopsis	Service ID
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* lns-interface service-id *number*
Tree	service-id
Range	1 to 2147483647 | 2147483648 | 2147483649 | 2147483650 | 2147483651 to 2147483690 | 2147483691 to 2148007980 | 2148007981 to 2148012076 | 2148012077 to 2148016172 | 2148016173 to 2148278316 | 2148278317 | 2148278318 to 2148278381 | 2148278382 | 2148278383 to 2148278386
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mld-import [policy-name] *string*

Synopsis	Add a list entry for **mld-import**
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* mld-import *string*
Tree	mld-import
Max. Instances	14
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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[**policy-name**] *string*

Synopsis	MLD import policy used to control the multicast group
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* mld-import *string*
Tree	mld-import
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

msap-defaults

Synopsis	Enter the **msap-defaults** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* msap-defaults
Tree	msap-defaults
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface

Synopsis	Enable the **group-interface** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* msap-defaults group-interface
Tree	group-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	IP interface name
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* msap-defaults group-interface name *string*
Tree	name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix *keyword*

Synopsis	Prefix to the IP interface name
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* msap-defaults group-interface prefix *keyword*
Tree	prefix
Options	port-id
Notes	The following elements are part of a choice: **prefix** or **suffix**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suffix *keyword*

Synopsis	Suffix for the group interface
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* msap-defaults group-interface suffix *keyword*
Tree	suffix
Options	port-id
Notes	The following elements are part of a choice: **prefix** or **suffix**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *string*

Synopsis	MSAP policy
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* msap-defaults policy *string*
Tree	policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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service *number*

Synopsis	Service ID
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* msap-defaults service *number*
Tree	service
Range	1 to 2147483647 | 2147483648 | 2147483649 | 2147483650 | 2147483651 to 2147483690 | 2147483691 to 2148007980 | 2148007981 to 2148012076 | 2148012077 to 2148016172 | 2148016173 to 2148278316 | 2148278317 | 2148278318 to 2148278381 | 2148278382 | 2148278383 to 2148278386
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pado-delay *number*

Synopsis	Delay timeout before sending a PADO
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* pado-delay *number*
Tree	pado-delay
Range	1 to 30
Units	deciseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password

Synopsis	Enter the **password** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* password
Tree	password
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

chap *string*

Synopsis	CHAP protocol
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* password chap *string*
Tree	chap
String Length	1 to 115

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Notes	The following elements are part of a choice: **chap**, **ignore**, or **pap**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore

Synopsis	Ignore the PAP and CHAP passwords
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* password ignore
Tree	ignore
Notes	The following elements are part of a choice: **chap**, **ignore**, or **pap**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pap *string*

Synopsis	PAP for the password
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* password pap *string*
Tree	pap
String Length	1 to 115
Notes	The following elements are part of a choice: **chap**, **ignore**, or **pap**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-policy-parameters

Synopsis	Enter the **ppp-policy-parameters** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ppp-policy-parameters
Tree	ppp-policy-parameters
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

keepalive

Synopsis	Enable the **keepalive** context

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Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ppp-policy-parameters keepalive
Tree	keepalive
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-up-multiplier *number*

Synopsis	PPP LCP keepalive hold up multiplier override
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ppp-policy-parameters keepalive hold-up-multiplier *number*
Tree	hold-up-multiplier
Description	This command configures the number of LCP echo replies that can be missed before the PPP session is brought down and overrides the value configured in the **configure subscriber-mgmt ppp-policy** context for PPPoE PTA sessions or in the **configure l2tp group** context for L2TP LNS sessions.
Range	1 to 5
Default	3
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	PPP LCP keepalive interval override
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ppp-policy-parameters keepalive interval *number*
Tree	interval
Description	This command configures the time interval in seconds at which LCP echo requests are transmitted for the PPP session and overrides the value configured in the **configure subscriber-mgmt ppp-policy** context for PPPoE PTA sessions or the c**onfigure l2tp group** context for L2TP LNS sessions.
Range	4 to 300
Units	seconds
Default	30
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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max-sessions-per-mac *number*

Synopsis	Maximum number of sessions per MAC address
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* ppp-policy-parameters max-sessions-per-mac *number*
Tree	max-sessions-per-mac
Description	This command sets the maximum PPP sessions that can be opened for a specified MAC address.
Range	1 to 8191
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy

Synopsis	Enter the **radius-accounting-policy** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* radius-accounting-policy
Tree	radius-accounting-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duplicate *string*

Synopsis	RADIUS accounting policy for generating duplicate accounting information
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* radius-accounting-policy duplicate *string*
Tree	duplicate
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	RADIUS accounting policy name
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* radius-accounting-policy name *string*
Tree	name
String Length	1 to 32

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retail-service-id *number*

Synopsis	Configure the retail service-id
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* retail-service-id *number*
Tree	retail-service-id
Range	1 to 2147483647 | 2147483648 | 2147483649 | 2147483650 | 2147483651 to 2147483690 | 2147483691 to 2148007980 | 2148007981 to 2148012076 | 2148012077 to 2148016172 | 2148016173 to 2148278316 | 2148278317 | 2148278318 to 2148278381 | 2148278382 | 2148278383 to 2148278386
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rip-policy *string*

Synopsis	RIP policy
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* rip-policy *string*
Tree	rip-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

steering-profile *string*

Synopsis	Steering profile
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* steering-profile *string*
Tree	steering-profile
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

to-client-options

Synopsis	Enter the **to-client-options** context

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Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* to-client-options
Tree	to-client-options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-option [number] *(number | keyword)*

Synopsis	Enter the **ipv6-option** list instance
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* to-client-options ipv6-option *(number | keyword)*
Tree	ipv6-option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**number**] *(number | keyword)*

Synopsis	DHCP option to send as identification string
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* to-client-options ipv6-option *(number | keyword)*
Tree	ipv6-option
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* to-client-options ipv6-option *(number | keyword)* ascii-string *string*
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-string *string*

Synopsis	DHCP option specified as a domain name
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* to-client-options ipv6-option *(number | keyword)* domain-string *string*
Tree	domain-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* to-client-options ipv6-option *(number | keyword)* empty
Tree	empty
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* to-client-options ipv6-option *(number | keyword)* hex-string *string*
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **empty**, **hex-string**, or **ipv6-address**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	**configure** subscriber-mgmt local-user-db *string* ppp host *string* to-client-options ipv6-option *(number | keyword)* ipv6-address *string*
Tree	ipv6-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **empty**, **hex-string**, or **ipv6-address**. This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mask type *keyword*

Synopsis	Enter the **mask** list instance
Context	**configure** subscriber-mgmt local-user-db *string* ppp mask type *keyword*
Tree	mask
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Matching type to identify a host
Context	**configure** subscriber-mgmt local-user-db *string* ppp mask type *keyword*
Tree	mask
Options	circuit-id, mac, remote-id, user-name, service-name, sap-id
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix

Synopsis	Enable the **prefix** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp mask type *keyword* prefix

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Tree	prefix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

length *number*

Synopsis	PPP mask prefix length
Context	**configure** subscriber-mgmt local-user-db *string* ppp mask type *keyword* prefix length *number*
Tree	length
Range	1 to 127
Notes	The following elements are part of a mandatory choice: **length** or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Prefix string
Context	**configure** subscriber-mgmt local-user-db *string* ppp mask type *keyword* prefix string *string*
Tree	string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **length** or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suffix

Synopsis	Enable the **suffix** context
Context	**configure** subscriber-mgmt local-user-db *string* ppp mask type *keyword* suffix
Tree	suffix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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length *number*

Synopsis	PPP mask suffix length
Context	**configure** subscriber-mgmt local-user-db *string* ppp mask type *keyword* suffix length *number*
Tree	length
Range	1 to 127
Notes	The following elements are part of a mandatory choice: **length** or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	Suffix string
Context	**configure** subscriber-mgmt local-user-db *string* ppp mask type *keyword* suffix string *string*
Tree	string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **length** or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match-list *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PPP host match type
Context	**configure** subscriber-mgmt local-user-db *string* ppp match-list *keyword*
Tree	match-list
Options	circuit-id, mac, remote-id, user-name, service-name, sap-id, encap-tag-range, derived-id, encap-tag-separate-range
Max. Instances	3
Notes	This element is ordered by the user.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mld-policy [name] *string*

Synopsis	Enter the **mld-policy** list instance
Context	**configure** subscriber-mgmt mld-policy *string*
Tree	mld-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Policy name
Context	**configure** subscriber-mgmt mld-policy *string*
Tree	mld-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt mld-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress-rate-modify

Synopsis	Enter the **egress-rate-modify** context
Context	**configure** subscriber-mgmt mld-policy *string* egress-rate-modify
Tree	egress-rate-modify
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

agg-rate

Synopsis	Maximum total rate for all subscriber egress queues
Context	**configure** subscriber-mgmt mld-policy *string* egress-rate-modify agg-rate
Tree	agg-rate
Description	This command specifies the maximum total rate for all subscriber egress queues for each subscriber associated with the policy.
Notes	The following elements are part of a choice: **agg-rate** or **scheduler**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler *string*

Synopsis	Scheduler to be applied for rate modification
Context	**configure** subscriber-mgmt mld-policy *string* egress-rate-modify scheduler *string*
Tree	scheduler
String Length	1 to 32
Notes	The following elements are part of a choice: **agg-rate** or **scheduler**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fast-leave *boolean*

Synopsis	Enable fast leave
Context	**configure** subscriber-mgmt mld-policy *string* fast-leave *boolean*
Tree	fast-leave
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy to filter MLD packets

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Context	**configure** subscriber-mgmt mld-policy *string* import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	**configure** subscriber-mgmt mld-policy *string* maximum-number-group-sources *number*
Tree	maximum-number-group-sources
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	**configure** subscriber-mgmt mld-policy *string* maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	**configure** subscriber-mgmt mld-policy *string* maximum-number-sources *number*
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	**configure** subscriber-mgmt mld-policy *string* query-interval *number*
Tree	query-interval
Range	2 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	**configure** subscriber-mgmt mld-policy *string* query-last-member-interval *number*
Tree	query-last-member-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	**configure** subscriber-mgmt mld-policy *string* query-response-interval *number*
Tree	query-response-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

redirection-policy *reference*

Synopsis	Multicast redirection action applied to the subscriber
Context	**configure** subscriber-mgmt mld-policy *string* redirection-policy *reference*
Tree	redirection-policy
Reference	**configure** policy-options policy-statement *string*

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

replication *keyword*

Synopsis	Multicast replication mode for subscriber multicast
Context	**configure** subscriber-mgmt mld-policy *string* replication *keyword*
Tree	replication
Options	per-sap, per-host, per-spi
Default	per-sap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	**configure** subscriber-mgmt mld-policy *string* router-alert-check *boolean*
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

static

Synopsis	Enter the **static** context
Context	**configure** subscriber-mgmt mld-policy *string* static
Tree	static
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group [group-address] *string*

Synopsis	Enter the **group** list instance
Context	**configure** subscriber-mgmt mld-policy *string* static group *string*
Tree	group

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**group-address**] *string*

Synopsis	Group address of multicast channel
Context	**configure** subscriber-mgmt mld-policy *string* static group *string*
Tree	group
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source [source-address] *string*

Synopsis	Add a list entry for **source**
Context	**configure** subscriber-mgmt mld-policy *string* static group *string* source *string*
Tree	source
Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**source-address**] *string*

Synopsis	Source IP address
Context	**configure** subscriber-mgmt mld-policy *string* static group *string* source *string*
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

starg

Synopsis	any source address (*,G)
Context	**configure** subscriber-mgmt mld-policy *string* static group *string* starg
Tree	starg

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Notes	The following elements are part of a mandatory choice: **source** or **starg**.
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-multicast-destination-mac *boolean*

Synopsis	Use multicast destination mac address for outgoing traffic.
Context	**configure** subscriber-mgmt mld-policy *string* use-multicast-destination-mac *boolean*
Tree	use-multicast-destination-mac
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis	MLD protocol version
Context	**configure** subscriber-mgmt mld-policy *string* version *keyword*
Tree	version
Options	1, 2
Default	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

msap-policy [name] *string*

Synopsis	Enter the **msap-policy** list instance
Context	**configure** subscriber-mgmt msap-policy *string*
Tree	msap-policy
Max. Instances	256
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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[**name**] *string*

Synopsis	Managed SAP policy name
Context	**configure** subscriber-mgmt msap-policy *string*
Tree	msap-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cpu-protection

Synopsis	Enter the **cpu-protection** context
Context	**configure** subscriber-mgmt msap-policy *string* cpu-protection
Tree	cpu-protection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

ip-src-monitoring

Synopsis	Apply the IP source monitoring
Context	**configure** subscriber-mgmt msap-policy *string* cpu-protection ip-src-monitoring
Tree	ip-src-monitoring
Notes	The following elements are part of a choice: **ip-src-monitoring** or **mac-monitoring**.
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

mac-monitoring

Synopsis	Apply the per-source rate limit
Context	**configure** subscriber-mgmt msap-policy *string* cpu-protection mac-monitoring
Tree	mac-monitoring
Notes	The following elements are part of a choice: **ip-src-monitoring** or **mac-monitoring**.
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

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policy-id *reference*

Synopsis	CPM protection policy
Context	**configure** subscriber-mgmt msap-policy *string* cpu-protection policy-id *reference*
Tree	policy-id
Reference	**configure** system security cpu-protection policy *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt msap-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dist-cpu-protection *string*

Synopsis	Distributed CPU protection policy
Context	**configure** subscriber-mgmt msap-policy *string* dist-cpu-protection *string*
Tree	dist-cpu-protection
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ies-vprn-only-sap-parameters

Synopsis	Enter the **ies-vprn-only-sap-parameters** context
Context	**configure** subscriber-mgmt msap-policy *string* ies-vprn-only-sap-parameters
Tree	ies-vprn-only-sap-parameters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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anti-spoof *keyword*

Synopsis	Anti-spoof filtering for the MSAP
Context	**configure** subscriber-mgmt msap-policy *string* ies-vprn-only-sap-parameters anti-spoof *keyword*
Tree	anti-spoof
Options	source-ip-and-mac-addr, next-hop-ip-and-mac-addr
Default	source-ip-and-mac-addr
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the **egress** context
Context	**configure** subscriber-mgmt msap-policy *string* ies-vprn-only-sap-parameters egress
Tree	egress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the **qos** context
Context	**configure** subscriber-mgmt msap-policy *string* ies-vprn-only-sap-parameters egress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	QoS policy ID or name to associate with the MSAPs
Context	**configure** subscriber-mgmt msap-policy *string* ies-vprn-only-sap-parameters egress qos policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-egress *string*
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the **ingress** context
Context	**configure** subscriber-mgmt msap-policy *string* ies-vprn-only-sap-parameters ingress
Tree	ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the **qos** context
Context	**configure** subscriber-mgmt msap-policy *string* ies-vprn-only-sap-parameters ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	QoS policy ID or name to associate with the MSAPs
Context	**configure** subscriber-mgmt msap-policy *string* ies-vprn-only-sap-parameters ingress qos policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-ingress *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

queuing-type *keyword*

Synopsis	Queuing type
Context	**configure** subscriber-mgmt msap-policy *string* ies-vprn-only-sap-parameters ingress qos queuing-type *keyword*
Tree	queuing-type
Options	shared, service

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Default	shared
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

igmp-host-tracking

Synopsis	Enter the **igmp-host-tracking** context
Context	**configure** subscriber-mgmt msap-policy *string* igmp-host-tracking
Tree	igmp-host-tracking
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

expiry-time *number*

Synopsis	Time that the system continues to track inactive hosts
Context	**configure** subscriber-mgmt msap-policy *string* igmp-host-tracking expiry-time *number*
Tree	expiry-time
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	**configure** subscriber-mgmt msap-policy *string* igmp-host-tracking import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis	Maximum number of multicast groups to track per group

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Context	**configure** subscriber-mgmt msap-policy *string* igmp-host-tracking maximum-number-group-sources *number*
Tree	maximum-number-group-sources
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of multicast groups to be tracked
Context	**configure** subscriber-mgmt msap-policy *string* igmp-host-tracking maximum-number-groups *number*
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis	Maximum number of multicast sources to be tracked
Context	**configure** subscriber-mgmt msap-policy *string* igmp-host-tracking maximum-number-sources *number*
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lag-link-map-profile *number*

Synopsis	Map profile for LAG link
Context	**configure** subscriber-mgmt msap-policy *string* lag-link-map-profile *number*
Tree	lag-link-map-profile
Range	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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sticky-msaps *boolean*

Synopsis	Prevent MSAPs from being deleted
Context	**configure** subscriber-mgmt msap-policy *string* sticky-msaps *boolean*
Tree	sticky-msaps
Description	When configured to **true**, MSAPs associated with the specified MSAP policy are not removed unless a manual **clear** command is issued. This feature is useful if historical statistics records on MSAPs need to be retained. It can also reduce host creation time because the MSAP is already created. When configured to **false**, MSAPs can be automatically removed when a host creation fails or when a subscriber is no longer associated with the MSAP, for example, when a subscriber ends the session.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sticky-msaps-idle-timeout *number*

Synopsis	Timeout used for sticky MSAPs
Context	**configure** subscriber-mgmt msap-policy *string* sticky-msaps-idle-timeout *number*
Tree	sticky-msaps-idle-timeout
Description	This command configures the timeout interval which determines when idle sticky MSAPs can be removed. By default, MSAPs are deleted shortly after the subscriber session ends. The system is prevented from automatically deleting sticky MSAPs after the session ends, allowing for a faster subsequent subscriber connection without MSAP creation; however, sticky MSAPs require SAP resources. The configuration of this command allows for the removal of sticky MSAPs that are idle for the specified time period. When unconfigured, no timeout interval is applied.
Range	5 to 604800
Units	seconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-sla-mgmt

Synopsis	Enter the **sub-sla-mgmt** context
Context	**configure** subscriber-mgmt msap-policy *string* sub-sla-mgmt

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Tree	sub-sla-mgmt
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

defaults

Synopsis	Enter the **defaults** context
Context	**configure** subscriber-mgmt msap-policy *string* sub-sla-mgmt defaults
Tree	defaults
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Application profile name
Context	**configure** subscriber-mgmt msap-policy *string* sub-sla-mgmt defaults app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

int-dest-id

Synopsis	Enter the **int-dest-id** context
Context	**configure** subscriber-mgmt msap-policy *string* sub-sla-mgmt defaults int-dest-id
Tree	int-dest-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	String to be used as the int-dest-id
Context	**configure** subscriber-mgmt msap-policy *string* sub-sla-mgmt defaults int-dest-id string *string*
Tree	string

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String Length	1 to 32
Notes	The following elements are part of a choice: **string** or **top-q-tag**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

top-q-tag

Synopsis	Derive string from top most delineating Dot1Q tag
Context	**configure** subscriber-mgmt msap-policy *string* sub-sla-mgmt defaults int-dest-id top-q-tag
Tree	top-q-tag
Notes	The following elements are part of a choice: **string** or **top-q-tag**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	Default SLA profile
Context	**configure** subscriber-mgmt msap-policy *string* sub-sla-mgmt defaults sla-profile *reference*
Tree	sla-profile
Reference	**configure** subscriber-mgmt sla-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Subscriber profile
Context	**configure** subscriber-mgmt msap-policy *string* sub-sla-mgmt defaults sub-profile *reference*
Tree	sub-profile
Reference	**configure** subscriber-mgmt sub-profile *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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subscriber-id

Synopsis	Enter the **subscriber-id** context
Context	**configure** subscriber-mgmt msap-policy *string* sub-sla-mgmt defaults subscriber-id
Tree	subscriber-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-id

Synopsis	Autogenerated sub-id as default sub-id
Context	**configure** subscriber-mgmt msap-policy *string* sub-sla-mgmt defaults subscriber-id auto-id
Tree	auto-id
Notes	The following elements are part of a choice: **auto-id**, **sap-id**, or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id

Synopsis	SAP-id as default sub-id
Context	**configure** subscriber-mgmt msap-policy *string* sub-sla-mgmt defaults subscriber-id sap-id
Tree	sap-id
Notes	The following elements are part of a choice: **auto-id**, **sap-id**, or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	String to be used as default sub-id
Context	**configure** subscriber-mgmt msap-policy *string* sub-sla-mgmt defaults subscriber-id string *string*
Tree	string
String Length	1 to 64
Notes	The following elements are part of a choice: **auto-id**, **sap-id**, or **string**.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

single-sub-parameters

Synopsis	Enter the **single-sub-parameters** context
Context	**configure** subscriber-mgmt msap-policy *string* sub-sla-mgmt single-sub-parameters
Tree	single-sub-parameters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

non-sub-traffic-profiles

Synopsis	Enable the **non-sub-traffic-profiles** context
Context	**configure** subscriber-mgmt msap-policy *string* sub-sla-mgmt single-sub-parameters non-sub-traffic-profiles
Tree	non-sub-traffic-profiles
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Application profile name
Context	**configure** subscriber-mgmt msap-policy *string* sub-sla-mgmt single-sub-parameters non-sub-traffic-profiles app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	SLA profile name
Context	**configure** subscriber-mgmt msap-policy *string* sub-sla-mgmt single-sub-parameters non-sub-traffic-profiles sla-profile *reference*
Tree	sla-profile

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Reference	**configure** subscriber-mgmt sla-profile *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Subscriber profile
Context	**configure** subscriber-mgmt msap-policy *string* sub-sla-mgmt single-sub-parameters non-sub-traffic-profiles sub-profile *reference*
Tree	sub-profile
Reference	**configure** subscriber-mgmt sub-profile *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id *string*

Synopsis	Subscriber identification string
Context	**configure** subscriber-mgmt msap-policy *string* sub-sla-mgmt single-sub-parameters non-sub-traffic-profiles subscriber-id *string*
Tree	subscriber-id
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

profiled-traffic-only *boolean*

Synopsis	Enable/disable profiled-traffic-only.
Context	**configure** subscriber-mgmt msap-policy *string* sub-sla-mgmt single-sub-parameters profiled-traffic-only *boolean*
Tree	profiled-traffic-only
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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sub-ident-policy *reference*

Synopsis	Configure subscriber identification policy
Context	**configure** subscriber-mgmt msap-policy *string* sub-sla-mgmt sub-ident-policy *reference*
Tree	sub-ident-policy
Reference	**configure** subscriber-mgmt sub-ident-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-limit *(keyword | number)*

Synopsis	Maximum subscribers on this SAP
Context	**configure** subscriber-mgmt msap-policy *string* sub-sla-mgmt subscriber-limit *(keyword | number)*
Tree	subscriber-limit
Range	1 to 131071
Options	no-limit
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vpls-only-sap-parameters

Synopsis	Enter the **vpls-only-sap-parameters** context
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters
Tree	vpls-only-sap-parameters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arp-host

Synopsis	Enter the **arp-host** context
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters arp-host
Tree	arp-host
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-limit *number*

Synopsis	Maximum number of ARP hosts
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters arp-host host-limit *number*
Tree	host-limit
Range	1 to 131071
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-auth-interval *number*

Synopsis	Minimum authentication interval
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters arp-host min-auth-interval *number*
Tree	min-auth-interval
Range	1 to 6000
Units	minutes
Default	15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arp-reply-agent *keyword*

Synopsis	Enable arp-reply-agent function
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters arp-reply-agent *keyword*
Tree	arp-reply-agent
Options	true, with-subscr-ident
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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dhcp

Synopsis	Enter the **dhcp** context
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters dhcp
Tree	dhcp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-populate *number*

Synopsis	Maximum number of DHCPv4 leases per managed SAP
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters dhcp lease-populate *number*
Tree	lease-populate
Range	1 to 131071
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option-82

Synopsis	Enter the **option-82** context
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters dhcp option-82
Tree	option-82
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	DHCP relay forwarding policy action
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters dhcp option-82 action *keyword*
Tree	action
Options	replace, drop, keep
Default	keep
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id *keyword*

Synopsis	Circuit ID suboption of the IPOE relay
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters dhcp option-82 circuit-id *keyword*
Tree	circuit-id
Options	none, ascii-tuple, vlan-ascii-tuple
Default	ascii-tuple
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id

Synopsis	Enter the **remote-id** context
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters dhcp option-82 remote-id
Tree	remote-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac

Synopsis	MAC address of the remote end encoded in the sub-option
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters dhcp option-82 remote-id mac
Tree	mac
Notes	The following elements are part of a choice: **mac** or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	String to encode in the suboption

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Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters dhcp option-82 remote-id string *string*
Tree	string
String Length	1 to 32
Notes	The following elements are part of a choice: **mac** or **string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor-specific-option

Synopsis	Enter the **vendor-specific-option** context
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters dhcp option-82 vendor-specific-option
Tree	vendor-specific-option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-mac-address *boolean*

Synopsis	Send MAC address in Nokia vendor-specific sub-option
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters dhcp option-82 vendor-specific-option client-mac-address *boolean*
Tree	client-mac-address
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id *boolean*

Synopsis	Send SAP ID in the Nokia vendor-specific sub-option
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters dhcp option-82 vendor-specific-option sap-id *boolean*
Tree	sap-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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service-id *boolean*

Synopsis	Send service ID in the Nokia vendor-specific sub-option
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters dhcp option-82 vendor-specific-option service-id *boolean*
Tree	service-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis	String in the sub-option of the DHCP relay packet
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters dhcp option-82 vendor-specific-option string *string*
Tree	string
Description	This command specifies the string in the Nokia vendor-specific sub-option of the DHCP relay packet.
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

system-id *boolean*

Synopsis	Send system ID in the Nokia vendor-specific sub-option
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters dhcp option-82 vendor-specific-option system-id *boolean*
Tree	system-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy-server

Synopsis	Enter the **proxy-server** context
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters dhcp proxy-server

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Tree	proxy-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCP proxy server
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters dhcp proxy-server admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

emulated-server *string*

Synopsis	IP address used as DHCP server address in SAP context
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters dhcp proxy-server emulated-server *string*
Tree	emulated-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-time

Synopsis	Enter the **lease-time** context
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters dhcp proxy-server lease-time
Tree	lease-time
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-override *boolean*

Synopsis	Use lease time information provided by RADIUS server

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Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters dhcp proxy-server lease-time radius-override *boolean*
Tree	radius-override
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	DHCP lease time
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters dhcp proxy-server lease-time value *number*
Tree	value
Range	300 to 315446399
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the **egress** context
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters egress
Tree	egress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the **qos** context
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters egress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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policy-name *reference*

Synopsis	QoS policy ID or name to associate with the MSAPs
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters egress qos policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-egress *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

igmp-snooping

Synopsis	Enter the **igmp-snooping** context
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters igmp-snooping
Tree	igmp-snooping
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fast-leave *boolean*

Synopsis	Allow IGMP fast leave processing
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters igmp-snooping fast-leave *boolean*
Tree	fast-leave
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters igmp-snooping import-policy *reference*
Tree	import-policy
Reference	**configure** policy-options policy-statement *string*
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *(keyword | number)*

Synopsis	Maximum number of multicast groups
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters igmp-snooping maximum-number-groups *(keyword | number)*
Tree	maximum-number-groups
Range	1 to 16000
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mcac

Synopsis	Enter the **mcac** context
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters igmp-snooping mcac
Tree	mcac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bandwidth

Synopsis	Enter the **bandwidth** context
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters igmp-snooping mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mandatory *(number | keyword)*

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters igmp-snooping mcac bandwidth mandatory *(number | keyword)*

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Tree	mandatory
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

total *(number | keyword)*

Synopsis	Maximum allowed bandwidth
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters igmp-snooping mcac bandwidth total *(number | keyword)*
Tree	total
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-policy *reference*

Synopsis	MCAC interface policy name
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters igmp-snooping mcac interface-policy *reference*
Tree	interface-policy
Reference	**configure** mcac interface-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mc-constraints

Synopsis	Enter the **mc-constraints** context
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters igmp-snooping mcac mc-constraints
Tree	mc-constraints
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

level [level-id] *number*

Synopsis	Enter the **level** list instance
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters igmp-snooping mcac mc-constraints level *number*
Tree	level
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**level-id**] *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters igmp-snooping mcac mc-constraints level *number*
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bandwidth *number*

Synopsis	Bandwidth available for this level
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters igmp-snooping mcac mc-constraints level *number* bandwidth *number*
Tree	bandwidth
Max. Range	0 to 4294967295
Units	kilobps
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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number-down [number-lag-port-down] *number*

Synopsis	Enter the **number-down** list instance
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters igmp-snooping mcac mc-constraints number-down *number*
Tree	number-down
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**number-lag-port-down**] *number*

Synopsis	Number of lag ports down
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters igmp-snooping mcac mc-constraints number-down *number*
Tree	number-down
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

level *number*

Synopsis	Level to be associated with this number of lag ports that are down
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters igmp-snooping mcac mc-constraints number-down *number* level *number*
Tree	level
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-lag-port-weight *boolean*

Synopsis	Use LAG port weight to calculate MCAC constraints
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters igmp-snooping mcac mc-constraints use-lag-port-weight *boolean*
Tree	use-lag-port-weight

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Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	Multicast CAC policy name
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters igmp-snooping mcac policy *reference*
Tree	policy
Reference	**configure** mcac policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mvr

Synopsis	Enter the **mvr** context
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters igmp-snooping mvr
Tree	mvr
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

from-vpls *reference*

Synopsis	MVR VPLS from which the multicast channels are taken
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters igmp-snooping mvr from-vpls *reference*
Tree	from-vpls
Reference	**configure** service vpls *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval *number*

Synopsis	Time between two consecutive host-query messages

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Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters igmp-snooping query-interval *number*
Tree	query-interval
Range	2 to 1024
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters igmp-snooping query-last-member-interval *number*
Tree	query-last-member-interval
Range	1 to 50
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters igmp-snooping query-response-interval *number*
Tree	query-response-interval
Range	1 to 1023
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

robust-count *number*

Synopsis	Number of retries after expected message loss

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Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters igmp-snooping robust-count *number*
Tree	robust-count
Range	2 to 7
Default	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

send-queries *boolean*

Synopsis	Generate IGMP general queries
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters igmp-snooping send-queries *boolean*
Tree	send-queries
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis	IGMP version
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters igmp-snooping version *keyword*
Tree	version
Options	1, 2, 3
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the **ingress** context
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters ingress
Tree	ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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qos

Synopsis	Enter the **qos** context
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	QoS policy ID or name to associate with the MSAPs
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters ingress qos policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-ingress *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

queuing-type *keyword*

Synopsis	Queuing type
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters ingress qos queuing-type *keyword*
Tree	queuing-type
Options	multipoint-shared, service
Default	multipoint-shared
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-da-hashing *boolean*

Synopsis	Include hashing on MAC DA ISO subscriber ID
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters mac-da-hashing *boolean*
Tree	mac-da-hashing
Default	false

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

split-horizon-group *string*

Synopsis	Name of the split horizon group for the MSAP
Context	**configure** subscriber-mgmt msap-policy *string* vpls-only-sap-parameters split-horizon-group *string*
Tree	split-horizon-group
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pfcp

Synopsis	Enter the **pfcp** context
Context	**configure** subscriber-mgmt pfcp
Tree	pfcp
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

association [name] *string*

Synopsis	Enter the **association** list instance
Context	**configure** subscriber-mgmt pfcp association *string*
Tree	association
Description	Commands in this context configure a PFCP association towards a BNG CUPS CPF.
Max. Instances	1
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	PFCP association name
Context	**configure** subscriber-mgmt pfcp association *string*

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Tree	association
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the PFCP association
Context	**configure** subscriber-mgmt pfcp association *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

association-release-timeout *(keyword | number)*

Synopsis	Time to wait for a response to a release request
Context	**configure** subscriber-mgmt pfcp association *string* association-release-timeout *(keyword | number)*
Tree	association-release-timeout
Description	This command configures the time to wait to clean up the PFCP association after it has been disabled. After administratively disabling a PFCP association, the system requests a shutdown to the BNG CPF. If the BNG CPF does not gracefully remove the association before expiry of the timer, the full association and all related sessions are forcefully removed. The PFCP protocol encoding does not allow the full range of configured values. The system automatically rounds up the configured value to the nearest value allowed by the protocol. For more information about the protocol encoding, see 3GPP TS 29.244 8.2.78.1.
Range	30 to 3600
Units	seconds
Options	none
Default	3600
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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bfd-expedited-path-down *boolean*

Synopsis	Track BFD sessions to expedite PFCP path down detection
Context	**configure** subscriber-mgmt pfcp association *string* bfd-expedited-path-down *boolean*
Tree	bfd-expedited-path-down
Description	When configured to **true**, the system tracks BFD sessions to expedite PFCP path down detection on BFD down events. This requires the configuration of **path-restoration-time**.
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt pfcp association *string* description *string*
Tree	description
String Length	1 to 80
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

heartbeat

Synopsis	Enter the **heartbeat** context
Context	**configure** subscriber-mgmt pfcp association *string* heartbeat
Tree	heartbeat
Description	Commands in this context configure the parameters for transmitting PFCP Heartbeat Request messages to a PFCP peer.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Time between two successful heartbeat request messages
Context	**configure** subscriber-mgmt pfcp association *string* heartbeat interval *number*
Tree	interval

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Range	5 to 180
Units	seconds
Default	60
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retries *number*

Synopsis	Number of retries after the heartbeat timeout expires
Context	**configure** subscriber-mgmt pfcp association *string* heartbeat retries *number*
Tree	retries
Description	This command configures the number of times the same Heartbeat Request is sent before the PFCP path to the peer is considered down.
Range	0 to 30
Default	4
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Time the system waits for a heartbeat response message
Context	**configure** subscriber-mgmt pfcp association *string* heartbeat timeout *number*
Tree	timeout
Description	This command configures the timeout after which a Heartbeat Request is considered unanswered.
Range	1 to 20
Units	seconds
Default	5
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface

Synopsis	Enter the **interface** context
Context	**configure** subscriber-mgmt pfcp association *string* interface

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Tree	interface
Description	Commands in this context configure the interface from which PFCP messages will be sent and on which PFCP messages will be received.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the interface to use for the association
Context	**configure** subscriber-mgmt pfcp association *string* interface name *string*
Tree	name
String Length	1 to 32
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router context for the PFCP association
Context	**configure** subscriber-mgmt pfcp association *string* interface router-instance *string*
Tree	router-instance
Description	This command configures the name of the interface, along with its routing instance, used as binding interface for PFCP.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nat

Synopsis	Enter the **nat** context
Context	**configure** subscriber-mgmt pfcp association *string* nat

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Tree	nat
Description	Commands in this context configure NAT or WLAN-GW groups for BNG CUPS PFCP association.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group *reference*

Synopsis	NAT group used for CUPS NAT functionality
Context	**configure** subscriber-mgmt pfcp association *string* nat nat-group *reference*
Tree	nat-group
Reference	**configure** isa nat-group *number*
Notes	The following elements are part of a choice: **nat-group** or **wlan-gw-group**.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*

Synopsis	WLAN gateway group used for CUPS NAT functionality
Context	**configure** subscriber-mgmt pfcp association *string* nat wlan-gw-group *reference*
Tree	wlan-gw-group
Reference	**configure** isa wlan-gw-group *number*
Notes	The following elements are part of a choice: **nat-group** or **wlan-gw-group**.
Introduced	20.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

node-id

Synopsis	Enter the **node-id** context
Context	**configure** subscriber-mgmt pfcp association *string* node-id
Tree	node-id
Description	Commands in this context configure the UPF Node Identifier as sent in PFCP. It can either be configured to use the linked interface source IP or a preconfigured FQDN.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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fqdn *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN that identifies the local system for PFCP
Context	**configure** subscriber-mgmt pfcp association *string* node-id fqdn *string*
Tree	fqdn
String Length	1 to 255
Notes	The following elements are part of a choice: **fqdn** or **use-ip-address**.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-ip-address

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use the IP address of interface for the association
Context	**configure** subscriber-mgmt pfcp association *string* node-id use-ip-address
Tree	use-ip-address
Description	When configured, the binding interface address is used as identification of the local system for PFCP.
Notes	The following elements are part of a choice: **fqdn** or **use-ip-address**.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

path-restoration-time *number*

Synopsis	Time to wait before declaring the path down
Context	**configure** subscriber-mgmt pfcp association *string* path-restoration-time *number*
Tree	path-restoration-time
Description	This command configures the time for which sessions are kept after a PFCP path failure is detected. If the path recovers without a restart before this time expires, the sessions are kept. Otherwise, they are removed.

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Range	1 to 11520
Units	minutes
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer

Synopsis	Enter the **peer** context
Context	**configure** subscriber-mgmt pfcp association *string* peer
Tree	peer
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PFCP peer IP address
Context	**configure** subscriber-mgmt pfcp association *string* peer ip-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ip-address
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy to process PFCP messages
Context	**configure** subscriber-mgmt pfcp association *string* python-policy *reference*
Tree	python-policy
Reference	**configure** python python-policy *string*
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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tx

Synopsis	Enter the **tx** context
Context	**configure** subscriber-mgmt pfcp association *string* tx
Tree	tx
Description	Commands in this context configure how PFCP messages are sent.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retries *number*

Synopsis	Number of retries
Context	**configure** subscriber-mgmt pfcp association *string* tx retries *number*
Tree	retries
Description	This command configures the number of times a message is retried before it is considered lost, also known as N1.
Range	0 to 7
Default	3
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Retransmission timer
Context	**configure** subscriber-mgmt pfcp association *string* tx timeout *number*
Tree	timeout
Description	This command configures the time after which a message is considered unanswered, also known as T1.
Range	1 to 30
Units	seconds
Default	1
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ttl *number*

Synopsis	TTL value in the IP header of egress PFCP packets
Context	**configure** subscriber-mgmt pfcp association *string* tx ttl *number*
Tree	ttl
Range	1 to 255
Default	255
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pim-policy [name] *string*

Synopsis	Enter the **pim-policy** list instance
Context	**configure** subscriber-mgmt pim-policy *string*
Tree	pim-policy
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Policy name
Context	**configure** subscriber-mgmt pim-policy *string*
Tree	pim-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt pim-policy *string* description *string*
Tree	description
String Length	1 to 80

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-policy [name] *string*

Synopsis	Enter the **ppp-policy** list instance
Context	**configure** subscriber-mgmt ppp-policy *string*
Tree	ppp-policy
Max. Instances	256
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	PPP policy name
Context	**configure** subscriber-mgmt ppp-policy *string*
Tree	ppp-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-same-circuit-id-for-dhcp *boolean*

Synopsis	Enable support for IPv4 address allocation on a SAP
Context	**configure** subscriber-mgmt ppp-policy *string* allow-same-circuit-id-for-dhcp *boolean*
Tree	allow-same-circuit-id-for-dhcp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cookies *boolean*

Synopsis	Enable/disable the use of AC-Cookie tags.

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Context	**configure** subscriber-mgmt ppp-policy *string* cookies *boolean*
Tree	cookies
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-pap-password *string*

Synopsis	Default PAP password when no password from PPP client
Context	**configure** subscriber-mgmt ppp-policy *string* default-pap-password *string*
Tree	default-pap-password
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-user-name *string*

Synopsis	Default username used for authentication
Context	**configure** subscriber-mgmt ppp-policy *string* default-user-name *string*
Tree	default-user-name
Description	This command configures the default username for authentication when not provided in PAP/CHAP authentication (no Name field in CHAP Response message or Peer0Id-Length=0 in PAP Authenticate-Request). The PPP session terminates when no username is provided in the PAP/CHAP authentication and no default username is configured.
String Length	1 to 253
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt ppp-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

force-ppp-mtu-gt-1492 *boolean*

Synopsis	Enable PPPoE MRU negotiations greater than 1492 bytes
Context	**configure** subscriber-mgmt ppp-policy *string* force-ppp-mtu-gt-1492 *boolean*
Tree	force-ppp-mtu-gt-1492
Description	When configured to **true**, this command enables PPPoE MRU negotiations greater than 1492 bytes without the need to receive a “PPP-Max-Payload” tag in PADI/PADR from the client as defined in RFC 4638, *Accommodating a Maximum Transit Unit/ Maximum Receive Unit (MTU/MRU) Greater Than 1492 in the Point-to-Point Protocol over Ethernet (PPPoE)*. When configured to **false**, this command disables PPPoE MRU negotiations greater than 1492 bytes.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipcp-subnet-negotiation *boolean*

Synopsis	Allow IPCP subnet negotiation for PPPoE hosts
Context	**configure** subscriber-mgmt ppp-policy *string* ipcp-subnet-negotiation *boolean*
Tree	ipcp-subnet-negotiation
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

keepalive

Synopsis	Enter the **keepalive** context
Context	**configure** subscriber-mgmt ppp-policy *string* keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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hold-up-multiplier *number*

Synopsis	PPP keepalive multiplier
Context	**configure** subscriber-mgmt ppp-policy *string* keepalive hold-up-multiplier *number*
Tree	hold-up-multiplier
Range	1 to 5
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	PPP keepalive interval
Context	**configure** subscriber-mgmt ppp-policy *string* keepalive interval *number*
Tree	interval
Range	4 to 300
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lcp-ignore-identifier *boolean*

Synopsis	Ignore identifier values in the LCP Echo Reply
Context	**configure** subscriber-mgmt ppp-policy *string* lcp-ignore-identifier *boolean*
Tree	lcp-ignore-identifier
Description	When configured to **true**, BNG ignores the Identifier field of the Echo-Reply message and keeps the PPP session up. When configured to **false**, BNG does not ignore the identifier value, discards any incorrect messages, and the PPP session terminates because of the echo timeout.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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lcp-ignore-magic-numbers *boolean*

Synopsis	Ignore LCP peer magic number mismatch
Context	**configure** subscriber-mgmt ppp-policy *string* lcp-ignore-magic-numbers *boolean*
Tree	lcp-ignore-magic-numbers
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-sessions-per-cid

Synopsis	Enable the **max-sessions-per-cid** context
Context	**configure** subscriber-mgmt ppp-policy *string* max-sessions-per-cid
Tree	max-sessions-per-cid
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-sessions-without-cid *boolean*

Synopsis	Allow PPPoE sessions without an Agent Circuit ID
Context	**configure** subscriber-mgmt ppp-policy *string* max-sessions-per-cid allow-sessions-without-cid *boolean*
Tree	allow-sessions-without-cid
Description	When configured to **true**, PPPoE sessions without an Agent Circuit ID can be established on a SAP. The limit configured for the maximum number of sessions allowed per Agent Circuit ID does not apply to these sessions. When configured to **false**, PPPoE sessions without an Agent Circuit ID are denied. The command is valid only when a limit is configured for the maximum sessions per Agent Circuit ID on a SAP.
Default	false
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

limit *number*

Synopsis	Maximum sessions per Agent Circuit ID and per SAP
Context	**configure** subscriber-mgmt ppp-policy *string* max-sessions-per-cid limit *number*

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Tree	limit
Description	This command configures the maximum number of PPPoE sessions that can be active with the same Agent Circuit ID on the same SAP or MSAP. This limit is enforced in the discovery phase, prior to PAP or CHAP authentication, based on the Agent Circuit ID sub-option present in the vendor-specific PPPoE access loop identification tag added in PADI and PADR messages by a PPPoE intermediate agent. PPPoE sessions without an Agent Circuit ID are not subject to the configured limit; however, sessions without an Agent Circuit ID can only be established when the **allow-sessions-without-cid** command is configured to **true**.
Range	1 to 8190
Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-sessions-per-mac *number*

Synopsis	Maximum number of sessions per MAC address
Context	**configure** subscriber-mgmt ppp-policy *string* max-sessions-per-mac *number*
Tree	max-sessions-per-mac
Description	This command sets the maximum PPP sessions that can be opened for a specified MAC address. To enable IPv4 address allocation using the internal DHCPv4 client for multiple PPPoE sessions on a single SAP and having the same MAC address and circuit-ID, the optional CLI parameter **allow-same-circuit-id-for-dhcp** should be added. The SR OS local DHCP server detects the additional vendor-specific options inserted by the internal DHCPv4 client and use an extended unique key for lease allocation.
Range	1 to 8191
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mlppp

Synopsis	Enter the **mlppp** context
Context	**configure** subscriber-mgmt ppp-policy *string* mlppp
Tree	mlppp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

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accept-mrru *boolean*

Synopsis	Accept multilink MRRU LCP option
Context	**configure** subscriber-mgmt ppp-policy *string* mlppp accept-mrru *boolean*
Tree	accept-mrru
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

endpoint

Synopsis	Enter the **endpoint** context
Context	**configure** subscriber-mgmt ppp-policy *string* mlppp endpoint
Tree	endpoint
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ip *(ipv4-address | keyword)*

Synopsis	Endpoint ID as an IP address
Context	**configure** subscriber-mgmt ppp-policy *string* mlppp endpoint ip *(ipv4-address | keyword)*
Tree	ip
Options	system
Notes	The following elements are part of a choice: **ip** or **mac**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

mac *(mac-address | keyword)*

Synopsis	Endpoint ID as a MAC address
Context	**configure** subscriber-mgmt ppp-policy *string* mlppp endpoint mac *(mac-address | keyword)*
Tree	mac
Options	system

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Notes	The following elements are part of a choice: **ip** or **mac**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

short-sequence-numbers *boolean*

Synopsis	Request a peer to send short sequence numbers
Context	**configure** subscriber-mgmt ppp-policy *string* mlppp short-sequence-numbers *boolean*
Tree	short-sequence-numbers
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ncp-renegotiation *keyword*

Synopsis	Behavior for subsequent NCP renegotiation messages
Context	**configure** subscriber-mgmt ppp-policy *string* ncp-renegotiation *keyword*
Tree	ncp-renegotiation
Options	ignore, terminate-session
Default	terminate-session
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pado-ac-name *string*

Synopsis	Access Concentrator name used in PPPoE PADO message
Context	**configure** subscriber-mgmt ppp-policy *string* pado-ac-name *string*
Tree	pado-ac-name
String Length	1 to 128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pado-delay *number*

Synopsis	Delay timeout before sending a PADO

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Context	**configure** subscriber-mgmt ppp-policy *string* pado-delay *number*
Tree	pado-delay
Range	1 to 30
Units	deciseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-authentication *keyword*

Synopsis	PPP authentication protocol to negotiate
Context	**configure** subscriber-mgmt ppp-policy *string* ppp-authentication *keyword*
Tree	ppp-authentication
Options	pap, chap, pref-chap, pref-pap
Default	pref-chap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-chap-challenge-length

Synopsis	Enter the **ppp-chap-challenge-length** context
Context	**configure** subscriber-mgmt ppp-policy *string* ppp-chap-challenge-length
Tree	ppp-chap-challenge-length
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max *number*

Synopsis	Maximum length for the PPP CHAP challenge
Context	**configure** subscriber-mgmt ppp-policy *string* ppp-chap-challenge-length max *number*
Tree	max
Range	8 to 64
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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min *number*

Synopsis	Minimum length for the PPP CHAP challenge
Context	**configure** subscriber-mgmt ppp-policy *string* ppp-chap-challenge-length min *number*
Tree	min
Range	8 to 64
Default	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-initial-delay *boolean*

Synopsis	Select delay timeout before starting the PPP stack
Context	**configure** subscriber-mgmt ppp-policy *string* ppp-initial-delay *boolean*
Tree	ppp-initial-delay
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-mtu *number*

Synopsis	Maximum PPP MTU size
Context	**configure** subscriber-mgmt ppp-policy *string* ppp-mtu *number*
Tree	ppp-mtu
Range	512 to 9212
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-options

Synopsis	Enter the **ppp-options** context
Context	**configure** subscriber-mgmt ppp-policy *string* ppp-options
Tree	ppp-options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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custom-option protocol *keyword* option-number *number*

Synopsis	Enter the **custom-option** list instance
Context	**configure** subscriber-mgmt ppp-policy *string* ppp-options custom-option protocol *keyword* option-number *number*
Tree	custom-option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

protocol *keyword*

Synopsis	Protocol for the custom PPP option
Context	**configure** subscriber-mgmt ppp-policy *string* ppp-options custom-option protocol *keyword* option-number *number*
Tree	custom-option
Options	lcp, ipcp, ipv6cp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option-number *number*

Synopsis	PPP option number
Context	**configure** subscriber-mgmt ppp-policy *string* ppp-options custom-option protocol *keyword* option-number *number*
Tree	custom-option
Range	0 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis	IP address of the custom PPP option
Context	**configure** subscriber-mgmt ppp-policy *string* ppp-options custom-option protocol *keyword* option-number *number* address *string*

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Tree	address
Notes	The following elements are part of a mandatory choice: **address**, **ascii-string**, **empty**, or **hex-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	ASCII string for the customer PPP option
Context	**configure** subscriber-mgmt ppp-policy *string* ppp-options custom-option protocol *keyword* option-number *number* ascii-string *string*
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **address**, **ascii-string**, **empty**, or **hex-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Configure an empty PPP option.
Context	**configure** subscriber-mgmt ppp-policy *string* ppp-options custom-option protocol *keyword* option-number *number* empty
Tree	empty
Notes	The following elements are part of a mandatory choice: **address**, **ascii-string**, **empty**, or **hex-string**.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	Hexadecimal string for the custom PPP option
Context	**configure** subscriber-mgmt ppp-policy *string* ppp-options custom-option protocol *keyword* option-number *number* hex-string *string*
Tree	hex-string
String Length	1 to 256

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Notes	The following elements are part of a mandatory choice: **address**, **ascii-string**, **empty**, or **hex-string**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

re-establish-session *boolean*

Synopsis	Reconnect and override an existing session
Context	**configure** subscriber-mgmt ppp-policy *string* re-establish-session *boolean*
Tree	re-establish-session
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reject-unconfigured-ncp *boolean*

Synopsis	Enable/disable reject unconfigured NCP.
Context	**configure** subscriber-mgmt ppp-policy *string* reject-unconfigured-ncp *boolean*
Tree	reject-unconfigured-ncp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reply-on-padt *boolean*

Synopsis	Enable/disable reply on PADT packets.
Context	**configure** subscriber-mgmt ppp-policy *string* reply-on-padt *boolean*
Tree	reply-on-padt
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-timeout *number*

Synopsis	Session timeout interval

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Context	**configure** subscriber-mgmt ppp-policy *string* session-timeout *number*
Tree	session-timeout
Range	1 to 31104000
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sid-allocation *keyword*

Synopsis	PPPoE session ID allocation method
Context	**configure** subscriber-mgmt ppp-policy *string* sid-allocation *keyword*
Tree	sid-allocation
Description	This command determines the allocation of session IDs for a PPPoE session with a given MAC address that is active on a given SAP.
Options	sequential, random
Default	sequential
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

unique-sid *keyword*

Synopsis	Mode in which a unique session ID is allocated
Context	**configure** subscriber-mgmt ppp-policy *string* unique-sid *keyword*
Tree	unique-sid
Description	This command specifies how unique session IDs are assigned to PPPoE sessions that are active on a single SAP. This command is used with the **sid-allocation** command to determine the assignment of session IDs to subsequent PPPoE sessions.
Options	per-sap, per-sap-mac, per-msap
Default	per-sap-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe-client-policy [name] *string*

Synopsis	Enter the **pppoe-client-policy** list instance

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Context	**configure** subscriber-mgmt pppoe-client-policy *string*
Tree	pppoe-client-policy
Max. Instances	256
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	PPPoE client policy name
Context	**configure** subscriber-mgmt pppoe-client-policy *string*
Tree	pppoe-client-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt pppoe-client-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

keepalive

Synopsis	Enter the **keepalive** context
Context	**configure** subscriber-mgmt pppoe-client-policy *string* keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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hold-up-multiplier *number*

Synopsis	PPPoE keepalive multiplier
Context	**configure** subscriber-mgmt pppoe-client-policy *string* keepalive hold-up-multiplier *number*
Tree	hold-up-multiplier
Range	1 to 5
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	PPPoE keepalive interval
Context	**configure** subscriber-mgmt pppoe-client-policy *string* keepalive interval *number*
Tree	interval
Range	10 to 300
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mru *number*

Synopsis	PPPoE MRU
Context	**configure** subscriber-mgmt pppoe-client-policy *string* mru *number*
Tree	mru
Range	512 to 9154
Default	1492
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mtu *number*

Synopsis	PPPoE MTU
Context	**configure** subscriber-mgmt pppoe-client-policy *string* mtu *number*

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Tree	mtu
Range	512 to 9154
Default	1492
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy for all messages to and from PPPoE client
Context	**configure** subscriber-mgmt pppoe-client-policy *string* python-policy *reference*
Tree	python-policy
Reference	**configure** python python-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

restart-backoff

Synopsis	Enter the **restart-backoff** context
Context	**configure** subscriber-mgmt pppoe-client-policy *string* restart-backoff
Tree	restart-backoff
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

initial-time *number*

Synopsis	Initial backoff time
Context	**configure** subscriber-mgmt pppoe-client-policy *string* restart-backoff initial-time *number*
Tree	initial-time
Range	10 to 3600
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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max-time *number*

Synopsis	Maximum backoff time
Context	**configure** subscriber-mgmt pppoe-client-policy *string* restart-backoff max-time *number*
Tree	max-time
Range	10 to 3600
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stack

Synopsis	Enter the **stack** context
Context	**configure** subscriber-mgmt pppoe-client-policy *string* stack
Tree	stack
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4 *boolean*

Synopsis	Start IPCP to retrieve an IPv4 address
Context	**configure** subscriber-mgmt pppoe-client-policy *string* stack ipv4 *boolean*
Tree	ipv4
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-slaac *boolean*

Synopsis	Start IPv6CP and use SLAAC to retrieve an IPv6 prefix
Context	**configure** subscriber-mgmt pppoe-client-policy *string* stack ipv6-slaac *boolean*
Tree	ipv6-slaac
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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radius-accounting-policy [name] *string*

Synopsis	Enter the **radius-accounting-policy** list instance
Context	**configure** subscriber-mgmt radius-accounting-policy *string*
Tree	radius-accounting-policy
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	RADIUS-based accounting policy name
Context	**configure** subscriber-mgmt radius-accounting-policy *string*
Tree	radius-accounting-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-tunnel-connection-fmt *string*

Synopsis	String sent in the accounting message
Context	**configure** subscriber-mgmt radius-accounting-policy *string* acct-tunnel-connection-fmt *string*
Tree	acct-tunnel-connection-fmt
String Length	1 to 253
Default	%n
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

custom-record

Synopsis	Enter the **custom-record** context
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record
Tree	custom-record

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

queue [id] *number*

Synopsis	Enter the **queue** list instance
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number*
Tree	queue
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**id**] *number*

Synopsis	Queue ID for which counters are collected in the record
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number*
Tree	queue
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

e-counters

Synopsis	Enter the **e-counters** context
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number* e-counters
Tree	e-counters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

in-profile-octets-discarded-count *boolean*

Synopsis	Include the in-profile octets discarded count

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Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number* e-counters in-profile-octets-discarded-count *boolean*
Tree	in-profile-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number* e-counters in-profile-octets-forwarded-count *boolean*
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in-profile packets discarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number* e-counters in-profile-packets-discarded-count *boolean*
Tree	in-profile-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number* e-counters in-profile-packets-forwarded-count *boolean*
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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out-profile-octets-discarded-count *boolean*

Synopsis	Include the out-profile octets discarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number* e-counters out-profile-octets-discarded-count *boolean*
Tree	out-profile-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number* e-counters out-profile-octets-forwarded-count *boolean*
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-profile-packets-discarded-count *boolean*

Synopsis	Include the out-profile packets discarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number* e-counters out-profile-packets-discarded-count *boolean*
Tree	out-profile-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number* e-counters out-profile-packets-forwarded-count *boolean*
Tree	out-profile-packets-forwarded-count

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Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

i-counters

Synopsis	Enter the **i-counters** context
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number* i-counters
Tree	i-counters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all-octets-offered-count *boolean*

Synopsis	Include the all octets offered count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number* i-counters all-octets-offered-count *boolean*
Tree	all-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all-packets-offered-count *boolean*

Synopsis	Include all packets offered count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number* i-counters all-packets-offered-count *boolean*
Tree	all-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high-octets-discarded-count *boolean*

Synopsis	Include the high octets discarded count

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Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number* i-counters high-octets-discarded-count *boolean*
Tree	high-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high-octets-offered-count *boolean*

Synopsis	Include the high octets offered count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number* i-counters high-octets-offered-count *boolean*
Tree	high-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high-packets-discarded-count *boolean*

Synopsis	Include the high packets discarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number* i-counters high-packets-discarded-count *boolean*
Tree	high-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high-packets-offered-count *boolean*

Synopsis	Include the high packets offered count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number* i-counters high-packets-offered-count *boolean*
Tree	high-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number* i-counters in-profile-octets-forwarded-count *boolean*
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number* i-counters in-profile-packets-forwarded-count *boolean*
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low-octets-discarded-count *boolean*

Synopsis	Include the low octets discarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number* i-counters low-octets-discarded-count *boolean*
Tree	low-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low-octets-offered-count *boolean*

Synopsis	Include the low octets offered count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number* i-counters low-octets-offered-count *boolean*
Tree	low-octets-offered-count

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Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low-packets-discarded-count *boolean*

Synopsis	Include the low packets discarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number* i-counters low-packets-discarded-count *boolean*
Tree	low-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low-packets-offered-count *boolean*

Synopsis	Include the low packets offered count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number* i-counters low-packets-offered-count *boolean*
Tree	low-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number* i-counters out-profile-octets-forwarded-count *boolean*
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number* i-counters out-profile-packets-forwarded-count *boolean*
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

uncoloured-octets-offered-count *boolean*

Synopsis	Include the uncolored octets offered count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number* i-counters uncoloured-octets-offered-count *boolean*
Tree	uncoloured-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

uncoloured-packets-offered-count *boolean*

Synopsis	Include the uncolored packets offered count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number* i-counters uncoloured-packets-offered-count *boolean*
Tree	uncoloured-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ref-queue

Synopsis	Enter the **ref-queue** context
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue
Tree	ref-queue
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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all

Synopsis	Apply significant change to counters for all queues
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue all
Tree	all
Notes	The following elements are part of a choice: **all** or **id**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

e-counters

Synopsis	Enter the **e-counters** context
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue e-counters
Tree	e-counters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

in-profile-octets-discarded-count *boolean*

Synopsis	Include the in-profile octets discarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue e-counters in-profile-octets-discarded-count *boolean*
Tree	in-profile-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue e-counters in-profile-octets-forwarded-count *boolean*
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in-profile packets discarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue e-counters in-profile-packets-discarded-count *boolean*
Tree	in-profile-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue e-counters in-profile-packets-forwarded-count *boolean*
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out-profile octets discarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue e-counters out-profile-octets-discarded-count *boolean*
Tree	out-profile-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue e-counters out-profile-octets-forwarded-count *boolean*

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Tree	out-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-profile-packets-discarded-count *boolean*

Synopsis	Include the out-profile packets discarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue e-counters out-profile-packets-discarded-count *boolean*
Tree	out-profile-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue e-counters out-profile-packets-forwarded-count *boolean*
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

i-counters

Synopsis	Enter the **i-counters** context
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue i-counters
Tree	i-counters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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all-octets-offered-count *boolean*

Synopsis	Include the all octets offered count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue i-counters all-octets-offered-count *boolean*
Tree	all-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all-packets-offered-count *boolean*

Synopsis	Include all packets offered count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue i-counters all-packets-offered-count *boolean*
Tree	all-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high-octets-discarded-count *boolean*

Synopsis	Include the high octets discarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue i-counters high-octets-discarded-count *boolean*
Tree	high-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high-octets-offered-count *boolean*

Synopsis	Include the high octets offered count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue i-counters high-octets-offered-count *boolean*
Tree	high-octets-offered-count
Default	false

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high-packets-discarded-count *boolean*

Synopsis	Include the high packets discarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue i-counters high-packets-discarded-count *boolean*
Tree	high-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high-packets-offered-count *boolean*

Synopsis	Include the high packets offered count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue i-counters high-packets-offered-count *boolean*
Tree	high-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue i-counters in-profile-octets-forwarded-count *boolean*
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-profile packets forwarded count

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Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue i-counters in-profile-packets-forwarded-count *boolean*
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low-octets-discarded-count *boolean*

Synopsis	Include the low octets discarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue i-counters low-octets-discarded-count *boolean*
Tree	low-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low-octets-offered-count *boolean*

Synopsis	Include the low octets offered count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue i-counters low-octets-offered-count *boolean*
Tree	low-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low-packets-discarded-count *boolean*

Synopsis	Include the low packets discarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue i-counters low-packets-discarded-count *boolean*
Tree	low-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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low-packets-offered-count *boolean*

Synopsis	Include the low packets offered count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue i-counters low-packets-offered-count *boolean*
Tree	low-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue i-counters out-profile-octets-forwarded-count *boolean*
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue i-counters out-profile-packets-forwarded-count *boolean*
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

uncoloured-octets-offered-count *boolean*

Synopsis	Include the uncolored octets offered count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue i-counters uncoloured-octets-offered-count *boolean*
Tree	uncoloured-octets-offered-count

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Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

uncoloured-packets-offered-count *boolean*

Synopsis	Include the uncolored packets offered count
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue i-counters uncoloured-packets-offered-count *boolean*
Tree	uncoloured-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

id *reference*

Synopsis	Queue ID
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record ref-queue id *reference*
Tree	id
Reference	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record queue *number*
Notes	The following elements are part of a choice: **all** or **id**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

significant-change *number*

Synopsis	Significant change required to generate the record
Context	**configure** subscriber-mgmt radius-accounting-policy *string* custom-record significant-change *number*
Tree	significant-change
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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delay-start-time *number*

Synopsis	Accounting start delay
Context	**configure** subscriber-mgmt radius-accounting-policy *string* delay-start-time *number*
Tree	delay-start-time
Range	1 to 10
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt radius-accounting-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-accounting

Synopsis	Enter the **host-accounting** context
Context	**configure** subscriber-mgmt radius-accounting-policy *string* host-accounting
Tree	host-accounting
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of per-host accounting
Context	**configure** subscriber-mgmt radius-accounting-policy *string* host-accounting admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interim-update *boolean*

Synopsis	Allow interim-update accounting messages to be sent
Context	**configure** subscriber-mgmt radius-accounting-policy *string* host-accounting interim-update *boolean*
Tree	interim-update
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

include-radius-attribute

Synopsis	Enter the **include-radius-attribute** context
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute
Tree	include-radius-attribute
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

access-loop-options *boolean*

Synopsis	Include access loop information
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute access-loop-options *boolean*
Tree	access-loop-options
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-authentic *boolean*

Synopsis	Enable/disable include of the acct-authentic attribute.
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute acct-authentic *boolean*

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Tree	acct-authentic
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-delay-time *boolean*

Synopsis	Include the acct-delay-time RADIUS attribute
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute acct-delay-time *boolean*
Tree	acct-delay-time
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-triggered-reason *boolean*

Synopsis	Include Alc-Acct-Triggered-Reason attribute
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute acct-triggered-reason *boolean*
Tree	acct-triggered-reason
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all-authorized-session-addresses *boolean*

Synopsis	Include all address/prefix attributes
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute all-authorized-session-addresses *boolean*
Tree	all-authorized-session-addresses
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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apn *boolean*

Synopsis	Enable/disable include of the APN attribute.
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute apn *boolean*
Tree	apn
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bearer-fteid *boolean*

Synopsis	Include bearer-fteid attribute
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute bearer-fteid *boolean*
Tree	bearer-fteid
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bonding-active-connections *boolean*

Synopsis	Include the RADIUS Alc-Bonding-Active-Connection VSA
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute bonding-active-connections *boolean*
Tree	bonding-active-connections
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bonding-id *boolean*

Synopsis	Include the Alc-Bonding-Id VSA
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute bonding-id *boolean*
Tree	bonding-id
Default	false

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

brg-num-active-sessions *boolean*

Synopsis	Include the RADIUS Alc-BRG-Num-Active-Sessions VSA
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute brg-num-active-sessions *boolean*
Tree	brg-num-active-sessions
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

called-station-id *boolean*

Synopsis	Include called-station-id attribute
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute called-station-id *boolean*
Tree	called-station-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

calling-station-id

Synopsis	Enable the **calling-station-id** context
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute calling-station-id
Tree	calling-station-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Format of the Calling-Station-ID attribute
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute calling-station-id type *keyword*

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Tree	type
Options	sap-string, mac, sap-id, remote-id, llid
Default	sap-string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id *boolean*

Synopsis	Include circuit-id attribute
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute circuit-id *boolean*
Tree	circuit-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delegated-ipv6-prefix *boolean*

Synopsis	Include delegated-ipv6-prefix attribute
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute delegated-ipv6-prefix *boolean*
Tree	delegated-ipv6-prefix
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

detailed-acct-attributes *boolean*

Synopsis	Include more detailed accounting attributes
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute detailed-acct-attributes *boolean*
Tree	detailed-acct-attributes
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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dhcp-vendor-class-id *boolean*

Synopsis	Include the RADIUS Alc-DHCP-Vendor-Class-Id VSA
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute dhcp-vendor-class-id *boolean*
Tree	dhcp-vendor-class-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

error-code *boolean*

Synopsis	Include detailed error codes
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute error-code *boolean*
Tree	error-code
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

firewall-info *boolean*

Synopsis	Include the Firewall Information VSA in AAA protocols
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute firewall-info *boolean*
Tree	firewall-info
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

framed-interface-id *boolean*

Synopsis	Include framed-interface-id attribute
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute framed-interface-id *boolean*
Tree	framed-interface-id

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Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

framed-ip-address *boolean*

Synopsis	Include framed-ip-address attribute
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute framed-ip-address *boolean*
Tree	framed-ip-address
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

framed-ip-netmask *boolean*

Synopsis	Include framed-ip-netmask attribute
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute framed-ip-netmask *boolean*
Tree	framed-ip-netmask
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

framed-ipv6-prefix *boolean*

Synopsis	Include framed-ipv6-prefix attribute
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute framed-ipv6-prefix *boolean*
Tree	framed-ipv6-prefix
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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framed-ipv6-route *boolean*

Synopsis	Include framed-ipv6-route attribute
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute framed-ipv6-route *boolean*
Tree	framed-ipv6-route
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

framed-route *boolean*

Synopsis	Include framed-route attribute
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute framed-route *boolean*
Tree	framed-route
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

imei *boolean*

Synopsis	Enable/disable include of the IMEI attribute.
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute imei *boolean*
Tree	imei
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

imsi *boolean*

Synopsis	Include the IMSI attribute for FWA sessions
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute imsi *boolean*
Tree	imsi
Default	false

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Introduced	22.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *boolean*

Synopsis	Include the IPv6 address attribute
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute ipv6-address *boolean*
Tree	ipv6-address
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lanext-bridge-id *boolean*

Synopsis	Include Alc-Bridge-Id in RADIUS accounting packets
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute lanext-bridge-id *boolean*
Tree	lanext-bridge-id
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lanext-device-type *boolean*

Synopsis	Include Alc-HLE-Device-type in accounting packets
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute lanext-device-type *boolean*
Tree	lanext-device-type
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lanext-route-distinguisher *boolean*

Synopsis	Include route distinguisher (Alc-RD) in RADIUS packets

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Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute lanext-route-distinguisher *boolean*
Tree	lanext-route-distinguisher
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lanext-route-target *boolean*

Synopsis	Include route target (Alc-RT) in RADIUS packets
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute lanext-route-target *boolean*
Tree	lanext-route-target
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lanext-vni *boolean*

Synopsis	Enable/disable include of the lanext-vni attribute.
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute lanext-vni *boolean*
Tree	lanext-vni
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-address *boolean*

Synopsis	Include the client MAC address in the RADIUS message
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute mac-address *boolean*
Tree	mac-address
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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msisdn *boolean*

Synopsis	Enable/disable include of the MSISDN attribute.
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute msisdn *boolean*
Tree	msisdn
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-identifier *boolean*

Synopsis	Enable/disable include of the NAS-Identifier attribute.
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute nas-identifier *boolean*
Tree	nas-identifier
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port

Synopsis	Enable the **nas-port** context
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute nas-port
Tree	nas-port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bit-spec *string*

Synopsis	RADIUS NAS-Port attribute
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute nas-port bit-spec *string*
Tree	bit-spec
String Length	1 to 255

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port-id

Synopsis	Enable the **nas-port-id** context
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute nas-port-id
Tree	nas-port-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-string *string*

Synopsis	String to be prefixed to the NAS-Port-Id attribute
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute nas-port-id prefix-string *string*
Tree	prefix-string
String Length	1 to 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suffix *keyword*

Synopsis	String to be suffixed to the NAS-Port-Id attribute
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute nas-port-id suffix *keyword*
Tree	suffix
Options	circuit-id, remote-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port-type

Synopsis	Enable the **nas-port-type** context

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Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute nas-port-type
Tree	nas-port-type
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *(keyword | number)*

Synopsis	Value for RADIUS NAS-Port-Type attribute
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute nas-port-type type *(keyword | number)*
Tree	type
Range	0 to 255
Options	rfc-aligned
Default	rfc-aligned
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nat-port-range *boolean*

Synopsis	Include NAT port range attribute
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute nat-port-range *boolean*
Tree	nat-port-range
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-id *boolean*

Synopsis	Include remote-id attribute
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute remote-id *boolean*
Tree	remote-id
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *boolean*

Synopsis	Include sla-profile attribute
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute sla-profile *boolean*
Tree	sla-profile
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

spi-sharing-id *boolean*

Synopsis	Include spi-sharing-id attribute
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute spi-sharing-id *boolean*
Tree	spi-sharing-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

std-acct-attributes *boolean*

Synopsis	Include standard accounting attributes
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute std-acct-attributes *boolean*
Tree	std-acct-attributes
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

steering-profile *boolean*

Synopsis	Include the RADIUS Alc-Steering-Profile VSA
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute steering-profile *boolean*

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Tree	steering-profile
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *boolean*

Synopsis	Include sub-profile attribute
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute sub-profile *boolean*
Tree	sub-profile
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id *boolean*

Synopsis	Include subscriber-id attribute
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute subscriber-id *boolean*
Tree	subscriber-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tunnel-client-attrs *boolean*

Synopsis	Enable/disable include of tunnel-client attributes.
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute tunnel-client-attrs *boolean*
Tree	tunnel-client-attrs
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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tunnel-server-attrs *boolean*

Synopsis	Enable/disable include of tunnel-server attributes.
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute tunnel-server-attrs *boolean*
Tree	tunnel-server-attrs
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

uli *boolean*

Synopsis	Generate the ULI RADIUS attribute
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute uli *boolean*
Tree	uli
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

user-name *boolean*

Synopsis	Include the user-name attribute
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute user-name *boolean*
Tree	user-name
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

v6-aggregate-stats *boolean*

Synopsis	Report IPv6 aggregated forwarded octet and packet counters
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute v6-aggregate-stats *boolean*
Tree	v6-aggregate-stats
Default	false

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wifi-num-attached-ues *boolean*

Synopsis	Include the RADIUS Alc-Num-Attached-UEs VSA
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute wifi-num-attached-ues *boolean*
Tree	wifi-num-attached-ues
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wifi-rssi *boolean*

Synopsis	Include 802.11 received signal strength indicator
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute wifi-rssi *boolean*
Tree	wifi-rssi
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wifi-ssid-vlan *boolean*

Synopsis	Include per-SSID VLAN ID in the Alc-Wlan-SSID-VLAN VSA
Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute wifi-ssid-vlan *boolean*
Tree	wifi-ssid-vlan
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect-tunnel-home-address *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Home-Ipv6 attribute

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Context	**configure** subscriber-mgmt radius-accounting-policy *string* include-radius-attribute xconnect-tunnel-home-address *boolean*
Tree	xconnect-tunnel-home-address
Default	false
Introduced	16.0.R3
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mcs-interval

Synopsis	Enter the **mcs-interval** context
Context	**configure** subscriber-mgmt radius-accounting-policy *string* mcs-interval
Tree	mcs-interval
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval *(keyword | number)*

Synopsis	MCS synchronization interval of usage counters
Context	**configure** subscriber-mgmt radius-accounting-policy *string* mcs-interval interval *(keyword | number)*
Tree	interval
Description	This command specifies the interval at which the active BNG in a dual-homed deployment synchronizes subscriber accounting data using MCS to the standby BNG. The MCS interval is a statically configured value or equal to the configured RADIUS accounting update-interval.
Range	5 to 60
Units	minutes
Options	none, use-update-interval
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

queue-instance-accounting

Synopsis	Enter the **queue-instance-accounting** context
Context	**configure** subscriber-mgmt radius-accounting-policy *string* queue-instance-accounting
Tree	queue-instance-accounting

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of per-queue instance accounting
Context	**configure** subscriber-mgmt radius-accounting-policy *string* queue-instance-accounting admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interim-update *boolean*

Synopsis	Send accounting messages for the queue instance
Context	**configure** subscriber-mgmt radius-accounting-policy *string* queue-instance-accounting interim-update *boolean*
Tree	interim-update
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-server-policy *reference*

Synopsis	Referenced RADIUS server policy
Context	**configure** subscriber-mgmt radius-accounting-policy *string* radius-server-policy *reference*
Tree	radius-server-policy
Reference	**configure** aaa radius server-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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session-accounting

Synopsis	Enter the **session-accounting** context
Context	**configure** subscriber-mgmt radius-accounting-policy *string* session-accounting
Tree	session-accounting
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of per-session accounting
Context	**configure** subscriber-mgmt radius-accounting-policy *string* session-accounting admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-update *boolean*

Synopsis	Allow host updates
Context	**configure** subscriber-mgmt radius-accounting-policy *string* session-accounting host-update *boolean*
Tree	host-update
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interim-update *boolean*

Synopsis	Allow interim-update accounting messages to be sent
Context	**configure** subscriber-mgmt radius-accounting-policy *string* session-accounting interim-update *boolean*
Tree	interim-update
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-id-format *keyword*

Synopsis	Format used in accounting session ID attributes
Context	**configure** subscriber-mgmt radius-accounting-policy *string* session-id-format *keyword*
Tree	session-id-format
Options	description, number
Default	description
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

triggered-updates

Synopsis	Enter the **triggered-updates** context
Context	**configure** subscriber-mgmt radius-accounting-policy *string* triggered-updates
Tree	triggered-updates
Description	Commands in this context configure non-periodic accounting updates that are triggered by specific events.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gtp-change

Synopsis	Enter the **gtp-change** context
Context	**configure** subscriber-mgmt radius-accounting-policy *string* triggered-updates gtp-change
Tree	gtp-change
Description	Commands in this context configure which GTP-related changes trigger an interim accounting update. This command is mutually exclusive with the legacy **gtp-mobility** command, which triggers interim accounting updates for all changes.
Notes	The following elements are part of a choice: **gtp-change** or **gtp-mobility**.
Introduced	23.3.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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s1-release *boolean*

Synopsis	Send an IU for S1 release (idle) procedure
Context	**configure** subscriber-mgmt radius-accounting-policy *string* triggered-updates gtp-change s1-release *boolean*
Tree	s1-release
Default	false
Introduced	23.3.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

service-request *boolean*

Synopsis	Send an IU for service request (reactivation) procedure
Context	**configure** subscriber-mgmt radius-accounting-policy *string* triggered-updates gtp-change service-request *boolean*
Tree	service-request
Default	false
Introduced	23.3.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

teidc-change *boolean*

Synopsis	Send an IU when GTP-C TEIDs are changed
Context	**configure** subscriber-mgmt radius-accounting-policy *string* triggered-updates gtp-change teidc-change *boolean*
Tree	teidc-change
Description	When configured to **true**, the router sends an interim accounting update when GTP-C TEIDs are changed. Changes to GTP-C TEIDs typically indicate an MME change.
Default	false
Introduced	23.3.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

teidu-change *boolean*

Synopsis	Send an IU when GTP-U TEIDs are changed
Context	**configure** subscriber-mgmt radius-accounting-policy *string* triggered-updates gtp-change teidu-change *boolean*

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Tree	teidu-change
Description	When configured to **true**, the router sends an interim accounting update when GTP-U TEIDs are changed. This update typically happens during mobility, idling, or service request procedures
Default	false
Introduced	23.3.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

uli-change *boolean*

Synopsis	Send an IU when a user location change is detected
Context	**configure** subscriber-mgmt radius-accounting-policy *string* triggered-updates gtp-change uli-change *boolean*
Tree	uli-change
Default	false
Introduced	23.3.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp-mobility *boolean*

WARNING:
This element is deprecated and will be removed in a future release.

Synopsis	Send updates for mobility events
Context	**configure** subscriber-mgmt radius-accounting-policy *string* triggered-updates gtp-mobility *boolean*
Tree	gtp-mobility
Default	false
Notes	The following elements are part of a choice: **gtp-change** or **gtp-mobility**.
Introduced	16.0.R5
Deprecated	23.3.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

update-interval

Synopsis	Enter the **update-interval** context
Context	**configure** subscriber-mgmt radius-accounting-policy *string* update-interval

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Tree	update-interval
Description	Commands in this context configure the attributes of the intermediate update interval.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Intermediate update interval
Context	**configure** subscriber-mgmt radius-accounting-policy *string* update-interval interval *number*
Tree	interval
Description	This command specifies the interval at which accounting data of subscriber hosts is updated in a RADIUS Accounting Interim-Update message. When specifying the accounting mode in the RADIUS accounting policy, the interim-update command for subscriber hosts must be set to true in one of the following context: • **configure subscriber-mgmt radius-accounting-policy host-accounting** • **configure subscriber-mgmt radius-accounting-policy queue-instance-accounting** • **configure subscriber-mgmt radiuis-accounting-policy session-accounting** A RADIUS-specified interim interval (attribute [85] Acct-Interim-Interval) overrides the CLI configured value.
Range	5 to 259200
Units	minutes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

jitter *(keyword | number)*

Synopsis	Maximum random delay for intermediate update interval
Context	**configure** subscriber-mgmt radius-accounting-policy *string* update-interval jitter *(keyword | number)*
Tree	jitter
Description	This command specifies the absolute maximum random delay introduced on the update interval between two accounting interim update messages. The effective maximum random delay value is the minimum of the configured absolute jitter value and 10% of the configured update-interval. A value of zero sends the accounting interim update message without introducing an additional random delay.

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Range	0 to 3600
Units	seconds
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-authentication-policy [name] *string*

Synopsis	Enter the **radius-authentication-policy** list instance
Context	**configure** subscriber-mgmt radius-authentication-policy *string*
Tree	radius-authentication-policy
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	RADIUS authentication policy name
Context	**configure** subscriber-mgmt radius-authentication-policy *string*
Tree	radius-authentication-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt radius-authentication-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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fallback

Synopsis	Enter the **fallback** context
Context	**configure** subscriber-mgmt radius-authentication-policy *string* fallback
Tree	fallback
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action

Synopsis	Enter the **action** context
Context	**configure** subscriber-mgmt radius-authentication-policy *string* fallback action
Tree	action
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accept

Synopsis	Automatically accept all authentication requests
Context	**configure** subscriber-mgmt radius-authentication-policy *string* fallback action accept
Tree	accept
Notes	The following elements are part of a choice: **accept** or **user-db**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *string*

Synopsis	Local user database used to authenticate to the server
Context	**configure** subscriber-mgmt radius-authentication-policy *string* fallback action user-db *string*
Tree	user-db
String Length	1 to 32
Notes	The following elements are part of a choice: **accept** or **user-db**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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force-probing *boolean*

Synopsis	Enable force probing
Context	**configure** subscriber-mgmt radius-authentication-policy *string* fallback force-probing *boolean*
Tree	force-probing
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

include-radius-attribute

Synopsis	Enter the **include-radius-attribute** context
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute
Tree	include-radius-attribute
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

access-loop-options *boolean*

Synopsis	Include access loop information
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute access-loop-options *boolean*
Tree	access-loop-options
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-session-id

Synopsis	Enable the **acct-session-id** context
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute acct-session-id
Tree	acct-session-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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type *keyword*

Synopsis	Format of the accounting session ID attribute
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute acct-session-id type *keyword*
Tree	type
Options	host, session
Default	host
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

apn *boolean*

Synopsis	Enable/disable include of the APN attribute.
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute apn *boolean*
Tree	apn
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

called-station-id *boolean*

Synopsis	Include called-station-id attribute
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute called-station-id *boolean*
Tree	called-station-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

calling-station-id

Synopsis	Enable the **calling-station-id** context
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute calling-station-id

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Tree	calling-station-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Format of the Calling-Station-ID attribute
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute calling-station-id type *keyword*
Tree	type
Options	sap-string, mac, sap-id, remote-id, llid
Default	sap-string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id *boolean*

Synopsis	Include circuit-id attribute
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute circuit-id *boolean*
Tree	circuit-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp-options *boolean*

Synopsis	Generate the DHCP options RADIUS attribute
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute dhcp-options *boolean*
Tree	dhcp-options
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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dhcp-vendor-class-id *boolean*

Synopsis	Include the RADIUS Alc-DHCP-Vendor-Class-Id VSA
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute dhcp-vendor-class-id *boolean*
Tree	dhcp-vendor-class-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp6-options *boolean*

Synopsis	Generate the DHCPv6 options RADIUS attribute
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute dhcp6-options *boolean*
Tree	dhcp6-options
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gprs-negotiated-qos-profile *boolean*

Synopsis	Generate GPRS negotiated QoS profile RADIUS attribute
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute gprs-negotiated-qos-profile *boolean*
Tree	gprs-negotiated-qos-profile
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

imei *boolean*

Synopsis	Enable/disable include of the IMEI attribute.
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute imei *boolean*
Tree	imei
Default	false

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Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

imsi *boolean*

Synopsis	Include the IMSI attribute for FWA sessions
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute imsi *boolean*
Tree	imsi
Default	false
Introduced	22.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-address *boolean*

Synopsis	Include the client MAC address in the RADIUS message
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute mac-address *boolean*
Tree	mac-address
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

msisdn *boolean*

Synopsis	Enable/disable include of the MSISDN attribute.
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute msisdn *boolean*
Tree	msisdn
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-identifier *boolean*

Synopsis	Enable/disable include of the NAS-Identifier attribute.

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Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute nas-identifier *boolean*
Tree	nas-identifier
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port

Synopsis	Enable the **nas-port** context
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute nas-port
Tree	nas-port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bit-spec *string*

Synopsis	RADIUS NAS-Port attribute
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute nas-port bit-spec *string*
Tree	bit-spec
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port-id

Synopsis	Enable the **nas-port-id** context
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute nas-port-id
Tree	nas-port-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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prefix-string *string*

Synopsis	String to be prefixed to the NAS-Port-Id attribute
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute nas-port-id prefix-string *string*
Tree	prefix-string
String Length	1 to 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suffix *keyword*

Synopsis	String to be suffixed to the NAS-Port-Id attribute
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute nas-port-id suffix *keyword*
Tree	suffix
Options	circuit-id, remote-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port-type

Synopsis	Enable the **nas-port-type** context
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute nas-port-type
Tree	nas-port-type
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *(keyword | number)*

Synopsis	Value for RADIUS NAS-Port-Type attribute
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute nas-port-type type *(keyword | number)*
Tree	type
Range	0 to 255
Options	rfc-aligned

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Default	rfc-aligned
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe-service-name *boolean*

Synopsis	Generate the pppoe-service-name RADIUS attribute
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute pppoe-service-name *boolean*
Tree	pppoe-service-name
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rat-type *boolean*

Synopsis	Generate the RAT type RADIUS attribute
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute rat-type *boolean*
Tree	rat-type
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-id *boolean*

Synopsis	Include remote-id attribute
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute remote-id *boolean*
Tree	remote-id
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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sap-session-index *boolean*

Synopsis	Generate the per-SAP unique session index
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute sap-session-index *boolean*
Tree	sap-session-index
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tunnel-server-attrs *boolean*

Synopsis	Enable/disable include of tunnel-server attributes.
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute tunnel-server-attrs *boolean*
Tree	tunnel-server-attrs
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

uli *boolean*

Synopsis	Generate the ULI RADIUS attribute
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute uli *boolean*
Tree	uli
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wifi-num-attached-ues *boolean*

Synopsis	Include the RADIUS Alc-Num-Attached-UEs VSA
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute wifi-num-attached-ues *boolean*
Tree	wifi-num-attached-ues
Default	false

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wifi-ssid-vlan *boolean*

Synopsis	Include per-SSID VLAN ID in the Alc-Wlan-SSID-VLAN VSA
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute wifi-ssid-vlan *boolean*
Tree	wifi-ssid-vlan
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect-tunnel-home-address *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Home-Ipv6 attribute
Context	**configure** subscriber-mgmt radius-authentication-policy *string* include-radius-attribute xconnect-tunnel-home-address *boolean*
Tree	xconnect-tunnel-home-address
Default	false
Introduced	16.0.R5
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	RADIUS request password
Context	**configure** subscriber-mgmt radius-authentication-policy *string* password *string*
Tree	password
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-user-name

Synopsis	Enter the **ppp-user-name** context
Context	**configure** subscriber-mgmt radius-authentication-policy *string* ppp-user-name

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Tree	ppp-user-name
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-name *string*

Synopsis	Domain name
Context	**configure** subscriber-mgmt radius-authentication-policy *string* ppp-user-name domain-name *string*
Tree	domain-name
String Length	1 to 128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-operation *keyword*

Synopsis	Operation to perform on the PAP or CHAP username
Context	**configure** subscriber-mgmt radius-authentication-policy *string* ppp-user-name domain-operation *keyword*
Tree	domain-operation
Description	This command specifies the operation to perform on the PAP or CHAP username. When unconfigured, there is no operation and the PAP or CHAP username is not changed.
Options	append, strip, replace, default
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe-access-method *keyword*

Synopsis	PPPoE access method
Context	**configure** subscriber-mgmt radius-authentication-policy *string* pppoe-access-method *keyword*
Tree	pppoe-access-method
Options	none, padi, pap-chap
Default	padi
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-server-policy *reference*

Synopsis	Referenced RADIUS server policy
Context	**configure** subscriber-mgmt radius-authentication-policy *string* radius-server-policy *reference*
Tree	radius-server-policy
Reference	**configure** aaa radius server-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

re-authentication *boolean*

Synopsis	Enable re-authentication on IPOE renewal
Context	**configure** subscriber-mgmt radius-authentication-policy *string* re-authentication *boolean*
Tree	re-authentication
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

send-acct-stop-on-fail

Synopsis	Enter the **send-acct-stop-on-fail** context
Context	**configure** subscriber-mgmt radius-authentication-policy *string* send-acct-stop-on-fail
Tree	send-acct-stop-on-fail
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-accept-failure *boolean*

Synopsis	Send an accounting stop message when a failure occurs
Context	**configure** subscriber-mgmt radius-authentication-policy *string* send-acct-stop-on-fail on-accept-failure *boolean*
Tree	on-accept-failure

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Description	When configured to **true**, the system sends an accounting stop message when a failure occurs after the reception of a RADIUS Access-Accept message (such as a duplicate IP address).
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-reject *boolean*

Synopsis	Send an accounting stop message for Access-Reject
Context	**configure** subscriber-mgmt radius-authentication-policy *string* send-acct-stop-on-fail on-reject *boolean*
Tree	on-reject
Description	When configured to **true**, the system sends an accounting stop message when an Access-Reject message is received.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-request-failure *boolean*

Synopsis	Send an accounting stop message for failures
Context	**configure** subscriber-mgmt radius-authentication-policy *string* send-acct-stop-on-fail on-request-failure *boolean*
Tree	on-request-failure
Description	When configured to **true**, the system sends an accounting stop message when a RADIUS Access-Request message cannot be sent (for example, there is no server configured, or timeout).
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-name

Synopsis	Enter the **user-name** context
Context	**configure** subscriber-mgmt radius-authentication-policy *string* user-name
Tree	user-name

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-name *string*

Synopsis	Domain name
Context	**configure** subscriber-mgmt radius-authentication-policy *string* user-name domain-name *string*
Tree	domain-name
String Length	1 to 128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-operation *keyword*

Synopsis	Operation to perform on the username
Context	**configure** subscriber-mgmt radius-authentication-policy *string* user-name domain-operation *keyword*
Tree	domain-operation
Description	This command specifies the operation to perform on the username. When unconfigured, there is no operation and the username is not changed.
Options	append, strip, replace, default
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

format *keyword*

Synopsis	User name format in the RADIUS message
Context	**configure** subscriber-mgmt radius-authentication-policy *string* user-name format *keyword*
Tree	format
Options	mac, circuit-id, tuple, ascii-converted-circuit-id, ascii-converted-tuple, dhcp-client-vendor-opts, mac-giaddr, ppp-user-name
Default	mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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gtp-format *keyword*

Synopsis	Username format used for FWA sessions
Context	**configure** subscriber-mgmt radius-authentication-policy *string* user-name gtp-format *keyword*
Tree	gtp-format
Description	This command specifies the username format to use for FWA sessions. If a PAP message is present in the PCO IE of the Create Session request, the system uses that for authentication instead of the format specified for this command. If you specify a format that includes APN, the separator is an @ character; for example, msisdn@apn.
Options	imsi, imsi-apn, msisdn, msisdn-apn
Default	imsi
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-format *string*

Synopsis	MAC address format when contacting a RADIUS server
Context	**configure** subscriber-mgmt radius-authentication-policy *string* user-name mac-format *string*
Tree	mac-format
String Length	2 to 7
Default	aa:
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rip-policy [name] *string*

Synopsis	Enter the **rip-policy** list instance
Context	**configure** subscriber-mgmt rip-policy *string*
Tree	rip-policy
Max. Instances	255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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[**name**] *string*

Synopsis	RIP policy name
Context	**configure** subscriber-mgmt rip-policy *string*
Tree	rip-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authentication-key *string*

Synopsis	Authentication key
Context	**configure** subscriber-mgmt rip-policy *string* authentication-key *string*
Tree	authentication-key
String Length	1 to 51
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authentication-type *keyword*

Synopsis	Authentication type used between RIP neighbors
Context	**configure** subscriber-mgmt rip-policy *string* authentication-type *keyword*
Tree	authentication-type
Options	password, message-digest, message-digest-20
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt rip-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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router-advertisement-policy [name] *string*

Synopsis	Enter the **router-advertisement-policy** list instance
Context	**configure** subscriber-mgmt router-advertisement-policy *string*
Tree	router-advertisement-policy
Max. Instances	16
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Router advertisement policy name
Context	**configure** subscriber-mgmt router-advertisement-policy *string*
Tree	router-advertisement-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

force-mcast *keyword*

Synopsis	Protocol with forced multicast
Context	**configure** subscriber-mgmt router-advertisement-policy *string* force-mcast *keyword*
Tree	force-mcast
Options	ip, ip-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-advertisement-interval *number*

Synopsis	Maximum advertisement interval
Context	**configure** subscriber-mgmt router-advertisement-policy *string* max-advertisement-interval *number*
Tree	max-advertisement-interval
Range	900 to 1800

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Units	seconds
Default	1800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-advertisement-interval *number*

Synopsis	Minimum advertisement interval
Context	**configure** subscriber-mgmt router-advertisement-policy *string* min-advertisement-interval *number*
Tree	min-advertisement-interval
Range	900 to 1350
Units	seconds
Default	900
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the **options** context
Context	**configure** subscriber-mgmt router-advertisement-policy *string* options
Tree	options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

current-hop-limit *number*

Synopsis	Hop limit to be advertised
Context	**configure** subscriber-mgmt router-advertisement-policy *string* options current-hop-limit *number*
Tree	current-hop-limit
Range	0 to 255
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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dns

Synopsis	Enter the **dns** context
Context	**configure** subscriber-mgmt router-advertisement-policy *string* options dns
Tree	dns
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

include-rdnss *boolean*

Synopsis	Include the RDNSS server option 25
Context	**configure** subscriber-mgmt router-advertisement-policy *string* options dns include-rdnss *boolean*
Tree	include-rdnss
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rdnss-lifetime *(number | keyword)*

Synopsis	Maximum time for the RDNSS address to remain valid
Context	**configure** subscriber-mgmt router-advertisement-policy *string* options dns rdnss-lifetime *(number | keyword)*
Tree	rdnss-lifetime
Range	900 to 3600
Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

managed-configuration *boolean*

Synopsis	Managed address configuration flag
Context	**configure** subscriber-mgmt router-advertisement-policy *string* options managed-configuration *boolean*

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Tree	managed-configuration
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mtu *(number | keyword)*

Synopsis	Advertised MTU value
Context	**configure** subscriber-mgmt router-advertisement-policy *string* options mtu *(number | keyword)*
Tree	mtu
Range	1280 to 9212
Units	bytes
Options	not-included
Default	not-included
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

other-stateful-configuration *boolean*

Synopsis	Other stateful configuration flag
Context	**configure** subscriber-mgmt router-advertisement-policy *string* options other-stateful-configuration *boolean*
Tree	other-stateful-configuration
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reachable-time *number*

Synopsis	Reachable time for advertisements
Context	**configure** subscriber-mgmt router-advertisement-policy *string* options reachable-time *number*
Tree	reachable-time
Range	0 to 3600000
Units	milliseconds

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Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retransmit-timer *number*

Synopsis	Retransmit time in router advertisements from interface
Context	**configure** subscriber-mgmt router-advertisement-policy *string* options retransmit-timer *number*
Tree	retransmit-timer
Range	0 to 1800000
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-lifetime *(number | keyword)*

Synopsis	Router lifetime
Context	**configure** subscriber-mgmt router-advertisement-policy *string* options router-lifetime *(number | keyword)*
Tree	router-lifetime
Range	2700 to 9000
Units	seconds
Options	no-default-router
Default	4500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-options

Synopsis	Enter the **prefix-options** context
Context	**configure** subscriber-mgmt router-advertisement-policy *string* prefix-options
Tree	prefix-options
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stateful

Synopsis	Enter the **stateful** context
Context	**configure** subscriber-mgmt router-advertisement-policy *string* prefix-options stateful
Tree	stateful
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-lifetimes *boolean*

Synopsis	Use automatic lifetimes for stateful prefixes
Context	**configure** subscriber-mgmt router-advertisement-policy *string* prefix-options stateful auto-lifetimes *boolean*
Tree	auto-lifetimes
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-link *boolean*

Synopsis	Assign the prefix to an interface on the specified link
Context	**configure** subscriber-mgmt router-advertisement-policy *string* prefix-options stateful on-link *boolean*
Tree	on-link
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime *(number | keyword)*

Synopsis	Time for a prefix to remain preferred
Context	**configure** subscriber-mgmt router-advertisement-policy *string* prefix-options stateful preferred-lifetime *(number | keyword)*
Tree	preferred-lifetime

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Range	0 to 4294967294
Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *(number | keyword)*

Synopsis	Time for a prefix to remain valid
Context	**configure** subscriber-mgmt router-advertisement-policy *string* prefix-options stateful valid-lifetime *(number | keyword)*
Tree	valid-lifetime
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stateless

Synopsis	Enter the **stateless** context
Context	**configure** subscriber-mgmt router-advertisement-policy *string* prefix-options stateless
Tree	stateless
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-link *boolean*

Synopsis	Assign the prefix to an interface on the specified link
Context	**configure** subscriber-mgmt router-advertisement-policy *string* prefix-options stateless on-link *boolean*
Tree	on-link
Default	true
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime *(number | keyword)*

Synopsis	Time for a prefix to remain preferred
Context	**configure** subscriber-mgmt router-advertisement-policy *string* prefix-options stateless preferred-lifetime *(number | keyword)*
Tree	preferred-lifetime
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *(number | keyword)*

Synopsis	Time for a prefix to remain valid
Context	**configure** subscriber-mgmt router-advertisement-policy *string* prefix-options stateless valid-lifetime *(number | keyword)*
Tree	valid-lifetime
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-template [name] *string*

Synopsis	Enter the **sap-template** list instance
Context	**configure** subscriber-mgmt sap-template *string*
Tree	sap-template
Description	Commands in this context configure a template for automatically-generated subscriber SAPs that is used when creating CUPS sessions. A template with name "default"

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	is used when no other instance is created, however, the "default" template must be explicitly provisioned.
Max. Instances	256
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	SAP template name
Context	**configure** subscriber-mgmt sap-template *string*
Tree	sap-template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cpu-protection

Synopsis	Enter the **cpu-protection** context
Context	**configure** subscriber-mgmt sap-template *string* cpu-protection
Tree	cpu-protection
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

ip-src-monitoring

Synopsis	Apply CPU protection policy on IP sources
Context	**configure** subscriber-mgmt sap-template *string* cpu-protection ip-src-monitoring
Tree	ip-src-monitoring
Notes	The following elements are part of a choice: **ip-src-monitoring** or **mac-monitoring**.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

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mac-monitoring

Synopsis	Apply CPU protection policy on MAC sources
Context	**configure** subscriber-mgmt sap-template *string* cpu-protection mac-monitoring
Tree	mac-monitoring
Notes	The following elements are part of a choice: **ip-src-monitoring** or **mac-monitoring**.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

policy-id *reference*

Synopsis	CPU protection policy ID
Context	**configure** subscriber-mgmt sap-template *string* cpu-protection policy-id *reference*
Tree	policy-id
Reference	**configure** system security cpu-protection policy *number*
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt sap-template *string* description *string*
Tree	description
String Length	1 to 80
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dist-cpu-protection *reference*

Synopsis	Distributed CPU protection policy name
Context	**configure** subscriber-mgmt sap-template *string* dist-cpu-protection *reference*
Tree	dist-cpu-protection
Reference	**configure** system security dist-cpu-protection policy *string*
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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hold-time *(number | keyword)*

Synopsis	Time to hold a SAP after last PFCP session is removed
Context	**configure** subscriber-mgmt sap-template *string* hold-time *(number | keyword)*
Tree	hold-time
Description	This command configures the time for which an SAP will be kept after the last session has been removed. Idle SAPs can be forcefully removed by the command **clear subscriber-mgmt sap-template template-name idle-saps**.
Range	0 | 30 to 2592000
Units	seconds
Options	infinite
Default	30
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv-policy [name] *string*

Synopsis	Enter the **shcv-policy** list instance
Context	**configure** subscriber-mgmt shcv-policy *string*
Tree	shcv-policy
Max. Instances	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	SHCV policy name
Context	**configure** subscriber-mgmt shcv-policy *string*
Tree	shcv-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt shcv-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

layer-3

Synopsis	Enter the **layer-3** context
Context	**configure** subscriber-mgmt shcv-policy *string* layer-3
Tree	layer-3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-ip-origin *keyword*

Synopsis	Source IP address to be used for SHCV messages
Context	**configure** subscriber-mgmt shcv-policy *string* layer-3 source-ip-origin *keyword*
Tree	source-ip-origin
Options	interface – IP address of the interface vrrp – Primary IP address of the VRRP
Default	interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

unnumbered-source-ip *string*

Synopsis	Source IPv4 address for unnumbered subscriber hosts
Context	**configure** subscriber-mgmt shcv-policy *string* layer-3 unnumbered-source-ip *string*
Tree	unnumbered-source-ip
Description	This command configures the source IPv4 address (also known as the sender IP address) used in SHCV ARP requests for unnumbered hosts. When unconfigured, 0.0.0.0 is used as the source IPv4 address in SHCV ARP requests.
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

periodic

Synopsis	Enter the **periodic** context
Context	**configure** subscriber-mgmt shcv-policy *string* periodic
Tree	periodic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	Action when periodic connectivity verification fails
Context	**configure** subscriber-mgmt shcv-policy *string* periodic action *keyword*
Tree	action
Options	alarm, remove
Default	alarm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of periodic connectivity check
Context	**configure** subscriber-mgmt shcv-policy *string* periodic admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Time interval which all known sources are verified
Context	**configure** subscriber-mgmt shcv-policy *string* periodic interval *number*
Tree	interval

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Description	This command specifies the time interval which all known sources are verified. The actual rate is dependent on the number of known hosts and intervals.
Range	1 to 6000
Units	minutes
Default	30
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retry-count *number*

Synopsis	Number of retransmissions in connectivity verification
Context	**configure** subscriber-mgmt shcv-policy *string* periodic retry-count *number*
Tree	retry-count
Range	1 to 29
Default	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Timeout before connectivity verification retransmitted
Context	**configure** subscriber-mgmt shcv-policy *string* periodic timeout *number*
Tree	timeout
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

trigger

Synopsis	Enter the **trigger** context
Context	**configure** subscriber-mgmt shcv-policy *string* trigger
Tree	trigger
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-limit-exceeded

Synopsis	Enter the **host-limit-exceeded** context
Context	**configure** subscriber-mgmt shcv-policy *string* trigger host-limit-exceeded
Tree	host-limit-exceeded
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of trigger for host-limit exceeded
Context	**configure** subscriber-mgmt shcv-policy *string* trigger host-limit-exceeded admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retry-count *number*

Synopsis	Number of retransmissions in periodic connectivity test
Context	**configure** subscriber-mgmt shcv-policy *string* trigger host-limit-exceeded retry-count *number*
Tree	retry-count
Range	1 to 29
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Timeout before a retransmission

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Context	**configure** subscriber-mgmt shcv-policy *string* trigger host-limit-exceeded timeout *number*
Tree	timeout
Range	1 to 60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

inactivity

Synopsis	Enter the **inactivity** context
Context	**configure** subscriber-mgmt shcv-policy *string* trigger inactivity
Tree	inactivity
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the trigger for inactive hosts
Context	**configure** subscriber-mgmt shcv-policy *string* trigger inactivity admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retry-count *number*

Synopsis	Number of retransmissions in periodic connectivity test
Context	**configure** subscriber-mgmt shcv-policy *string* trigger inactivity retry-count *number*
Tree	retry-count
Range	1 to 29
Default	2
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Timeout before a retransmission
Context	**configure** subscriber-mgmt shcv-policy *string* trigger inactivity timeout *number*
Tree	timeout
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-conflict

Synopsis	Enter the **ip-conflict** context
Context	**configure** subscriber-mgmt shcv-policy *string* trigger ip-conflict
Tree	ip-conflict
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the trigger for IP conflict
Context	**configure** subscriber-mgmt shcv-policy *string* trigger ip-conflict admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retry-count *number*

Synopsis	Number of retransmissions in periodic connectivity test
Context	**configure** subscriber-mgmt shcv-policy *string* trigger ip-conflict retry-count *number*

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Tree	retry-count
Range	1 to 29
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Timeout before a retransmission
Context	**configure** subscriber-mgmt shcv-policy *string* trigger ip-conflict timeout *number*
Tree	timeout
Range	1 to 60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-learning

Synopsis	Enter the **mac-learning** context
Context	**configure** subscriber-mgmt shcv-policy *string* trigger mac-learning
Tree	mac-learning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of trigger for MAC learning
Context	**configure** subscriber-mgmt shcv-policy *string* trigger mac-learning admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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retry-count *number*

Synopsis	Number of retransmissions in periodic connectivity test
Context	**configure** subscriber-mgmt shcv-policy *string* trigger mac-learning retry-count *number*
Tree	retry-count
Range	1 to 29
Default	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Timeout before a retransmission
Context	**configure** subscriber-mgmt shcv-policy *string* trigger mac-learning timeout *number*
Tree	timeout
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mobility

Synopsis	Enter the **mobility** context
Context	**configure** subscriber-mgmt shcv-policy *string* trigger mobility
Tree	mobility
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of trigger for SAP IP/MAC conflict
Context	**configure** subscriber-mgmt shcv-policy *string* trigger mobility admin-state *keyword*
Tree	admin-state
Options	enable, disable

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Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retry-count *number*

Synopsis	Number of retransmissions in periodic connectivity test
Context	**configure** subscriber-mgmt shcv-policy *string* trigger mobility retry-count *number*
Tree	retry-count
Range	1 to 29
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Timeout before a retransmission
Context	**configure** subscriber-mgmt shcv-policy *string* trigger mobility timeout *number*
Tree	timeout
Range	1 to 60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vpls

Synopsis	Enter the **vpls** context
Context	**configure** subscriber-mgmt shcv-policy *string* vpls
Tree	vpls
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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source-ip *string*

Synopsis	Source IPv4 address for connectivity verification
Context	**configure** subscriber-mgmt shcv-policy *string* vpls source-ip *string*
Tree	source-ip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-mac *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Source MAC address for connectivity verification
Context	**configure** subscriber-mgmt shcv-policy *string* vpls source-mac *string*
Tree	source-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile [name] *string*

Synopsis	Enter the **sla-profile** list instance
Context	**configure** subscriber-mgmt sla-profile *string*
Tree	sla-profile
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	SLA profile name
Context	**configure** subscriber-mgmt sla-profile *string*
Tree	sla-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

control

Synopsis	Enter the **control** context
Context	**configure** subscriber-mgmt sla-profile *string* control
Tree	control
Description	Commands in this context determine which sessions can use the SLA profile. By default, only sessions set up by the local system can use the SLA profile, but the SLA profile can also be enabled for sessions set up by a BNG CUPS Control Plane Function (CPF).
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cups *boolean*

Synopsis	Allow the CUPS control plane to use the profile
Context	**configure** subscriber-mgmt sla-profile *string* control cups *boolean*
Tree	cups
Description	When configured to **true**, the profile can be used by sessions set up by a BNG CUPS Control Plane Function (CPF).
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local *boolean*

Synopsis	Allow the local control plane to use the profile
Context	**configure** subscriber-mgmt sla-profile *string* control local *boolean*
Tree	local
Description	When configured to **true**, the profile can be used by sessions set up by the local system.
Default	true
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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credit-control-policy *reference*

Synopsis	Credit policy for this SLA profile
Context	**configure** subscriber-mgmt sla-profile *string* credit-control-policy *reference*
Tree	credit-control-policy
Reference	**configure** subscriber-mgmt credit-control-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

def-instance-sharing *keyword*

Synopsis	Default SPI sharing method for IPoE or PPPoE sessions
Context	**configure** subscriber-mgmt sla-profile *string* def-instance-sharing *keyword*
Tree	def-instance-sharing
Options	per-sap, per-session
Default	per-sap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt sla-profile *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the **egress** context
Context	**configure** subscriber-mgmt sla-profile *string* egress
Tree	egress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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bonding-selection

Synopsis	Enter the **bonding-selection** context
Context	**configure** subscriber-mgmt sla-profile *string* egress bonding-selection
Tree	bonding-selection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-thresholds

Synopsis	Enter the **rate-thresholds** context
Context	**configure** subscriber-mgmt sla-profile *string* egress bonding-selection rate-thresholds
Tree	rate-thresholds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis	High threshold rate percentage
Context	**configure** subscriber-mgmt sla-profile *string* egress bonding-selection rate-thresholds high *number*
Tree	high
Range	56 to 99
Units	percent
Default	90
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low *number*

Synopsis	Low threshold rate percentage
Context	**configure** subscriber-mgmt sla-profile *string* egress bonding-selection rate-thresholds low *number*
Tree	low
Range	55 to 98
Units	percent

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Default	80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

weight

Synopsis	Enter the **weight** context
Context	**configure** subscriber-mgmt sla-profile *string* egress bonding-selection weight
Tree	weight
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

change *number*

Synopsis	Weight change of the preferred connection
Context	**configure** subscriber-mgmt sla-profile *string* egress bonding-selection weight change *number*
Tree	change
Range	0 to 10
Units	percent
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial *number*

Synopsis	Initial weight of the preferred connection
Context	**configure** subscriber-mgmt sla-profile *string* egress bonding-selection weight initial *number*
Tree	initial
Range	1 to 100
Units	percent
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ip-filter *reference*

Synopsis	IPv4 filter policy name
Context	**configure** subscriber-mgmt sla-profile *string* egress ip-filter *reference*
Tree	ip-filter
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-filter *reference*

Synopsis	IPv6 filter policy name
Context	**configure** subscriber-mgmt sla-profile *string* egress ipv6-filter *reference*
Tree	ipv6-filter
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the **qos** context
Context	**configure** subscriber-mgmt sla-profile *string* egress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hs-agg-rate *number*

Synopsis	Maximum rate for expanded egress HS queues
Context	**configure** subscriber-mgmt sla-profile *string* egress qos hs-agg-rate *number*
Tree	hs-agg-rate
Range	1 to 100000000
Units	kilobps
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

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qos-marking-from-sap *boolean*

Synopsis	Set policy where egress QoS marking rules are applied
Context	**configure** subscriber-mgmt sla-profile *string* egress qos qos-marking-from-sap *boolean*
Tree	qos-marking-from-sap
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-egress

Synopsis	Enter the **sap-egress** context
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress
Tree	sap-egress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overrides

Synopsis	Enter the **overrides** context
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hs-queue-stat-mode *keyword*

Synopsis	Egress HS queue stats mode
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides hs-queue-stat-mode *keyword*
Tree	hs-queue-stat-mode
Options	v4-v6
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

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hs-wrr-group [id] *reference*

Synopsis	Enter the **hs-wrr-group** list instance
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides hs-wrr-group *reference*
Tree	hs-wrr-group
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[**id**] *reference*

Synopsis	HS WRR group ID to override in the QoS policy table
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides hs-wrr-group *reference*
Tree	hs-wrr-group
Reference	**configure** qos sap-egress *string* hs-wrr-group *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-class-weight *number*

Synopsis	Class weight override for WRR group
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides hs-wrr-group *reference* hs-class-weight *number*
Tree	hs-class-weight
Range	1 | 2 | 4 | 8
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

rate *(number* | *keyword)*

Synopsis	PIR rate override for WRR group
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides hs-wrr-group *reference* rate *(number* | *keyword)*
Tree	rate
Range	1 to 2000000000

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Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policer [id] *reference*

Synopsis	Enter the **policer** list instance
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides policer *reference*
Tree	policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**id**] *reference*

Synopsis	Policer ID
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides policer *reference*
Tree	policer
Reference	**configure** qos sap-egress *string* policer *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cbs *(number | keyword)*

Synopsis	CBS
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides policer *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides policer *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packet-byte-offset *number*

Synopsis	Packet byte offset
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides policer *reference* packet-byte-offset *number*
Tree	packet-byte-offset
Range	-64 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate

Synopsis	Enter the **rate** context
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides policer *reference* rate
Tree	rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cir *(number | keyword)*

Synopsis	CIR override for the packet byte offset
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides policer *reference* rate cir *(number | keyword)*

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Tree	cir
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir *(number | keyword)*

Synopsis	PIR override for the packet bye offset
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides policer *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

stat-mode *keyword*

Synopsis	Stat mode for the policer
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides policer *reference* stat-mode *keyword*
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, v4-v6, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue [id] *reference*

Synopsis	Enter the **queue** list instance
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides queue *reference*
Tree	queue

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**id**] *reference*

Synopsis	Queue ID
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides queue *reference*
Tree	queue
Reference	**configure** qos sap-egress *string* queue *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

avg-frame-overhead *decimal-number*

Synopsis	Average frame overhead
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides queue *reference* avg-frame-overhead *decimal-number*
Tree	avg-frame-overhead
Range	0.00 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cbs *(number | keyword)*

Synopsis	CBS
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides queue *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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high-prio-only *(number | keyword)*

Synopsis	High priority burst size
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides queue *reference* high-prio-only *(number | keyword)*
Tree	high-prio-only
Range	0 to 100
Units	percent
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hs-class-weight *number*

Synopsis	Class-weight override for expanded egress HS queues
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides queue *reference* hs-class-weight *number*
Tree	hs-class-weight
Range	1 | 2 | 4 | 8
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wred-queue

Synopsis	Enter the **hs-wred-queue** context
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides queue *reference* hs-wred-queue
Tree	hs-wred-queue
Introduced	16.0.R4
Platforms	7750 SR-7/12/12e

policy *reference*

Synopsis	Name of the slope-policy override applied to HS queue
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides queue *reference* hs-wred-queue policy *reference*

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Tree	policy
Reference	**configure** qos slope-policy *string*
Introduced	16.0.R4
Platforms	7750 SR-7/12/12e

hs-wrr-weight *number*

Synopsis	Maximum rate for expanded egress HS queues
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides queue *reference* hs-wrr-weight *number*
Tree	hs-wrr-weight
Range	1 to 127
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides queue *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate

Synopsis	Enter the **rate** context
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides queue *reference* rate
Tree	rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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cir *(number | keyword)*

Synopsis	CIR for the queue
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides queue *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pir *(number | keyword)*

Synopsis	PIR for the queue
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides queue *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stat-mode *keyword*

Synopsis	Stat mode for the policer
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress overrides queue *reference* stat-mode *keyword*
Tree	stat-mode
Options	v4-v6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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policy-name *reference*

Synopsis	SAP-egress QoS policy
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-egress *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

port-parent-location *keyword*

Synopsis	Scheduling type for queued traffic
Context	**configure** subscriber-mgmt sla-profile *string* egress qos sap-egress port-parent-location *keyword*
Tree	port-parent-location
Options	port, vport
Default	port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler-policy

Synopsis	Enter the **scheduler-policy** context
Context	**configure** subscriber-mgmt sla-profile *string* egress qos scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overrides

Synopsis	Enter the **overrides** context
Context	**configure** subscriber-mgmt sla-profile *string* egress qos scheduler-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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scheduler [scheduler-name] *reference*

Synopsis	Enter the **scheduler** list instance
Context	**configure** subscriber-mgmt sla-profile *string* egress qos scheduler-policy overrides scheduler *reference*
Tree	scheduler
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**scheduler-name**] *reference*

Synopsis	Scheduler policy name
Context	**configure** subscriber-mgmt sla-profile *string* egress qos scheduler-policy overrides scheduler *reference*
Tree	scheduler
Reference	**configure** qos scheduler-policy *string* tier *number* scheduler *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate

Synopsis	Enter the **rate** context
Context	**configure** subscriber-mgmt sla-profile *string* egress qos scheduler-policy overrides scheduler *reference* rate
Tree	rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cir *(number | keyword)*

Synopsis	Administrative CIR
Context	**configure** subscriber-mgmt sla-profile *string* egress qos scheduler-policy overrides scheduler *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 3200000000

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Units	kilobps
Options	sum, max
Default	sum
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pir *(number | keyword)*

Synopsis	Administrative PIR
Context	**configure** subscriber-mgmt sla-profile *string* egress qos scheduler-policy overrides scheduler *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Scheduler policy name
Context	**configure** subscriber-mgmt sla-profile *string* egress qos scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos scheduler-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-ingress-l2tp-dscp *boolean*

Synopsis	Use outer L2TP header for LAC sessions
Context	**configure** subscriber-mgmt sla-profile *string* egress qos use-ingress-l2tp-dscp *boolean*
Tree	use-ingress-l2tp-dscp
Description	When configured to **true**, egress classification is based on the outer L2TP header DSCP instead of the inner IP header for LAC sessions.

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	This command is ignored for non-LAC sessions.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

report-rate

Synopsis	Enter the **report-rate** context
Context	**configure** subscriber-mgmt sla-profile *string* egress report-rate
Tree	report-rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

agg-rate

Synopsis	Report the aggregate rate
Context	**configure** subscriber-mgmt sla-profile *string* egress report-rate agg-rate
Tree	agg-rate
Notes	The following elements are part of a choice: **agg-rate**, **policer**, **pppoe-actual-rate**, **rfc5515-actual-rate**, or **scheduler**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer *number*

Synopsis	Report the rate of the specified policer
Context	**configure** subscriber-mgmt sla-profile *string* egress report-rate policer *number*
Tree	policer
Range	1 to 63
Notes	The following elements are part of a choice: **agg-rate**, **policer**, **pppoe-actual-rate**, **rfc5515-actual-rate**, or **scheduler**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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pppoe-actual-rate

Synopsis	Report rate from the DSL characteristics PPPoE tags
Context	**configure** subscriber-mgmt sla-profile *string* egress report-rate pppoe-actual-rate
Tree	pppoe-actual-rate
Notes	The following elements are part of a choice: **agg-rate**, **policer**, **pppoe-actual-rate**, **rfc5515-actual-rate**, or **scheduler**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rfc5515-actual-rate

Synopsis	Report the rate as specified in RFC5515
Context	**configure** subscriber-mgmt sla-profile *string* egress report-rate rfc5515-actual-rate
Tree	rfc5515-actual-rate
Notes	The following elements are part of a choice: **agg-rate**, **policer**, **pppoe-actual-rate**, **rfc5515-actual-rate**, or **scheduler**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler *string*

Synopsis	Report the rate of the specified scheduler
Context	**configure** subscriber-mgmt sla-profile *string* egress report-rate scheduler *string*
Tree	scheduler
String Length	1 to 32
Notes	The following elements are part of a choice: **agg-rate**, **policer**, **pppoe-actual-rate**, **rfc5515-actual-rate**, or **scheduler**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-limits

Synopsis	Enter the **host-limits** context
Context	**configure** subscriber-mgmt sla-profile *string* host-limits
Tree	host-limits

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** subscriber-mgmt sla-profile *string* host-limits ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arp *number*

Synopsis	Maximum number of IPv4 ARP hosts
Context	**configure** subscriber-mgmt sla-profile *string* host-limits ipv4 arp *number*
Tree	arp
Description	This command configures the maximum number of IPv4 ARP hosts per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp *number*

Synopsis	Maximum number of IPv4 DHCP hosts
Context	**configure** subscriber-mgmt sla-profile *string* host-limits ipv4 dhcp *number*
Tree	dhcp
Description	This command configures the maximum number of IPv4 DHCP hosts per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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overall *number*

Synopsis	Maximum number of IPv4 hosts
Context	**configure** subscriber-mgmt sla-profile *string* host-limits ipv4 overall *number*
Tree	overall
Description	This command configures the maximum number of IPv4 hosts per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp *number*

Synopsis	Maximum number of IPv4 PPP hosts
Context	**configure** subscriber-mgmt sla-profile *string* host-limits ipv4 ppp *number*
Tree	ppp
Description	This command configures the maximum number of IPv4 PPP hosts per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** subscriber-mgmt sla-profile *string* host-limits ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overall *number*

Synopsis	Maximum number of IPv6 hosts

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Context	**configure** subscriber-mgmt sla-profile *string* host-limits ipv6 overall *number*
Tree	overall
Description	This command configures the maximum number of IPv6 hosts per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pd-ipoe-dhcp *number*

Synopsis	Maximum number of IPv6 IPoE DHCP PD hosts
Context	**configure** subscriber-mgmt sla-profile *string* host-limits ipv6 pd-ipoe-dhcp *number*
Tree	pd-ipoe-dhcp
Description	This command configures the maximum number of IPv6 IPoE DHCP Prefix Delegation hosts (IA-PD) per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pd-overall *number*

Synopsis	Maximum number of IPv6 DHCP PD hosts
Context	**configure** subscriber-mgmt sla-profile *string* host-limits ipv6 pd-overall *number*
Tree	pd-overall
Description	The command configures the maximum number of IPv6 DHCP Prefix Delegation hosts (IA-PD) per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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pd-ppp-dhcp *number*

Synopsis	Maximum number of IPv6 PPPoE DHCP PD hosts
Context	**configure** subscriber-mgmt sla-profile *string* host-limits ipv6 pd-ppp-dhcp *number*
Tree	pd-ppp-dhcp
Description	This command configures the maximum number of IPv6 PPPoE DHCP Prefix Delegation hosts (IA-PD) per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-ipoe-dhcp *number*

Synopsis	Maximum number of IPv6 IPoE DHCP WAN hosts
Context	**configure** subscriber-mgmt sla-profile *string* host-limits ipv6 wan-ipoe-dhcp *number*
Tree	wan-ipoe-dhcp
Description	This command configures the maximum number of IPv6 IPoE DHCP WAN hosts (IA-NA) per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-ipoe-slaac *number*

Synopsis	Maximum number of IPv6 IPoE SLAAC WAN hosts
Context	**configure** subscriber-mgmt sla-profile *string* host-limits ipv6 wan-ipoe-slaac *number*
Tree	wan-ipoe-slaac
Description	This command configures the maximum number of IPv6 IPoE SLAAC WAN hosts per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-overall *number*

Synopsis	Maximum number of IPv6 WAN hosts
Context	**configure** subscriber-mgmt sla-profile *string* host-limits ipv6 wan-overall *number*
Tree	wan-overall
Description	This command configures the maximum number of IPv6 WAN hosts per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-ppp-dhcp *number*

Synopsis	Maximum number IPv6 PPPoE DHCP WAN hosts
Context	**configure** subscriber-mgmt sla-profile *string* host-limits ipv6 wan-ppp-dhcp *number*
Tree	wan-ppp-dhcp
Description	This command configures the maximum number of IPv6 PPPoE DHCP WAN hosts (IA-NA) per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-ppp-slaac *number*

Synopsis	Maximum number of IPv6 PPPoE SLAAC WAN hosts
Context	**configure** subscriber-mgmt sla-profile *string* host-limits ipv6 wan-ppp-slaac *number*
Tree	wan-ppp-slaac
Description	This command configures the maximum number of IPv6 PPPoE DHCP WAN hosts per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.

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Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lac-overall *number*

Synopsis	Maximum number of L2TP LAC hosts
Context	**configure** subscriber-mgmt sla-profile *string* host-limits lac-overall *number*
Tree	lac-overall
Description	This command configures the maximum number of L2TP LAC hosts per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overall *number*

Synopsis	Maximum number of subscriber hosts
Context	**configure** subscriber-mgmt sla-profile *string* host-limits overall *number*
Tree	overall
Description	This command configures the maximum number of subscriber hosts per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	1 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remove-oldest *boolean*

Synopsis	Remove oldest
Context	**configure** subscriber-mgmt sla-profile *string* host-limits remove-oldest *boolean*
Tree	remove-oldest
Default	false

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

idle-timeout

Synopsis	Enable the **idle-timeout** context
Context	**configure** subscriber-mgmt sla-profile *string* idle-timeout
Tree	idle-timeout
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

category [category-name] *reference*

Synopsis	Enter the **category** list instance
Context	**configure** subscriber-mgmt sla-profile *string* idle-timeout category *reference*
Tree	category
Max. Instances	16
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**category-name**] *reference*

Synopsis	Category name
Context	**configure** subscriber-mgmt sla-profile *string* idle-timeout category *reference*
Tree	category
Description	This command specifies the category name where the queues and policers are defined for the idle-timeout monitoring for subscriber hosts.
Reference	**configure** subscriber-mgmt category-map *string* category *string*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	Action when the idle-timeout is reached

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Context	**configure** subscriber-mgmt sla-profile *string* idle-timeout category *reference* action *keyword*
Tree	action
Description	This command specifies the action to be executed when the idle-timeout is reached. The action is performed for all hosts associated with the SLA profile instance.
Options	terminate, shcv
Default	terminate
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Time the category can stay below its activity threshold
Context	**configure** subscriber-mgmt sla-profile *string* idle-timeout category *reference* timeout *number*
Tree	timeout
Range	60 to 15552000
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

category-map-name *reference*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Category map name
Context	**configure** subscriber-mgmt sla-profile *string* idle-timeout category-map-name *reference*
Tree	category-map-name
Reference	**configure** subscriber-mgmt category-map *string*
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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ingress

Synopsis	Enter the **ingress** context
Context	**configure** subscriber-mgmt sla-profile *string* ingress
Tree	ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-filter *reference*

Synopsis	IPv4 filter policy name
Context	**configure** subscriber-mgmt sla-profile *string* ingress ip-filter *reference*
Tree	ip-filter
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-filter *reference*

Synopsis	IPv6 filter policy name
Context	**configure** subscriber-mgmt sla-profile *string* ingress ipv6-filter *reference*
Tree	ipv6-filter
Reference	**configure** filter ipv6-filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the **qos** context
Context	**configure** subscriber-mgmt sla-profile *string* ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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sap-ingress

Synopsis	Enter the **sap-ingress** context
Context	**configure** subscriber-mgmt sla-profile *string* ingress qos sap-ingress
Tree	sap-ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overrides

Synopsis	Enter the **overrides** context
Context	**configure** subscriber-mgmt sla-profile *string* ingress qos sap-ingress overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer [id] *reference*

Synopsis	Enter the **policer** list instance
Context	**configure** subscriber-mgmt sla-profile *string* ingress qos sap-ingress overrides policer *reference*
Tree	policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**id**] *reference*

Synopsis	Policer ID
Context	**configure** subscriber-mgmt sla-profile *string* ingress qos sap-ingress overrides policer *reference*
Tree	policer
Reference	**configure** qos sap-ingress *string* policer *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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cbs *(number | keyword)*

Synopsis	CBS
Context	**configure** subscriber-mgmt sla-profile *string* ingress qos sap-ingress overrides policer *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** subscriber-mgmt sla-profile *string* ingress qos sap-ingress overrides policer *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packet-byte-offset *number*

Synopsis	Packet byte offset
Context	**configure** subscriber-mgmt sla-profile *string* ingress qos sap-ingress overrides policer *reference* packet-byte-offset *number*
Tree	packet-byte-offset
Range	-32 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate

Synopsis	Enter the **rate** context

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Context	**configure** subscriber-mgmt sla-profile *string* ingress qos sap-ingress overrides policer *reference* rate
Tree	rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cir *(number | keyword)*

Synopsis	CIR override for the packet byte offset
Context	**configure** subscriber-mgmt sla-profile *string* ingress qos sap-ingress overrides policer *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir *(number | keyword)*

Synopsis	PIR override for the packet bye offset
Context	**configure** subscriber-mgmt sla-profile *string* ingress qos sap-ingress overrides policer *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

stat-mode *keyword*

Synopsis	Stat mode for the policer
Context	**configure** subscriber-mgmt sla-profile *string* ingress qos sap-ingress overrides policer *reference* stat-mode *keyword*
Tree	stat-mode

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Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir, v4-v6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue [id] *reference*

Synopsis	Enter the **queue** list instance
Context	**configure** subscriber-mgmt sla-profile *string* ingress qos sap-ingress overrides queue *reference*
Tree	queue
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**id**] *reference*

Synopsis	Queue ID
Context	**configure** subscriber-mgmt sla-profile *string* ingress qos sap-ingress overrides queue *reference*
Tree	queue
Reference	**configure** qos sap-ingress *string* queue *number*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cbs *(number | keyword)*

Synopsis	CBS
Context	**configure** subscriber-mgmt sla-profile *string* ingress qos sap-ingress overrides queue *reference* cbs *(number | keyword)*
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high-prio-only *(number | keyword)*

Synopsis	High priority burst size
Context	**configure** subscriber-mgmt sla-profile *string* ingress qos sap-ingress overrides queue *reference* high-prio-only *(number | keyword)*
Tree	high-prio-only
Range	0 to 100
Units	percent
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mbs *(number | keyword)*

Synopsis	MBS
Context	**configure** subscriber-mgmt sla-profile *string* ingress qos sap-ingress overrides queue *reference* mbs *(number | keyword)*
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate

Synopsis	Enter the **rate** context
Context	**configure** subscriber-mgmt sla-profile *string* ingress qos sap-ingress overrides queue *reference* rate
Tree	rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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cir *(number | keyword)*

Synopsis	CIR for the queue
Context	**configure** subscriber-mgmt sla-profile *string* ingress qos sap-ingress overrides queue *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pir *(number | keyword)*

Synopsis	PIR for the queue
Context	**configure** subscriber-mgmt sla-profile *string* ingress qos sap-ingress overrides queue *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stat-mode *keyword*

Synopsis	Stat mode for the policer
Context	**configure** subscriber-mgmt sla-profile *string* ingress qos sap-ingress overrides queue *reference* stat-mode *keyword*
Tree	stat-mode
Options	v4-v6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	SAP-ingress QoS policy

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Context	**configure** subscriber-mgmt sla-profile *string* ingress qos sap-ingress policy-name *reference*
Tree	policy-name
Reference	**configure** qos sap-ingress *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

queuing-type *keyword*

Synopsis	Queuing type
Context	**configure** subscriber-mgmt sla-profile *string* ingress qos sap-ingress queuing-type *keyword*
Tree	queuing-type
Options	service, shared, multipoint-shared
Default	service
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

report-rate

Synopsis	Enter the **report-rate** context
Context	**configure** subscriber-mgmt sla-profile *string* ingress report-rate
Tree	report-rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

agg-rate

Synopsis	Report the aggregate rate
Context	**configure** subscriber-mgmt sla-profile *string* ingress report-rate agg-rate
Tree	agg-rate
Notes	The following elements are part of a choice: **agg-rate**, **policer**, **pppoe-actual-rate**, **rfc5515-actual-rate**, or **scheduler**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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policer *number*

Synopsis	Report the rate of the specified policer
Context	**configure** subscriber-mgmt sla-profile *string* ingress report-rate policer *number*
Tree	policer
Range	1 to 63
Notes	The following elements are part of a choice: **agg-rate**, **policer**, **pppoe-actual-rate**, **rfc5515-actual-rate**, or **scheduler**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe-actual-rate

Synopsis	Report rate from the DSL characteristics PPPoE tags
Context	**configure** subscriber-mgmt sla-profile *string* ingress report-rate pppoe-actual-rate
Tree	pppoe-actual-rate
Notes	The following elements are part of a choice: **agg-rate**, **policer**, **pppoe-actual-rate**, **rfc5515-actual-rate**, or **scheduler**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rfc5515-actual-rate

Synopsis	Report the rate as specified in RFC5515
Context	**configure** subscriber-mgmt sla-profile *string* ingress report-rate rfc5515-actual-rate
Tree	rfc5515-actual-rate
Notes	The following elements are part of a choice: **agg-rate**, **policer**, **pppoe-actual-rate**, **rfc5515-actual-rate**, or **scheduler**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler *string*

Synopsis	Report the rate of the specified scheduler
Context	**configure** subscriber-mgmt sla-profile *string* ingress report-rate scheduler *string*
Tree	scheduler

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String Length	1 to 32
Notes	The following elements are part of a choice: **agg-rate**, **policer**, **pppoe-actual-rate**, **rfc5515-actual-rate**, or **scheduler**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

one-time-http-redirection

Synopsis	Enter the **one-time-http-redirection** context
Context	**configure** subscriber-mgmt sla-profile *string* one-time-http-redirection
Tree	one-time-http-redirection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-filter *reference*

Synopsis	IPv4 filter policy name
Context	**configure** subscriber-mgmt sla-profile *string* one-time-http-redirection ip-filter *reference*
Tree	ip-filter
Reference	**configure** filter ip-filter *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pfcp-mappings

Synopsis	Enter the **pfcp-mappings** context
Context	**configure** subscriber-mgmt sla-profile *string* pfcp-mappings
Tree	pfcp-mappings
Description	Commands in this context configure the mapping of packet forwarding control protocol (PFCP) QoS IEs (such as QoS enforcement rule (QER) GBR/MBR IEs), to local QoS overrides (such as queue and policer rates).
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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second-level-flow-rate *keyword*

Synopsis	Enforcement for two-level rate limiting downstream
Context	**configure** subscriber-mgmt sla-profile *string* pfcp-mappings second-level-flow-rate *keyword*
Tree	second-level-flow-rate
Options	ignore, shape
Default	shape
Introduced	23.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-qer

Synopsis	Enter the **session-qer** context
Context	**configure** subscriber-mgmt sla-profile *string* pfcp-mappings session-qer
Tree	session-qer
Description	Commands in this context configure the mapping of the PFCP session QER rate to the local QoS rate. If a signaled PFCP QER rate applies to all data-plane rules, it is interpreted as the session QER rate and is mapped to the QoS overrides in the configuration. Examples of such QER rates are APN-AMBR for 4G FWA sessions and session-AMBR for 5G FWA sessions. A QER that contains a QER correlation ID does not use the QER mapping because it is assumed not to be a per-session construct.
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

downlink

Synopsis	Enter the **downlink** context
Context	**configure** subscriber-mgmt sla-profile *string* pfcp-mappings session-qer downlink
Tree	downlink
Description	Commands in this context configure the downlink MBR/GBR to QoS override mapping.
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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aggregate-rate

Synopsis	Map MBR/GBR to a rate override for the aggregate rate
Context	**configure** subscriber-mgmt sla-profile *string* pfcp-mappings session-qer downlink aggregate-rate
Tree	aggregate-rate
Notes	The following elements are part of a choice: **aggregate-rate**, **arbiter**, **policer**, **queue**, or **scheduler**.
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

arbiter *string*

Synopsis	Arbiter target of MBR/GBR override
Context	**configure** subscriber-mgmt sla-profile *string* pfcp-mappings session-qer downlink arbiter *string*
Tree	arbiter
String Length	1 to 32
Notes	The following elements are part of a choice: **aggregate-rate**, **arbiter**, **policer**, **queue**, or **scheduler**.
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer *number*

Synopsis	Policer target of MBR/GBR override
Context	**configure** subscriber-mgmt sla-profile *string* pfcp-mappings session-qer downlink policer *number*
Tree	policer
Range	1 to 8
Notes	The following elements are part of a choice: **aggregate-rate**, **arbiter**, **policer**, **queue**, or **scheduler**.
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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queue *number*

Synopsis	Queue target of MBR/GBR override
Context	**configure** subscriber-mgmt sla-profile *string* pfcp-mappings session-qer downlink queue *number*
Tree	queue
Range	1 to 8
Notes	The following elements are part of a choice: **aggregate-rate**, **arbiter**, **policer**, **queue**, or **scheduler**.
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

scheduler *string*

Synopsis	Scheduler target of MBR/GBR override
Context	**configure** subscriber-mgmt sla-profile *string* pfcp-mappings session-qer downlink scheduler *string*
Tree	scheduler
String Length	1 to 32
Notes	The following elements are part of a choice: **aggregate-rate**, **arbiter**, **policer**, **queue**, or **scheduler**.
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

uplink

Synopsis	Enter the **uplink** context
Context	**configure** subscriber-mgmt sla-profile *string* pfcp-mappings session-qer uplink
Tree	uplink
Description	Commands in this context configure the uplink MBR/GBR to QoS override mapping.
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

arbiter *string*

Synopsis	Arbiter target of MBR/GBR override

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Context	**configure** subscriber-mgmt sla-profile *string* pfcp-mappings session-qer uplink arbiter *string*
Tree	arbiter
String Length	1 to 32
Notes	The following elements are part of a choice: **arbiter**, **policer**, **queue**, or **scheduler**.
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer *number*

Synopsis	Policer target of MBR/GBR override
Context	**configure** subscriber-mgmt sla-profile *string* pfcp-mappings session-qer uplink policer *number*
Tree	policer
Range	1 to 63
Notes	The following elements are part of a choice: **arbiter**, **policer**, **queue**, or **scheduler**.
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue *number*

Synopsis	Queue target of MBR/GBR override
Context	**configure** subscriber-mgmt sla-profile *string* pfcp-mappings session-qer uplink queue *number*
Tree	queue
Range	1 to 32
Notes	The following elements are part of a choice: **arbiter**, **policer**, **queue**, or **scheduler**.
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

scheduler *string*

Synopsis	Scheduler target of MBR/GBR override
Context	**configure** subscriber-mgmt sla-profile *string* pfcp-mappings session-qer uplink scheduler *string*
Tree	scheduler

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String Length	1 to 32
Notes	The following elements are part of a choice: **arbiter**, **policer**, **queue**, or **scheduler**.
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-limits

Synopsis	Enter the **session-limits** context
Context	**configure** subscriber-mgmt sla-profile *string* session-limits
Tree	session-limits
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe *number*

Synopsis	Maximum number of IPoE sessions
Context	**configure** subscriber-mgmt sla-profile *string* session-limits ipoe *number*
Tree	ipoe
Description	This command configures the maximum number of IPoE sessions per SLA profile instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2tp

Synopsis	Enter the **l2tp** context
Context	**configure** subscriber-mgmt sla-profile *string* session-limits l2tp
Tree	l2tp
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lns *number*

Synopsis	Maximum number of L2TP LNS sessions

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Context	**configure** subscriber-mgmt sla-profile *string* session-limits l2tp lns *number*
Tree	lns
Description	This command configures the maximum number of L2TP LNS sessions per SLA profile instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lts *number*

Synopsis	Maximum number of L2TP LTS sessions
Context	**configure** subscriber-mgmt sla-profile *string* session-limits l2tp lts *number*
Tree	lts
Description	This command configures the maximum number of L2TP LTS sessions per SLA profile instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overall *number*

Synopsis	Maximum number of L2TP sessions
Context	**configure** subscriber-mgmt sla-profile *string* session-limits l2tp overall *number*
Tree	overall
Description	This command configures the maximum number of L2TP sessions per SLA profile instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overall *number*

Synopsis	Maximum number of subscriber sessions
Context	**configure** subscriber-mgmt sla-profile *string* session-limits overall *number*
Tree	overall
Range	0 to 131071

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Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe

Synopsis	Enter the **pppoe** context
Context	**configure** subscriber-mgmt sla-profile *string* session-limits pppoe
Tree	pppoe
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lac *number*

Synopsis	Maximum number of PPPoE L2TP LAC sessions
Context	**configure** subscriber-mgmt sla-profile *string* session-limits pppoe lac *number*
Tree	lac
Description	This command configures the maximum number of PPPoE L2TP LAC sessions per SLA profile instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local *number*

Synopsis	Maximum number of PPPoE local terminated sessions
Context	**configure** subscriber-mgmt sla-profile *string* session-limits pppoe local *number*
Tree	local
Description	This command configures the maximum number of PPPoE local terminated sessions (PTA) per SLA profile instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overall *number*

Synopsis	Maximum number of PPPoE sessions

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Context	**configure** subscriber-mgmt sla-profile *string* session-limits pppoe overall *number*
Tree	overall
Description	This command configures the maximum number of PPPoE sessions per SLA profile instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

steering-profile [name] *string*

Synopsis	Enter the **steering-profile** list instance
Context	**configure** subscriber-mgmt steering-profile *string*
Tree	steering-profile
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Steering profile name
Context	**configure** subscriber-mgmt steering-profile *string*
Tree	steering-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

access

Synopsis	Enter the **access** context
Context	**configure** subscriber-mgmt steering-profile *string* access
Tree	access
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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router-instance *string*

Synopsis	Router instance to be used as an access VAS router
Context	**configure** subscriber-mgmt steering-profile *string* access router-instance *string*
Tree	router-instance
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt steering-profile *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

network

Synopsis	Enter the **network** context
Context	**configure** subscriber-mgmt steering-profile *string* network
Tree	network
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

next-hop *string*

Synopsis	Next-hop IP address used for network next-hop
Context	**configure** subscriber-mgmt steering-profile *string* network next-hop *string*
Tree	next-hop
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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router-instance *string*

Synopsis	Router instance to be used as an access VAS router
Context	**configure** subscriber-mgmt steering-profile *string* network router-instance *string*
Tree	router-instance
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-ident-policy [name] *string*

Synopsis	Enter the **sub-ident-policy** list instance
Context	**configure** subscriber-mgmt sub-ident-policy *string*
Tree	sub-ident-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Subscriber identification policy name
Context	**configure** subscriber-mgmt sub-ident-policy *string*
Tree	sub-ident-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile-map

Synopsis	Enter the **app-profile-map** context
Context	**configure** subscriber-mgmt sub-ident-policy *string* app-profile-map
Tree	app-profile-map
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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entry [app-profile-string] *string*

Synopsis	Enter the **entry** list instance
Context	**configure** subscriber-mgmt sub-ident-policy *string* app-profile-map entry *string*
Tree	entry
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**app-profile-string**] *string*

Synopsis	Application profile string
Context	**configure** subscriber-mgmt sub-ident-policy *string* app-profile-map entry *string*
Tree	entry
String Length	1 to 16
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Application profile name
Context	**configure** subscriber-mgmt sub-ident-policy *string* app-profile-map entry *string* app-profile *reference*
Tree	app-profile
Reference	**configure** application-assurance group *number* partition *number* policy app-profile *string*
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

use-direct-map-as-default *boolean*

Synopsis	Enable direct mapping of application profile as default
Context	**configure** subscriber-mgmt sub-ident-policy *string* app-profile-map use-direct-map-as-default *boolean*
Tree	use-direct-map-as-default
Default	false

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Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt sub-ident-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

primary

Synopsis	Enter the **primary** context
Context	**configure** subscriber-mgmt sub-ident-policy *string* primary
Tree	primary
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of script execution
Context	**configure** subscriber-mgmt sub-ident-policy *string* primary admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

script-url *string*

Synopsis	Identification script URL
Context	**configure** subscriber-mgmt sub-ident-policy *string* primary script-url *string*
Tree	script-url

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String Length	1 to 180
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

secondary

Synopsis	Enter the **secondary** context
Context	**configure** subscriber-mgmt sub-ident-policy *string* secondary
Tree	secondary
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of script execution
Context	**configure** subscriber-mgmt sub-ident-policy *string* secondary admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

script-url *string*

Synopsis	Identification script URL
Context	**configure** subscriber-mgmt sub-ident-policy *string* secondary script-url *string*
Tree	script-url
String Length	1 to 180
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile-map

Synopsis	Enter the **sla-profile-map** context
Context	**configure** subscriber-mgmt sub-ident-policy *string* sla-profile-map

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Tree	sla-profile-map
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [sla-profile-string] *string*

Synopsis	Enter the **entry** list instance
Context	**configure** subscriber-mgmt sub-ident-policy *string* sla-profile-map entry *string*
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**sla-profile-string**] *string*

Synopsis	SLA profile string
Context	**configure** subscriber-mgmt sub-ident-policy *string* sla-profile-map entry *string*
Tree	entry
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	SLA profile
Context	**configure** subscriber-mgmt sub-ident-policy *string* sla-profile-map entry *string* sla-profile *reference*
Tree	sla-profile
Reference	**configure** subscriber-mgmt sla-profile *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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use-direct-map-as-default *boolean*

Synopsis	Allow direct mapping of SLA profile as default
Context	**configure** subscriber-mgmt sub-ident-policy *string* sla-profile-map use-direct-map-as-default *boolean*
Tree	use-direct-map-as-default
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

strings-from-option *number*

Synopsis	IPOE option to get the identification strings
Context	**configure** subscriber-mgmt sub-ident-policy *string* strings-from-option *number*
Tree	strings-from-option
Range	1 to 254
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile-map

Synopsis	Enter the **sub-profile-map** context
Context	**configure** subscriber-mgmt sub-ident-policy *string* sub-profile-map
Tree	sub-profile-map
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [sub-profile-string] *string*

Synopsis	Enter the **entry** list instance
Context	**configure** subscriber-mgmt sub-ident-policy *string* sub-profile-map entry *string*
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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[**sub-profile-string**] *string*

Synopsis	Subscriber identification string
Context	**configure** subscriber-mgmt sub-ident-policy *string* sub-profile-map entry *string*
Tree	entry
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis	Subscriber profile
Context	**configure** subscriber-mgmt sub-ident-policy *string* sub-profile-map entry *string* sub-profile *reference*
Tree	sub-profile
Reference	**configure** subscriber-mgmt sub-profile *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-direct-map-as-default *boolean*

Synopsis	Allow direct mapping of subscriber profile as default
Context	**configure** subscriber-mgmt sub-ident-policy *string* sub-profile-map use-direct-map-as-default *boolean*
Tree	use-direct-map-as-default
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tertiary

Synopsis	Enter the **tertiary** context
Context	**configure** subscriber-mgmt sub-ident-policy *string* tertiary
Tree	tertiary

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of script execution
Context	**configure** subscriber-mgmt sub-ident-policy *string* tertiary admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

script-url *string*

Synopsis	Identification script URL
Context	**configure** subscriber-mgmt sub-ident-policy *string* tertiary script-url *string*
Tree	script-url
String Length	1 to 180
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-mcac-policy [name] *string*

Synopsis	Enter the **sub-mcac-policy** list instance
Context	**configure** subscriber-mgmt sub-mcac-policy *string*
Tree	sub-mcac-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

[**name**] *string*

Synopsis	Policy name
Context	**configure** subscriber-mgmt sub-mcac-policy *string*
Tree	sub-mcac-policy

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String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of the subscriber MCAC policy
Context	**configure** subscriber-mgmt sub-mcac-policy *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

bandwidth

Synopsis	Enter the **bandwidth** context
Context	**configure** subscriber-mgmt sub-mcac-policy *string* bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

mandatory *(number | keyword)*

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	**configure** subscriber-mgmt sub-mcac-policy *string* bandwidth mandatory *(number | keyword)*
Tree	mandatory
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

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total *(number | keyword)*

Synopsis	Maximum allowed bandwidth
Context	**configure** subscriber-mgmt sub-mcac-policy *string* bandwidth total *(number | keyword)*
Tree	total
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt sub-mcac-policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

sub-profile [name] *string*

Synopsis	Enter the **sub-profile** list instance
Context	**configure** subscriber-mgmt sub-profile *string*
Tree	sub-profile
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Subscriber profile name
Context	**configure** subscriber-mgmt sub-profile *string*
Tree	sub-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	Accounting policy
Context	**configure** subscriber-mgmt sub-profile *string* accounting-policy *reference*
Tree	accounting-policy
Reference	**configure** log accounting-policy *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accu-stats-policy *reference*

Synopsis	Accumulated statistics policy
Context	**configure** subscriber-mgmt sub-profile *string* accu-stats-policy *reference*
Tree	accu-stats-policy
Reference	**configure** subscriber-mgmt accu-stats-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp

Synopsis	Enter the **ancp** context
Context	**configure** subscriber-mgmt sub-profile *string* ancp
Tree	ancp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-policy *reference*

Synopsis	ANCP policy for this subscriber profile
Context	**configure** subscriber-mgmt sub-profile *string* ancp ancp-policy *reference*
Tree	ancp-policy
Reference	**configure** subscriber-mgmt ancp ancp-policy *string*
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Collect statistics
Context	**configure** subscriber-mgmt sub-profile *string* collect-stats *boolean*
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

control

Synopsis	Enter the **control** context
Context	**configure** subscriber-mgmt sub-profile *string* control
Tree	control
Description	Commands in this context determine which sessions can use the subscriber profile. By default, only sessions set up by the local system can use the profile, however, the profile can also be enabled for sessions set up by a BNG CUPS CPF.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cups *boolean*

Synopsis	Allow the CUPS control plane to use the profile
Context	**configure** subscriber-mgmt sub-profile *string* control cups *boolean*
Tree	cups
Description	When configured to **true**, the profile can be used by sessions set up by a BNG CUPS Control Plane Function (CPF).
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local *boolean*

Synopsis	Allow the local control plane to use the profile

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Context	**configure** subscriber-mgmt sub-profile *string* control local *boolean*
Tree	local
Description	When configured to **true**, the profile can be used by sessions set up by the local system.
Default	true
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt sub-profile *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the **egress** context
Context	**configure** subscriber-mgmt sub-profile *string* egress
Tree	egress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lag-per-link-hash

Synopsis	Enter the **lag-per-link-hash** context
Context	**configure** subscriber-mgmt sub-profile *string* egress lag-per-link-hash
Tree	lag-per-link-hash
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

class *number*

Synopsis	Class used to select a LAG link

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Context	**configure** subscriber-mgmt sub-profile *string* egress lag-per-link-hash class *number*
Tree	class
Range	1 to 3
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

weight *number*

Synopsis	Weight associated with SAP when selecting a LAG link
Context	**configure** subscriber-mgmt sub-profile *string* egress lag-per-link-hash weight *number*
Tree	weight
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the **qos** context
Context	**configure** subscriber-mgmt sub-profile *string* egress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

agg-rate

Synopsis	Enter the **agg-rate** context
Context	**configure** subscriber-mgmt sub-profile *string* egress qos agg-rate
Tree	agg-rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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adaptation-rule *keyword*

Synopsis	Adaptation rule for operational PIR value of subscriber
Context	**configure** subscriber-mgmt sub-profile *string* egress qos agg-rate adaptation-rule *keyword*
Tree	adaptation-rule
Description	This command configures the adaptation rule for the PIR value of the subscriber aggregate rate. This rule determines which configured value is adapted to **oper-agg-rate** based on hardware capabilities.
Options	max, min, closest
Default	closest
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

burst-limit *(number | keyword)*

Synopsis	Burst limit of the subscriber aggregate rate
Context	**configure** subscriber-mgmt sub-profile *string* egress qos agg-rate burst-limit *(number | keyword)*
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

min-resv-bw *number*

Synopsis	Reserved minimum total rate of all egress queues
Context	**configure** subscriber-mgmt sub-profile *string* egress qos agg-rate min-resv-bw *number*
Tree	min-resv-bw
Range	0 to 800000000
Units	kilobps
Default	1
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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queue-frame-based-accounting *boolean*

Synopsis	Use frame-based accounting to evaluate rate limit
Context	**configure** subscriber-mgmt sub-profile *string* egress qos agg-rate queue-frame-based-accounting *boolean*
Tree	queue-frame-based-accounting
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate *number*

Synopsis	Maximum total rate of all egress queues
Context	**configure** subscriber-mgmt sub-profile *string* egress qos agg-rate rate *number*
Tree	rate
Range	1 to 800000000
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

encap-offset

Synopsis	Enable the **encap-offset** context
Context	**configure** subscriber-mgmt sub-profile *string* egress qos encap-offset
Tree	encap-offset
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Offset type
Context	**configure** subscriber-mgmt sub-profile *string* egress qos encap-offset type *keyword*
Tree	type
Options	pppoa-llc, pppoa-null, pppoeoa-llc, pppoeoa-llc-fcs, pppoeoa-llc-tagged, pppoeoa-llc-tagged-fcs, pppoeoa-null, pppoeoa-null-fcs, pppoeoa-null-tagged, pppoeoa-null-tagged-fcs, ipoa-llc, ipoa-null, ipoeoa-llc, ipoeoa-llc-fcs, ipoeoa-llc-tagged,

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	ipoeoa-llc-tagged-fcs, ipoeoa-null, ipoeoa-null-fcs, ipoeoa-null-tagged, ipoeoa-null-tagged-fcs, pppoe, pppoe-tagged, ipoe, ipoe-tagged
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hs-agg-rate *number*

Synopsis	Maximum rate for single egress HS queues
Context	**configure** subscriber-mgmt sub-profile *string* egress qos hs-agg-rate *number*
Tree	hs-agg-rate
Range	1 to 100000000
Units	kilobps
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-low-burst-max-class *number*

Synopsis	Scheduling classes to map the low burst limit threshold
Context	**configure** subscriber-mgmt sub-profile *string* egress qos hs-low-burst-max-class *number*
Tree	hs-low-burst-max-class
Range	1 to 6
Default	6
Introduced	16.0.R4
Platforms	7750 SR-7/12/12e

hs-min-resv-bw *number*

Synopsis	Reserved minimum total rate of all egress queues
Context	**configure** subscriber-mgmt sub-profile *string* egress qos hs-min-resv-bw *number*
Tree	hs-min-resv-bw
Range	0 to 100000000
Units	kilobps
Default	1
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

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policer-control-policy

Synopsis	Enter the **policer-control-policy** context
Context	**configure** subscriber-mgmt sub-profile *string* egress qos policer-control-policy
Tree	policer-control-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

overrides

Synopsis	Enter the **overrides** context
Context	**configure** subscriber-mgmt sub-profile *string* egress qos policer-control-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

root

Synopsis	Enable the **root** context
Context	**configure** subscriber-mgmt sub-profile *string* egress qos policer-control-policy overrides root
Tree	root
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-rate *(number | keyword)*

Synopsis	Maximum rate
Context	**configure** subscriber-mgmt sub-profile *string* egress qos policer-control-policy overrides root max-rate *(number | keyword)*
Tree	max-rate
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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priority-mbs-thresholds

Synopsis	Enter the **priority-mbs-thresholds** context
Context	**configure** subscriber-mgmt sub-profile *string* egress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

min-thresh-separation *(number | keyword)*

Synopsis	Minimum threshold separation
Context	**configure** subscriber-mgmt sub-profile *string* egress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation *(number | keyword)*
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority [level] *number*

Synopsis	Enter the **priority** list instance
Context	**configure** subscriber-mgmt sub-profile *string* egress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*
Tree	priority
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**level**] *number*

Synopsis	Strict priority level
Context	**configure** subscriber-mgmt sub-profile *string* egress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*
Tree	priority

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Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs-contribution *(number | keyword)*

Synopsis	MBS size
Context	**configure** subscriber-mgmt sub-profile *string* egress qos policer-control-policy overrides root priority-mbs-thresholds priority *number* mbs-contribution *(number | keyword)*
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	**configure** subscriber-mgmt sub-profile *string* egress qos policer-control-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos policer-control-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

scheduler-policy

Synopsis	Enter the **scheduler-policy** context
Context	**configure** subscriber-mgmt sub-profile *string* egress qos scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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overrides

Synopsis	Enter the **overrides** context
Context	**configure** subscriber-mgmt sub-profile *string* egress qos scheduler-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler [scheduler-name] *reference*

Synopsis	Enter the **scheduler** list instance
Context	**configure** subscriber-mgmt sub-profile *string* egress qos scheduler-policy overrides scheduler *reference*
Tree	scheduler
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**scheduler-name**] *reference*

Synopsis	Scheduler policy name
Context	**configure** subscriber-mgmt sub-profile *string* egress qos scheduler-policy overrides scheduler *reference*
Tree	scheduler
Reference	**configure** qos scheduler-policy *string* tier *number* scheduler *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate

Synopsis	Enter the **rate** context
Context	**configure** subscriber-mgmt sub-profile *string* egress qos scheduler-policy overrides scheduler *reference* rate
Tree	rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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cir *(number | keyword)*

Synopsis	CIR to override administrative CIR used by scheduler
Context	**configure** subscriber-mgmt sub-profile *string* egress qos scheduler-policy overrides scheduler *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 3200000000
Units	kilobps
Options	sum, max
Default	sum
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pir *(number | keyword)*

Synopsis	PIR to override administrative PIR used by scheduler
Context	**configure** subscriber-mgmt sub-profile *string* egress qos scheduler-policy overrides scheduler *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Scheduler policy name
Context	**configure** subscriber-mgmt sub-profile *string* egress qos scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos scheduler-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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firewall-policy *reference*

Synopsis	Firewall policy
Context	**configure** subscriber-mgmt sub-profile *string* firewall-policy *reference*
Tree	firewall-policy
Reference	**configure** service nat firewall-policy *string*
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

host-limits

Synopsis	Enter the **host-limits** context
Context	**configure** subscriber-mgmt sub-profile *string* host-limits
Tree	host-limits
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis	Enter the **ipv4** context
Context	**configure** subscriber-mgmt sub-profile *string* host-limits ipv4
Tree	ipv4
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arp *number*

Synopsis	Maximum number of IPv4 ARP hosts
Context	**configure** subscriber-mgmt sub-profile *string* host-limits ipv4 arp *number*
Tree	arp
Description	This command configures the maximum number of IPv4 ARP hosts per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071

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Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp *number*

Synopsis	Maximum number of IPv4 DHCP hosts
Context	**configure** subscriber-mgmt sub-profile *string* host-limits ipv4 dhcp *number*
Tree	dhcp
Description	This command configures the maximum number of IPv4 DHCP hosts per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overall *number*

Synopsis	Maximum number of IPv4 hosts
Context	**configure** subscriber-mgmt sub-profile *string* host-limits ipv4 overall *number*
Tree	overall
Description	This command configures the maximum number of IPv4 hosts per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp *number*

Synopsis	Maximum number of IPv4 PPP hosts
Context	**configure** subscriber-mgmt sub-profile *string* host-limits ipv4 ppp *number*
Tree	ppp
Description	This command configures the maximum number of IPv4 PPP hosts per subscriber instance.

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The operational maximum value may be smaller due to equipped hardware dependencies.

Range 0 to 131071

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis Enter the **ipv6** context

Context **configure** subscriber-mgmt sub-profile *string* host-limits ipv6

Tree ipv6

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overall *number*

Synopsis Maximum number of IPv6 hosts

Context **configure** subscriber-mgmt sub-profile *string* host-limits ipv6 overall *number*

Tree overall

Description This command configures the maximum number of IPv6 hosts per subscriber instance.

The operational maximum value may be smaller due to equipped hardware dependencies.

Range 0 to 131071

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pd-ipoe-dhcp *number*

Synopsis Maximum number of IPv6 IPoE DHCP PD hosts

Context **configure** subscriber-mgmt sub-profile *string* host-limits ipv6 pd-ipoe-dhcp *number*

Tree pd-ipoe-dhcp

Description This command configures the maximum number of IPv6 IPoE DHCP Prefix Delegation hosts (IA-PD) per subscriber instance.

The operational maximum value may be smaller due to equipped hardware dependencies.

Range 0 to 131071

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Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pd-overall *number*

Synopsis	Maximum number of IPv6 DHCP PD hosts
Context	**configure** subscriber-mgmt sub-profile *string* host-limits ipv6 pd-overall *number*
Tree	pd-overall
Description	The command configures the maximum number of IPv6 DHCP Prefix Delegation hosts (IA-PD) per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pd-ppp-dhcp *number*

Synopsis	Maximum number of IPv6 PPPoE DHCP PD hosts
Context	**configure** subscriber-mgmt sub-profile *string* host-limits ipv6 pd-ppp-dhcp *number*
Tree	pd-ppp-dhcp
Description	This command configures the maximum number of IPv6 PPPoE DHCP Prefix Delegation hosts (IA-PD) per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-ipoe-dhcp *number*

Synopsis	Maximum number of IPv6 IPoE DHCP WAN hosts
Context	**configure** subscriber-mgmt sub-profile *string* host-limits ipv6 wan-ipoe-dhcp *number*
Tree	wan-ipoe-dhcp
Description	This command configures the maximum number of IPv6 IPoE DHCP WAN hosts (IA-NA) per subscriber instance.

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The operational maximum value may be smaller due to equipped hardware dependencies.

Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-ipoe-slaac *number*

Synopsis	Maximum number of IPv6 IPoE SLAAC WAN hosts
Context	**configure** subscriber-mgmt sub-profile *string* host-limits ipv6 wan-ipoe-slaac *number*
Tree	wan-ipoe-slaac
Description	This command configures the maximum number of IPv6 IPoE SLAAC WAN hosts per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-overall *number*

Synopsis	Maximum number of IPv6 WAN hosts
Context	**configure** subscriber-mgmt sub-profile *string* host-limits ipv6 wan-overall *number*
Tree	wan-overall
Description	This command configures the maximum number of IPv6 WAN hosts per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-ppp-dhcp *number*

Synopsis	Maximum number of IPv6 PPPoE DHCP WAN hosts
Context	**configure** subscriber-mgmt sub-profile *string* host-limits ipv6 wan-ppp-dhcp *number*
Tree	wan-ppp-dhcp

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Description	This command configures the maximum number of IPv6 PPPoE DHCP WAN hosts per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-ppp-slaac *number*

Synopsis	Maximum number of IPv6 PPPoE SLAAC WAN hosts
Context	**configure** subscriber-mgmt sub-profile *string* host-limits ipv6 wan-ppp-slaac *number*
Tree	wan-ppp-slaac
Description	This command configures the maximum number of IPv6 PPPoE SLAAC WAN hosts per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lac-overall *number*

Synopsis	Maximum number of L2TP LAC hosts
Context	**configure** subscriber-mgmt sub-profile *string* host-limits lac-overall *number*
Tree	lac-overall
Description	This command configures the maximum number of L2TP LAC hosts per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overall *number*

Synopsis	Maximum number of subscriber hosts

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Context	**configure** subscriber-mgmt sub-profile *string* host-limits overall *number*
Tree	overall
Description	This command configures the maximum number of subscriber hosts per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	1 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-tracking-policy *reference*

Synopsis	Host tracking policy
Context	**configure** subscriber-mgmt sub-profile *string* host-tracking-policy *reference*
Tree	host-tracking-policy
Reference	**configure** subscriber-mgmt host-tracking-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hs-sla-mode *keyword*

Synopsis	HS board subscriber SLA mode
Context	**configure** subscriber-mgmt sub-profile *string* hs-sla-mode *keyword*
Tree	hs-sla-mode
Options	expanded, single
Default	expanded
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

igmp-policy *reference*

Synopsis	IGMP policy
Context	**configure** subscriber-mgmt sub-profile *string* igmp-policy *reference*
Tree	igmp-policy
Reference	**configure** subscriber-mgmt igmp-policy *string*

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis	Enter the **ingress** context
Context	**configure** subscriber-mgmt sub-profile *string* ingress
Tree	ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the **qos** context
Context	**configure** subscriber-mgmt sub-profile *string* ingress qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer-control-policy

Synopsis	Enter the **policer-control-policy** context
Context	**configure** subscriber-mgmt sub-profile *string* ingress qos policer-control-policy
Tree	policer-control-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

overrides

Synopsis	Enter the **overrides** context
Context	**configure** subscriber-mgmt sub-profile *string* ingress qos policer-control-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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root

Synopsis	Enable the **root** context
Context	**configure** subscriber-mgmt sub-profile *string* ingress qos policer-control-policy overrides root
Tree	root
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-rate *(number | keyword)*

Synopsis	Maximum rate
Context	**configure** subscriber-mgmt sub-profile *string* ingress qos policer-control-policy overrides root max-rate *(number | keyword)*
Tree	max-rate
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority-mbs-thresholds

Synopsis	Enter the **priority-mbs-thresholds** context
Context	**configure** subscriber-mgmt sub-profile *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

min-thresh-separation *(number | keyword)*

Synopsis	Minimum threshold separation
Context	**configure** subscriber-mgmt sub-profile *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation *(number | keyword)*
Tree	min-thresh-separation

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Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority [level] *number*

Synopsis	Enter the **priority** list instance
Context	**configure** subscriber-mgmt sub-profile *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*
Tree	priority
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**level**] *number*

Synopsis	Strict priority level
Context	**configure** subscriber-mgmt sub-profile *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds priority *number*
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs-contribution *(number | keyword)*

Synopsis	MBS size
Context	**configure** subscriber-mgmt sub-profile *string* ingress qos policer-control-policy overrides root priority-mbs-thresholds priority *number* mbs-contribution *(number | keyword)*
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	**configure** subscriber-mgmt sub-profile *string* ingress qos policer-control-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos policer-control-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

scheduler-policy

Synopsis	Enter the **scheduler-policy** context
Context	**configure** subscriber-mgmt sub-profile *string* ingress qos scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overrides

Synopsis	Enter the **overrides** context
Context	**configure** subscriber-mgmt sub-profile *string* ingress qos scheduler-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler [scheduler-name] *reference*

Synopsis	Enter the **scheduler** list instance
Context	**configure** subscriber-mgmt sub-profile *string* ingress qos scheduler-policy overrides scheduler *reference*
Tree	scheduler
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**scheduler-name**] *reference*

Synopsis	Scheduler policy name
Context	**configure** subscriber-mgmt sub-profile *string* ingress qos scheduler-policy overrides scheduler *reference*
Tree	scheduler
Reference	**configure** qos scheduler-policy *string* tier *number* scheduler *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate

Synopsis	Enter the **rate** context
Context	**configure** subscriber-mgmt sub-profile *string* ingress qos scheduler-policy overrides scheduler *reference* rate
Tree	rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cir *(number | keyword)*

Synopsis	CIR to override administrative CIR used by scheduler
Context	**configure** subscriber-mgmt sub-profile *string* ingress qos scheduler-policy overrides scheduler *reference* rate cir *(number | keyword)*
Tree	cir
Range	0 to 3200000000
Units	kilobps
Options	sum, max
Default	sum
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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pir *(number | keyword)*

Synopsis	PIR to override administrative PIR used by scheduler
Context	**configure** subscriber-mgmt sub-profile *string* ingress qos scheduler-policy overrides scheduler *reference* rate pir *(number | keyword)*
Tree	pir
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis	Scheduler policy name
Context	**configure** subscriber-mgmt sub-profile *string* ingress qos scheduler-policy policy-name *reference*
Tree	policy-name
Reference	**configure** qos scheduler-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mld-policy *reference*

Synopsis	MLD policy
Context	**configure** subscriber-mgmt sub-profile *string* mld-policy *reference*
Tree	mld-policy
Reference	**configure** subscriber-mgmt mld-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nat

Synopsis	Enter the **nat** context
Context	**configure** subscriber-mgmt sub-profile *string* nat

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Tree	nat
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

access-mode *keyword*

Synopsis	The subscriber NAT access mode
Context	**configure** subscriber-mgmt sub-profile *string* nat access-mode *keyword*
Tree	access-mode
Options	auto – Automatically derived from the access SAP's anti-spoof type bridged – Force to bridged mode
Default	auto
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

allow-bypass *boolean*

Synopsis	Allow traffic to bypass NAT
Context	**configure** subscriber-mgmt sub-profile *string* nat allow-bypass *boolean*
Tree	allow-bypass
Description	When configured to **true**, the system enables L2-Aware NAT subscribers for NAT bypass. When enabled, the IP filter configuration applied in the subscriber profile determines whether the traffic is bypassed. When configured to **false**, traffic is subject to L2-Aware NAT operation.
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	NAT policy associated with the subscriber profile
Context	**configure** subscriber-mgmt sub-profile *string* nat policy *reference*
Tree	policy
Reference	**configure** service nat nat-policy *string*
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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prefix-list *reference*

Synopsis	NAT prefix list name
Context	**configure** subscriber-mgmt sub-profile *string* nat prefix-list *reference*
Tree	prefix-list
Reference	**configure** service nat prefix-list *string*
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pim-policy *reference*

Synopsis	Protocol Independent Multicast (PIM) policy
Context	**configure** subscriber-mgmt sub-profile *string* pim-policy *reference*
Tree	pim-policy
Reference	**configure** subscriber-mgmt pim-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference *number*

Synopsis	Relative preference value for the subscriber profile
Context	**configure** subscriber-mgmt sub-profile *string* preference *number*
Tree	preference
Range	1 to 10
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-accounting

Synopsis	Enter the **radius-accounting** context
Context	**configure** subscriber-mgmt sub-profile *string* radius-accounting
Tree	radius-accounting
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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policy *reference*

Synopsis	RADIUS accounting policies
Context	**configure** subscriber-mgmt sub-profile *string* radius-accounting policy *reference*
Tree	policy
Reference	**configure** subscriber-mgmt radius-accounting-policy *string*
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-optimized-stop *boolean*

Synopsis	Optimize PPPoE session accounting stop behavior
Context	**configure** subscriber-mgmt sub-profile *string* radius-accounting session-optimized-stop *boolean*
Tree	session-optimized-stop
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

secondary-shaper-hashing *boolean*

Synopsis	Include LAG hashing on secondary shaper
Context	**configure** subscriber-mgmt sub-profile *string* secondary-shaper-hashing *boolean*
Tree	secondary-shaper-hashing
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limits

Synopsis	Enter the **session-limits** context
Context	**configure** subscriber-mgmt sub-profile *string* session-limits

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Tree	session-limits
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe *number*

Synopsis	Maximum number of IPoE sessions
Context	**configure** subscriber-mgmt sub-profile *string* session-limits ipoe *number*
Tree	ipoe
Description	This command configures the maximum number of IPoE sessions per subscriber instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2tp

Synopsis	Enter the **l2tp** context
Context	**configure** subscriber-mgmt sub-profile *string* session-limits l2tp
Tree	l2tp
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lns *number*

Synopsis	Maximum number of L2TP LNS sessions
Context	**configure** subscriber-mgmt sub-profile *string* session-limits l2tp lns *number*
Tree	lns
Description	This command configures the maximum number of L2TP LNS sessions per subscriber instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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lts *number*

Synopsis	Maximum number of L2TP LTS sessions
Context	**configure** subscriber-mgmt sub-profile *string* session-limits l2tp lts *number*
Tree	lts
Description	This command configures the maximum number of L2TP LTS sessions per subscriber instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overall *number*

Synopsis	Maximum number of L2TP sessions
Context	**configure** subscriber-mgmt sub-profile *string* session-limits l2tp overall *number*
Tree	overall
Description	This command configures the maximum number of L2TP sessions per subscriber instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overall *number*

Synopsis	Maximum number of subscriber sessions
Context	**configure** subscriber-mgmt sub-profile *string* session-limits overall *number*
Tree	overall
Description	This command configures the maximum number of subscriber sessions per subscriber instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe

Synopsis	Enter the **pppoe** context

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Context	**configure** subscriber-mgmt sub-profile *string* session-limits pppoe
Tree	pppoe
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lac *number*

Synopsis	Maximum number of PPPoE L2TP LAC sessions
Context	**configure** subscriber-mgmt sub-profile *string* session-limits pppoe lac *number*
Tree	lac
Description	This command configures the maximum number of PPPoE L2TP LAC sessions per subscriber instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local *number*

Synopsis	Maximum number of PPPoE local-terminated sessions
Context	**configure** subscriber-mgmt sub-profile *string* session-limits pppoe local *number*
Tree	local
Description	This command configures the maximum number of PPPoE local-terminated sessions (PTA) per subscriber instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overall *number*

Synopsis	Maximum number of PPPoE sessions
Context	**configure** subscriber-mgmt sub-profile *string* session-limits pppoe overall *number*
Tree	overall
Description	This command configures the maximum number of PPPoE sessions per subscriber instance.
Range	0 to 131071
Introduced	20.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile-map

Synopsis	Enter the **sla-profile-map** context
Context	**configure** subscriber-mgmt sub-profile *string* sla-profile-map
Tree	sla-profile-map
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [sla-profile-string] *string*

Synopsis	Enter the **entry** list instance
Context	**configure** subscriber-mgmt sub-profile *string* sla-profile-map entry *string*
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**sla-profile-string**] *string*

Synopsis	SLA profile string
Context	**configure** subscriber-mgmt sub-profile *string* sla-profile-map entry *string*
Tree	entry
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis	SLA profile
Context	**configure** subscriber-mgmt sub-profile *string* sla-profile-map entry *string* sla-profile *reference*
Tree	sla-profile
Reference	**configure** subscriber-mgmt sla-profile *string*

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-direct-map-as-default *boolean*

Synopsis	Allow direct mapping of SLA profile as default
Context	**configure** subscriber-mgmt sub-profile *string* sla-profile-map use-direct-map-as-default *boolean*
Tree	use-direct-map-as-default
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-mcac-policy *reference*

Synopsis	Subscriber MCAC policy
Context	**configure** subscriber-mgmt sub-profile *string* sub-mcac-policy *reference*
Tree	sub-mcac-policy
Reference	**configure** subscriber-mgmt sub-mcac-policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

upnp-policy *reference*

Synopsis	UPnP policy for the subscriber profile
Context	**configure** subscriber-mgmt sub-profile *string* upnp-policy *reference*
Tree	upnp-policy
Description	This command specifies the Universal Plug 'n Play policy (UPnP) IGD service for the subscriber profile. All ESM hosts of the subscriber can use the UPnP protocol to create port mapping. This feature only supports L2-Aware NAT hosts. The UPnP parameters are defined in the referenced UPnP policy configured in the **configure service upnp** context.
Reference	**configure** service upnp policy *string*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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volume-stats-type *keyword*

Synopsis	Include non-IP headers in the accounting statistics
Context	**configure** subscriber-mgmt sub-profile *string* volume-stats-type *keyword*
Tree	volume-stats-type
Options	l2, ip
Default	l2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vport-hashing *boolean*

Synopsis	Include LAG hashing on Vport
Context	**configure** subscriber-mgmt sub-profile *string* vport-hashing *boolean*
Tree	vport-hashing
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-interface-statistics

Synopsis	Enter the **subscriber-interface-statistics** context
Context	**configure** subscriber-mgmt subscriber-interface-statistics
Tree	subscriber-interface-statistics
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state for statistics collection
Context	**configure** subscriber-mgmt subscriber-interface-statistics admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

svlan-statistics

Synopsis	Enter the **svlan-statistics** context
Context	**configure** subscriber-mgmt svlan-statistics
Tree	svlan-statistics
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of statistics collection
Context	**configure** subscriber-mgmt svlan-statistics admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

system-behavior

Synopsis	Enter the **system-behavior** context
Context	**configure** subscriber-mgmt system-behavior
Tree	system-behavior
Description	Commands in this context configure the attributes of system-wide subscriber management behavior.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

legacy-dns-nbns *boolean*

Synopsis	Restrict authentication origins for name servers
Context	**configure** subscriber-mgmt system-behavior legacy-dns-nbns *boolean*
Tree	legacy-dns-nbns

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Description	When configured to **true**, this command enables legacy DNS NBNS behavior, which restricts the supported default extended authentication origins for DNS and NBNS name servers. The main differences include: • only support DHCP server as origin for DHCP relay: IPoE DHCPv4/DHCPv6 and PPPoE DHCPv6 • Local Address Assignment (LAA) is highest priority origin: IPoE and PPPoE SLAAC DNSv6 and PPPoE DNSv4 • no default DNS for IPoE DHCPv4 proxy When configured to **false**, this command reverts to the recommended default extended DNS and NBNS name server origin priorities.
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

up-resiliency

Synopsis	Enter the **up-resiliency** context
Context	**configure** subscriber-mgmt up-resiliency
Tree	up-resiliency
Description	Commands in this context configure the inter-UPF resiliency in a CUPS system.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fate-sharing-group-template [name] *string*

Synopsis	Enter the **fate-sharing-group-template** list instance
Context	**configure** subscriber-mgmt up-resiliency fate-sharing-group-template *string*
Tree	fate-sharing-group-template
Description	Commands in this context configure resiliency parameters per FSG.
Max. Instances	256
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	FSG template ID

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Context	**configure** subscriber-mgmt up-resiliency fate-sharing-group-template *string*
Tree	fate-sharing-group-template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt up-resiliency fate-sharing-group-template *string* description *string*
Tree	description
String Length	1 to 80
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gratuitous-arp *keyword*

Synopsis	Granularity for sending GARP packets on switchover
Context	**configure** subscriber-mgmt up-resiliency fate-sharing-group-template *string* gratuitous-arp *keyword*
Tree	gratuitous-arp
Options	one-per-outer-tag – Send a single Gratuitous ARP for all q-in-q SAPs sharing the same outer tag on any one of those SAP one-per-sap – Send a single Gratuitous ARP per SAP
Default	one-per-sap
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

path-restoration-state *keyword*

Synopsis	FSG state behavior when the PFCP association is in restoration/headless.
Context	**configure** subscriber-mgmt up-resiliency fate-sharing-group-template *string* path-restoration-state *keyword*
Tree	path-restoration-state

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Options	standby – FSG state always changes to standby auto – FSG state changes to standby if at least one network instance has a health value of 0
Default	auto
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

redundant-interface

Synopsis	Enter the **redundant-interface** context
Context	**configure** subscriber-mgmt up-resiliency fate-sharing-group-template *string* redundant-interface
Tree	redundant-interface
Description	Commands in this context configure downstream traffic shunting from a standby BNG UPF to an active BNG UPF. Downstream traffic that is received for standby sessions is sent over the redundant interface to the active BNG UPF. This requires the configuration of the **multi-chassis-shunt-id** in the service that receives the session traffic.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	Redundant interface name
Context	**configure** subscriber-mgmt up-resiliency fate-sharing-group-template *string* redundant-interface name *string*
Tree	name
Description	This command configures the name of the redundant interface. It must exist in the service that contains the redundant interface.
String Length	1 to 32
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service *string*

Synopsis	Service that contains the redundant interface
Context	**configure** subscriber-mgmt up-resiliency fate-sharing-group-template *string* redundant-interface service *string*
Tree	service

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Description	This command configures the service that contains the redundant interface. It can be different from the service where the session traffic is terminated.
String Length	1 to 64
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

uplink-forwarding-while-standby *boolean*

Synopsis	Allows a standby BNG UPF to forward packets
Context	**configure** subscriber-mgmt up-resiliency fate-sharing-group-template *string* uplink-forwarding-while-standby *boolean*
Tree	uplink-forwarding-while-standby
Description	This command allows a standby BNG UPF to forward uplink traffic. To prevent the possibility of packet replication towards the network, this command should only be enabled if the access network is provisioned not to replicate unicast packets to the BNG UPF.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vrgw

Synopsis	Enter the **vrgw** context
Context	**configure** subscriber-mgmt vrgw
Tree	vrgw
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

brg-profile [brg-profile-name] *string*

Synopsis	Enter the **brg-profile** list instance
Context	**configure** subscriber-mgmt vrgw brg-profile *string*
Tree	brg-profile
Max. Instances	16
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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[**brg-profile-name**] *string*

Synopsis	BRG profile name
Context	**configure** subscriber-mgmt vrgw brg-profile *string*
Tree	brg-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

connectivity-verification

Synopsis	Enter the **connectivity-verification** context
Context	**configure** subscriber-mgmt vrgw brg-profile *string* connectivity-verification
Tree	connectivity-verification
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of BRG connectivity verification
Context	**configure** subscriber-mgmt vrgw brg-profile *string* connectivity-verification admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

count *number*

Synopsis	Connection attempts before BRG is considered down
Context	**configure** subscriber-mgmt vrgw brg-profile *string* connectivity-verification count *number*
Tree	count
Range	1 to 5

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Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retry-time *number*

Synopsis	Wait time before a new connectivity verification cycle
Context	**configure** subscriber-mgmt vrgw brg-profile *string* connectivity-verification retry-time *number*
Tree	retry-time
Range	300 to 3600
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Timeout after which a message is considered unanswered
Context	**configure** subscriber-mgmt vrgw brg-profile *string* connectivity-verification timeout *number*
Tree	timeout
Range	5 to 60
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** subscriber-mgmt vrgw brg-profile *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-time *number*

Synopsis	The time to hold on to a BRG after it went down
Context	**configure** subscriber-mgmt vrgw brg-profile *string* hold-time *number*

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Tree	hold-time
Range	0 | 30 to 2592000
Units	seconds
Default	0
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

home-pool

Synopsis	Enter the **home-pool** context
Context	**configure** subscriber-mgmt vrgw brg-profile *string* home-pool
Tree	home-pool
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-time *number*

Synopsis	Lease time used when allocating addresses from the pool
Context	**configure** subscriber-mgmt vrgw brg-profile *string* home-pool lease-time *number*
Tree	lease-time
Range	300 to 315446399
Units	seconds
Default	21600
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [number] *(number | keyword)*

Synopsis	Enter the **option** list instance
Context	**configure** subscriber-mgmt vrgw brg-profile *string* home-pool option *(number | keyword)*
Tree	option
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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[**number**] *(number | keyword)*

Synopsis	DHCP option to send identification strings to client
Context	**configure** subscriber-mgmt vrgw brg-profile *string* home-pool option *(number | keyword)*
Tree	option
Range	1 to 254
Options	subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time
Notes	This element is part of a list key.
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	ASCII string of the DHCP option
Context	**configure** subscriber-mgmt vrgw brg-profile *string* home-pool option *(number | keyword)* ascii-string *string*
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option as time duration.
Context	**configure** subscriber-mgmt vrgw brg-profile *string* home-pool option *(number | keyword)* duration *number*
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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empty

Synopsis	Empty DHCP option.
Context	**configure** subscriber-mgmt vrgw brg-profile *string* home-pool option *(number | keyword)* empty
Tree	empty
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option as a hexadecimal string
Context	**configure** subscriber-mgmt vrgw brg-profile *string* home-pool option *(number | keyword)* hex-string *string*
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4-address *string*

Synopsis	DHCP option as a list of IPv4 addresses
Context	**configure** subscriber-mgmt vrgw brg-profile *string* home-pool option *(number | keyword)* ipv4-address *string*
Tree	ipv4-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**. This element is ordered by the user.
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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netbios-node-type *keyword*

Synopsis	DHCP option as NetBIOS node type.
Context	**configure** subscriber-mgmt vrgw brg-profile *string* home-pool option *(number | keyword)* netbios-node-type *keyword*
Tree	netbios-node-type
Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

standby-ip-lifetime *number*

Synopsis	The lifetime of the standby IP addresses
Context	**configure** subscriber-mgmt vrgw brg-profile *string* home-pool standby-ip-lifetime *number*
Tree	standby-ip-lifetime
Range	300 to 315446399
Units	seconds
Default	21600
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subnet

Synopsis	Enter the **subnet** context
Context	**configure** subscriber-mgmt vrgw brg-profile *string* home-pool subnet
Tree	subnet
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *string*

Synopsis	Upper bound of the IP address range
Context	**configure** subscriber-mgmt vrgw brg-profile *string* home-pool subnet end *string*

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Tree	end
Default	192.168.0.254
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix *string*

Synopsis	Prefix and default-gateway to be used inside the home
Context	**configure** subscriber-mgmt vrgw brg-profile *string* home-pool subnet prefix *string*
Tree	prefix
Default	192.168.0.1/24
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *string*

Synopsis	Lower bound of the IP address range
Context	**configure** subscriber-mgmt vrgw brg-profile *string* home-pool subnet start *string*
Tree	start
Default	192.168.0.2
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

initial-hold-time *number*

Synopsis	Hold time for BRG instances created without any hosts
Context	**configure** subscriber-mgmt vrgw brg-profile *string* initial-hold-time *number*
Tree	initial-hold-time
Range	0 to 900
Units	seconds
Default	300
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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radius-authentication

Synopsis	Enter the **radius-authentication** context
Context	**configure** subscriber-mgmt vrgw brg-profile *string* radius-authentication
Tree	radius-authentication
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	Password used for authentication
Context	**configure** subscriber-mgmt vrgw brg-profile *string* radius-authentication password *string*
Tree	password
String Length	1 to 115
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server-policy *reference*

Synopsis	Radius servers to be used for authentication
Context	**configure** subscriber-mgmt vrgw brg-profile *string* radius-authentication server-policy *reference*
Tree	server-policy
Reference	**configure** aaa radius server-policy *string*
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-proxy-server [router-instance] *string* name *string*

Synopsis	Add a list entry for **radius-proxy-server**
Context	**configure** subscriber-mgmt vrgw brg-profile *string* radius-proxy-server *string* name *string*
Tree	radius-proxy-server
Max. Instances	4
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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[**router-instance**] *string*

Synopsis	router-instance
Context	**configure** subscriber-mgmt vrgw brg-profile *string* radius-proxy-server *string* name *string*
Tree	radius-proxy-server
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	RADIUS proxy server name
Context	**configure** subscriber-mgmt vrgw brg-profile *string* radius-proxy-server *string* name *string*
Tree	radius-proxy-server
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile-string *string*

Synopsis	Default for SLA-profile lookup
Context	**configure** subscriber-mgmt vrgw brg-profile *string* sla-profile-string *string*
Tree	sla-profile-string
String Length	0 to 32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile-string *string*

Synopsis	Default for subscriber-profile lookup
Context	**configure** subscriber-mgmt vrgw brg-profile *string* sub-profile-string *string*
Tree	sub-profile-string

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String Length	0 to 32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

uplink-initial-wait *number*

Synopsis	Wait time for non-routed uplink to become operational
Context	**configure** subscriber-mgmt vrgw brg-profile *string* uplink-initial-wait *number*
Tree	uplink-initial-wait
Range	10 to 300
Units	seconds
Default	30
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lanext

Synopsis	Enter the **lanext** context
Context	**configure** subscriber-mgmt vrgw lanext
Tree	lanext
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-target-as-number *number*

Synopsis	AS number to derive RT and RD for the HLE service
Context	**configure** subscriber-mgmt vrgw lanext router-target-as-number *number*
Tree	router-target-as-number
Range	1 to 65535
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw

Synopsis	Enter the **wlan-gw** context

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Context	**configure** subscriber-mgmt wlan-gw
Tree	wlan-gw
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

queries

Synopsis	Enter the **queries** context
Context	**configure** subscriber-mgmt wlan-gw queries
Tree	queries
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel [name] *string*

Synopsis	Enter the **tunnel** list instance
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string*
Tree	tunnel
Max. Instances	1024
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	Tunnel query name
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string*
Tree	tunnel
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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access-point-mac-address-learning-status *keyword*

Synopsis	Matching criteria of tunnels based on learning status
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string* access-point-mac-address-learning-status *keyword*
Tree	access-point-mac-address-learning-status
Options	failed, succeeded
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

calculate-counts *boolean*

Synopsis	Count the number of tunnels matching the criteria
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string* calculate-counts *boolean*
Tree	calculate-counts
Default	false
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

encapsulation

Synopsis	Enable the **encapsulation** context
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string* encapsulation
Tree	encapsulation
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

gre *boolean*

Synopsis	Controls whether the query returns Soft GRE tunnels
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string* encapsulation gre *boolean*
Tree	gre
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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l2 *boolean*

Synopsis	Enable matching on Layer 2 tunnels
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string* encapsulation l2 *boolean*
Tree	l2
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2tp *boolean*

Synopsis	Controls whether the query returns Soft L2TPv3 tunnels
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string* encapsulation l2tp *boolean*
Tree	l2tp
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

vxlan *boolean*

Synopsis	Controls whether the query returns VXLAN tunnels
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string* encapsulation vxlan *boolean*
Tree	vxlan
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2

Synopsis	Enter the **l2** context
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string* l2
Tree	l2
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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inner-vlan *number*

Synopsis	Value to match the Layer 2 access point of the tunnel
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string* l2 inner-vlan *number*
Tree	inner-vlan
Range	0 to 4095
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

outer-vlan *number*

Synopsis	Layer 2 access point matching with a specified S-VLAN
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string* l2 outer-vlan *number*
Tree	outer-vlan
Range	0 to 4095
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap *string*

Synopsis	Value to match the L2-AP Access Point of the tunnel
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string* l2 sap *string*
Tree	sap
String Length	1 to 45
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

l3

Synopsis	Enter the **l3** context
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string* l3
Tree	l3
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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address-type *keyword*

Synopsis	Address type to match
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string* l3 address-type *keyword*
Tree	address-type
Options	ipv4, ipv6
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address as local endpoint to match
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string* l3 local-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	local-address
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address as remote endpoint to match
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string* l3 remote-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	remote-address
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Router instance to match
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string* l3 router-instance *string*
Tree	router-instance
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ues

Synopsis	Enter the **ues** context
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string* ues
Tree	ues
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

maximum *number*

Synopsis	Maximum number of UEs
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string* ues maximum *number*
Tree	maximum
Max. Range	0 to 4294967295
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

minimum *number*

Synopsis	Minimum number of UEs
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string* ues minimum *number*
Tree	minimum
Max. Range	0 to 4294967295
Default	1
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

state

Synopsis	Enable the **state** context
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string* ues state
Tree	state
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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cross-connect *boolean*

Synopsis	Match on tunnels with cross-connect UEs
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string* ues state cross-connect *boolean*
Tree	cross-connect
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dsm *boolean*

Synopsis	Match on DSM UEs
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string* ues state dsm *boolean*
Tree	dsm
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

esm *boolean*

Synopsis	Match on ESM UEs
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string* ues state esm *boolean*
Tree	esm
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2 *boolean*

Synopsis	Match on tunnels with L2W UEs
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string* ues state l2 *boolean*
Tree	l2
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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migrant *boolean*

Synopsis	Match on tunnels with migrant UEs
Context	**configure** subscriber-mgmt wlan-gw queries tunnel *string* ues state migrant *boolean*
Tree	migrant
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ue [name] *string*

Synopsis	Enter the **ue** list instance
Context	**configure** subscriber-mgmt wlan-gw queries ue *string*
Tree	ue
Max. Instances	1024
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	UE query name
Context	**configure** subscriber-mgmt wlan-gw queries ue *string*
Tree	ue
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

address

Synopsis	Enter the **address** context
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* address
Tree	address
Introduced	19.5.R1

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Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp6-na *string*

Synopsis	DHCPv6 IA-NA address to match for UEs
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* address dhcp6-na *string*
Tree	dhcp6-na
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4 *string*

Synopsis	IPv4 address to match for UEs
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* address ipv4 *string*
Tree	ipv4
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

slaac *string*

Synopsis	SLAAC prefix to match for UEs
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* address slaac *string*
Tree	slaac
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Address type to match for UEs
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* address type *keyword*
Tree	type
Options	ipv4 – Any IPv4 address ipv6 – Any IPv6 address ipv4-only – IPv4 address only ipv6-only – IPv6 address only ipv4v6 – IPv4 and IPv6 address
Introduced	19.5.R1

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Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

bridge-domain *number*

Synopsis	Bridge Domain to match for UEs
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* bridge-domain *number*
Tree	bridge-domain
Range	0 to 4294967294
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

connection-state

Synopsis	Enable the **connection-state** context
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* connection-state
Tree	connection-state
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

already-signed-in *boolean*

Synopsis	Enable matching on UEs that are already signed in
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* connection-state already-signed-in *boolean*
Tree	already-signed-in
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

authorized-only *boolean*

Synopsis	Enable matching on UEs in an authorized state
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* connection-state authorized-only *boolean*
Tree	authorized-only
Default	true

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Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

cross-connect *boolean*

Synopsis	Enable matching on cross-connected UEs
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* connection-state cross-connect *boolean*
Tree	cross-connect
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

data-triggered *boolean*

Synopsis	Enable matching on UEs in a data-triggered state
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* connection-state data-triggered *boolean*
Tree	data-triggered
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

delete-pending *boolean*

Synopsis	Enable matching on UEs in a delete-pending state
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* connection-state delete-pending *boolean*
Tree	delete-pending
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp-triggered *boolean*

Synopsis	Enable matching on UEs in DHCP-triggered state

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Context	**configure** subscriber-mgmt wlan-gw queries ue *string* connection-state dhcp-triggered *boolean*
Tree	dhcp-triggered
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dsm *boolean*

Synopsis	Controls whether the query returns UEs in DSM state
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* connection-state dsm *boolean*
Tree	dsm
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

esm *boolean*

Synopsis	Controls whether the query returns UEs in ESM state
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* connection-state esm *boolean*
Tree	esm
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp-authorized *boolean*

Synopsis	Enable matching on UEs in GTP-authorized state
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* connection-state gtp-authorized *boolean*
Tree	gtp-authorized
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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ip-assigned *boolean*

Synopsis	Match on UEs in an IP-assigned state
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* connection-state ip-assigned *boolean*
Tree	ip-assigned
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-assigned-authorized *boolean*

Synopsis	Match on UEs in an IP-assigned and authorized state
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* connection-state ip-assigned-authorized *boolean*
Tree	ip-assigned-authorized
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2 *boolean*

Synopsis	Match on Layer-2 wholesale state for UEs
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* connection-state l2 *boolean*
Tree	l2
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

portal *boolean*

Synopsis	Controls whether the query returns UEs in portal state
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* connection-state portal *boolean*
Tree	portal
Default	true
Introduced	19.5.R1

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Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-address *string*

Synopsis	MAC address to use for matching on UEs
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* mac-address *string*
Tree	mac-address
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

soft-quota-exhausted *boolean*

Synopsis	Send interim update message when the quota is reached
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* soft-quota-exhausted *boolean*
Tree	soft-quota-exhausted
Default	false
Introduced	21.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel

Synopsis	Enter the **tunnel** context
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* tunnel
Tree	tunnel
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

encapsulation *keyword*

Synopsis	Tunnel type to match for active UEs
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* tunnel encapsulation *keyword*
Tree	encapsulation
Options	gre, l2tp, l2, vxlan
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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local-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address as local tunnel endpoint to match for UEs
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* tunnel local-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	local-address
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address as remote tunnel endpoint to match for UEs
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* tunnel remote-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	remote-address
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Router instance of tunnels to match for UEs
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* tunnel router-instance *string*
Tree	router-instance
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

vlan *number*

Synopsis	VLAN tag within the tunnel to match for UEs
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* vlan *number*
Tree	vlan
Range	0 to 4095
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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wlan-gw-group

Synopsis	Enable the **wlan-gw-group** context
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* wlan-gw-group
Tree	wlan-gw-group
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

id *number*

Synopsis	WLAN-GW ISA group ID
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* wlan-gw-group id *number*
Tree	id
Range	1 to 4
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

member *number*

Synopsis	The member of the WLAN-GW ISA group
Context	**configure** subscriber-mgmt wlan-gw queries ue *string* wlan-gw-group member *number*
Tree	member
Range	1 to 1024
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

virtual-chassis-identifier *string*

Synopsis	WLAN Gateway virtual chassis ID or dual homing key
Context	**configure** subscriber-mgmt wlan-gw virtual-chassis-identifier *string*
Tree	virtual-chassis-identifier
String Length	1 to 16
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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3.46 system commands

```
configure
  - system
    - alarm-contact-in-power boolean
    - alarm-contact-input number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - clear-message string
      - description string
      - normal-state keyword
      - trigger-message string
    - alarms
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - max-cleared number
    - allow-boot-license-violations boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - bluetooth
      - admin-state keyword
      - advertising-timeout number
      - apply-groups reference
      - apply-groups-exclude reference
      - device string
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
      - module string
        - apply-groups reference
        - apply-groups-exclude reference
        - provisioned-identifier string
      - pairing-button boolean
      - passkey string
      - power-mode keyword
    - boot-bad-exec string
    - boot-good-exec string
    - central-frequency-clock
      - apply-groups reference
      - apply-groups-exclude reference
      - bits
        - input
          - admin-state keyword
        - interface-type keyword
        - output
          - admin-state keyword
          - line-length keyword
          - ql-minimum keyword
          - source keyword
          - squelch boolean
        - ql-override keyword
        - ssm-bit number
      - gnss
        - admin-state keyword
        - ql-override keyword
      - ptp
        - admin-state keyword
        - ql-override keyword
      - ql-minimum keyword
```


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configure system central-frequency-clock ql-selection

```
        - ql-selection boolean
        - ref-order
          - fifth keyword
          - first keyword
          - fourth keyword
          - second keyword
          - sixth keyword
          - third keyword
        - ref1
          - admin-state keyword
          - ql-override keyword
          - source-port string
        - ref2
          - admin-state keyword
          - ql-override keyword
          - source-port string
        - revert boolean
        - synce
          - admin-state keyword
          - ql-override keyword
        - wait-to-restore number
    - clli-code string
    - congestion-management boolean
    - contact string
    - coordinates string
    - cpm-http-redirect
        - apply-groups reference
        - apply-groups-exclude reference
        - optimized-mode boolean
    - cron
        - apply-groups reference
        - apply-groups-exclude reference
        - schedule string owner string
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - count number
          - day-of-month number
          - description string
          - end-time
            - date-and-time string
            - day keyword
            - time string
          - hour number
          - interval number
          - minute number
          - month (keyword | number)
          - script-policy
            - name string
            - owner string
          - type keyword
          - weekday (keyword | number)
    - dhcp6
        - adv-noaddrs-global keyword
        - apply-groups reference
        - apply-groups-exclude reference
    - dns
        - address-pref keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - dnssec
          - ad-validation keyword
    - efm-oam
        - apply-groups reference
```


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```
        - apply-groups-exclude reference
        - dying-gasp-tx-on-reset boolean
        - grace-tx boolean
    - eth-cfm
        - apply-groups reference
        - apply-groups-exclude reference
        - grace boolean
        - md-auto-id
            - ma-index-range
                - apply-groups reference
                - apply-groups-exclude reference
                - end number
                - start number
            - md-index-range
                - apply-groups reference
                - apply-groups-exclude reference
                - end number
                - start number
        - named-display boolean
        - redundancy
            - apply-groups reference
            - apply-groups-exclude reference
            - mc-lag
                - propagate-hold-time (number | keyword)
                - standby-mep boolean
        - sender-id
            - local-name string
            - type keyword
        - slm
            - apply-groups reference
            - apply-groups-exclude reference
            - inactivity-timer number
    - fan-control
        - apply-groups reference
        - apply-groups-exclude reference
        - cooling-profile keyword
    - grpc
        - admin-state keyword
        - allow-unsecure-connection
        - apply-groups reference
        - apply-groups-exclude reference
        - gnmi
            - admin-state keyword
            - auto-config-save boolean
            - proto-version keyword
        - gnoi
            - cert-mgmt
                - admin-state keyword
            - file
                - admin-state keyword
            - system
                - admin-state keyword
        - listening-port number
        - max-msg-size number
        - md-cli
            - admin-state keyword
        - rib-api
            - admin-state keyword
            - purge-timeout number
        - tcp-keepalive
            - admin-state keyword
            - idle-time number
            - interval number
            - retries number
```


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```
        - tls-server-profile reference
    - grpc-tunnel
        - apply-groups reference
        - apply-groups-exclude reference
        - destination-group string
            - allow-unsecure-connection
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - destination (ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-
domain-name) port number
                - apply-groups reference
                - apply-groups-exclude reference
                - local-source-address (ipv4-address-no-zone | ipv6-address-no-zone)
                - originated-qos-marking keyword
                - router-instance string
            - tcp-keepalive
                - admin-state keyword
                - idle-time number
                - interval number
                - retries number
            - tls-client-profile reference
        - tunnel string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - destination-group reference
            - handler string
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - port number
                - target-type
                    - custom-type string
                    - grpc-server
                    - ssh-server
            - target-name
                - custom-string string
                - node-name
                - user-agent
    - icmp-vse boolean
    - ip
        - allow-qinq-network-interface boolean
        - apply-groups reference
        - apply-groups-exclude reference
        - enforce-unique-if-index boolean
        - forward-6in4 boolean
        - forward-ip-over-gre boolean
        - ipv6-eh keyword
        - mpls
            - label-stack-statistics-count number
    - l2tp
        - apply-groups reference
        - apply-groups-exclude reference
        - non-multi-chassis-tunnel-id-range
            - end number
            - start number
    - lacp
        - apply-groups reference
        - apply-groups-exclude reference
        - system-priority number
    - lldp
        - admin-state keyword
```


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```
        - apply-groups reference
        - apply-groups-exclude reference
        - message-fast-tx number
        - message-fast-tx-init number
        - notification-interval number
        - reinit-delay number
        - tx-credit-max number
        - tx-hold-multiplier number
        - tx-interval number
    - load-balancing
        - apply-groups reference
        - apply-groups-exclude reference
        - l2tp-load-balancing boolean
        - l4-load-balancing boolean
        - lsr-load-balancing keyword
        - mc-enh-load-balancing boolean
        - service-id-lag-hashing boolean
        - system-ip-load-balancing boolean
    - location string
    - login-control
        - apply-groups reference
        - apply-groups-exclude reference
        - exponential-backoff boolean
        - ftp
            - inbound-max-sessions number
        - idle-timeout (keyword | number)
        - login-banner boolean
        - login-scripts
            - global-script string
            - per-user-script
                - file-name string
                - user-directory string
        - motd
            - text string
            - url string
        - pre-login-message
            - message string
            - name boolean
        - ssh
            - graceful-shutdown boolean
            - inbound-max-sessions number
            - outbound-max-sessions number
            - ttl-security number
        - telnet
            - graceful-shutdown boolean
            - inbound-max-sessions number
            - outbound-max-sessions number
            - ttl-security number
    - management-interface
        - apply-groups reference
        - apply-groups-exclude reference
        - cli
            - apply-groups reference
            - apply-groups-exclude reference
            - classic-cli
                - allow-immediate boolean
                - rollback
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - local-checkpoints number
                    - location string
                    - remote-checkpoints number
                    - rescue
                        - location string
```


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configure system management-interface cli cli-engine

```
            - cli-engine keyword
            - md-cli
               - apply-groups reference
               - apply-groups-exclude reference
               - auto-config-save boolean
               - environment
                  - command-alias
                     - alias string
                        - admin-state keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - cli-command string
                        - description string
                        - mount-point (keyword | string)
                        - python-script reference
                  - command-completion
                     - enter boolean
                     - space boolean
                     - tab boolean
                  - console
                     - length number
                     - width number
                  - info-output
                     - always-display
                        - admin-state boolean
                  - message-severity-level
                     - cli keyword
                  - more boolean
                  - progress-indicator
                     - admin-state keyword
                     - delay number
                     - type keyword
                  - prompt
                     - context boolean
                     - newline boolean
                     - timestamp boolean
                     - uncommitted-changes-indicator boolean
                  - python
                     - memory-reservation number
                     - minimum-available-memory number
                     - timeout number
                  - time-display keyword
                  - time-format keyword
         - commit-history number
         - configuration-mode keyword
         - configuration-save
            - apply-groups reference
            - apply-groups-exclude reference
            - configuration-backups number
            - incremental-saves boolean
         - netconf
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - auto-config-save boolean
            - capabilities
               - candidate boolean
            - port number
         - operations
            - apply-groups reference
            - apply-groups-exclude reference
            - global-timeouts
               - asynchronous-execution (number | keyword)
               - asynchronous-retention (number | keyword)
```


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configure system management-interface operations global-timeouts synchronous-execution

```
                - synchronous-execution (number | keyword)
            - remote-management
                - admin-state keyword
                - allow-unsecure-connection
                - apply-groups reference
                - apply-groups-exclude reference
                - client-tls-profile reference
                - connection-timeout number
                - device-label string
                - device-name string
                - hello-interval number
                - manager string
                    - admin-state keyword
                    - allow-unsecure-connection
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - client-tls-profile reference
                    - connection-timeout number
                    - description string
                    - device-label string
                    - device-name string
                    - manager-address (ipv4-address-no-zone | ipv6-address-no-zone | fully-
qualified-domain-name)
                    - manager-port number
                    - router-instance string
                    - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
                    - source-port (number | keyword)
                - router-instance string
                - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
                - source-port (number | keyword)
            - schema-path string
            - snmp
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - engine-id string
                - general-port number
                - max-bulk-duration number
                - packet-size number
                - streaming
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
            - yang-modules
                - apply-groups reference
                - apply-groups-exclude reference
                - nmda
                    - nmda-support boolean
                - nokia-combined-modules boolean
                - nokia-submodules boolean
                - openconfig-modules boolean
                - shared-model-management boolean
        - name string
        - network-element-discovery
            - apply-groups reference
            - apply-groups-exclude reference
            - generate-traps boolean
            - profile string
                - apply-groups reference
                - apply-groups-exclude reference
                - neid string
                - neip
                    - apply-groups reference
                    - apply-groups-exclude reference
```


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configure system network-element-discovery profile neip auto-generate

```
                - auto-generate
                  - ipv4
                    - vendor-id-value number
                  - ipv6
                    - vendor-id-value number
                - ipv4 string
                - ipv6 string
            - platform-type string
            - system-mac string
            - vendor-id string
      - ospf-dynamic-hostnames boolean
      - persistence
        - ancp
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - location keyword
        - application-assurance
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - location keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - dhcp-server
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - location keyword
        - nat-port-forwarding
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - location keyword
        - options
          - apply-groups reference
          - apply-groups-exclude reference
          - dhcp-leasetime-threshold number
        - python-policy-cache
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - location keyword
        - subscriber-mgmt
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - location keyword
      - power-management power-zone number
        - apply-groups reference
        - apply-groups-exclude reference
        - mode keyword
        - power-safety-alert number
        - power-safety-level number
      - ptp
        - admin-state keyword
        - alternate-profile string
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - domain number
          - log-announce-interval number
          - profile keyword
        - announce-receipt-timeout number
```


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```
        - apply-groups reference
        - apply-groups-exclude reference
        - clock-type keyword
        - domain number
        - local-priority number
        - log-announce-interval number
        - network-type keyword
        - port reference
          - address string
          - admin-state keyword
          - alternate-profile reference
          - apply-groups reference
          - apply-groups-exclude reference
          - local-priority number
          - log-delay-interval number
          - log-sync-interval number
          - master-only boolean
        - priority1 number
        - priority2 number
        - profile keyword
        - ptsf
          - monitor-ptsf-unusable
            - admin-state keyword
        - router string
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - peer (ipv4-address-no-zone | ipv6-address-no-zone)
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - local-priority number
            - log-sync-interval number
          - peer-limit number
        - tx-while-sync-uncertain boolean
    - script-control
        - apply-groups reference
        - apply-groups-exclude reference
        - script string owner string
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - location string
        - script-policy string owner string
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - expire-time (number | keyword)
          - lifetime (number | keyword)
          - lock-override boolean
          - max-completed number
          - python-lifetime number
          - python-script
            - name reference
          - results string
          - script
            - name string
            - owner string
    - security
        - aaa
          - apply-groups reference
          - apply-groups-exclude reference
          - cli-session-group string
```


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configure system security aaa cli-session-group apply-groups

```
            - apply-groups reference
            - apply-groups-exclude reference
            - combined-max-sessions number
            - description string
            - ssh-max-sessions number
            - telnet-max-sessions number
         - health-check (number | keyword)
         - local-profiles
            - apply-groups reference
            - apply-groups-exclude reference
            - profile string
               - apply-groups reference
               - apply-groups-exclude reference
               - cli-session-group reference
               - combined-max-sessions number
               - default-action keyword
               - entry number
                  - action keyword
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - description string
                  - match string
               - grpc
                  - rpc-authorization
                     - gnmi-capabilities keyword
                     - gnmi-get keyword
                     - gnmi-set keyword
                     - gnmi-subscribe keyword
                     - gnoi-cert-mgmt-cangenerate keyword
                     - gnoi-cert-mgmt-getcert keyword
                     - gnoi-cert-mgmt-install keyword
                     - gnoi-cert-mgmt-revoke keyword
                     - gnoi-cert-mgmt-rotate keyword
                     - gnoi-file-get keyword
                     - gnoi-file-put keyword
                     - gnoi-file-remove keyword
                     - gnoi-file-stat keyword
                     - gnoi-file-transfertoremote keyword
                     - gnoi-system-cancelreboot keyword
                     - gnoi-system-ping keyword
                     - gnoi-system-reboot keyword
                     - gnoi-system-rebootstatus keyword
                     - gnoi-system-setpackage keyword
                     - gnoi-system-switchcontrolprocessor keyword
                     - gnoi-system-time keyword
                     - gnoi-system-traceroute keyword
                     - md-cli-session keyword
                     - rib-api-getversion keyword
                     - rib-api-modify keyword
               - li boolean
               - netconf
                  - base-op-authorization
                     - action boolean
                     - cancel-commit boolean
                     - close-session boolean
                     - commit boolean
                     - copy-config boolean
                     - create-subscription boolean
                     - delete-config boolean
                     - discard-changes boolean
                     - edit-config boolean
                     - get boolean
                     - get-config boolean
                     - get-data boolean
```


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configure system security aaa local-profiles profile netconf base-op-authorization get-schema

```
                    - get-schema boolean
                    - kill-session boolean
                    - lock boolean
                    - validate boolean
                - ssh-max-sessions number
                - telnet-max-sessions number
            - management-interface
                - apply-groups reference
                - apply-groups-exclude reference
                - md-cli
                    - command-accounting-during-load boolean
                - output-authorization
                    - md-interfaces boolean
                    - telemetry-data boolean
            - remote-servers
                - apply-groups reference
                - apply-groups-exclude reference
                - ldap
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - public-key-authentication boolean
                    - route-preference keyword
                    - server number
                        - address (ipv4-address-no-zone | ipv6-address-no-zone)
                            - apply-groups reference
                            - apply-groups-exclude reference
                            - port number
                        - admin-state keyword
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - bind-authentication
                            - password string
                            - root-dn string
                        - search
                            - base-dn string
                        - server-name string
                        - tls-profile reference
                    - server-retry number
                    - server-timeout number
                    - use-default-template boolean
                - radius
                    - access-algorithm keyword
                    - accounting boolean
                    - accounting-port number
                    - admin-state keyword
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - authorization boolean
                    - interactive-authentication boolean
                    - port number
                    - route-preference keyword
                    - server number
                        - address (ipv4-address-no-zone | ipv6-address-no-zone)
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - authenticator keyword
                        - secret string
                        - tls-client-profile reference
                    - server-retry number
                    - server-timeout number
                    - use-default-template boolean
                - tacplus
                    - accounting
```


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configure system security aaa remote-servers tacplus accounting record-type

```
                    - record-type keyword
                 - admin-control
                    - tacplus-map-to-priv-lvl number
                 - admin-state keyword
                 - apply-groups reference
                 - apply-groups-exclude reference
                 - authorization
                    - request-format
                       - access-operation-cmd keyword
                    - use-priv-lvl boolean
                 - interactive-authentication boolean
                 - priv-lvl-map
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - priv-lvl number
                       - apply-groups reference
                       - apply-groups-exclude reference
                       - user-profile-name reference
                 - route-preference keyword
                 - server number
                    - address (ipv4-address-no-zone | ipv6-address-no-zone)
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - port number
                    - secret string
                 - server-timeout number
                 - use-default-template boolean
              - vprn-server
                 - apply-groups reference
                 - apply-groups-exclude reference
                 - inband reference
                 - outband reference
                 - vprn reference
           - user-template keyword
              - access
                 - console boolean
                 - ftp boolean
                 - grpc boolean
                 - li boolean
                 - netconf boolean
              - apply-groups reference
              - apply-groups-exclude reference
              - console
                 - login-exec string
              - home-directory (sat-url | cflash-without-slot-url)
              - profile string
              - restricted-to-home boolean
              - save-when-restricted boolean
        - apply-groups reference
        - apply-groups-exclude reference
        - cli-script
           - apply-groups reference
           - apply-groups-exclude reference
           - authorization
              - cron
                 - cli-user reference
              - event-handler
                 - cli-user reference
        - cpm-filter
           - apply-groups reference
           - apply-groups-exclude reference
           - default-action keyword
           - ip-filter
              - admin-state keyword
```


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configure system security cpm-filter ip-filter entry

```
            - entry number
              - action
                - accept
                - default
                - drop
                - queue reference
              - apply-groups reference
              - apply-groups-exclude reference
              - description string
              - log reference
              - match
                - dscp keyword
                - dst-ip
                  - address (ipv4-prefix-with-host-bits | ipv4-address)
                  - ip-prefix-list reference
                  - mask string
                - dst-port
                  - eq number
                  - mask number
                  - port-list reference
                  - range
                    - end number
                    - start number
                - fragment keyword
                - icmp
                  - code number
                  - type number
                - ip-option
                  - mask number
                  - type number
                - multiple-option boolean
                - option-present boolean
                - port
                  - eq number
                  - mask number
                  - port-list reference
                  - range
                    - end number
                    - start number
                - protocol (number | keyword)
                - router-instance string
                - src-ip
                  - address (ipv4-prefix-with-host-bits | ipv4-address)
                  - ip-prefix-list reference
                  - mask string
                - src-port
                  - eq number
                  - mask number
                  - port-list reference
                  - range
                    - end number
                    - start number
                - tcp-flags
                  - ack boolean
                  - syn boolean
          - ipv6-filter
            - admin-state keyword
            - entry number
              - action
                - accept
                - default
                - drop
                - queue reference
              - apply-groups reference
```


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configure system security cpm-filter ipv6-filter entry apply-groups-exclude

```
                  - apply-groups-exclude reference
                  - description string
                  - log reference
                  - match
                     - dscp keyword
                     - dst-ip
                        - address (ipv6-prefix-with-host-bits | ipv6-address)
                        - ipv6-prefix-list reference
                        - mask string
                     - dst-port
                        - eq number
                        - mask number
                        - port-list reference
                        - range
                           - end number
                           - start number
                     - extension-header
                        - hop-by-hop boolean
                     - flow-label number
                     - fragment keyword
                     - icmp
                        - code number
                        - type number
                     - next-header (number | keyword)
                     - port
                        - eq number
                        - mask number
                        - port-list reference
                        - range
                           - end number
                           - start number
                     - router-instance string
                     - src-ip
                        - address (ipv6-prefix-with-host-bits | ipv6-address)
                        - ipv6-prefix-list reference
                        - mask string
                     - src-port
                        - eq number
                        - mask number
                        - port-list reference
                        - range
                           - end number
                           - start number
                     - tcp-flags
                        - ack boolean
                        - syn boolean
            - mac-filter
               - admin-state keyword
               - entry number
                  - action
                     - accept
                     - default
                     - drop
                     - queue reference
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - description string
                  - log reference
                  - match
                     - cfm-opcode
                        - eq number
                        - gt number
                        - lt number
                        - range
```


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configure system security cpm-filter mac-filter entry match cfm-opcode range end

```
                        - end number
                        - start number
                  - dst-mac
                     - address string
                     - mask string
                  - etype string
                  - frame-type keyword
                  - llc-dsap
                     - dsap number
                     - mask number
                  - llc-ssap
                     - mask number
                     - ssap number
                  - service reference
                  - src-mac
                     - address string
                     - mask string
      - cpm-queue
         - apply-groups reference
         - apply-groups-exclude reference
         - queue number
            - apply-groups reference
            - apply-groups-exclude reference
            - cbs number
            - mbs number
            - rate
               - cir (number | keyword)
               - pir (number | keyword)
      - cpu-protection
         - apply-groups reference
         - apply-groups-exclude reference
         - ip-src-monitoring
            - included-protocols
               - dhcp boolean
               - gtp boolean
               - icmp boolean
               - igmp boolean
         - link-specific-rate (number | keyword)
         - policy number
            - alarm boolean
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - eth-cfm
               - entry number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - level start number end number
                  - opcode start number end number
                  - pir (number | keyword)
            - out-profile-rate
               - log-events boolean
               - pir (number | keyword)
            - overall-rate (number | keyword)
            - per-source-parameters
               - ip-src-monitoring
                  - limit-dhcp-ci-addr-zero boolean
            - per-source-rate (number | keyword)
         - port-overall-rate
            - action-low-priority boolean
            - pir (number | keyword)
         - protocol-protection
            - allow-sham-links boolean
            - block-pim-tunneled boolean
```


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```
        - dist-cpu-protection
          - apply-groups reference
          - apply-groups-exclude reference
          - policy string
            - apply-groups reference
            - apply-groups-exclude reference
            - description string
            - local-monitoring-policer string
              - apply-groups reference
              - apply-groups-exclude reference
              - description string
              - exceed-action keyword
              - log-events keyword
              - rate
                - kbps
                  - limit (keyword | number)
                  - mbs number
                - packets
                  - initial-delay number
                  - limit (keyword | number)
                  - within number
            - protocol keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - dynamic-parameters
                - detection-time number
                - exceed-action
                  - action keyword
                  - hold-down (keyword | number)
                - log-events keyword
                - rate
                  - kbps
                    - limit (keyword | number)
                    - mbs number
                  - packets
                    - initial-delay number
                    - limit (keyword | number)
                    - within number
              - enforcement
                - dynamic
                  - mon-policer-name reference
                - dynamic-local-mon-bypass
                - static
                  - policer-name reference
            - static-policer string
              - apply-groups reference
              - apply-groups-exclude reference
              - description string
              - detection-time number
              - exceed-action
                - action keyword
                - hold-down (keyword | number)
              - log-events keyword
              - rate
                - kbps
                  - limit (keyword | number)
                  - mbs number
                - packets
                  - initial-delay number
                  - limit (keyword | number)
                  - within number
            - type keyword
        - dot1x
          - admin-state keyword
```


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```
            - apply-groups reference
            - apply-groups-exclude reference
            - radius-policy string
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - retry number
               - server number
                  - accounting-port number
                  - address string
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - authentication-port number
                  - secret string
                  - type keyword
               - source-address string
               - timeout number
         - ftp-server boolean
         - hash-control
            - apply-groups reference
            - apply-groups-exclude reference
            - management-interface
               - classic-cli
                  - read-algorithm keyword
                  - write-algorithm keyword
               - grpc
                  - hash-algorithm keyword
               - md-cli
                  - hash-algorithm keyword
               - netconf
                  - hash-algorithm keyword
         - keychains
            - keychain string
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - bidirectional
                  - entry number
                     - admin-state keyword
                     - algorithm keyword
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - authentication-key string
                     - begin-time string
                     - option keyword
                     - tolerance (number | keyword)
               - description string
               - receive
                  - entry number
                     - admin-state keyword
                     - algorithm keyword
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - authentication-key string
                     - begin-time string
                     - end-time string
                     - tolerance (number | keyword)
               - send
                  - entry number
                     - admin-state keyword
                     - algorithm keyword
                     - apply-groups reference
                     - apply-groups-exclude reference
                     - authentication-key string
```


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configure system security keychains keychain send entry begin-time

```
                  – begin-time string
               – tcp-option-number
                  – receive keyword
                  – send keyword
         – management
            – allow-ftp boolean
            – allow-grpc boolean
            – allow-netconf boolean
            – allow-ssh boolean
            – allow-telnet boolean
            – allow-telnet6 boolean
            – apply-groups reference
            – apply-groups-exclude reference
         – management-access-filter
            – apply-groups reference
            – apply-groups-exclude reference
            – ip-filter
               – admin-state keyword
               – apply-groups reference
               – apply-groups-exclude reference
               – default-action keyword
               – entry number
                  – action keyword
                  – apply-groups reference
                  – apply-groups-exclude reference
                  – description string
                  – log-events boolean
                  – match
                     – dst-port
                        – mask number
                        – port number
                     – mgmt-port
                        – cpm
                        – lag string
                        – port-id string
                     – protocol (number | keyword)
                     – router-instance string
                     – src-ip
                        – address (ipv4-prefix | ipv4-address)
                        – ip-prefix-list reference
                        – mask string
                     – src-port
                        – mask number
                        – port number
            – ipv6-filter
               – admin-state keyword
               – apply-groups reference
               – apply-groups-exclude reference
               – default-action keyword
               – entry number
                  – action keyword
                  – apply-groups reference
                  – apply-groups-exclude reference
                  – description string
                  – log-events boolean
                  – match
                     – dst-port
                        – mask number
                        – port number
                     – flow-label number
                     – mgmt-port
                        – cpm
                        – lag string
                        – port-id string
```


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configure system security management-access-filter ipv6-filter entry match next-header

```
                    - next-header (number | keyword)
                    - router-instance string
                    - src-ip
                       - address (ipv6-prefix | ipv6-address)
                       - ipv6-prefix-list reference
                       - mask string
                    - src-port
                       - mask number
                       - port number
         - mac-filter
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - default-action keyword
            - entry number
               - action keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - description string
               - log-events boolean
               - match
                  - cfm-opcode
                     - eq number
                     - gt number
                     - lt number
                     - range
                        - end number
                        - start number
                  - dot1p
                     - mask number
                     - priority number
                  - dst-mac
                     - address string
                     - mask string
                  - etype string
                  - frame-type keyword
                  - llc-dsap
                     - dsap number
                     - mask number
                  - llc-ssap
                     - mask number
                     - ssap number
                  - service string
                  - snap-oui keyword
                  - snap-pid number
                  - src-mac
                     - address string
                     - mask string
      - per-peer-queuing boolean
      - pki
         - apply-groups reference
         - apply-groups-exclude reference
         - ca-profile string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - auto-crl-update
               - admin-state keyword
               - apply-groups reference
               - apply-groups-exclude reference
               - crl-urls
                  - url-entry number
                     - apply-groups reference
                     - apply-groups-exclude reference
```


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configure system security pki ca-profile auto-crl-update crl-urls url-entry transmission-profile

```
                    - transmission-profile reference
                    - url http-url-path-loose
                - periodic-update-interval number
                - pre-update-time number
                - retry-interval number
                - schedule-type keyword
            - cert-file string
            - cmpv2
                - accept-unprotected-message
                    - error-message boolean
                    - pkiconf-message boolean
                - always-set-sender-for-ir boolean
                - http
                    - response-timeout number
                    - version keyword
                - key-list
                    - key string
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - password string
                - recipient-subject string
                - response-signing-cert string
                - response-signing-use-extracert
                - same-recipient-nonce-for-poll-request boolean
                - signing-cert-subject string
                - url
                    - service-name string
                    - transmission-profile reference
                    - url-string http-optional-url-loose
                - use-ca-subject
            - crl-file string
            - description string
            - ocsp
                - responder-url http-optional-url-loose
                - service-name string
                - transmission-profile reference
            - revocation-check keyword
        - certificate-auto-update string
            - apply-groups reference
            - apply-groups-exclude reference
            - key-file-name string
            - profile reference
        - certificate-display-format keyword
        - certificate-expiration-warning
            - hours number
            - repeat-hours number
        - certificate-update-profile string
            - after-issue number
            - apply-groups reference
            - apply-groups-exclude reference
            - before-expiry number
            - cmpv2
                - ca-profile reference
            - dsa
                - key-size number
            - ecdsa
                - curve keyword
            - est
                - est-profile reference
            - hash-algorithm keyword
            - retry-interval number
            - rsa
                - key-size number
            - same-as-existing-key
```


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```
            - common-name-list string
              - apply-groups reference
              - apply-groups-exclude reference
              - common-name number
                - apply-groups reference
                - apply-groups-exclude reference
                - cn-type keyword
                - cn-value string
            - crl-expiration-warning
              - hours number
              - repeat-hours number
            - est-profile string
              - apply-groups reference
              - apply-groups-exclude reference
              - check-id-kp-cmcra-only boolean
              - client-tls-profile string
              - http-authentication
                - password string
                - username string
              - server
                - fqdn string
                - ipv4 string
                - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
                - port number
              - transmission-profile string
            - imported-format keyword
            - maximum-cert-chain-depth number
          - python-script
            - apply-groups reference
            - apply-groups-exclude reference
            - authorization
              - cron
                - cli-user reference
              - event-handler
                - cli-user reference
          - snmp
            - access string context string security-model keyword security-level keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - notify string
              - prefix-match keyword
              - read string
              - write string
            - apply-groups reference
            - apply-groups-exclude reference
            - attempts
              - apply-groups reference
              - apply-groups-exclude reference
              - count number
              - lockout number
              - time number
            - community string
              - access-permissions keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - source-access-list reference
              - version keyword
            - source-access-list string
              - apply-groups reference
              - apply-groups-exclude reference
              - source-host string
                - address (ipv4-address-no-zone | ipv6-address-no-zone)
                - apply-groups reference
                - apply-groups-exclude reference
```


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```
            - usm-community string
              - apply-groups reference
              - apply-groups-exclude reference
              - group string
              - source-access-list reference
            - view string subtree string
              - apply-groups reference
              - apply-groups-exclude reference
              - mask string
              - type keyword
        - source-address
            - ipv4 keyword
              - address string
              - apply-groups reference
              - apply-groups-exclude reference
              - interface-name string
            - ipv6 keyword
              - address string
              - apply-groups reference
              - apply-groups-exclude reference
        - ssh
            - apply-groups reference
            - apply-groups-exclude reference
            - authentication-method
              - server
                - public-key-only boolean
            - client-cipher-list-v2
              - apply-groups reference
              - apply-groups-exclude reference
              - cipher number
                - apply-groups reference
                - apply-groups-exclude reference
                - name keyword
            - client-kex-list-v2
              - kex number
                - apply-groups reference
                - apply-groups-exclude reference
                - name keyword
            - client-mac-list-v2
              - mac number
                - apply-groups reference
                - apply-groups-exclude reference
                - name keyword
            - key-re-exchange
              - client
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - mbytes (number | keyword)
                - minutes (number | keyword)
              - server
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - mbytes (number | keyword)
                - minutes (number | keyword)
            - permit-empty-passwords boolean
            - preserve-key boolean
            - server-admin-state keyword
            - server-cipher-list-v2
              - apply-groups reference
              - apply-groups-exclude reference
              - cipher number
                - apply-groups reference
```


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configure system security ssh server-cipher-list-v2 cipher apply-groups-exclude

```
                - apply-groups-exclude reference
                - name keyword
            - server-kex-list-v2
                - kex number
                - apply-groups reference
                - apply-groups-exclude reference
                - name keyword
            - server-mac-list-v2
                - mac number
                - apply-groups reference
                - apply-groups-exclude reference
                - name keyword
        - system-passwords
            - admin-password string
            - apply-groups reference
            - apply-groups-exclude reference
        - tech-support
            - apply-groups reference
            - apply-groups-exclude reference
            - ts-location (ts-sat-url | cflash-url | string)
        - telnet-server boolean
        - telnet6-server boolean
        - tls
            - apply-groups reference
            - apply-groups-exclude reference
            - cert-profile string
                - admin-state keyword
                - apply-groups reference
                - apply-groups-exclude reference
                - entry number
                - apply-groups reference
                - apply-groups-exclude reference
                - certificate-file string
                - key-file string
                - send-chain
                    - ca-profile reference
            - client-cipher-list string
                - apply-groups reference
                - apply-groups-exclude reference
                - tls12-cipher number
                - apply-groups reference
                - apply-groups-exclude reference
                - name keyword
                - tls13-cipher number
                - apply-groups reference
                - apply-groups-exclude reference
                - name keyword
            - client-group-list string
                - apply-groups reference
                - apply-groups-exclude reference
                - tls13-group number
                - apply-groups reference
                - apply-groups-exclude reference
                - name keyword
            - client-signature-list string
                - apply-groups reference
                - apply-groups-exclude reference
                - tls13-signature number
                - apply-groups reference
                - apply-groups-exclude reference
                - name keyword
            - client-tls-profile string
                - admin-state keyword
                - apply-groups reference
```


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```
            - apply-groups-exclude reference
            - cert-profile reference
            - cipher-list reference
            - group-list reference
            - protocol-version keyword
            - signature-list reference
            - status-verify
              - default-result keyword
            - trust-anchor-profile reference
         - server-cipher-list string
            - apply-groups reference
            - apply-groups-exclude reference
            - tls12-cipher number
              - apply-groups reference
              - apply-groups-exclude reference
              - name keyword
            - tls13-cipher number
              - apply-groups reference
              - apply-groups-exclude reference
              - name keyword
         - server-group-list string
            - apply-groups reference
            - apply-groups-exclude reference
            - tls13-group number
              - apply-groups reference
              - apply-groups-exclude reference
              - name keyword
         - server-signature-list string
            - apply-groups reference
            - apply-groups-exclude reference
            - tls13-signature number
              - apply-groups reference
              - apply-groups-exclude reference
              - name keyword
         - server-tls-profile string
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - authenticate-client
              - common-name-list reference
              - trust-anchor-profile reference
            - cert-profile reference
            - cipher-list reference
            - group-list reference
            - protocol-version keyword
            - signature-list reference
            - status-verify
              - default-result keyword
            - tls-re-negotiate-timer number
         - trust-anchor-profile string
            - apply-groups reference
            - apply-groups-exclude reference
            - trust-anchor reference
      - user-params
         - apply-groups reference
         - apply-groups-exclude reference
         - attempts
            - count number
            - lockout number
            - time number
         - authentication-order
            - exit-on-reject boolean
            - order keyword
         - local-user
```


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configure system security user-params local-user password

```
                - password
                  - aging number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - complexity-rules
                    - allow-user-name boolean
                    - credits
                      - lowercase number
                      - numeric number
                      - special-character number
                      - uppercase number
                    - minimum-classes number
                    - minimum-length number
                    - repeated-characters number
                    - required
                      - lowercase number
                      - numeric number
                      - special-character number
                      - uppercase number
                  - hashing keyword
                  - history-size number
                  - minimum-age number
                  - minimum-change number
                - user string
                  - access
                    - console boolean
                    - ftp boolean
                    - grpc boolean
                    - li boolean
                    - netconf boolean
                    - snmp boolean
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - cli-engine keyword
                  - console
                    - cannot-change-password boolean
                    - login-exec (sat-url | cflash-url | ftp-tftp-url | filename)
                    - member reference
                    - new-password-at-login boolean
                  - home-directory (sat-url | cflash-without-slot-url)
                  - password string
                  - public-keys
                    - ecdsa
                      - ecdsa-key number
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - description string
                        - key-value string
                    - rsa
                      - rsa-key number
                        - apply-groups reference
                        - apply-groups-exclude reference
                        - description string
                        - key-value string
                  - restricted-to-home boolean
                  - save-when-restricted boolean
                  - snmp
                    - apply-groups reference
                    - apply-groups-exclude reference
                    - authentication
                      - authentication-key string
                      - authentication-protocol keyword
                      - privacy
                        - privacy-key string
```


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configure system security user-params local-user user snmp authentication privacy privacy-protocol

```
                        – privacy-protocol keyword
                     – group string
                  – ssh-authentication-method
                     – server
                        – public-key-only keyword
         – vprn-network-exceptions
            – count number
            – window number
      – selective-fib boolean
      – software-repository string
         – apply-groups reference
         – apply-groups-exclude reference
         – description string
         – primary-location string
         – secondary-location string
         – tertiary-location string
      – switch-fabric
         – apply-groups reference
         – apply-groups-exclude reference
         – failure-recovery
            – admin-state keyword
         – sfm-loss-threshold number
      – telemetry
         – apply-groups reference
         – apply-groups-exclude reference
         – destination-group string
            – allow-unsecure-connection
            – apply-groups reference
            – apply-groups-exclude reference
            – description string
            – destination (ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-
domain-name) port number
               – apply-groups reference
               – apply-groups-exclude reference
               – router-instance string
            – tcp-keepalive
               – admin-state keyword
               – idle-time number
               – interval number
               – retries number
            – tls-client-profile reference
         – notification-bundling
            – admin-state keyword
            – apply-groups reference
            – apply-groups-exclude reference
            – max-msg-count number
            – max-time-granularity number
         – persistent-subscriptions
            – subscription string
               – admin-state keyword
               – apply-groups reference
               – apply-groups-exclude reference
               – description string
               – destination-group reference
               – encoding keyword
               – local-source-address (ipv4-address-no-zone | ipv6-address-no-zone)
               – mode keyword
               – originated-qos-marking keyword
               – sample-interval number
               – sensor-group reference
         – sensor-groups
            – sensor-group string
               – apply-groups reference
               – apply-groups-exclude reference
```


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configure system telemetry sensor-groups sensor-group description

```
            - description string
            - path string
      - thresholds
         - cflash-cap-alarm-percent string
            - apply-groups reference
            - apply-groups-exclude reference
            - falling-threshold number
            - interval number
            - rising-threshold number
            - rmon-event-type keyword
            - startup-alarm keyword
         - cflash-cap-warn-percent string
            - apply-groups reference
            - apply-groups-exclude reference
            - falling-threshold number
            - interval number
            - rising-threshold number
            - rmon-event-type keyword
            - startup-alarm keyword
         - kb-memory-use-alarm
            - apply-groups reference
            - apply-groups-exclude reference
            - falling-threshold number
            - interval number
            - rising-threshold number
            - rmon-event-type keyword
            - startup-alarm keyword
         - kb-memory-use-warn
            - apply-groups reference
            - apply-groups-exclude reference
            - falling-threshold number
            - interval number
            - rising-threshold number
            - rmon-event-type keyword
            - startup-alarm keyword
         - rmon
            - alarm number
               - apply-groups reference
               - apply-groups-exclude reference
               - falling-event number
               - falling-threshold number
               - interval number
               - owner string
               - rising-event number
               - rising-threshold number
               - sample-type keyword
               - startup-alarm keyword
               - variable-oid string
            - event number
               - apply-groups reference
               - apply-groups-exclude reference
               - description string
               - event-type keyword
               - owner string
      - time
         - apply-groups reference
         - apply-groups-exclude reference
         - dst-zone string
            - apply-groups reference
            - apply-groups-exclude reference
            - end
               - day keyword
               - hours-minutes string
               - month keyword
```


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configure system time dst-zone end week

```
                - week keyword
            - offset number
            - start
                - day keyword
                - hours-minutes string
                - month keyword
                - week keyword
        - ntp
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - authentication-check boolean
            - authentication-key number
                - apply-groups reference
                - apply-groups-exclude reference
                - key string
                - type keyword
            - broadcast reference interface-name string
                - apply-groups reference
                - apply-groups-exclude reference
                - key-id reference
                - ttl number
                - version number
            - broadcast-client string interface-name string
                - apply-groups reference
                - apply-groups-exclude reference
                - authenticate boolean
            - multicast
                - apply-groups reference
                - apply-groups-exclude reference
                - key-id reference
                - version number
            - multicast-client
                - apply-groups reference
                - apply-groups-exclude reference
                - authenticate boolean
            - ntp-server
                - authenticate boolean
            - peer (ipv4-address-no-zone | ipv6-address-no-zone) router-instance string
                - apply-groups reference
                - apply-groups-exclude reference
                - key-id reference
                - prefer boolean
                - version number
            - server (ipv4-address-no-zone | ipv6-address-no-zone | keyword) router-
instance string
                - apply-groups reference
                - apply-groups-exclude reference
                - key-id reference
                - prefer boolean
                - version number
        - prefer-local-time boolean
        - sntp
            - admin-state keyword
            - apply-groups reference
            - apply-groups-exclude reference
            - server (ipv4-address-no-zone | ipv6-address-no-zone)
                - apply-groups reference
                - apply-groups-exclude reference
                - interval number
                - prefer boolean
                - version number
            - sntp-state keyword
        - zone
```


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configure system time zone non-standard

```
            –  non-standard
               –  name string
               –  offset string
            –  standard
               –  name keyword
      –  transmission-profile string
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  http-version keyword
         –  ipv4-source-address string
         –  ipv6-source-address string
         –  redirection number
         –  retry number
         –  router-instance string
         –  timeout number
      –  usb keyword
         –  admin-state keyword
         –  apply-groups reference
         –  apply-groups-exclude reference
```


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3.46.1 system command descriptions

system

Synopsis	Enter the **system** context
Context	**configure** system
Tree	system
Introduced	16.0.R1
Platforms	All

alarm-contact-in-power *boolean*

Synopsis	Power the output pin on the CPM alarm interface port
Context	**configure** system alarm-contact-in-power *boolean*
Tree	alarm-contact-in-power
Default	false
Introduced	16.0.R1
Platforms	7750 SR-a

alarm-contact-input [input-pin-number] *number*

Synopsis	Enter the **alarm-contact-input** list instance
Context	**configure** system alarm-contact-input *number*
Tree	alarm-contact-input
Introduced	16.0.R1
Platforms	7750 SR-a

[input-pin-number] *number*

Synopsis	Alarm contact input pin
Context	**configure** system alarm-contact-input *number*
Tree	alarm-contact-input
Range	1 to 4
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	7750 SR-a

admin-state *keyword*

Synopsis	Administrative state of the alarm contact input
Context	**configure** system alarm-contact-input *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR-a

clear-message *string*

Synopsis	Text message sent in the log event when an alarm clears
Context	**configure** system alarm-contact-input *number* clear-message *string*
Tree	clear-message
Description	This command configures a text message to be included in the log event that is sent when the system clears an alarm. The system generates the default "Alarm Input Cleared" message if no message is configured. The **clear-message** string is included in the log event when the pin changes to the normal state.
String Length	1 to 80
Default	Alarm Input Cleared
Introduced	16.0.R1
Platforms	7750 SR-a

description *string*

Synopsis	Text description
Context	**configure** system alarm-contact-input *number* description *string*
Tree	description
String Length	1 to 160
Introduced	16.0.R1
Platforms	7750 SR-a

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normal-state *keyword*

Synopsis	Normal state associated with the alarm contact input
Context	**configure** system alarm-contact-input *number* normal-state *keyword*
Tree	normal-state
Options	open, closed
Default	open
Introduced	16.0.R1
Platforms	7750 SR-a

trigger-message *string*

Synopsis	Text message sent in the log event when input changes
Context	**configure** system alarm-contact-input *number* trigger-message *string*
Tree	trigger-message
Description	This command configures a text message to be included in the log event that is sent when the system generates an alarm. The system generates the default message "Alarm Input Triggered" if no message is configured. This command's message string is included in the log event when the pin changes from the normal state.
String Length	1 to 80
Default	Alarm Input Triggered
Introduced	16.0.R1
Platforms	7750 SR-a

alarms

Synopsis	Enter the **alarms** context
Context	**configure** system alarms
Tree	alarms
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the system alarm

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Context	**configure** system alarms admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

max-cleared *number*

Synopsis	Maximum number of cleared alarms
Context	**configure** system alarms max-cleared *number*
Tree	max-cleared
Range	0 to 500
Default	500
Introduced	16.0.R4
Platforms	All

allow-boot-license-violations *boolean*

Synopsis	Allow boot license violations in boot-up configuration
Context	**configure** system allow-boot-license-violations *boolean*
Tree	allow-boot-license-violations
Default	true
Introduced	16.0.R4
Platforms	All

bluetooth

Synopsis	Enter the **bluetooth** context
Context	**configure** system bluetooth
Tree	bluetooth
Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s

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admin-state *keyword*

Synopsis	Administrative state of the Bluetooth module
Context	**configure** system bluetooth admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.2.R1
Platforms	7750 SR-1, 7750 SR-s

advertising-timeout *number*

Synopsis	Bluetooth advertising timeout
Context	**configure** system bluetooth advertising-timeout *number*
Tree	advertising-timeout
Range	30 to 3600
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s

device [mac-address] *string*

Synopsis	Enter the **device** list instance
Context	**configure** system bluetooth device *string*
Tree	device
Max. Instances	5
Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s

[**mac-address**] *string*

Synopsis	Bluetooth client device MAC address
Context	**configure** system bluetooth device *string*
Tree	device
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s

description *string*

Synopsis	Text description
Context	**configure** system bluetooth device *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s

module [cpm-slot] *string*

Synopsis	Enter the **module** list instance
Context	**configure** system bluetooth module *string*
Tree	module
Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s

[**cpm-slot**] *string*

Synopsis	CPM slot on which the module resides
Context	**configure** system bluetooth module *string*
Tree	module
String Length	1
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s

provisioned-identifier *string*

Synopsis	Bluetooth module ID
Context	**configure** system bluetooth module *string* provisioned-identifier *string*
Tree	provisioned-identifier

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String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s

pairing-button *boolean*

Synopsis	Enable the pairing button
Context	**configure** system bluetooth pairing-button *boolean*
Tree	pairing-button
Default	false
Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s

passkey *string*

Synopsis	Bluetooth passkey
Context	**configure** system bluetooth passkey *string*
Tree	passkey
String Length	6
Default	123456
Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s

power-mode *keyword*

Synopsis	Bluetooth module power mode
Context	**configure** system bluetooth power-mode *keyword*
Tree	power-mode
Options	manual, automatic
Default	automatic
Introduced	20.2.R1
Platforms	7750 SR-1, 7750 SR-s

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boot-bad-exec *string*

Synopsis	CLI script file to execute following a failed boot-up
Context	**configure** system boot-bad-exec *string*
Tree	boot-bad-exec
Description	This command configures the name of the CLI script file to be run following the failure of a boot-up configuration. **Note**: This command has no effect in model-driven mode.
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

boot-good-exec *string*

Synopsis	CLI script file to execute following successful boot-up
Context	**configure** system boot-good-exec *string*
Tree	boot-good-exec
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

central-frequency-clock

Synopsis	Enter the **central-frequency-clock** context
Context	**configure** system central-frequency-clock
Tree	central-frequency-clock
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bits

Synopsis	Enter the **bits** context
Context	**configure** system central-frequency-clock bits
Tree	bits
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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input

Synopsis	Enter the **input** context
Context	**configure** system central-frequency-clock bits input
Tree	input
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the BITS input timing reference
Context	**configure** system central-frequency-clock bits input admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interface-type *keyword*

Synopsis	Interface type of the BITS timing reference
Context	**configure** system central-frequency-clock bits interface-type *keyword*
Tree	interface-type
Options	ds1-esf, ds1-sf, e1-pcm30crc, e1-pcm31crc, g703-2048khz
Default	ds1-esf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

output

Synopsis	Enter the **output** context
Context	**configure** system central-frequency-clock bits output
Tree	output
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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admin-state *keyword*

Synopsis	Administrative state of BITS output timing reference
Context	**configure** system central-frequency-clock bits output admin-state *keyword*
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

line-length *keyword*

Synopsis	Line length for the BITS output timing reference
Context	**configure** system central-frequency-clock bits output line-length *keyword*
Tree	line-length
Options	length-not-applicable, 110, 220, 330, 440, 550, 660
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ql-minimum *keyword*

Synopsis	Minimum signal quality level for BITSout port
Context	**configure** system central-frequency-clock bits output ql-minimum *keyword*
Tree	ql-minimum
Options	unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2
Default	unused
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source *keyword*

Synopsis	Source of the BITS output timing reference
Context	**configure** system central-frequency-clock bits output source *keyword*
Tree	source
Options	line-ref, internal-clock
Default	line-ref

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch *boolean*

Synopsis	Squelch the signal of the BITS output timing reference
Context	**configure** system central-frequency-clock bits output squelch *boolean*
Tree	squelch
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ql-override *keyword*

Synopsis	Override for the quality level of the timing reference
Context	**configure** system central-frequency-clock bits ql-override *keyword*
Tree	ql-override
Options	unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec
Default	unused
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ssm-bit *number*

Synopsis	Sa bit to convey SSM information
Context	**configure** system central-frequency-clock bits ssm-bit *number*
Tree	ssm-bit
Range	4 to 8
Default	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

gnss

Synopsis	Enter the **gnss** context

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Context	**configure** system central-frequency-clock gnss
Tree	gnss
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

admin-state *keyword*

Synopsis	Administrative state of the gnss timing reference
Context	**configure** system central-frequency-clock gnss admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

ql-override *keyword*

Synopsis	Quality level override for a timing reference
Context	**configure** system central-frequency-clock gnss ql-override *keyword*
Tree	ql-override
Options	unused, prs, stu, st2, tnc, st3e, st3
Default	unused
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

ptp

Synopsis	Enter the **ptp** context
Context	**configure** system central-frequency-clock ptp
Tree	ptp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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admin-state *keyword*

Synopsis	Administrative state of the PTP timing reference
Context	**configure** system central-frequency-clock ptp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ql-override *keyword*

Synopsis	Quality level of a timing reference that overrides any value provided by the reference's SSM process
Context	**configure** system central-frequency-clock ptp ql-override *keyword*
Tree	ql-override
Options	unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec
Default	unused
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ql-minimum *keyword*

Synopsis	Minimum signal quality level for system timing module
Context	**configure** system central-frequency-clock ql-minimum *keyword*
Tree	ql-minimum
Options	unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2
Default	unused
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ql-selection *boolean*

Synopsis	Consider quality level in system and BITS output timing
Context	**configure** system central-frequency-clock ql-selection *boolean*

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Tree	ql-selection
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ref-order

Synopsis	Enter the **ref-order** context
Context	**configure** system central-frequency-clock ref-order
Tree	ref-order
Description	Commands in this context specify the priority order of the synchronous equipment timing subsystem**.** If a reference source is disabled, this command defines the next reference source for the clock. If all reference sources are disabled, clocking is derived from a local oscillator. If a timing reference is linked to a source port that is operationally down, the port is no longer a qualified, valid reference.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fifth *keyword*

Synopsis	Fifth preferred timing reference source
Context	**configure** system central-frequency-clock ref-order fifth *keyword*
Tree	fifth
Options	ref1, ref2, bits, ptp, none, synce, gnss
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

first *keyword*

Synopsis	First preferred timing reference source
Context	**configure** system central-frequency-clock ref-order first *keyword*
Tree	first
Options	ref1, ref2, bits, ptp, none, synce, gnss
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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fourth *keyword*

Synopsis	Fourth preferred timing reference source
Context	**configure** system central-frequency-clock ref-order fourth *keyword*
Tree	fourth
Options	ref1, ref2, bits, ptp, none, synce, gnss
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

second *keyword*

Synopsis	Second preferred timing reference source
Context	**configure** system central-frequency-clock ref-order second *keyword*
Tree	second
Options	ref1, ref2, bits, ptp, none, synce, gnss
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sixth *keyword*

Synopsis	Sixth preferred timing reference source
Context	**configure** system central-frequency-clock ref-order sixth *keyword*
Tree	sixth
Options	ref1, ref2, bits, ptp, none, synce, gnss
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

third *keyword*

Synopsis	Third preferred timing reference source
Context	**configure** system central-frequency-clock ref-order third *keyword*
Tree	third
Options	ref1, ref2, bits, ptp, none, synce, gnss
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ref1

Synopsis	Enter the **ref1** context
Context	**configure** system central-frequency-clock ref1
Tree	ref1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the first timing reference
Context	**configure** system central-frequency-clock ref1 admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ql-override *keyword*

Synopsis	Quality level override of a timing reference
Context	**configure** system central-frequency-clock ref1 ql-override *keyword*
Tree	ql-override
Options	unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2
Default	unused
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-port *string*

Synopsis	Source port for the first timing reference
Context	**configure** system central-frequency-clock ref1 source-port *string*
Tree	source-port

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ref2

Synopsis	Enter the **ref2** context
Context	**configure** system central-frequency-clock ref2
Tree	ref2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the second timing reference
Context	**configure** system central-frequency-clock ref2 admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ql-override *keyword*

Synopsis	Quality level override of a timing reference
Context	**configure** system central-frequency-clock ref2 ql-override *keyword*
Tree	ql-override
Options	unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2
Default	unused
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-port *string*

Synopsis	Source port for the second timing reference
Context	**configure** system central-frequency-clock ref2 source-port *string*

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Tree	source-port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

revert *boolean*

Synopsis	Revert to higher-priority reference source
Context	**configure** system central-frequency-clock revert *boolean*
Tree	revert
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

synce

Synopsis	Enter the **synce** context
Context	**configure** system central-frequency-clock synce
Tree	synce
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the SyncE timing reference
Context	**configure** system central-frequency-clock synce admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ql-override *keyword*

Synopsis	Override the quality level of a timing reference
Context	**configure** system central-frequency-clock synce ql-override *keyword*

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Tree	ql-override
Options	unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2
Default	unused
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

wait-to-restore *number*

Synopsis	Time to re-validate a previously failed input reference
Context	**configure** system central-frequency-clock wait-to-restore *number*
Tree	wait-to-restore
Range	1 to 12
Units	minutes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

clli-code *string*

Synopsis	CLLI code value for the system
Context	**configure** system clli-code *string*
Tree	clli-code
String Length	11
Introduced	16.0.R1
Platforms	All

congestion-management *boolean*

Synopsis	Enable Virtual Service Router congestion management
Context	**configure** system congestion-management *boolean*
Tree	congestion-management
Default	false
Introduced	16.0.R1
Platforms	VSR

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contact *string*

Synopsis	Contact information for the managed node
Context	**configure** system contact *string*
Tree	contact
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

coordinates *string*

Synopsis	GPS coordinates for the system location
Context	**configure** system coordinates *string*
Tree	coordinates
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

cpm-http-redirect

Synopsis	Enter the **cpm-http-redirect** context
Context	**configure** system cpm-http-redirect
Tree	cpm-http-redirect
Introduced	16.0.R4
Platforms	All

optimized-mode *boolean*

Synopsis	Enable optimized mode for CPM HTTP redirect messages
Context	**configure** system cpm-http-redirect optimized-mode *boolean*
Tree	optimized-mode
Default	true
Introduced	16.0.R4
Platforms	All

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cron

Synopsis	Enter the **cron** context
Context	**configure** system cron
Tree	cron
Introduced	16.0.R1
Platforms	All

schedule [schedule-name] *string* owner *string*

Synopsis	Enter the **schedule** list instance
Context	**configure** system cron schedule *string* owner *string*
Tree	schedule
Max. Instances	255
Introduced	16.0.R1
Platforms	All

[**schedule-name**] *string*

Synopsis	Schedule name
Context	**configure** system cron schedule *string* owner *string*
Tree	schedule
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

owner *string*

Synopsis	Schedule owner
Context	**configure** system cron schedule *string* owner *string*
Tree	schedule
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the CRON schedule
Context	**configure** system cron schedule *string* owner *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

count *number*

Synopsis	Number of times to repeat a periodic schedule run
Context	**configure** system cron schedule *string* owner *string* count *number*
Tree	count
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

day-of-month *number*

Synopsis	Days in a month when a schedule runs
Context	**configure** system cron schedule *string* owner *string* day-of-month *number*
Tree	day-of-month
Range	-31 to -1 | 1 to 31
Max. Instances	62
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** system cron schedule *string* owner *string* description *string*

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Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

end-time

Synopsis	Enter the **end-time** context
Context	**configure** system cron schedule *string* owner *string* end-time
Tree	end-time
Introduced	16.0.R1
Platforms	All

date-and-time *string*

Synopsis	Date and time to stop triggering the schedule
Context	**configure** system cron schedule *string* owner *string* end-time date-and-time *string*
Tree	date-and-time
Notes	The following elements are part of a choice: **date-and-time** or (**day** and **time**).
Introduced	16.0.R1
Platforms	All

day *keyword*

Synopsis	Day to stop triggering the schedule
Context	**configure** system cron schedule *string* owner *string* end-time day *keyword*
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	The following elements are part of a choice: **date-and-time** or (**day** and **time**).
Introduced	16.0.R1
Platforms	All

time *string*

Synopsis	Time to stop triggering the schedule

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Context	**configure** system cron schedule *string* owner *string* end-time time *string*
Tree	time
String Length	5
Notes	The following elements are part of a choice: **date-and-time** or (**day** and **time**).
Introduced	16.0.R1
Platforms	All

hour *number*

Synopsis	Hours within a day when the schedule runs
Context	**configure** system cron schedule *string* owner *string* hour *number*
Tree	hour
Range	0 to 23
Max. Instances	24
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Time between each periodic schedule run
Context	**configure** system cron schedule *string* owner *string* interval *number*
Tree	interval
Range	30 to 42949672
Units	seconds
Introduced	16.0.R1
Platforms	All

minute *number*

Synopsis	Minutes in an hour when the schedule runs
Context	**configure** system cron schedule *string* owner *string* minute *number*
Tree	minute
Range	0 to 59

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Max. Instances	60
Introduced	16.0.R1
Platforms	All

month *(keyword | number)*

Synopsis	Months when the schedule runs
Context	**configure** system cron schedule *string* owner *string* month *(keyword | number)*
Tree	month
Range	1 to 12
Options	january, february, march, april, may, june, july, august, september, october, november, december
Max. Instances	12
Introduced	16.0.R1
Platforms	All

script-policy

Synopsis	Enter the **script-policy** context
Context	**configure** system cron schedule *string* owner *string* script-policy
Tree	script-policy
Introduced	16.0.R1
Platforms	All

name *string*

Synopsis	CLI script policy name
Context	**configure** system cron schedule *string* owner *string* script-policy name *string*
Tree	name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

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owner *string*

Synopsis	Script policy owner
Context	**configure** system cron schedule *string* owner *string* script-policy owner *string*
Tree	owner
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Schedule type
Context	**configure** system cron schedule *string* owner *string* type *keyword*
Tree	type
Options	periodic, calendar, oneshot
Default	periodic
Introduced	16.0.R1
Platforms	All

weekday *(keyword | number)*

Synopsis	Weekdays when the schedule runs
Context	**configure** system cron schedule *string* owner *string* weekday *(keyword | number)*
Tree	weekday
Range	1 to 7
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Max. Instances	7
Introduced	16.0.R1
Platforms	All

dhcp6

Synopsis	Enter the **dhcp6** context
Context	**configure** system dhcp6
Tree	dhcp6

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Introduced	16.0.R4
Platforms	All

adv-noaddrs-global *keyword*

Synopsis	Applications to send NoAddrsAvail in Advertise messages
Context	**configure** system dhcp6 adv-noaddrs-global *keyword*
Tree	adv-noaddrs-global
Options	esm-relay, server
Max. Instances	2
Introduced	16.0.R4
Platforms	All

dns

Synopsis	Enter the **dns** context
Context	**configure** system dns
Tree	dns
Introduced	16.0.R1
Platforms	All

address-pref *keyword*

Synopsis	Preference in DNS address resolving order
Context	**configure** system dns address-pref *keyword*
Tree	address-pref
Options	ipv4-only, ipv6-first
Introduced	16.0.R1
Platforms	All

dnssec

Synopsis	Enter the **dnssec** context
Context	**configure** system dns dnssec
Tree	dnssec

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Introduced	16.0.R1
Platforms	All

ad-validation *keyword*

Synopsis	Validation of AD-bit presence in DNS server responses
Context	**configure** system dns dnssec ad-validation *keyword*
Tree	ad-validation
Options	fall-through – Allow non-DNSSEC responses to fall-through to permit resolution in case of validation failure drop – Drop non-DNSSEC responses in case of validation failure
Introduced	16.0.R1
Platforms	All

efm-oam

Synopsis	Enter the **efm-oam** context
Context	**configure** system efm-oam
Tree	efm-oam
Introduced	16.0.R1
Platforms	All

dying-gasp-tx-on-reset *boolean*

Synopsis	Generate Information OAM PDU on soft reset notification
Context	**configure** system efm-oam dying-gasp-tx-on-reset *boolean*
Tree	dying-gasp-tx-on-reset
Default	false
Introduced	16.0.R1
Platforms	All

grace-tx *boolean*

Synopsis	Send Grace TLVs for soft reset graceful recovery events
Context	**configure** system efm-oam grace-tx *boolean*
Tree	grace-tx

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Description	When configured to **true**, the system sends the Nokia Vendor specific Grace TLV in the information PDU after an ISSU or a soft reset. The Grace TLV informs a remote peer to ignore the negotiated interval and multiplier and instead use the new timeout interval. By default, the command is disabled at the system level and enabled at the port level. Both the system and port level must be enabled to support grace on a specific port. When configured to **true**, the EFM-OAM protocol does not enter a non-operational state when both nodes acknowledge the grace function. This feature minimizes service interruption by giving the restarting router time to become operationally and administratively up within the grace period. The peer receiving the Grace TLV must be able to parse and process the vendor-specific messaging. Do not configure grace if the Nokia Vendor Specific Grace TLV is not supported on the remote peer. When configured to **false**, the Nokia Vendor Specific Grace TLV is not sent.
Default	false
Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the **eth-cfm** context
Context	**configure** system eth-cfm
Tree	eth-cfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace *boolean*

Synopsis	Allow system level capability of grace messaging
Context	**configure** system eth-cfm grace *boolean*
Tree	grace
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-auto-id

Synopsis	Enter the **md-auto-id** context
Context	**configure** system eth-cfm md-auto-id

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Tree	md-auto-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-index-range

Synopsis	Enable the **ma-index-range** context
Context	**configure** system eth-cfm md-auto-id ma-index-range
Tree	ma-index-range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

end *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the range
Context	**configure** system eth-cfm md-auto-id ma-index-range end *number*
Tree	end
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

start *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the range
Context	**configure** system eth-cfm md-auto-id ma-index-range start *number*
Tree	start
Range	1 to 4294967295

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-index-range

Synopsis	Enable the **md-index-range** context
Context	**configure** system eth-cfm md-auto-id md-index-range
Tree	md-index-range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

end *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the range
Context	**configure** system eth-cfm md-auto-id md-index-range end *number*
Tree	end
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

start *number*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the range
Context	**configure** system eth-cfm md-auto-id md-index-range start *number*
Tree	start
Range	1 to 4294967295

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

named-display *boolean*

Synopsis	Enable administrative name display in CLI show outputs
Context	**configure** system eth-cfm named-display *boolean*
Tree	named-display
Description	When configured to **true**, the system displays the administrative names for domains, associations, and bridge-identifiers in **show eth-cfm** command outputs in addition to the numerical maintenance domain (MD) index, maintenance association (MA) index, and bridge ID values. The administrative names are displayed underneath the numerical values, each on a separate row. When configured to **false**, the system only displays the numerical MD index, MA index, and bridge ID values in **show eth-cfm** command outputs.
Default	false
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

redundancy

Synopsis	Enter the **redundancy** context
Context	**configure** system eth-cfm redundancy
Tree	redundancy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mc-lag

Synopsis	Enter the **mc-lag** context
Context	**configure** system eth-cfm redundancy mc-lag
Tree	mc-lag
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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propagate-hold-time *(number | keyword)*

Synopsis	Delay timer value for the fault propagation
Context	**configure** system eth-cfm redundancy mc-lag propagate-hold-time *(number | keyword)*
Tree	propagate-hold-time
Range	1 to 60
Units	seconds
Options	none
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

standby-mep *boolean*

Synopsis	Allow standby MC-LAG MEPs to act administratively down
Context	**configure** system eth-cfm redundancy mc-lag standby-mep *boolean*
Tree	standby-mep
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sender-id

Synopsis	Enter the **sender-id** context
Context	**configure** system eth-cfm sender-id
Tree	sender-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

local-name *string*

Synopsis	Local name used in CFM PDUs
Context	**configure** system eth-cfm sender-id local-name *string*
Tree	local-name
String Length	1 to 45
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type *keyword*

Synopsis	ETH-CFM sender ID to be used in CFM PDUs
Context	**configure** system eth-cfm sender-id type *keyword*
Tree	type
Options	system, local
Default	system
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

slm

Synopsis	Enter the **slm** context
Context	**configure** system eth-cfm slm
Tree	slm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

inactivity-timer *number*

Synopsis	SLR inactivity timer to maintain the stale test data
Context	**configure** system eth-cfm slm inactivity-timer *number*
Tree	inactivity-timer
Range	10 to 100
Units	seconds
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fan-control

Synopsis	Enter the **fan-control** context
Context	**configure** system fan-control

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Tree	fan-control
Description	Commands in this context configure the speed of the router fans. **Caution**: Only use commands in this context with authorized direction from Nokia technical support.
Introduced	23.7.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

cooling-profile *keyword*

Synopsis	Cooling profile used to determine fan speeds
Context	**configure** system fan-control cooling-profile *keyword*
Tree	cooling-profile
Description	This command configures the cooling profile used to determine the fan speed. Nokia recommends that the default setting be used unless aggressive cooling is explicitly required.
Options	default, aggressive
Default	default
Introduced	23.7.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

grpc

Synopsis	Enter the **grpc** context
Context	**configure** system grpc
Tree	grpc
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the gRPC server
Context	**configure** system grpc admin-state *keyword*
Tree	admin-state
Options	enable, disable

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Default	disable
Introduced	16.0.R1
Platforms	All

allow-unsecure-connection

Synopsis	Allow connection without secured transport protocol
Context	**configure** system grpc allow-unsecure-connection
Tree	allow-unsecure-connection
Description	When configured, the system allows an unsecured connection to remote managers; TCP connections are not encrypted, including username and password information.
Notes	The following elements are part of a choice: **allow-unsecure-connection** or **tls-server-profile**.
Introduced	16.0.R1
Platforms	All

gnmi

Synopsis	Enter the **gnmi** context
Context	**configure** system grpc gnmi
Tree	gnmi
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the gNMI service
Context	**configure** system grpc gnmi admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

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auto-config-save *boolean*

Synopsis	Automatically save configuration as part of commit
Context	**configure** system grpc gnmi auto-config-save *boolean*
Tree	auto-config-save
Description	When configured to **true**, the system automatically writes the running configuration to the save configuration file as part of a successful commit operation.
Default	true
Introduced	16.0.R1
Platforms	All

proto-version *keyword*

Synopsis	gnmi.proto version
Context	**configure** system grpc gnmi proto-version *keyword*
Tree	proto-version
Description	This command sets the gnmi.proto version that the GRPC server should use for all gNMI RPCs. Only use options other than **latest** for backward compatibility with legacy collectors.
Options	latest – Latest supported version v070 – gNMI version 0.7.0
Default	latest
Introduced	23.3.R1
Platforms	All

gnoi

Synopsis	Enter the **gnoi** context
Context	**configure** system grpc gnoi
Tree	gnoi
Introduced	19.10.R1
Platforms	All

cert-mgmt

Synopsis	Enter the **cert-mgmt** context
Context	**configure** system grpc gnoi cert-mgmt

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Tree	cert-mgmt
Introduced	19.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of gNOI CertificateManagement
Context	**configure** system grpc gnoi cert-mgmt admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	19.10.R1
Platforms	All

file

Synopsis	Enter the **file** context
Context	**configure** system grpc gnoi file
Tree	file
Introduced	21.2.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the gNOI File service
Context	**configure** system grpc gnoi file admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.2.R1
Platforms	All

system

Synopsis	Enter the **system** context

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Context	**configure** system grpc gnoi system
Tree	system
Introduced	20.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the gNOI System service
Context	**configure** system grpc gnoi system admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.5.R1
Platforms	All

listening-port *number*

Synopsis	Listening port for the gRPC server
Context	**configure** system grpc listening-port *number*
Tree	listening-port
Range	1024 to 49151 | 57400
Default	57400
Introduced	23.7.R1
Platforms	All

max-msg-size *number*

Synopsis	Maximum size of received message
Context	**configure** system grpc max-msg-size *number*
Tree	max-msg-size
Range	1 to 1024
Units	megabytes
Default	512
Introduced	16.0.R1
Platforms	All

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md-cli

Synopsis	Enter the **md-cli** context
Context	**configure** system grpc md-cli
Tree	md-cli
Introduced	20.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the MD-CLI service
Context	**configure** system grpc md-cli admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.5.R1
Platforms	All

rib-api

Synopsis	Enter the **rib-api** context
Context	**configure** system grpc rib-api
Tree	rib-api
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the RIB API service
Context	**configure** system grpc rib-api admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

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purge-timeout *number*

Synopsis	Time until stale entries are purged
Context	**configure** system grpc rib-api purge-timeout *number*
Tree	purge-timeout
Range	1 to 100000
Units	seconds
Introduced	16.0.R4
Platforms	All

tcp-keepalive

Synopsis	Enter the **tcp-keepalive** context
Context	**configure** system grpc tcp-keepalive
Tree	tcp-keepalive
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the TCP keepalive algorithm
Context	**configure** system grpc tcp-keepalive admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

idle-time *number*

Synopsis	Time until the first TCP keepalive probe is sent
Context	**configure** system grpc tcp-keepalive idle-time *number*
Tree	idle-time
Description	This command configures the amount of time the connection must be idle before TCP keepalives are sent.

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Range	1 to 100000
Units	seconds
Default	600
Introduced	16.0.R4
Platforms	All

interval *number*

Synopsis	Time between TCP keep-alive probes
Context	**configure** system grpc tcp-keepalive interval *number*
Tree	interval
Range	1 to 100000
Units	seconds
Default	15
Introduced	16.0.R4
Platforms	All

retries *number*

Synopsis	Number of probe retries before closing the connection
Context	**configure** system grpc tcp-keepalive retries *number*
Tree	retries
Description	This command configures the number of missed TCP keepalive probes before closing the TCP connection and attempting to reach the other destinations within the same destination group.
Range	3 to 100
Default	4
Introduced	16.0.R4
Platforms	All

tls-server-profile *reference*

Synopsis	Preferred TLS server profile
Context	**configure** system grpc tls-server-profile *reference*
Tree	tls-server-profile

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Reference	**configure** system security tls server-tls-profile *string*
Notes	The following elements are part of a choice: **allow-unsecure-connection** or **tls-server-profile**.
Introduced	16.0.R1
Platforms	All

grpc-tunnel

Synopsis	Enter the **grpc-tunnel** context
Context	**configure** system grpc-tunnel
Tree	grpc-tunnel
Introduced	22.2.R1
Platforms	All

destination-group [name] *string*

Synopsis	Enter the **destination-group** list instance
Context	**configure** system grpc-tunnel destination-group *string*
Tree	destination-group
Description	Commands in this context configure parameters for destination groups.
Max. Instances	4
Introduced	22.2.R1
Platforms	All

[name] *string*

Synopsis	Destination group name
Context	**configure** system grpc-tunnel destination-group *string*
Tree	destination-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

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allow-unsecure-connection

Synopsis	Allow unsecured operation of gRPC connections
Context	**configure** system grpc-tunnel destination-group *string* allow-unsecure-connection
Tree	allow-unsecure-connection
Description	This command allows a gRPC tunnel to run without a secured transport protocol. Data is transferred in unencrypted form.
Notes	The following elements are part of a choice: **allow-unsecure-connection** or **tls-client-profile**.
Introduced	22.2.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** system grpc-tunnel destination-group *string* description *string*
Tree	description
String Length	1 to 80
Introduced	22.2.R1
Platforms	All

destination [address] *(ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name)* port *number*

Synopsis	Enter the **destination** list instance
Context	**configure** system grpc-tunnel destination-group *string* destination *(ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name)* port *number*
Tree	destination
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	22.2.R1
Platforms	All

[**address**] *(ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name)*

Synopsis	Address of the destination within the destination group

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Context	**configure** system grpc-tunnel destination-group *string* destination *(ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name)* port *number*
Tree	destination
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

port *number*

Synopsis	TCP port number for the destination
Context	**configure** system grpc-tunnel destination-group *string* destination *(ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name)* port *number*
Tree	destination
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

local-source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Local IP address of packets sent from the source
Context	**configure** system grpc-tunnel destination-group *string* destination *(ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name)* port *number* local-source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	local-source-address
Introduced	22.2.R1
Platforms	All

originated-qos-marking *keyword*

Synopsis	QoS marking used for gRPC tunnel packets
Context	**configure** system grpc-tunnel destination-group *string* destination *(ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name)* port *number* originated-qos-marking *keyword*
Tree	originated-qos-marking

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Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	22.2.R1
Platforms	All

router-instance *string*

Synopsis	Router instance for the destination group
Context	**configure** system grpc-tunnel destination-group *string* destination *(ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name)* port *number* router-instance *string*
Tree	router-instance
Introduced	22.2.R1
Platforms	All

tcp-keepalive

Synopsis	Enter the **tcp-keepalive** context
Context	**configure** system grpc-tunnel destination-group *string* tcp-keepalive
Tree	tcp-keepalive
Introduced	22.2.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the TCP keepalive algorithm
Context	**configure** system grpc-tunnel destination-group *string* tcp-keepalive admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	22.2.R1
Platforms	All

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idle-time *number*

Synopsis	Time until the first TCP keepalive probe is sent
Context	**configure** system grpc-tunnel destination-group *string* tcp-keepalive idle-time *number*
Tree	idle-time
Description	This command configures the amount of time the connection must be idle before TCP keepalives are sent.
Range	1 to 100000
Units	seconds
Default	600
Introduced	22.2.R1
Platforms	All

interval *number*

Synopsis	Time between TCP keep-alive probes
Context	**configure** system grpc-tunnel destination-group *string* tcp-keepalive interval *number*
Tree	interval
Range	1 to 100000
Units	seconds
Default	15
Introduced	22.2.R1
Platforms	All

retries *number*

Synopsis	Number of probe retries before closing the connection
Context	**configure** system grpc-tunnel destination-group *string* tcp-keepalive retries *number*
Tree	retries
Description	This command configures the number of missed TCP keepalive probes before closing the TCP connection and attempting to reach the other destinations within the same destination group.
Range	3 to 100
Default	4
Introduced	22.2.R1
Platforms	All

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tls-client-profile *reference*

Synopsis	TLS client profile assigned to the destination group
Context	**configure** system grpc-tunnel destination-group *string* tls-client-profile *reference*
Tree	tls-client-profile
Reference	**configure** system security tls client-tls-profile *string*
Notes	The following elements are part of a choice: **allow-unsecure-connection** or **tls-client-profile**.
Introduced	22.2.R1
Platforms	All

tunnel [name] *string*

Synopsis	Enter the **tunnel** list instance
Context	**configure** system grpc-tunnel tunnel *string*
Tree	tunnel
Description	Commands in this context configure gRPC-tunnel-related parameters.
Max. Instances	4
Introduced	22.2.R1
Platforms	All

[**name**] *string*

Synopsis	Tunnel name
Context	**configure** system grpc-tunnel tunnel *string*
Tree	tunnel
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the tunnel

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Context	**configure** system grpc-tunnel tunnel *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	22.2.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** system grpc-tunnel tunnel *string* description *string*
Tree	description
String Length	1 to 80
Introduced	22.2.R1
Platforms	All

destination-group *reference*

Synopsis	Destination group used in the tunnel
Context	**configure** system grpc-tunnel tunnel *string* destination-group *reference*
Tree	destination-group
Reference	**configure** system grpc-tunnel destination-group *string*
Introduced	22.2.R1
Platforms	All

handler [name] *string*

Synopsis	Enter the **handler** list instance
Context	**configure** system grpc-tunnel tunnel *string* handler *string*
Tree	handler
Description	Commands in this context configure handler parameters for this instance. Multiple handlers can be created for any tunnel.
Max. Instances	8
Introduced	22.2.R1

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Platforms	All

[**name**] *string*

Synopsis	Handler name
Context	**configure** system grpc-tunnel tunnel *string* handler *string*
Tree	handler
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the handler
Context	**configure** system grpc-tunnel tunnel *string* handler *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	22.2.R1
Platforms	All

port *number*

Synopsis	TCP port number the handler listens to internally
Context	**configure** system grpc-tunnel tunnel *string* handler *string* port *number*
Tree	port
Range	1 to 65535
Introduced	22.2.R1
Platforms	All

target-type

Synopsis	Enter the **target-type** context
Context	**configure** system grpc-tunnel tunnel *string* handler *string* target-type

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Tree	target-type
Introduced	22.2.R1
Platforms	All

custom-type *string*

Synopsis	Custom string for target type
Context	**configure** system grpc-tunnel tunnel *string* handler *string* target-type custom-type *string*
Tree	custom-type
Description	This command configures a custom string for the target type. This string can correspond to specific values used by the gRPC tunnel protocol, such as GNMI_GNOI or SSH. If a custom string is defined, the gRPC tunnel client must specify the string to request a session for that handler. The string must be unique within a tunnel.
String Length	1 to 64
Notes	The following elements are part of a choice: **custom-type**, **grpc-server**, or **ssh-server**.
Introduced	22.2.R1
Platforms	All

grpc-server

Synopsis	Target type set to GNMI_GNOI
Context	**configure** system grpc-tunnel tunnel *string* handler *string* target-type grpc-server
Tree	grpc-server
Description	When configured, this command assigns the gRPC server as a handler for all tunnels sessions. At the gRPC tunnel protocol level, this corresponds to a value of GNMI_GNOI.
Notes	The following elements are part of a choice: **custom-type**, **grpc-server**, or **ssh-server**.
Introduced	22.2.R1
Platforms	All

ssh-server

Synopsis	Target type is SSH
Context	**configure** system grpc-tunnel tunnel *string* handler *string* target-type ssh-server
Tree	ssh-server
Description	When configured, this command assigns the SSH server as a handler for all tunnels sessions. At the gRPC tunnel protocol level, this corresponds to a value of SSH.

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Notes	The following elements are part of a choice: **custom-type**, **grpc-server**, or **ssh-server**.
Introduced	22.2.R1
Platforms	All

target-name

Synopsis	Enter the **target-name** context
Context	**configure** system grpc-tunnel tunnel *string* target-name
Tree	target-name
Introduced	22.2.R1
Platforms	All

custom-string *string*

Synopsis	Custom target name
Context	**configure** system grpc-tunnel tunnel *string* target-name custom-string *string*
Tree	custom-string
String Length	1 to 64
Notes	The following elements are part of a choice: **custom-string**, **node-name**, or **user-agent**.
Introduced	22.2.R1
Platforms	All

node-name

Synopsis	Set the node name as target name
Context	**configure** system grpc-tunnel tunnel *string* target-name node-name
Tree	node-name
Description	When configured, this command uses the node name as the target name. The node name is configured by the **configure system name** command.
Notes	The following elements are part of a choice: **custom-string**, **node-name**, or **user-agent**.
Introduced	22.2.R1
Platforms	All

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user-agent

Synopsis	Set the user agent as the target name
Context	**configure** system grpc-tunnel tunnel *string* target-name user-agent
Tree	user-agent
Description	When configured, this command uses the user agent as the target name. The agent is a string consisting of *node-name*:*vendor*:*model*:*software-version*.
Notes	The following elements are part of a choice: **custom-string**, **node-name**, or **user-agent**.
Introduced	22.2.R1
Platforms	All

icmp-vse *boolean*

Synopsis	Enable vendor-specific extensions to ICMP
Context	**configure** system icmp-vse *boolean*
Tree	icmp-vse
Default	false
Introduced	16.0.R1
Platforms	All

ip

Synopsis	Enter the **ip** context
Context	**configure** system ip
Tree	ip
Introduced	16.0.R1
Platforms	All

allow-qinq-network-interface *boolean*

Synopsis	Allow QinQ encapsulation for network interfaces
Context	**configure** system ip allow-qinq-network-interface *boolean*
Tree	allow-qinq-network-interface
Default	false
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

enforce-unique-if-index *boolean*

Synopsis	Force creation of globally unique IP interface indexes
Context	**configure** system ip enforce-unique-if-index *boolean*
Tree	enforce-unique-if-index
Default	false
Introduced	16.0.R1
Platforms	All

forward-6in4 *boolean*

Synopsis	Allow forwarding of IPv6 over IPv4 to system IP address
Context	**configure** system ip forward-6in4 *boolean*
Tree	forward-6in4
Default	false
Introduced	19.10.R1
Platforms	All

forward-ip-over-gre *boolean*

Synopsis	Allow forwarding of IP over GRE to system IP address
Context	**configure** system ip forward-ip-over-gre *boolean*
Tree	forward-ip-over-gre
Default	false
Introduced	19.10.R1
Platforms	All

ipv6-eh *keyword*

Synopsis	Number of IPv6 extension headers parsed in line cards
Context	**configure** system ip ipv6-eh *keyword*
Tree	ipv6-eh
Options	max, limited

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Default	max
Introduced	20.5.R1
Platforms	All

mpls

Synopsis	Enter the **mpls** context
Context	**configure** system ip mpls
Tree	mpls
Introduced	19.10.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

label-stack-statistics-count *number*

Synopsis	Collect traffic statistics on labels of the MPLS stack
Context	**configure** system ip mpls label-stack-statistics-count *number*
Tree	label-stack-statistics-count
Range	1 to 2
Default	1
Introduced	19.10.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

l2tp

Synopsis	Enter the **l2tp** context
Context	**configure** system l2tp
Tree	l2tp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

non-multi-chassis-tunnel-id-range

Synopsis	Enter the **non-multi-chassis-tunnel-id-range** context
Context	**configure** system l2tp non-multi-chassis-tunnel-id-range
Tree	non-multi-chassis-tunnel-id-range

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the range
Context	**configure** system l2tp non-multi-chassis-tunnel-id-range end *number*
Tree	end
Range	0 to 16383
Default	16383
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of the range
Context	**configure** system l2tp non-multi-chassis-tunnel-id-range start *number*
Tree	start
Range	0 to 16383
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lacp

Synopsis	Enter the **lacp** context
Context	**configure** system lacp
Tree	lacp
Introduced	16.0.R1
Platforms	All

system-priority *number*

Synopsis	LACP system priority on aggregated Ethernet interfaces
Context	**configure** system lacp system-priority *number*

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Tree	system-priority
Range	1 to 65535
Default	32768
Introduced	16.0.R1
Platforms	All

lldp

Synopsis	Enter the **lldp** context
Context	**configure** system lldp
Tree	lldp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of LLDP
Context	**configure** system lldp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

message-fast-tx *number*

Synopsis	Interval at which LLDP frames are transmitted
Context	**configure** system lldp message-fast-tx *number*
Tree	message-fast-tx
Description	This command configures the interval at which LLDP frames are transmitted on behalf of the LLDP during a fast transmission period.
Range	1 to 3600
Units	seconds
Default	1
Introduced	16.0.R1

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Platforms	All

message-fast-tx-init *number*

Synopsis	PDUs to transmit during the fast transmission period
Context	**configure** system lldp message-fast-tx-init *number*
Tree	message-fast-tx-init
Range	1 to 8
Default	4
Introduced	16.0.R1
Platforms	All

notification-interval *number*

Synopsis	Minimum interval between change notifications
Context	**configure** system lldp notification-interval *number*
Tree	notification-interval
Range	5 to 3600
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

reinit-delay *number*

Synopsis	Time required before re-initializing LLDP on a port
Context	**configure** system lldp reinit-delay *number*
Tree	reinit-delay
Range	1 to 10
Units	seconds
Default	2
Introduced	16.0.R1
Platforms	All

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tx-credit-max *number*

Synopsis	Maximum consecutive LLDPDUs that can be transmitted
Context	**configure** system lldp tx-credit-max *number*
Tree	tx-credit-max
Range	1 to 100
Default	5
Introduced	16.0.R1
Platforms	All

tx-hold-multiplier *number*

Synopsis	Transmit interval multiplier
Context	**configure** system lldp tx-hold-multiplier *number*
Tree	tx-hold-multiplier
Range	2 to 10
Default	4
Introduced	16.0.R1
Platforms	All

tx-interval *number*

Synopsis	LLDP transmit interval
Context	**configure** system lldp tx-interval *number*
Tree	tx-interval
Range	5 to 32768
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

load-balancing

Synopsis	Enter the **load-balancing** context
Context	**configure** system load-balancing
Tree	load-balancing

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Introduced	16.0.R1
Platforms	All

l2tp-load-balancing *boolean*

Synopsis	Include L2TP header information for load balancing
Context	**configure** system load-balancing l2tp-load-balancing *boolean*
Tree	l2tp-load-balancing
Default	false
Introduced	16.0.R4
Platforms	All

l4-load-balancing *boolean*

Synopsis	Use load balancing based on Layer 4 fields
Context	**configure** system load-balancing l4-load-balancing *boolean*
Tree	l4-load-balancing
Introduced	16.0.R1
Platforms	All

lsr-load-balancing *keyword*

Synopsis	Algorithm for system-wide LSR load balancing
Context	**configure** system load-balancing lsr-load-balancing *keyword*
Tree	lsr-load-balancing
Options	lbl-only, lbl-ip, ip-only, eth-encap-ip, lbl-ip-l4-teid, lbl-eth-ip-l4-teid, lbl-ip-or-teid
Introduced	16.0.R1
Platforms	All

mc-enh-load-balancing *boolean*

Synopsis	Enable enhanced egress multicast load balancing
Context	**configure** system load-balancing mc-enh-load-balancing *boolean*
Tree	mc-enh-load-balancing
Default	false

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Introduced	16.0.R1
Platforms	All

service-id-lag-hashing *boolean*

Synopsis	Enable enhanced VLL LAG service ID hashing
Context	**configure** system load-balancing service-id-lag-hashing *boolean*
Tree	service-id-lag-hashing
Default	false
Introduced	16.0.R1
Platforms	All

system-ip-load-balancing *boolean*

Synopsis	Use system IP address for ECMP and LAG load balancing
Context	**configure** system load-balancing system-ip-load-balancing *boolean*
Tree	system-ip-load-balancing
Introduced	16.0.R1
Platforms	All

location *string*

Synopsis	Site location of the system
Context	**configure** system location *string*
Tree	location
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

login-control

Synopsis	Enter the **login-control** context
Context	**configure** system login-control
Tree	login-control
Introduced	16.0.R1

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Platforms	All

exponential-backoff *boolean*

Synopsis	Enable exponential-backoff of the login prompt
Context	**configure** system login-control exponential-backoff *boolean*
Tree	exponential-backoff
Default	false
Introduced	16.0.R1
Platforms	All

ftp

Synopsis	Enter the **ftp** context
Context	**configure** system login-control ftp
Tree	ftp
Introduced	16.0.R1
Platforms	All

inbound-max-sessions *number*

Synopsis	Maximum number of concurrent inbound FTP sessions
Context	**configure** system login-control ftp inbound-max-sessions *number*
Tree	inbound-max-sessions
Range	0 to 5
Default	3
Introduced	16.0.R1
Platforms	All

idle-timeout *(keyword | number)*

Synopsis	Idle timeout for FTP, console, or Telnet sessions
Context	**configure** system login-control idle-timeout *(keyword | number)*
Tree	idle-timeout
Range	1 to 1440

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Units	minutes
Options	none
Default	30
Introduced	16.0.R1
Platforms	All

login-banner *boolean*

Synopsis	Display login banner
Context	**configure** system login-control login-banner *boolean*
Tree	login-banner
Default	false
Introduced	16.0.R1
Platforms	All

login-scripts

Synopsis	Enter the **login-scripts** context
Context	**configure** system login-control login-scripts
Tree	login-scripts
Introduced	16.0.R1
Platforms	All

global-script *string*

Synopsis	URL of the global CLI login script
Context	**configure** system login-control login-scripts global-script *string*
Tree	global-script
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

per-user-script

Synopsis	Enter the **per-user-script** context

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Context	**configure** system login-control login-scripts per-user-script
Tree	per-user-script
Introduced	16.0.R1
Platforms	All

file-name *string*

Synopsis	File name of the per-user login script
Context	**configure** system login-control login-scripts per-user-script file-name *string*
Tree	file-name
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

user-directory *string*

Synopsis	Directory name of user-defined login script
Context	**configure** system login-control login-scripts per-user-script user-directory *string*
Tree	user-directory
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

motd

Synopsis	Enter the **motd** context
Context	**configure** system login-control motd
Tree	motd
Introduced	16.0.R1
Platforms	All

text *string*

Synopsis	Message of the day displayed after console login
Context	**configure** system login-control motd text *string*

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Tree	text
String Length	1 to 900
Notes	The following elements are part of a choice: **text** or **url**.
Introduced	16.0.R1
Platforms	All

url *string*

Synopsis	URL of the location of message of the day
Context	**configure** system login-control motd url *string*
Tree	url
String Length	1 to 180
Notes	The following elements are part of a choice: **text** or **url**.
Introduced	16.0.R1
Platforms	All

pre-login-message

Synopsis	Enter the **pre-login-message** context
Context	**configure** system login-control pre-login-message
Tree	pre-login-message
Introduced	16.0.R1
Platforms	All

message *string*

Synopsis	Message displayed prior to the login prompt
Context	**configure** system login-control pre-login-message message *string*
Tree	message
String Length	1 to 900
Introduced	16.0.R1
Platforms	All

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name *boolean*

Synopsis	Display the system name before the pre-login message
Context	**configure** system login-control pre-login-message name *boolean*
Tree	name
Default	false
Introduced	16.0.R1
Platforms	All

ssh

Synopsis	Enter the **ssh** context
Context	**configure** system login-control ssh
Tree	ssh
Introduced	16.0.R1
Platforms	All

graceful-shutdown *boolean*

Synopsis	Allow graceful shutdown of SSH sessions
Context	**configure** system login-control ssh graceful-shutdown *boolean*
Tree	graceful-shutdown
Default	true
Introduced	16.0.R1
Platforms	All

inbound-max-sessions *number*

Synopsis	Maximum number of concurrent inbound sessions
Context	**configure** system login-control ssh inbound-max-sessions *number*
Tree	inbound-max-sessions
Range	0 to 50
Default	5
Introduced	16.0.R1
Platforms	All

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outbound-max-sessions *number*

Synopsis	Maximum number of concurrent outbound sessions
Context	**configure** system login-control ssh outbound-max-sessions *number*
Tree	outbound-max-sessions
Range	0 to 15
Default	5
Introduced	16.0.R1
Platforms	All

ttl-security *number*

Synopsis	Minimum TTL value for incoming packets
Context	**configure** system login-control ssh ttl-security *number*
Tree	ttl-security
Range	1 to 255
Introduced	16.0.R1
Platforms	All

telnet

Synopsis	Enter the **telnet** context
Context	**configure** system login-control telnet
Tree	telnet
Introduced	16.0.R1
Platforms	All

graceful-shutdown *boolean*

Synopsis	Allow graceful shutdown of Telnet sessions
Context	**configure** system login-control telnet graceful-shutdown *boolean*
Tree	graceful-shutdown
Default	false
Introduced	16.0.R1
Platforms	All

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inbound-max-sessions *number*

Synopsis	Maximum number of concurrent inbound sessions
Context	**configure** system login-control telnet inbound-max-sessions *number*
Tree	inbound-max-sessions
Range	0 to 50
Default	5
Introduced	16.0.R1
Platforms	All

outbound-max-sessions *number*

Synopsis	Maximum number of concurrent outbound sessions
Context	**configure** system login-control telnet outbound-max-sessions *number*
Tree	outbound-max-sessions
Range	0 to 15
Default	5
Introduced	16.0.R1
Platforms	All

ttl-security *number*

Synopsis	Minimum TTL value for incoming packets
Context	**configure** system login-control telnet ttl-security *number*
Tree	ttl-security
Range	1 to 255
Introduced	16.0.R1
Platforms	All

management-interface

Synopsis	Enter the **management-interface** context
Context	**configure** system management-interface
Tree	management-interface
Introduced	16.0.R1

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Platforms	All

cli

Synopsis	Enter the **cli** context
Context	**configure** system management-interface cli
Tree	cli
Description	Commands in this context configure the CLI management interfaces.
Introduced	16.0.R1
Platforms	All

classic-cli

Synopsis	Enter the **classic-cli** context
Context	**configure** system management-interface cli classic-cli
Tree	classic-cli
Description	Commands in this context configure the classic CLI management interface.
Introduced	16.0.R1
Platforms	All

allow-immediate *boolean*

Synopsis	Allow writable access in classic CLI configure branch
Context	**configure** system management-interface cli classic-cli allow-immediate *boolean*
Tree	allow-immediate
Description	When configured to **true**, this command enables write access in the classic CLI configuration branch without having to use the classic CLI **candidate edit** functionality. When configured to **false**, this command blocks write access and configuration changes in the classic CLI configuration branch, and the classic CLI configuration branch is read-only. This enforces using the classic CLI **candidate edit** functionality, including **candidate commit**, to modify the router configuration, instead of allowing immediate line-by-line configuration changes.
Default	true
Introduced	16.0.R1
Platforms	All

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rollback

Synopsis	Enter the **rollback** context
Context	**configure** system management-interface cli classic-cli rollback
Tree	rollback
Description	Commands in this context control classic CLI configuration rollback functionality, such as the maximum number of rollback checkpoints the system maintains. Configuration rollback allows the operator to revert to previous router configuration states while minimizing impacts to services.
Introduced	16.0.R1
Platforms	All

local-checkpoints *number*

Synopsis	Maximum number of rollback files on local storage
Context	**configure** system management-interface cli classic-cli rollback local-checkpoints *number*
Tree	local-checkpoints
Range	1 to 50
Default	10
Introduced	16.0.R1
Platforms	All

location *string*

Synopsis	Path and filename prefix for rollback checkpoint files
Context	**configure** system management-interface cli classic-cli rollback location *string*
Tree	location
Description	This command configures the local (for example, compact flash) or remote location and name of the classic CLI rollback checkpoint files. The filename must not contain a suffix. The suffixes for rollback checkpoint files are, for example, .rb, .rb.1, .rb.2, and so on. The suffixes are automatically appended to rollback checkpoint files.
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

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remote-checkpoints *number*

Synopsis	Maximum rollback files saved at a remote location
Context	**configure** system management-interface cli classic-cli rollback remote-checkpoints *number*
Tree	remote-checkpoints
Range	1 to 200
Default	10
Introduced	16.0.R1
Platforms	All

rescue

Synopsis	Enter the **rescue** context
Context	**configure** system management-interface cli classic-cli rollback rescue
Tree	rescue
Introduced	16.0.R1
Platforms	All

location *string*

Synopsis	Location of the rescue configuration file
Context	**configure** system management-interface cli classic-cli rollback rescue location *string*
Tree	location
Description	This command configures the local or remote location and filename of the classic CLI rescue configuration file. The suffix (.rc) is automatically appended to the filename when a rescue configuration file is saved. Trivial FTP (TFTP) is not supported for remote locations.
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

cli-engine *keyword*

Synopsis	System-wide CLI engine access
Context	**configure** system management-interface cli cli-engine *keyword*
Tree	cli-engine

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Description	This command configures the system-wide CLI engine. The operator can configure one or both engines. For the configuration to take effect, exit the running CLI session and start a new session after committing the new value.
Options	classic-cli, md-cli
Default	md-cli
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

md-cli

Synopsis	Enter the **md-cli** context
Context	**configure** system management-interface cli md-cli
Tree	md-cli
Description	Commands in this context configure the MD-CLI management interface.
Introduced	16.0.R1
Platforms	All

auto-config-save *boolean*

Synopsis	Automatically save configuration as part of commit
Context	**configure** system management-interface cli md-cli auto-config-save *boolean*
Tree	auto-config-save
Description	When configured to **true**, the system automatically writes the running configuration to the save configuration file as part of a successful commit operation.
Default	true
Introduced	16.0.R1
Platforms	All

environment

Synopsis	Enter the **environment** context
Context	**configure** system management-interface cli md-cli environment
Tree	environment

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Introduced	16.0.R1
Platforms	All

command-alias

Synopsis	Enter the **command-alias** context
Context	**configure** system management-interface cli md-cli environment command-alias
Tree	command-alias
Introduced	21.7.R1
Platforms	All

alias [alias-name] *string*

Synopsis	Enter the **alias** list instance
Context	**configure** system management-interface cli md-cli environment command-alias alias *string*
Tree	alias
Description	Commands in this context create aliases to existing MD-CLI commands or to Python applications. Aliases may be mounted for use globally or for selected context paths. Arguments and output modifiers may be provided to aliases at configuration or run time.
Introduced	21.7.R1
Platforms	All

[**alias-name**] *string*

Synopsis	Alias name
Context	**configure** system management-interface cli md-cli environment command-alias alias *string*
Tree	alias
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of the alias
Context	**configure** system management-interface cli md-cli environment command-alias alias *string* admin-state *keyword*
Tree	admin-state
Description	This command controls the administrative state of the MD-CLI alias. MD-CLI aliases that are administratively disabled cannot be executed, are not displayed in command completion, and do not appear in **?** help.
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	All

cli-command *string*

Synopsis	CLI command to run when executing the alias
Context	**configure** system management-interface cli md-cli environment command-alias alias *string* cli-command *string*
Tree	cli-command
String Length	1 to 255
Notes	The following elements are part of a mandatory choice: **cli-command** or **python-script**.
Introduced	21.7.R1
Platforms	All

description *string*

Synopsis	Alias description
Context	**configure** system management-interface cli md-cli environment command-alias alias *string* description *string*
Tree	description
String Length	1 to 110
Introduced	21.7.R1
Platforms	All

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mount-point [path] *(keyword | string)*

Synopsis	Add a list entry for **mount-point**
Context	**configure** system management-interface cli md-cli environment command-alias alias *string* mount-point *(keyword | string)*
Tree	mount-point
Min. Instances	1
Introduced	21.7.R1
Platforms	All

[**path**] *(keyword | string)*

Synopsis	Mount point where the alias is available
Context	**configure** system management-interface cli md-cli environment command-alias alias *string* mount-point *(keyword | string)*
Tree	mount-point
String Length	1 to 255
Options	global
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	All

python-script *reference*

Synopsis	Python script to run when executing the alias
Context	**configure** system management-interface cli md-cli environment command-alias alias *string* python-script *reference*
Tree	python-script
Reference	**configure** python python-script *string*
Notes	The following elements are part of a mandatory choice: **cli-command** or **python-script**.
Introduced	21.7.R1
Platforms	All

command-completion

Synopsis	Enter the **command-completion** context

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Context	**configure** system management-interface cli md-cli environment command-completion
Tree	command-completion
Introduced	16.0.R1
Platforms	All

enter *boolean*

Synopsis	Complete the command when the Enter key is pressed
Context	**configure** system management-interface cli md-cli environment command-completion enter *boolean*
Tree	enter
Default	true
Introduced	16.0.R1
Platforms	All

space *boolean*

Synopsis	Complete the command when the Space key is pressed
Context	**configure** system management-interface cli md-cli environment command-completion space *boolean*
Tree	space
Default	true
Introduced	16.0.R1
Platforms	All

tab *boolean*

Synopsis	Complete the command when the Tab key is pressed
Context	**configure** system management-interface cli md-cli environment command-completion tab *boolean*
Tree	tab
Default	true
Introduced	16.0.R1
Platforms	All

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console

Synopsis	Enter the **console** context
Context	**configure** system management-interface cli md-cli environment console
Tree	console
Introduced	16.0.R1
Platforms	All

length *number*

Synopsis	Number of lines displayed on the console
Context	**configure** system management-interface cli md-cli environment console length *number*
Tree	length
Range	24 to 512
Default	24
Introduced	16.0.R1
Platforms	All

width *number*

Synopsis	Number of columns displayed on the console
Context	**configure** system management-interface cli md-cli environment console width *number*
Tree	width
Range	80 to 512
Default	80
Introduced	16.0.R1
Platforms	All

info-output

Synopsis	Enter the **info-output** context
Context	**configure** system management-interface cli md-cli environment info-output
Tree	info-output
Introduced	22.2.R1
Platforms	All

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always-display

Synopsis	Enter the **always-display** context
Context	**configure** system management-interface cli md-cli environment info-output always-display
Tree	always-display
Description	Commands in this context specify elements that are always displayed in the **info** output, regardless of whether the **detail** option is used.
Introduced	22.2.R1
Platforms	All

admin-state *boolean*

Synopsis	Always display admin-state elements
Context	**configure** system management-interface cli md-cli environment info-output always-display admin-state *boolean*
Tree	admin-state
Description	When configured to **true**, the values of the **admin-state** elements in **info** output (without the **detail** option) are always displayed, even if they are the default values.
Default	false
Introduced	22.2.R1
Platforms	All

message-severity-level

Synopsis	Enter the **message-severity-level** context
Context	**configure** system management-interface cli md-cli environment message-severity-level
Tree	message-severity-level
Introduced	16.0.R1
Platforms	All

cli *keyword*

Synopsis	Message severity threshold for CLI messages
Context	**configure** system management-interface cli md-cli environment message-severity-level cli *keyword*

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Tree	cli
Options	warning, info
Default	info
Introduced	16.0.R1
Platforms	All

more *boolean*

Synopsis	Activate the pager when output is longer than a screen
Context	**configure** system management-interface cli md-cli environment more *boolean*
Tree	more
Default	true
Introduced	16.0.R1
Platforms	All

progress-indicator

Synopsis	Enter the **progress-indicator** context
Context	**configure** system management-interface cli md-cli environment progress-indicator
Tree	progress-indicator
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the progress indicator
Context	**configure** system management-interface cli md-cli environment progress-indicator admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

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delay *number*

Synopsis	Delay before the progress indicator is displayed
Context	**configure** system management-interface cli md-cli environment progress-indicator delay *number*
Tree	delay
Range	0 to 10000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Progress indicator output style
Context	**configure** system management-interface cli md-cli environment progress-indicator type *keyword*
Tree	type
Options	dots
Default	dots
Introduced	16.0.R1
Platforms	All

prompt

Synopsis	Enter the **prompt** context
Context	**configure** system management-interface cli md-cli environment prompt
Tree	prompt
Introduced	16.0.R1
Platforms	All

context *boolean*

Synopsis	Show the current command context in the prompt
Context	**configure** system management-interface cli md-cli environment prompt context *boolean*
Tree	context

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Default	true
Introduced	16.0.R1
Platforms	All

newline *boolean*

Synopsis	Add a new line before every prompt line
Context	**configure** system management-interface cli md-cli environment prompt newline *boolean*
Tree	newline
Default	true
Introduced	16.0.R1
Platforms	All

timestamp *boolean*

Synopsis	Show the timestamp before the first prompt line
Context	**configure** system management-interface cli md-cli environment prompt timestamp *boolean*
Tree	timestamp
Default	false
Introduced	16.0.R1
Platforms	All

uncommitted-changes-indicator *boolean*

Synopsis	Show an asterisk (*) when uncommitted changes exist
Context	**configure** system management-interface cli md-cli environment prompt uncommitted-changes-indicator *boolean*
Tree	uncommitted-changes-indicator
Default	true
Introduced	16.0.R1
Platforms	All

python

Synopsis	Enter the **python** context

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Context	**configure** system management-interface cli md-cli environment python
Tree	python
Description	Commands in this context customize Python settings used with the Python 3 interpreter in MD-CLI applications such as pyexec, command aliases, EHS, and CRON.
Introduced	21.10.R1
Platforms	All

memory-reservation *number*

Synopsis	Memory reserved per Python interpreter
Context	**configure** system management-interface cli md-cli environment python memory-reservation *number*
Tree	memory-reservation
Range	1 to 500
Units	megabytes
Introduced	21.10.R1
Platforms	All

minimum-available-memory *number*

Synopsis	Minimum memory requirement to run a Python interpreter
Context	**configure** system management-interface cli md-cli environment python minimum-available-memory *number*
Tree	minimum-available-memory
Range	5 to 50
Units	percent
Introduced	21.10.R1
Platforms	All

timeout *number*

Synopsis	Maximum run time before a Python application is stopped
Context	**configure** system management-interface cli md-cli environment python timeout *number*
Tree	timeout
Range	30 to 86400
Units	seconds

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Default	3600
Introduced	21.10.R1
Platforms	All

time-display *keyword*

Synopsis	Time zone to display time
Context	**configure** system management-interface cli md-cli environment time-display *keyword*
Tree	time-display
Description	This command configures the time zone for a timestamp displayed in outputs, such as event logs and **show** commands for the current CLI session. In event logs, the selected time is used to control the timestamps in the CLI output of **show log log-id** and in YANG state in the /state/log/log-id branch (for logs such as session, cli, memory, SNMP, and NETCONF). Also see the **configure log log-id time-format** command.
Options	local, utc
Default	local
Introduced	16.0.R1
Platforms	All

time-format *keyword*

Synopsis	Format to display the date and time
Context	**configure** system management-interface cli md-cli environment time-format *keyword*
Tree	time-format
Description	This command specifies the format of the time display in the prompt, configuration, state, and certain **show** command output in the current CLI session.
Options	iso-8601, rfc-1123, rfc-3339
Default	rfc-3339
Introduced	20.5.R1
Platforms	All

commit-history *number*

Synopsis	Number of commit history IDs to store
Context	**configure** system management-interface commit-history *number*

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Tree	commit-history
Description	This command sets the number of IDs to store in the commit history. Setting the value to 0 disables the commit history.
Range	0 to 200
Default	50
Introduced	21.10.R1
Platforms	All

configuration-mode *keyword*

Synopsis	Management interfaces allowed to edit the configuration
Context	**configure** system management-interface configuration-mode *keyword*
Tree	configuration-mode
Description	This command controls which of the classic or model-driven management interfaces can modify the configuration of the router. Any management interface can be used in any configuration mode (to gather state information or perform operations, for example), but only specific management interfaces (CLI, NETCONF, and so on) are allowed to edit the configuration of the router in different modes. For example, only classic CLI and SNMP can be used to edit the configuration when in classic mode.
Options	classic, model-driven, mixed
Introduced	16.0.R1
Platforms	All

configuration-save

Synopsis	Enter the **configuration-save** context
Context	**configure** system management-interface configuration-save
Tree	configuration-save
Description	Commands in this context configure the attributes for saved configuration files.
Introduced	16.0.R1
Platforms	All

configuration-backups *number*

Synopsis	Maximum number of configuration versions maintained

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Context	**configure** system management-interface configuration-save configuration-backups *number*
Tree	configuration-backups
Description	This command configures the maximum number of saved configuration file versions the router maintains. When the configuration is saved, configuration file names are appended with a numeric extension. Each subsequent configuration save creates a new configuration file version with an incremented numeric extension until the maximum count is reached, after which the next configuration save overwrites the oldest file version. Each persistent index file is updated at the same time as the associated configuration file. The system synchronizes the active and standby CPM for all configurations and their associated persistent index files.
Range	1 to 200
Default	50
Introduced	16.0.R1
Platforms	All

incremental-saves *boolean*

Synopsis	Use incremental saved configuration files
Context	**configure** system management-interface configuration-save incremental-saves *boolean*
Tree	incremental-saves
Description	When configured to **true**, the system saves each commit to the **configure** configuration region in a separate incremental saved configuration file, which allows for faster commits, instead of saving a complete saved configuration file each time.
Default	true
Introduced	22.7.R1
Platforms	All

netconf

Synopsis	Enter the **netconf** context
Context	**configure** system management-interface netconf
Tree	netconf
Introduced	16.0.R1
Platforms	All

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admin-state *keyword*

Synopsis	Administrative state of NETCONF
Context	**configure** system management-interface netconf admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

auto-config-save *boolean*

Synopsis	Automatically save configuration as part of commit
Context	**configure** system management-interface netconf auto-config-save *boolean*
Tree	auto-config-save
Description	When configured to **true**, the system automatically writes the running configuration to the save configuration file as part of a successful commit operation.
Default	true
Introduced	16.0.R1
Platforms	All

capabilities

Synopsis	Enter the **capabilities** context
Context	**configure** system management-interface netconf capabilities
Tree	capabilities
Description	Commands in this context configure explicit capabilities for the NETCONF server.
Introduced	16.0.R1
Platforms	All

candidate *boolean*

Synopsis	Allow the NETCONF server to access candidate datastore
Context	**configure** system management-interface netconf capabilities candidate *boolean*
Tree	candidate

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Description When configured to **true**, this command allows the SR OS NETCONF server to access the candidate configuration datastore. Configuring this command to **true** also enables using **commit** and **discard-changes**.

When **configure system management-interface configuration-mode** is set to **classic**, the candidate capability is disabled, even if this command is configured to **true**.

When configured to **false**, this command disables the SR OS NETCONF server from accessing the candidate datastore. If the candidate is disabled, requests that reference the candidate datastore return an error, and when a NETCONF client establishes a new session, the candidate capability is not advertised in the SR OS NETCONF Hello message.

Default true

Introduced 16.0.R1

Platforms All

port *number*

Synopsis Port on which NETCONF server listens for connections

Context **configure** system management-interface netconf port *number*

Tree port

Description This command specifies the port on which the SR OS NETCONF server listens for new connections. One port can be configured for NETCONF management.

The configured port applies to both non-VPRN and VPRN management. New NETCONF connections are able to use the configured port.

For NETCONF connections not using VPRN management, active NETCONF connections are not disconnected if the connection port changes. For NETCONF connections using VPRN management, active NETCONF connections are disconnected if the connection port changes.

Range 22 | 830

Default 830

Introduced 19.10.R1

Platforms All

operations

Synopsis Enter the **operations** context

Context **configure** system management-interface operations

Tree operations

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Description	Commands in this context configure parameters associated with operational commands in model-driven interfaces.
Introduced	21.5.R1
Platforms	All

global-timeouts

Synopsis	Enter the **global-timeouts** context
Context	**configure** system management-interface operations global-timeouts
Tree	global-timeouts
Description	Commands in this context configure system timeout parameters for operational commands. Timeout parameters provide default system-level control for various types of operational commands in model-driven interfaces. The timeout values are used when specific execution and retention timeouts are not requested for a specific operation.
Introduced	21.5.R1
Platforms	All

asynchronous-execution *(number | keyword)*

Synopsis	Timeout for asynchronous operation execution
Context	**configure** system management-interface operations global-timeouts asynchronous-execution *(number | keyword)*
Tree	asynchronous-execution
Description	This command configures the period of time that operations launched as “asynchronous” are allowed to execute before being automatically stopped by the SR OS. An asynchronous operation is not deleted from the system when it is stopped. See the **asynchronous-retention** command. If a specific execution timeout is not included in the request for a particular asynchronous operation, this system-level timeout applies. **Note**: This execution timeout is part of the general global operations infrastructure and is separate and independent from any operation-specific timeouts (for example, the **ping** operation also has its own timeout parameter).
Range	1 to 604800
Units	seconds
Options	never
Default	3600

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Introduced	21.5.R1
Platforms	All

asynchronous-retention *(number | keyword)*

Synopsis	Timeout for asynchronous operation data retention
Context	**configure** system management-interface operations global-timeouts asynchronous-retention *(number | keyword)*
Tree	asynchronous-retention
Description	This command configures the period of time that data related to operations launched as “asynchronous” is retained in the system. After the retention timeout expires, all information related to the operation is deleted, including any status information and result data. If a specific retention timeout is not included in the request for a particular asynchronous operation, this system-level timeout applies.
Range	1 to 604800
Units	seconds
Options	never
Default	86400
Introduced	21.5.R1
Platforms	All

synchronous-execution *(number | keyword)*

Synopsis	Timeout for synchronous operation execution
Context	**configure** system management-interface operations global-timeouts synchronous-execution *(number | keyword)*
Tree	synchronous-execution
Description	This command configures the period of time that operations launched as “'synchronous” (the default method for all operations) are allowed to execute before they are automatically stopped, and their associated data is deleted. If a specific execution timeout is not included in the request for a particular synchronous operation, this system-level timeout applies. **Note**: This execution timeout is part of the general global operations infrastructure and is separate and independent from any operation-specific timeouts (for example, the **ping** operation also has its own timeout parameter). **Caution**: If this command is set with a specific time value, MD-CLI operations are subject to the timeout and are interrupted if they execute longer than the time value.

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	This situation can arise because the timeout also applies to operations requested in the MD-CLI interface (for example, **ping**, **file dir**, and so on).
Range	1 to 604800
Units	seconds
Options	never
Default	never
Introduced	21.5.R1
Platforms	All

remote-management

Synopsis	Enter the **remote-management** context
Context	**configure** system management-interface remote-management
Tree	remote-management
Description	Commands in this context configure the SR OS node to use the remote management service. Configuring remote management enables the SR OS node to report itself to a remote manager service running on a remote server, so that it is included in the dynamic list of available nodes. The manager service streamlines the management of multiple SR OS nodes running different SR OS versions using the same client application providing a similar shell to the MD-CLI.
Introduced	20.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of remote management registration
Context	**configure** system management-interface remote-management admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.5.R1
Platforms	All

allow-unsecure-connection

Synopsis	Allow connection without secured transport protocol

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Context	**configure** system management-interface remote-management allow-unsecure-connection
Tree	allow-unsecure-connection
Description	When configured, this command allows an unsecured connection to remote managers; TCP connections are not encrypted, including username and password information.
Notes	The following elements are part of a choice: **allow-unsecure-connection** or **client-tls-profile**.
Introduced	20.5.R1
Platforms	All

client-tls-profile *reference*

Synopsis	TLS client profile name
Context	**configure** system management-interface remote-management client-tls-profile *reference*
Tree	client-tls-profile
Description	This command specifies the client TLS profile to all remote managers.
Reference	**configure** system security tls client-tls-profile *string*
Notes	The following elements are part of a choice: **allow-unsecure-connection** or **client-tls-profile**.
Introduced	20.5.R1
Platforms	All

connection-timeout *number*

Synopsis	Time without a response before manager declared down
Context	**configure** system management-interface remote-management connection-timeout *number*
Tree	connection-timeout
Range	1 to 3600
Units	seconds
Default	60
Introduced	20.5.R1
Platforms	All

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device-label *string*

Synopsis	Device label supplied to the remote manager
Context	**configure** system management-interface remote-management device-label *string*
Tree	device-label
Description	This command specifies a metadata label that is supplied to the manager. This label is used to group devices or network nodes with a common purpose or goal.
String Length	1 to 64
Introduced	20.5.R1
Platforms	All

device-name *string*

Synopsis	Device name supplied to the remote manager
Context	**configure** system management-interface remote-management device-name *string*
Tree	device-name
Description	This command specifies a device name that is supplied to the manager. The name identifies a specific SR OS node in the network. When unconfigured, the default system name is used.
String Length	1 to 64
Introduced	20.5.R1
Platforms	All

hello-interval *number*

Synopsis	Time between hello messages from SR OS node to manager
Context	**configure** system management-interface remote-management hello-interval *number*
Tree	hello-interval
Range	10 to 216000
Units	seconds
Default	600
Introduced	20.5.R1
Platforms	All

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manager [manager-name] *string*

Synopsis	Enter the **manager** list instance
Context	**configure** system management-interface remote-management manager *string*
Tree	manager
Description	Commands in this context configure options for a specific manager. Commands configured in this context take precedence over command values specified directly in the **configure management-interface remote-management** context. If a command is not configured in this context, the command setting is inherited from the higher level context.
Max. Instances	2
Introduced	20.5.R1
Platforms	All

[**manager-name**] *string*

Synopsis	Remote management manager name
Context	**configure** system management-interface remote-management manager *string*
Tree	manager
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of remote management registration
Context	**configure** system management-interface remote-management manager *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.5.R1
Platforms	All

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allow-unsecure-connection

Synopsis	Allow connection without secured transport protocol
Context	**configure** system management-interface remote-management manager *string* allow-unsecure-connection
Tree	allow-unsecure-connection
Description	When configured, the system allows an unsecured connection to the remote managers; the TCP connection is not encrypted. This includes username and password information.
Notes	The following elements are part of a choice: **allow-unsecure-connection** or **client-tls-profile**.
Introduced	20.5.R1
Platforms	All

client-tls-profile *reference*

Synopsis	TLS client profile name assigned to the remote manager
Context	**configure** system management-interface remote-management manager *string* client-tls-profile *reference*
Tree	client-tls-profile
Reference	**configure** system security tls client-tls-profile *string*
Notes	The following elements are part of a choice: **allow-unsecure-connection** or **client-tls-profile**.
Introduced	20.5.R1
Platforms	All

connection-timeout *number*

Synopsis	Time without response before manager is declared down
Context	**configure** system management-interface remote-management manager *string* connection-timeout *number*
Tree	connection-timeout
Range	1 to 3600
Units	seconds
Introduced	20.5.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** system management-interface remote-management manager *string* description *string*
Tree	description
String Length	1 to 80
Introduced	20.5.R1
Platforms	All

device-label *string*

Synopsis	Device label supplied to the remote manager
Context	**configure** system management-interface remote-management manager *string* device-label *string*
Tree	device-label
Description	This command specifies a metadata label that is supplied to the manager. This label is used to group devices or network nodes with a common purpose or goal.
String Length	1 to 64
Introduced	20.5.R1
Platforms	All

device-name *string*

Synopsis	Device name supplied to the remote manager
Context	**configure** system management-interface remote-management manager *string* device-name *string*
Tree	device-name
Description	This command specifies a device name that is supplied to the manager. The name identifies a specific SR OS node in the network. When unconfigured, the default system name is used.
String Length	1 to 64
Introduced	20.5.R1
Platforms	All

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manager-address *(ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name)*

Synopsis	Destination IP address of the manager
Context	**configure** system management-interface remote-management manager *string* manager-address *(ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name)*
Tree	manager-address
String Length	1 to 255
Introduced	20.5.R1
Platforms	All

manager-port *number*

Synopsis	Destination TCP port for gRPC connections to manager
Context	**configure** system management-interface remote-management manager *string* manager-port *number*
Tree	manager-port
Range	1 to 65535
Default	57400
Introduced	20.5.R1
Platforms	All

router-instance *string*

Synopsis	Reference to a router or VPRN service name
Context	**configure** system management-interface remote-management manager *string* router-instance *string*
Tree	router-instance
Introduced	20.5.R1
Platforms	All

source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source IP address for connection to the manager
Context	**configure** system management-interface remote-management manager *string* source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-address

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Introduced	20.5.R1
Platforms	All

source-port *(number | keyword)*

Synopsis	Source TCP destination port number
Context	**configure** system management-interface remote-management manager *string* source-port *(number | keyword)*
Tree	source-port
Range	1 to 65535
Options	grpc-default
Introduced	20.5.R1
Platforms	All

router-instance *string*

Synopsis	Router name or VPRN service name
Context	**configure** system management-interface remote-management router-instance *string*
Tree	router-instance
Default	management
Introduced	20.5.R1
Platforms	All

source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source IP address for connection to the manager
Context	**configure** system management-interface remote-management source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	source-address
Introduced	20.5.R1
Platforms	All

source-port *(number | keyword)*

Synopsis	Source TCP port number to connection to the manager

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Context	**configure** system management-interface remote-management source-port *(number | keyword)*
Tree	source-port
Range	1 to 65535
Options	grpc-default
Default	grpc-default
Introduced	20.5.R1
Platforms	All

schema-path *string*

Synopsis	Schema path URL
Context	**configure** system management-interface schema-path *string*
Tree	schema-path
Description	This command specifies the schema path where the SR OS YANG modules can be placed by the user before using a <get-schema> request. Nokia recommends that the URL string not exceed 135 characters for the <get-schema> request to work correctly with all schema files. If this command is not configured, the software upgrade process manages the YANG schema files to ensure the schema files are synchronized with the software image on both the primary and standby CPM.
String Length	1 to 180
Introduced	16.0.R4
Platforms	All

snmp

Synopsis	Enter the **snmp** context
Context	**configure** system management-interface snmp
Tree	snmp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the SNMP agent
Context	**configure** system management-interface snmp admin-state *keyword*

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Tree	admin-state
Description	This command administratively enables or disables SNMP agent operations. Disabling SNMP does not prevent the agent from sending SNMP notifications to configured SNMP trap destinations. In classic and mixed configuration mode, the agent is administratively disabled in the event of a reboot when the processing of the configuration file fails to complete or when an SNMP persistent index file fails while the **bof system persistent-indices** command is set to **true**. This prevents an SNMP-based management system from accessing and possibly synchronizing with a partially booted or incomplete network element. This auto-disable behavior is not applicable to model-driven configuration mode.
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

engine-id *string*

Synopsis	SNMP engine ID that identifies the SNMPv3 node
Context	**configure** system management-interface snmp engine-id *string*
Tree	engine-id
Description	This command sets the SNMP engine ID that uniquely identifies the SNMPv3 node. If unconfigured, the system uses an engine ID based on the information from the system backplane. If the SNMP engine ID is changed, the current configuration must be saved and a reboot must be executed. Otherwise, the previously configured SNMP communities and logger trap-target notify communities will not be valid for the new engine ID. **Note:** Changing the SNMP engine ID invalidates all SNMPv3 MD5 and SHA security digest keys, which may render the node unmanageable. When replacing a chassis, configure the new router to use the same engine ID as the previous router. This preserves SNMPv3 security keys and allows management stations to use their existing authentication keys for the new router. Ensure that the engine ID of each router is unique. A management domain can only maintain one instance of a specific engine ID.
String Length	10 to 64
Introduced	16.0.R1
Platforms	All

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general-port *number*

Synopsis	Port number used to send general SNMP messages
Context	**configure** system management-interface snmp general-port *number*
Tree	general-port
Description	This command configures the port number used to receive SNMP request messages and send replies. For the port used for SNMP notifications, configure the **configure log snmp-trap-group trap-target port** command.
Range	0 | 1 to 65535
Default	161
Introduced	16.0.R1
Platforms	All

max-bulk-duration *number*

Synopsis	Maximum process duration before responses are returned
Context	**configure** system management-interface snmp max-bulk-duration *number*
Tree	max-bulk-duration
Description	This command sets the maximum duration to process an SNMP request before bulk responses are returned to avoid a timeout on the management system when a lot of information is returned in the response.
Range	100 to 5000
Units	milliseconds
Introduced	23.3.R1
Platforms	All

packet-size *number*

Synopsis	Maximum SNMP packet size generated by the node
Context	**configure** system management-interface snmp packet-size *number*
Tree	packet-size
Range	484 to 9216
Default	1500
Introduced	16.0.R1
Platforms	All

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streaming

Synopsis	Enter the **streaming** context
Context	**configure** system management-interface snmp streaming
Tree	streaming
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of SNMP streaming
Context	**configure** system management-interface snmp streaming admin-state *keyword*
Tree	admin-state
Description	This command enables or disables the proprietary SNMP request and response bundling as well as the TCP-based transport mechanism for optimizing network management of the router nodes. In higher latency networks, synchronizing router MIBs from network management using streaming takes less time than synchronizing using classic SNMP UDP requests. Streaming operates on TCP port 1491 and runs over IPv4 or IPv6.
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

yang-modules

Synopsis	Enter the **yang-modules** context
Context	**configure** system management-interface yang-modules
Tree	yang-modules
Description	Commands in this context determine the system support of the Nokia YANG models. The settings affect the data sent in a NETCONF <hello>, data populated in the RFC 6022 /netconf-state/schemas list, data returned in a <get-schema> request, and data populated in the RFC 8525 /yang-library. See "NETCONF monitoring" and "YANG library" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR System Management Guide* for more information.
Introduced	16.0.R1
Platforms	All

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nmda

Synopsis	Enter the **nmda** context
Context	**configure** system management-interface yang-modules nmda
Tree	nmda
Description	Commands in this context configure the attributes for the Network Management Datastores Architecture (NMDA).
Introduced	21.7.R1
Platforms	All

nmda-support *boolean*

Synopsis	Advertise NMDA support over NETCONF
Context	**configure** system management-interface yang-modules nmda nmda-support *boolean*
Tree	nmda-support
Description	When configured to **true**, this command enables the advertisement of NMDA support over NETCONF through the use of YANG library 1.1. When configured to **false**, this command disables NMDA advertisement over NETCONF and YANG library 1.0 is used.
Default	false
Introduced	21.7.R1
Platforms	All

nokia-combined-modules *boolean*

Synopsis	Support access to combined Nokia YANG models
Context	**configure** system management-interface yang-modules nokia-combined-modules *boolean*
Tree	nokia-combined-modules
Description	When configured to **true**, the system supports the combined Nokia YANG files for both configuration and state data in the NETCONF server. When the system is operating in classic configuration mode, attempts to access (read or write) the configuration using the Nokia configuration modules or namespace via NETCONF result in errors, even if this command is set to **true**. When configured to **false**, access to the combined Nokia YANG files is not supported. This command and the **nokia-submodules** command cannot both be set to **true** at the same time.

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Introduced	16.0.R4
Platforms	All

nokia-submodules *boolean*

Synopsis	Support submodule-based packaging of Nokia YANG models
Context	**configure** system management-interface yang-modules nokia-submodules *boolean*
Tree	nokia-submodules
Description	When configured to **true**, the system supports the alternative submodule-based packaging of the Nokia YANG files for both configuration and state data in the NETCONF server. When the system is operating in classic configuration mode, attempts to access (read or write) the configuration using the Nokia configuration modules or namespace via NETCONF result in errors, even if this command is set to **true**. When configured to **false**, access to the submodule-based packaging of the Nokia YANG files is not supported. This command and the **nokia-combined-module**s command cannot both be set to **true** at the same time.
Introduced	21.2.R1
Platforms	All

openconfig-modules *boolean*

Synopsis	Support access to OpenConfig YANG models
Context	**configure** system management-interface yang-modules openconfig-modules *boolean*
Tree	openconfig-modules
Description	When configured to **true**, this command allows access to OpenConfig YANG models in all model-driven interfaces.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

shared-model-management *boolean*

Synopsis	Allow multiple models to configure the same elements
Context	**configure** system management-interface yang-modules shared-model-management *boolean*
Tree	shared-model-management

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Description	When configured to **true**, the router allows Nokia and third-party models to configure the same elements in model-driven interfaces. When configured to **false**, only one model can be used to configure the same element.
Default	true
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

name *string*

Synopsis	Administrative name assigned to the system
Context	**configure** system name *string*
Tree	name
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

network-element-discovery

Synopsis	Enter the **network-element-discovery** context
Context	**configure** system network-element-discovery
Tree	network-element-discovery
Introduced	19.5.R1
Platforms	All

generate-traps *boolean*

Synopsis	Generate NE discovery traps
Context	**configure** system network-element-discovery generate-traps *boolean*
Tree	generate-traps
Default	false
Introduced	19.5.R1
Platforms	All

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profile [name] *string*

Synopsis	Enter the **profile** list instance
Context	**configure** system network-element-discovery profile *string*
Tree	profile
Max. Instances	1
Introduced	19.5.R1
Platforms	All

[**name**] *string*

Synopsis	Profile name
Context	**configure** system network-element-discovery profile *string*
Tree	profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

neid *string*

Synopsis	Network element ID of the advertised node
Context	**configure** system network-element-discovery profile *string* neid *string*
Tree	neid
String Length	7 to 8
Introduced	19.5.R1
Platforms	All

neip

Synopsis	Enter the **neip** context
Context	**configure** system network-element-discovery profile *string* neip
Tree	neip
Introduced	19.5.R1
Platforms	All

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auto-generate

Synopsis	Enter the **auto-generate** context
Context	**configure** system network-element-discovery profile *string* neip auto-generate
Tree	auto-generate
Introduced	21.2.R1
Platforms	All

ipv4

Synopsis	Enable the **ipv4** context
Context	**configure** system network-element-discovery profile *string* neip auto-generate ipv4
Tree	ipv4
Introduced	21.2.R1
Platforms	All

vendor-id-value *number*

Synopsis	Most significant byte if the NE IPv4 address
Context	**configure** system network-element-discovery profile *string* neip auto-generate ipv4 vendor-id-value *number*
Tree	vendor-id-value
Range	1 to 255
Default	140
Introduced	21.2.R1
Platforms	All

ipv6

Synopsis	Enable the **ipv6** context
Context	**configure** system network-element-discovery profile *string* neip auto-generate ipv6
Tree	ipv6
Introduced	21.2.R1
Platforms	All

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vendor-id-value *number*

Synopsis	Most significant byte of the NE IPv6 address
Context	**configure** system network-element-discovery profile *string* neip auto-generate ipv6 vendor-id-value *number*
Tree	vendor-id-value
Range	1 to 255
Default	140
Introduced	21.2.R1
Platforms	All

ipv4 *string*

Synopsis	NEIP IPv4 address
Context	**configure** system network-element-discovery profile *string* neip ipv4 *string*
Tree	ipv4
Introduced	19.5.R1
Platforms	All

ipv6 *string*

Synopsis	NEIP IPv6 address
Context	**configure** system network-element-discovery profile *string* neip ipv6 *string*
Tree	ipv6
Introduced	19.5.R1
Platforms	All

platform-type *string*

Synopsis	Platform name and chassis type to be advertised
Context	**configure** system network-element-discovery profile *string* platform-type *string*
Tree	platform-type
String Length	1 to 255
Introduced	19.5.R1
Platforms	All

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system-mac *string*

Synopsis	MAC address of the advertised node
Context	**configure** system network-element-discovery profile *string* system-mac *string*
Tree	system-mac
Introduced	19.5.R1
Platforms	All

vendor-id *string*

Synopsis	Vendor ID to be advertised
Context	**configure** system network-element-discovery profile *string* vendor-id *string*
Tree	vendor-id
String Length	1 to 255
Default	Nokia
Introduced	19.5.R1
Platforms	All

ospf-dynamic-hostnames *boolean*

Synopsis	Process received OSPF dynamic hostname information
Context	**configure** system ospf-dynamic-hostnames *boolean*
Tree	ospf-dynamic-hostnames
Description	When configured to **true**, OSPF dynamic hostnames are enabled. The router receiving the new dynamic hostname within the OSPF Router Information (RI) LSA is instructed to process the received dynamic hostname information. When configured to **false**, dynamic hostname information is not processed.
Default	false
Introduced	20.2.R1
Platforms	All

persistence

Synopsis	Enter the **persistence** context
Context	**configure** system persistence
Tree	persistence

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Description	Commands in this context configure persistence on the system. The persistence feature enables the system to retain state information learned through DHCP snooping across reboots. This information includes data such as the IP address and MAC binding information, lease-length information, and ingress SAP information (required for VPLS snooping to identify the ingress interface). If persistence is enabled when there are no DHCP relay or snooping commands enabled, the system creates an empty file.
Introduced	16.0.R1
Platforms	All

ancp

Synopsis	Enter the **ancp** context
Context	**configure** system persistence ancp
Tree	ancp
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** system persistence ancp description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

location *keyword*

Synopsis	CPM flash card where the information is stored
Context	**configure** system persistence ancp location *keyword*
Tree	location
Options	cf1, cf2, cf3
Introduced	16.0.R1
Platforms	All

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application-assurance

Synopsis	Enter the **application-assurance** context
Context	**configure** system persistence application-assurance
Tree	application-assurance
Description	Commands in this context configure AA persistence on the system.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** system persistence application-assurance description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

location *keyword*

Synopsis	CPM flash card where the information is stored
Context	**configure** system persistence application-assurance location *keyword*
Tree	location
Options	cf1, cf2, cf3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp-server

Synopsis	Enter the **dhcp-server** context
Context	**configure** system persistence dhcp-server
Tree	dhcp-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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description *string*

Synopsis	Text description
Context	**configure** system persistence dhcp-server description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

location *keyword*

Synopsis	CPM flash card where the information is stored
Context	**configure** system persistence dhcp-server location *keyword*
Tree	location
Options	cf1, cf2, cf3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nat-port-forwarding

Synopsis	Enter the **nat-port-forwarding** context
Context	**configure** system persistence nat-port-forwarding
Tree	nat-port-forwarding
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** system persistence nat-port-forwarding description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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location *keyword*

Synopsis	CPM flash card where the information is stored
Context	**configure** system persistence nat-port-forwarding location *keyword*
Tree	location
Options	cf1, cf2, cf3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the **options** context
Context	**configure** system persistence options
Tree	options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp-leasetime-threshold *number*

Synopsis	DHCP lease time limit to be eligible for persistence
Context	**configure** system persistence options dhcp-leasetime-threshold *number*
Tree	dhcp-leasetime-threshold
Range	1 to 631152000
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy-cache

Synopsis	Enter the **python-policy-cache** context
Context	**configure** system persistence python-policy-cache
Tree	python-policy-cache
Introduced	16.0.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** system persistence python-policy-cache description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

location *keyword*

Synopsis	CPM flash card where the information is stored
Context	**configure** system persistence python-policy-cache location *keyword*
Tree	location
Options	cf1, cf2, cf3
Introduced	16.0.R1
Platforms	All

subscriber-mgmt

Synopsis	Enter the **subscriber-mgmt** context
Context	**configure** system persistence subscriber-mgmt
Tree	subscriber-mgmt
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	**configure** system persistence subscriber-mgmt description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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location *keyword*

Synopsis	CPM flash card where the information is stored
Context	**configure** system persistence subscriber-mgmt location *keyword*
Tree	location
Options	cf1, cf2, cf3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

power-management power-zone *number*

Synopsis	Enter the **power-management** list instance
Context	**configure** system power-management power-zone *number*
Tree	power-management
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

power-zone *number*

Synopsis	Power zone
Context	**configure** system power-management power-zone *number*
Tree	power-management
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mode *keyword*

Synopsis	Power capacity mode algorithm
Context	**configure** system power-management power-zone *number* mode *keyword*
Tree	mode
Options	none, basic, advanced
Default	basic
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

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power-safety-alert *number*

Synopsis	Power capacity to trigger a safety alert event
Context	**configure** system power-management power-zone *number* power-safety-alert *number*
Tree	power-safety-alert
Range	0 to 120000
Units	watts
Default	0
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

power-safety-level *number*

Synopsis	Minimum threshold to power off devices
Context	**configure** system power-management power-zone *number* power-safety-level *number*
Tree	power-safety-level
Range	0 to 100
Units	percent
Default	100
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

ptp

Synopsis	Enter the **ptp** context
Context	**configure** system ptp
Tree	ptp
Description	Commands in this context configure Precision Time Control (PTP) parameters based on *IEEE 1588-2008, Precision Time Protocol*. The context is only supported on control assemblies that support 1588.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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admin-state *keyword*

Synopsis	Administrative state of PTP
Context	**configure** system ptp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alternate-profile [name] *string*

Synopsis	Enter the **alternate-profile** list instance
Context	**configure** system ptp alternate-profile *string*
Tree	alternate-profile
Description	Commands in this context create an alternate profile configuration for use in PTP messaging. The alternate profile can be used at the edge of a network to provide PTP time or frequency distribution outward to external PTP clocks. The alternate profile cannot be deleted if it is configured as the profile under a PTP port.
Max. Instances	6
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**name**] *string*

Synopsis	Alternate profile name
Context	**configure** system ptp alternate-profile *string*
Tree	alternate-profile
Description	This command configures an alternate profile name. The strings "Primary" and "primary" cannot be used for the alternate-profile name.
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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admin-state *keyword*

Synopsis	Administrative state of the alternate PTP profile
Context	**configure** system ptp alternate-profile *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

domain *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Alternate profile PTP domain number
Context	**configure** system ptp alternate-profile *string* domain *number*
Tree	domain
Range	0 to 255
Default	24
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

log-announce-interval *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PTP announce message interval in log form
Context	**configure** system ptp alternate-profile *string* log-announce-interval *number*
Tree	log-announce-interval
Description	This command configures the announce message interval used for multicast messages within the alternate profile. For multicast messages used on PTP Ethernet ports, this command configures the message interval used for announce messages transmitted by the local node.

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	This value has no impact on the interval used for the BTCA, which is controlled by the value defined for the primary profile.
Range	-3 to 4
Default	-3
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

profile *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Standard based profile used within an alternate profile
Context	**configure** system ptp alternate-profile *string* profile *keyword*
Tree	profile
Description	This command specifies the standard based profile that is used as the basis for the alternate profile. This setting controls the contents of PTP messages sent on ports and peers using this alternate profile.
Options	g8265dot1-2010, ieee1588-2008, g8275dot1-2014, g8275dot2-2016
Default	g8275dot1-2014
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

announce-receipt-timeout *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Expired intervals count before timeout event declared
Context	**configure** system ptp announce-receipt-timeout *number*
Tree	announce-receipt-timeout
Description	This command configures the number of Announce message intervals that must expire with no received Announce messages before declaring an ANNOUNCE_RECEIPT_TIMEOUT event.
Range	2 to 10

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Default	3
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

clock-type *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Clock type
Context	**configure** system ptp clock-type *keyword*
Tree	clock-type
Options	slave-only, master-only, boundary
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

domain *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PTP domain
Context	**configure** system ptp domain *number*
Tree	domain
Description	This command configures the PTP domain. The default and valid range of the domain depend on the configured PTP profile. • IEEE 1588-2008 - domain range of 0 to 255 (default 0) • G.8265.1 - domain range of 0 to 255 (default 4) • G.8275.1 - domain range of 24 to 43 (default 24) • G.8275.2 - domain range of 0 to 255 (default 44)
Range	0 to 255
Introduced	21.7.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

local-priority *number*

Synopsis	PTP clock local priority
Context	**configure** system ptp local-priority *number*
Tree	local-priority
Description	This command configures the local priority used to choose between PTP time Transmitters in the best timeTransmitter clock algorithm (BTCA). This setting applies when the PTP profile is either configured for G.8275.1 or G.8275.2 and is ignored for any other profile. For G.8275.1 or G.8275.2, this command configures the localPriority parameter associated with the local clock (**ptp** context). See G.8275.1 or G.8275.2 for detailed information.
Range	1 to 255
Default	128
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

log-announce-interval *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Announce message interval in log form
Context	**configure** system ptp log-announce-interval *number*
Tree	log-announce-interval
Description	This command configures the Announce message interval used for both unicast and multicast messages. For unicast messages, the Announce message interval is requested during unicast negotiation to any peer. This controls the Announce message rate sent from remote peers to the local node. It does not affect the announce message rate that may be sent from the local node to remote peers. Remote peers may request an Announce message rate within the acceptable grant range. For multicast messages used on PTP Ethernet ports, this command specifies the message interval used for Announce messages transmitted by the local node. This value also defines the interval between executions of the BTCA within the node. To minimize BTCA driven reconfigurations, IEEE recommends that the announce interval should be consistent across the entire 1588 network.

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Range	-3 to 4
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

network-type *keyword*

Synopsis	PTP network type
Context	**configure** system ptp network-type *keyword*
Tree	network-type
Description	This command configures the codeset to be used for the encoding of QL values into PTP clockClass values and vice versa when the profile is configured for G.8265.1 or G.8275.2. This setting only applies to the range of values observed in the clockClass values transmitted out of the node in Announce messages. The router supports the reception of any valid value in Table 1/G.8265.1 and Table2/G.8275.2.
Options	sonet, sdh
Default	sdh
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port [port-id] *reference*

Synopsis	Enter the **port** list instance
Context	**configure** system ptp port *reference*
Tree	port
Description	Commands in this context configure PTP over Ethernet on the physical port. The PTP process transmits and receives PTP messages through the port using Ethernet encapsulation (as opposed to UDP/IPv4 encapsulation). Frames are transmitted with no VLAN tags, even if the port is configured for dot1q or qinq modes for encap-type. The received frames from the external PTP clock must also be untagged. Two reserved multicast addresses are allocated for PTP messages (see Annex F IEEE Std 1588-2008). Either address can be configured for the PTP messages sent through the port. A PTP port cannot be created if the PTP profile is configured for G.8265.1. If the port supports 1588 port-based timestamping, Synchronous Ethernet must be enabled on the MDA when PTP over Ethernet is enabled. De-provisioning of the card or MDA containing the specified port is not permitted while the port is configured within PTP.

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Changing the encapsulation or the port type of the Ethernet port is not permitted when PTP Ethernet Multicast operation is configured on the port.

To allocate an Ethernet satellite client port as a PTP port, the Ethernet satellite must first be enabled for the transparent clock function. For more information, see the **configure satellite ethernet-satellite ptp-tc** command.

The SyncE/1588 ports of the CPM and CCMs can be specified as PTP ports. These use the 'A/3' and 'B/3' designation and both must be specified as two PTP ports if both are used. The active CPM sends and receives messages on both ports if they are specified and enabled.

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**port-id**] *reference*

Synopsis Ethernet PTP port ID

Context **configure** system ptp port *reference*

Tree port

Reference **configure** port *string*

Notes This element is part of a list key.

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

address *string*

Synopsis Destination MAC address of the transmitted PTP messages

Context **configure** system ptp port *reference* address *string*

Tree address

Description This command specifies the destination MAC address of the transmitted PTP messages. IEEE Std 1588-2008 Annex F defines two reserved addresses for 1588 messages, which include:

- **01-1B-19-00-00-00** — all except the peer delay mechanism messages
- **01-80-C2-00-00-0E** — peer delay mechanism messages

Both addresses are supported for reception, independent of the address configured by this command.

Default 01:1B:19:00:00:00

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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admin-state *keyword*

Synopsis	Administrative state of the PTP port
Context	**configure** system ptp port *reference* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alternate-profile *reference*

Synopsis	Alternate profile for the PTP port
Context	**configure** system ptp port *reference* alternate-profile *reference*
Tree	alternate-profile
Description	This command creates the alternate profile that is used in communications with the port or peer. If no alternate profile is specified, the primary profile is used.
Reference	**configure** system ptp alternate-profile *string*
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

local-priority *number*

Synopsis	PTP port local priority
Context	**configure** system ptp port *reference* local-priority *number*
Tree	local-priority
Description	This command configures the local priority used to choose between PTP time Transmitters in the best timeTransmitter clock algorithm (BTCA). This setting applies when the PTP profile is either configured for G.8275.1 or G.8275.2 and is ignored for any other profile. For G.8275.1 or G.8275.2, this command configures the localPriority parameter associated with the Announce messages received from the external clocks (**ptp port** context). See G.8275.1 or G.8275.2 for detailed information.
Range	1 to 255
Default	128
Introduced	21.7.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

log-delay-interval *number*

Synopsis	Minimum interval for Delay_Req messages in log form
Context	**configure** system ptp port *reference* log-delay-interval *number*
Tree	log-delay-interval
Description	This command configures the minimum interval used for multicast Delay_Req messages for the port. For ports in a slave state, the interval is used, unless the parent port indicates a longer interval. For a port in master state, the interval is advertised to external slave ports as the minimum acceptable interval for Delay_Req messages from the slave ports. The router supports the 1588 standard requirement for a port in slave state to check the logMessageInterval field of received multicast Delay_Resp messages. If the value of the logMessageInterval field of the messages is greater than the value configured locally for the generation of Delay_Req messages, the slave must use the longer interval for the generation of Delay_Req messages. The interval value is specified as the logarithm to the base 2.
Range	-6 to 0
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

log-sync-interval *number*

Synopsis	Interval for transmission of Sync messages in log form
Context	**configure** system ptp port *reference* log-sync-interval *number*
Tree	log-sync-interval
Description	This command configures the interval used for Sync messages transmitted by the local node when the port is in master state. The interval value is specified as the logarithm to the base 2.
Range	-6 to 0
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

master-only *boolean*

Synopsis	Restrict the local port to master state
Context	**configure** system ptp port *reference* master-only *boolean*

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Tree	master-only
Description	When configured to **true**, the local port is restricted to master state only, ensuring that the system does not obtain synchronization from attached external devices. This command is supported only when the PTP profile is set for G.8275.1 or G.8275.2.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority1 *number*

Synopsis	Priority1 of the local clock
Context	**configure** system ptp priority1 *number*
Tree	priority1
Description	This command configures the priority1 parameter of the local clock. The setting is used when the profile is configured for IEEE 1588-2008. This value is used by the Best Master Clock Algorithm to determine which clock should provide timing for the network and is advertised in Announce messages.
Range	0 to 255
Default	128
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority2 *number*

Synopsis	Priority2 of the local clock
Context	**configure** system ptp priority2 *number*
Tree	priority2
Description	This command configures the priority2 parameter of the local clock. The setting is used when the profile is configured for IEEE 1588-2008, G.8275.1, or G.8275.2. This value is used by the Best Master Clock algorithm to determine which clock should provide timing for the network and is advertised in Announce messages.
Range	0 to 255
Default	128
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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profile *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PTP profile
Context	**configure** system ptp profile *keyword*
Tree	profile
Description	This command configures the profile to be used for the internal PTP clock. It defines the Best timeTransmitter Clock Algorithm (BTCA) behavior. Profile changes may affect the settings of other configuration elements, such as the clock type and default settings for the delay interval, announce interval, and the Sync interval. The following clock types are supported for the indicated profiles: • G.8265.1: slave only, master only • IEEE 1588 2008: slave only, master only, boundary • G.8275.1: slave only, boundary, master only (master only, only if the platform includes an embedded GNSS receiver) • G.8275.2: slave only, boundary, master only (master only, only if the platform includes an embedded GNSS receiver)
Options	g8265dot1-2010, ieee1588-2008, g8275dot1-2014, g8275dot2-2016
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ptsf

Synopsis	Enter the **ptsf** context
Context	**configure** system ptp ptsf
Tree	ptsf
Description	Commands in this context configure the attributes of Packet Timing Signal Fail (PTSF).
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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monitor-ptsf-unusable

Synopsis	Enter the **monitor-ptsf-unusable** context
Context	**configure** system ptp ptsf monitor-ptsf-unusable
Tree	monitor-ptsf-unusable
Description	Commands in this context configure monitoring of neighbor clocks for the PTSF-unusable state (condition) when the profile is set to g8275dot1-2014. When administratively enabled, the local clock monitors the noise level of PTP event messages between external neighbor PTP ports and the local clock. If it detects a high variation in the network path between the external neighbor port and the local port, it considers the neighbor port unusable. Announce messages from the neighbor are discarded and excluded from the BTCA and the port cannot be selected as the parent clock. The unusable condition must be manually cleared. When administratively disabled, the monitor PTSF function of the PTP clock clears PTSF-unusable states from all neighbor PTP ports. If no PTP messages are received from a neighbor for 15 minutes, the neighbor information is purged and the PTSF-unusable state is cleared.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of PTSF unusable monitoring
Context	**configure** system ptp ptsf monitor-ptsf-unusable admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

router [router-instance] *string*

Synopsis	Enter the **router** list instance
Context	**configure** system ptp router *string*
Tree	router
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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[**router-instance**] *string*

Synopsis	Router name or VPRN service name
Context	**configure** system ptp router *string*
Tree	router
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of PTP on the router instance
Context	**configure** system ptp router *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

peer [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **peer** list instance
Context	**configure** system ptp router *string* peer *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	peer
Description	Commands in this context configure a remote PTP peer.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the remote PTP peer
Context	**configure** system ptp router *string* peer *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	peer
Description	This command specifies the IP address of the remote PTP peer. In the current release, the system supports PTP using IPv4 only.

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Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the PTP peer
Context	**configure** system ptp router *string* peer *(ipv4-address-no-zone | ipv6-address-no-zone)* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

local-priority *number*

Synopsis	PTP peer local priority
Context	**configure** system ptp router *string* peer *(ipv4-address-no-zone | ipv6-address-no-zone)* local-priority *number*
Tree	local-priority
Description	This command configures the local priority for the peer, which is used to choose between PTP timeTransmitters in the best timeTransmitter clock algorithm (BTCA). This setting applies when the PTP profile is configured for G.8265.1, G.8275.1, or G.8275.2 and is ignored for any other profile. For G.8265.1, this command configures the priority used to choose between time Transmitter clocks with the same quality (see G.8265.1 for more details). For G.8275.1 or G.8275.2, this command configures the localPriority parameter associated with the Announce messages received from the external clocks (**ptp router peer** context). See G.8275.1 or G.8275.2 for detailed information.
Range	1 to 255
Default	128
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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log-sync-interval *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PTP peer interval for Sync messages in log form
Context	**configure** system ptp router *string* peer *(ipv4-address-no-zone | ipv6-address-no-zone)* log-sync-interval *number*
Tree	log-sync-interval
Description	This command configures the message interval used for Sync and Delay_Resp messages that are requested during unicast negotiation to the peer. The setting controls messages sent from remote peers to the local node but the packet rate from the local node to remote peers is not affected. Remote peers may request a packet rate within the acceptable range. The interval value is specified as the logarithm to the base 2.
Range	-6 to 0
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

peer-limit *number*

Synopsis	Number of discovered peers allowed for routing instance
Context	**configure** system ptp router *string* peer-limit *number*
Tree	peer-limit
Description	This command specifies the maximum number of discovered peers permitted within the routing instance. This ensures that a routing instance does not consume all the possible discovered peers and prevents the routing instance from blocking discovered peers in other routing instances. The sum of all peer limit values for all routing instances cannot exceed the maximum number of discovered peers supported by the system.
Range	0 to 512
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-while-sync-uncertain *boolean*

Synopsis	Send Announce messages while clock is unsynchronized
Context	**configure** system ptp tx-while-sync-uncertain *boolean*

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Tree	tx-while-sync-uncertain
Description	When configured to **true**, the local PTP clock transmits Announce messages to downstream clocks to indicate it has not yet stabilized on the recovered synchronization source (upstream clocks or GM clock). While the PTP clock is unsynchronized, the Sync Uncertain state is true. When configured to **false**, the local PTP clock does not send Announce messages to downstream clocks to indicate it is not synchronized to a valid timing source. If the Sync Uncertain state of the clock is true while this command is configured to **false**, unicast negotiation grant requests are not granted and current grants are canceled.
Default	true
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

script-control

Synopsis	Enter the **script-control** context
Context	**configure** system script-control
Tree	script-control
Introduced	16.0.R1
Platforms	All

script [script-name] *string* owner *string*

Synopsis	Enter the **script** list instance
Context	**configure** system script-control script *string* owner *string*
Tree	script
Max. Instances	1500
Introduced	16.0.R1
Platforms	All

[**script-name**] *string*

Synopsis	Script name
Context	**configure** system script-control script *string* owner *string*
Tree	script
String Length	1 to 32

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

owner *string*

Synopsis	Script owner
Context	**configure** system script-control script *string* owner *string*
Tree	script
Description	This command configures the owner to be associated with the script. The owner is optional and "TiMOS CLI" is used if an owner is not specified. The owner is an arbitrary name and not necessarily a user name. Commands in the scripts are not authorized against the owner. The **configure system security cli-script authorization** x **cli-user** command determines the user context against which commands in the scripts are authorized.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the script
Context	**configure** system script-control script *string* owner *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** system script-control script *string* owner *string* description *string*
Tree	description
String Length	1 to 80

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Introduced	16.0.R1
Platforms	All

location *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Script location
Context	**configure** system script-control script *string* owner *string* location *string*
Tree	location
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

script-policy [policy-name] *string* owner *string*

Synopsis	Enter the **script-policy** list instance
Context	**configure** system script-control script-policy *string* owner *string*
Tree	script-policy
Max. Instances	1500
Introduced	16.0.R1
Platforms	All

[**policy-name**] *string*

Synopsis	Script policy name
Context	**configure** system script-control script-policy *string* owner *string*
Tree	script-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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owner *string*

Synopsis	Script policy owner
Context	**configure** system script-control script-policy *string* owner *string*
Tree	script-policy
Description	This command configures the owner to be associated with the script policy. The owner is optional and "TiMOS CLI" is used if an owner is not specified. The owner is an arbitrary name and not necessarily a user name. Commands in the scripts are not authorized against the owner. The **configure system security cli-script authorization** x **cli-user** command determines the user context against which commands in the scripts are authorized.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the script policy
Context	**configure** system script-control script-policy *string* owner *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

expire-time *(number | keyword)*

Synopsis	Maximum amount of time to keep a run history status
Context	**configure** system script-control script-policy *string* owner *string* expire-time *(number | keyword)*
Tree	expire-time
Range	0 to 21474836
Units	seconds
Options	forever
Default	3600

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Introduced	16.0.R1
Platforms	All

lifetime *(number | keyword)*

Synopsis	Maximum amount of time the script may run
Context	**configure** system script-control script-policy *string* owner *string* lifetime *(number | keyword)*
Tree	lifetime
Range	0 to 21474836
Units	seconds
Options	forever
Default	3600
Notes	The following elements are part of a choice: (**lifetime** and **script**) or (**python-lifetime** and **python-script**).
Introduced	16.0.R1
Platforms	All

lock-override *boolean*

Synopsis	Allow EHS/CRON script to break database explicit lock
Context	**configure** system script-control script-policy *string* owner *string* lock-override *boolean*
Tree	lock-override
Default	false
Introduced	19.10.R1
Platforms	All

max-completed *number*

Synopsis	Maximum number of script history status entries kept
Context	**configure** system script-control script-policy *string* owner *string* max-completed *number*
Tree	max-completed
Range	1 to 1500
Default	1
Introduced	16.0.R1

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Platforms	All

python-lifetime *number*

Synopsis	Maximum time the Python application can run
Context	**configure** system script-control script-policy *string* owner *string* python-lifetime *number*
Tree	python-lifetime
Range	30 to 86400
Units	seconds
Notes	The following elements are part of a choice: (**lifetime** and **script**) or (**python-lifetime** and **python-script**).
Introduced	21.10.R1
Platforms	All

python-script

Synopsis	Enter the **python-script** context
Context	**configure** system script-control script-policy *string* owner *string* python-script
Tree	python-script
Notes	The following elements are part of a choice: (**lifetime** and **script**) or (**python-lifetime** and **python-script**).
Introduced	21.10.R1
Platforms	All

name *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Python application name
Context	**configure** system script-control script-policy *string* owner *string* python-script name *reference*
Tree	name
Reference	**configure** python python-script *string*
Introduced	21.10.R1

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Platforms	All

results *string*

Synopsis	Location to receive CLI output of a script run
Context	**configure** system script-control script-policy *string* owner *string* results *string*
Tree	results
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

script

Synopsis	Enter the **script** context
Context	**configure** system script-control script-policy *string* owner *string* script
Tree	script
Notes	The following elements are part of a choice: (**lifetime** and **script**) or (**python-lifetime** and **python-script**).
Introduced	16.0.R1
Platforms	All

name *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Script name
Context	**configure** system script-control script-policy *string* owner *string* script name *string*
Tree	name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

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owner *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Script owner
Context	**configure** system script-control script-policy *string* owner *string* script owner *string*
Tree	owner
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

security

Synopsis	Enter the **security** context
Context	**configure** system security
Tree	security
Description	Commands in this context configure central security settings such as DDoS protection, users, authorization profiles, and certificates. Access to these commands should be restricted to highly trusted users and device administrators.
Introduced	16.0.R1
Platforms	All

aaa

Synopsis	Enter the **aaa** context
Context	**configure** system security aaa
Tree	aaa
Introduced	16.0.R1
Platforms	All

cli-session-group [cli-session-group-name] *string*

Synopsis	Enter the **cli-session-group** list instance
Context	**configure** system security aaa cli-session-group *string*

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Tree	cli-session-group
Max. Instances	16
Introduced	16.0.R1
Platforms	All

[**cli-session-group-name**] *string*

Synopsis	CLI session group name
Context	**configure** system security aaa cli-session-group *string*
Tree	cli-session-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

combined-max-sessions *number*

Synopsis	Maximum number of concurrent SSH and Telnet sessions
Context	**configure** system security aaa cli-session-group *string* combined-max-sessions *number*
Tree	combined-max-sessions
Range	0 to 50
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** system security aaa cli-session-group *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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ssh-max-sessions *number*

Synopsis	Maximum number of concurrent SSH sessions
Context	**configure** system security aaa cli-session-group *string* ssh-max-sessions *number*
Tree	ssh-max-sessions
Range	0 to 50
Introduced	16.0.R1
Platforms	All

telnet-max-sessions *number*

Synopsis	Maximum number of concurrent Telnet sessions
Context	**configure** system security aaa cli-session-group *string* telnet-max-sessions *number*
Tree	telnet-max-sessions
Range	0 to 50
Introduced	16.0.R1
Platforms	All

health-check *(number | keyword)*

Synopsis	Polling interval of RADIUS, TACACS+, and LDAP servers
Context	**configure** system security aaa health-check *(number | keyword)*
Tree	health-check
Range	6 to 1500
Units	seconds
Options	none
Default	30
Introduced	16.0.R1
Platforms	All

local-profiles

Synopsis	Enter the **local-profiles** context
Context	**configure** system security aaa local-profiles
Tree	local-profiles
Introduced	16.0.R1

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Platforms	All

profile [user-profile-name] *string*

Synopsis	Enter the **profile** list instance
Context	**configure** system security aaa local-profiles profile *string*
Tree	profile
Max. Instances	128
Introduced	16.0.R1
Platforms	All

[**user-profile-name**] *string*

Synopsis	User profile name
Context	**configure** system security aaa local-profiles profile *string*
Tree	profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

cli-session-group *reference*

Synopsis	CLI session group to which the profile belongs
Context	**configure** system security aaa local-profiles profile *string* cli-session-group *reference*
Tree	cli-session-group
Reference	**configure** system security aaa cli-session-group *string*
Introduced	16.0.R1
Platforms	All

combined-max-sessions *number*

Synopsis	Maximum number of concurrent SSH and Telnet sessions
Context	**configure** system security aaa local-profiles profile *string* combined-max-sessions *number*

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Tree	combined-max-sessions
Range	0 to 50
Introduced	16.0.R1
Platforms	All

default-action *keyword*

Synopsis	Action for non-matching entry
Context	**configure** system security aaa local-profiles profile *string* default-action *keyword*
Tree	default-action
Options	deny-all, permit-all, none, read-only-all
Default	none
Introduced	16.0.R1
Platforms	All

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** system security aaa local-profiles profile *string* entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**entry-id**] *number*

Synopsis	User profile entry ID
Context	**configure** system security aaa local-profiles profile *string* entry *number*
Tree	entry
Range	1 to 9999
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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action *keyword*

Synopsis	Action when a user command matches the entry
Context	**configure** system security aaa local-profiles profile *string* entry *number* action *keyword*
Tree	action
Options	deny, permit, none, read-only
Default	none
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** system security aaa local-profiles profile *string* entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

match *string*

Synopsis	Command to match the entry
Context	**configure** system security aaa local-profiles profile *string* entry *number* match *string*
Tree	match
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

grpc

Synopsis	Enter the **grpc** context
Context	**configure** system security aaa local-profiles profile *string* grpc
Tree	grpc
Introduced	16.0.R1
Platforms	All

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rpc-authorization

Synopsis	Enter the **rpc-authorization** context
Context	**configure** system security aaa local-profiles profile *string* grpc rpc-authorization
Tree	rpc-authorization
Description	Commands in this context control the authorization of each RPC in gRPC interfaces.
Introduced	16.0.R1
Platforms	All

gnmi-capabilities *keyword*

Synopsis	gNMI Capabilities RPC authorization
Context	**configure** system security aaa local-profiles profile *string* grpc rpc-authorization gnmi-capabilities *keyword*
Tree	gnmi-capabilities
Options	permit, deny
Default	permit
Introduced	16.0.R1
Platforms	All

gnmi-get *keyword*

Synopsis	gNMI Get RPC authorization
Context	**configure** system security aaa local-profiles profile *string* grpc rpc-authorization gnmi-get *keyword*
Tree	gnmi-get
Options	permit, deny
Default	permit
Introduced	16.0.R1
Platforms	All

gnmi-set *keyword*

Synopsis	gNMI Set RPC authorization
Context	**configure** system security aaa local-profiles profile *string* grpc rpc-authorization gnmi-set *keyword*

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Tree	gnmi-set
Options	permit, deny
Default	permit
Introduced	16.0.R1
Platforms	All

gnmi-subscribe *keyword*

Synopsis	gNMI Subscribe RPC authorization
Context	**configure** system security aaa local-profiles profile *string* grpc rpc-authorization gnmi-subscribe *keyword*
Tree	gnmi-subscribe
Options	permit, deny
Default	permit
Introduced	16.0.R1
Platforms	All

gnoi-cert-mgmt-cangenerate *keyword*

Synopsis	gNOI CanGenerateCSR RPC authorization
Context	**configure** system security aaa local-profiles profile *string* grpc rpc-authorization gnoi-cert-mgmt-cangenerate *keyword*
Tree	gnoi-cert-mgmt-cangenerate
Options	permit, deny
Default	deny
Introduced	19.10.R1
Platforms	All

gnoi-cert-mgmt-getcert *keyword*

Synopsis	gNOI GetCertificates RPC authorization
Context	**configure** system security aaa local-profiles profile *string* grpc rpc-authorization gnoi-cert-mgmt-getcert *keyword*
Tree	gnoi-cert-mgmt-getcert
Options	permit, deny
Default	deny

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Introduced	19.10.R1
Platforms	All

gnoi-cert-mgmt-install *keyword*

Synopsis	gNOI Install RPC authorization
Context	**configure** system security aaa local-profiles profile *string* grpc rpc-authorization gnoi-cert-mgmt-install *keyword*
Tree	gnoi-cert-mgmt-install
Options	permit, deny
Default	deny
Introduced	19.10.R1
Platforms	All

gnoi-cert-mgmt-revoke *keyword*

Synopsis	gNOI RevokeCertificates RPC authorization
Context	**configure** system security aaa local-profiles profile *string* grpc rpc-authorization gnoi-cert-mgmt-revoke *keyword*
Tree	gnoi-cert-mgmt-revoke
Options	permit, deny
Default	deny
Introduced	20.2.R1
Platforms	All

gnoi-cert-mgmt-rotate *keyword*

Synopsis	gNOI Rotate RPC authorization
Context	**configure** system security aaa local-profiles profile *string* grpc rpc-authorization gnoi-cert-mgmt-rotate *keyword*
Tree	gnoi-cert-mgmt-rotate
Options	permit, deny
Default	deny
Introduced	19.10.R1
Platforms	All

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gnoi-file-get *keyword*

Synopsis	gNOI File Get RPC authorization
Context	**configure** system security aaa local-profiles profile *string* grpc rpc-authorization gnoi-file-get *keyword*
Tree	gnoi-file-get
Options	permit, deny
Default	permit
Introduced	21.2.R1
Platforms	All

gnoi-file-put *keyword*

Synopsis	gNOI File Put RPC authorization
Context	**configure** system security aaa local-profiles profile *string* grpc rpc-authorization gnoi-file-put *keyword*
Tree	gnoi-file-put
Options	permit, deny
Default	permit
Introduced	21.2.R1
Platforms	All

gnoi-file-remove *keyword*

Synopsis	gNOI File Remove RPC authorization
Context	**configure** system security aaa local-profiles profile *string* grpc rpc-authorization gnoi-file-remove *keyword*
Tree	gnoi-file-remove
Options	permit, deny
Default	permit
Introduced	21.2.R1
Platforms	All

gnoi-file-stat *keyword*

Synopsis	gNOI File Stat RPC authorization

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Context	**configure** system security aaa local-profiles profile *string* grpc rpc-authorization gnoi-file-stat *keyword*
Tree	gnoi-file-stat
Options	permit, deny
Default	permit
Introduced	21.2.R1
Platforms	All

gnoi-file-transfertoremote *keyword*

Synopsis	gNOI File TransferToRemote RPC authorization
Context	**configure** system security aaa local-profiles profile *string* grpc rpc-authorization gnoi-file-transfertoremote *keyword*
Tree	gnoi-file-transfertoremote
Options	permit, deny
Default	permit
Introduced	21.7.R1
Platforms	All

gnoi-system-cancelreboot *keyword*

Synopsis	gNOI System CancelReboot RPC authorization
Context	**configure** system security aaa local-profiles profile *string* grpc rpc-authorization gnoi-system-cancelreboot *keyword*
Tree	gnoi-system-cancelreboot
Options	permit, deny
Default	deny
Introduced	20.5.R1
Platforms	All

gnoi-system-ping *keyword*

Synopsis	gNOI System Ping RPC authorization
Context	**configure** system security aaa local-profiles profile *string* grpc rpc-authorization gnoi-system-ping *keyword*
Tree	gnoi-system-ping

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Options	permit, deny
Default	permit
Introduced	21.7.R1
Platforms	All

gnoi-system-reboot *keyword*

Synopsis	gNOI System Reboot RPC authorization
Context	**configure** system security aaa local-profiles profile *string* grpc rpc-authorization gnoi-system-reboot *keyword*
Tree	gnoi-system-reboot
Options	permit, deny
Default	deny
Introduced	20.5.R1
Platforms	All

gnoi-system-rebootstatus *keyword*

Synopsis	gNOI System RebootStatus RPC authorization
Context	**configure** system security aaa local-profiles profile *string* grpc rpc-authorization gnoi-system-rebootstatus *keyword*
Tree	gnoi-system-rebootstatus
Options	permit, deny
Default	deny
Introduced	20.5.R1
Platforms	All

gnoi-system-setpackage *keyword*

Synopsis	gNOI System SetPackage RPC authorization
Context	**configure** system security aaa local-profiles profile *string* grpc rpc-authorization gnoi-system-setpackage *keyword*
Tree	gnoi-system-setpackage
Options	permit, deny
Default	deny
Introduced	20.5.R1

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Platforms	All

gnoi-system-switchcontrolprocessor *keyword*

Synopsis	gNOI System SwitchControlProcessor RPC authorization
Context	**configure** system security aaa local-profiles profile *string* grpc rpc-authorization gnoi-system-switchcontrolprocessor *keyword*
Tree	gnoi-system-switchcontrolprocessor
Options	permit, deny
Default	deny
Introduced	20.5.R1
Platforms	All

gnoi-system-time *keyword*

Synopsis	gNOI System Time RPC authorization
Context	**configure** system security aaa local-profiles profile *string* grpc rpc-authorization gnoi-system-time *keyword*
Tree	gnoi-system-time
Options	permit, deny
Default	permit
Introduced	21.7.R1
Platforms	All

gnoi-system-traceroute *keyword*

Synopsis	gNOI System Traceroute RPC authorization
Context	**configure** system security aaa local-profiles profile *string* grpc rpc-authorization gnoi-system-traceroute *keyword*
Tree	gnoi-system-traceroute
Options	permit, deny
Default	permit
Introduced	21.7.R1
Platforms	All

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md-cli-session *keyword*

Synopsis	gNOI MdCli Session RPC authorization
Context	**configure** system security aaa local-profiles profile *string* grpc rpc-authorization md-cli-session *keyword*
Tree	md-cli-session
Options	permit, deny
Default	permit
Introduced	20.5.R1
Platforms	All

rib-api-getversion *keyword*

Synopsis	RibApi GetVersion RPC authorization
Context	**configure** system security aaa local-profiles profile *string* grpc rpc-authorization rib-api-getversion *keyword*
Tree	rib-api-getversion
Options	permit, deny
Default	permit
Introduced	16.0.R4
Platforms	All

rib-api-modify *keyword*

Synopsis	RibApi Modify RPC authorization
Context	**configure** system security aaa local-profiles profile *string* grpc rpc-authorization rib-api-modify *keyword*
Tree	rib-api-modify
Options	permit, deny
Default	permit
Introduced	16.0.R4
Platforms	All

li *boolean*

Synopsis	Allow lawful intercept profile ID
Context	**configure** system security aaa local-profiles profile *string* li *boolean*

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Tree	li
Default	false
Introduced	19.10.R1
Platforms	All

netconf

Synopsis	Enter the **netconf** context
Context	**configure** system security aaa local-profiles profile *string* netconf
Tree	netconf
Introduced	16.0.R1
Platforms	All

base-op-authorization

Synopsis	Enter the **base-op-authorization** context
Context	**configure** system security aaa local-profiles profile *string* netconf base-op-authorization
Tree	base-op-authorization
Description	Commands in this context configure the permission to use NETCONF operations at the base operation level for the specified profile. The NETCONF operations are authorized by default in the built-in system-generated administrative profile.
Introduced	16.0.R1
Platforms	All

action *boolean*

Synopsis	Allow NETCONF action operation
Context	**configure** system security aaa local-profiles profile *string* netconf base-op-authorization action *boolean*
Tree	action
Default	false
Introduced	21.7.R1
Platforms	All

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cancel-commit *boolean*

Synopsis	Allow NETCONF cancel-commit operation
Context	**configure** system security aaa local-profiles profile *string* netconf base-op-authorization cancel-commit *boolean*
Tree	cancel-commit
Default	false
Introduced	21.7.R1
Platforms	All

close-session *boolean*

Synopsis	Allow NETCONF close-session operation
Context	**configure** system security aaa local-profiles profile *string* netconf base-op-authorization close-session *boolean*
Tree	close-session
Default	false
Introduced	21.7.R1
Platforms	All

commit *boolean*

Synopsis	Allow NETCONF commit operation
Context	**configure** system security aaa local-profiles profile *string* netconf base-op-authorization commit *boolean*
Tree	commit
Default	false
Introduced	21.7.R1
Platforms	All

copy-config *boolean*

Synopsis	Allow NETCONF copy-config operation
Context	**configure** system security aaa local-profiles profile *string* netconf base-op-authorization copy-config *boolean*
Tree	copy-config
Default	false

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Introduced	21.7.R1
Platforms	All

create-subscription *boolean*

Synopsis	Allow NETCONF create-subscription operation
Context	**configure** system security aaa local-profiles profile *string* netconf base-op-authorization create-subscription *boolean*
Tree	create-subscription
Description	When configured to **true**, this command enables the NETCONF create-subscription operation in the default profile. The **base-op-authorization create-subscription** configuration is not pre-emptive, which means that it is checked only at the time of the initial subscription. Configuration changes to **base-op-authorization** do not cancel any in-progress subscriptions and operators who successfully subscribed continue to receive messages. When configured to **false**, this command disables the NETCONF create-subscription operation in the default profile. The operation is enabled by default in the built-in system-generated administrative profile.
Default	false
Introduced	21.7.R1
Platforms	All

delete-config *boolean*

Synopsis	Allow NETCONF delete-config operation
Context	**configure** system security aaa local-profiles profile *string* netconf base-op-authorization delete-config *boolean*
Tree	delete-config
Default	false
Introduced	21.7.R1
Platforms	All

discard-changes *boolean*

Synopsis	Allow NETCONF discard-changes operation
Context	**configure** system security aaa local-profiles profile *string* netconf base-op-authorization discard-changes *boolean*

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Tree	discard-changes
Default	false
Introduced	21.7.R1
Platforms	All

edit-config *boolean*

Synopsis	Allow NETCONF edit-config operation
Context	**configure** system security aaa local-profiles profile *string* netconf base-op-authorization edit-config *boolean*
Tree	edit-config
Default	false
Introduced	21.7.R1
Platforms	All

get *boolean*

Synopsis	Allow NETCONF get operation
Context	**configure** system security aaa local-profiles profile *string* netconf base-op-authorization get *boolean*
Tree	get
Default	false
Introduced	21.7.R1
Platforms	All

get-config *boolean*

Synopsis	Allow NETCONF get-config operation
Context	**configure** system security aaa local-profiles profile *string* netconf base-op-authorization get-config *boolean*
Tree	get-config
Default	false
Introduced	21.7.R1
Platforms	All

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get-data *boolean*

Synopsis	Allow NETCONF get-data operation
Context	**configure** system security aaa local-profiles profile *string* netconf base-op-authorization get-data *boolean*
Tree	get-data
Default	false
Introduced	21.7.R1
Platforms	All

get-schema *boolean*

Synopsis	Allow NETCONF get-schema operation
Context	**configure** system security aaa local-profiles profile *string* netconf base-op-authorization get-schema *boolean*
Tree	get-schema
Default	false
Introduced	21.7.R1
Platforms	All

kill-session *boolean*

Synopsis	Allow NETCONF kill-session operation
Context	**configure** system security aaa local-profiles profile *string* netconf base-op-authorization kill-session *boolean*
Tree	kill-session
Default	false
Introduced	16.0.R1
Platforms	All

lock *boolean*

Synopsis	Allow NETCONF lock and unlock operations
Context	**configure** system security aaa local-profiles profile *string* netconf base-op-authorization lock *boolean*
Tree	lock
Default	false

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Introduced	16.0.R1
Platforms	All

validate *boolean*

Synopsis	Allow NETCONF validate operation
Context	**configure** system security aaa local-profiles profile *string* netconf base-op-authorization validate *boolean*
Tree	validate
Default	false
Introduced	21.7.R1
Platforms	All

ssh-max-sessions *number*

Synopsis	Maximum number of concurrent SSH sessions
Context	**configure** system security aaa local-profiles profile *string* ssh-max-sessions *number*
Tree	ssh-max-sessions
Range	0 to 50
Introduced	16.0.R1
Platforms	All

telnet-max-sessions *number*

Synopsis	Maximum number of concurrent Telnet sessions
Context	**configure** system security aaa local-profiles profile *string* telnet-max-sessions *number*
Tree	telnet-max-sessions
Range	0 to 50
Introduced	16.0.R1
Platforms	All

management-interface

Synopsis	Enter the **management-interface** context
Context	**configure** system security aaa management-interface
Tree	management-interface

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Introduced	20.10.R1
Platforms	All

md-cli

Synopsis	Enter the **md-cli** context
Context	**configure** system security aaa management-interface md-cli
Tree	md-cli
Introduced	20.10.R1
Platforms	All

command-accounting-during-load *boolean*

Synopsis	Perform file command accounting for load or rollback
Context	**configure** system security aaa management-interface md-cli command-accounting-during-load *boolean*
Tree	command-accounting-during-load
Default	true
Introduced	20.10.R1
Platforms	All

output-authorization

Synopsis	Enter the **output-authorization** context
Context	**configure** system security aaa management-interface output-authorization
Tree	output-authorization
Description	Commands in this context configure output authorization for model-driven interfaces and telemetry. When output authorization is performed, commands that display configuration or state output must authorize every element in the output. If a remote AAA server is configured, there may be delays in displaying output while the output is authorized. The remote AAA server may receive a large volume of authorization requests when substantial output displays are needed, such as for system configuration details. Input to edit the configuration is always authorized, and is not affected by commands in this context.
Introduced	20.10.R1
Platforms	All

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md-interfaces *boolean*

Synopsis	Authorize output in model-driven interfaces
Context	**configure** system security aaa management-interface output-authorization md-interfaces *boolean*
Tree	md-interfaces
Description	When configured to **true**, output is authorized for the following: • MD-CLI **info** and **compare** commands • MD-CLI command completion of list key values • NETCONF <get> and <get-config> RPC • gRPC/gNMI Get RPCs
Default	true
Introduced	20.10.R1
Platforms	All

telemetry-data *boolean*

Synopsis	Authorize telemetry data in gNMI Subscribe RPC response
Context	**configure** system security aaa management-interface output-authorization telemetry-data *boolean*
Tree	telemetry-data
Default	false
Introduced	20.10.R1
Platforms	All

remote-servers

Synopsis	Enter the **remote-servers** context
Context	**configure** system security aaa remote-servers
Tree	remote-servers
Introduced	16.0.R1
Platforms	All

ldap

Synopsis	Enter the **ldap** context

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Context	**configure** system security aaa remote-servers ldap
Tree	ldap
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LDAP operation protocol
Context	**configure** system security aaa remote-servers ldap admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

public-key-authentication *boolean*

Synopsis	Allow SSH public key authentication from LDAP server
Context	**configure** system security aaa remote-servers ldap public-key-authentication *boolean*
Tree	public-key-authentication
Default	false
Introduced	16.0.R1
Platforms	All

route-preference *keyword*

Synopsis	Route preference to reach the AAA server
Context	**configure** system security aaa remote-servers ldap route-preference *keyword*
Tree	route-preference
Description	This command specifies the routing preference to reach the AAA server. If the configured option is to use both in-band and out-of-band routes, the out-of-band routes in the Base routing instance are used to reach the server before the in-band routes in the management routing instance.
Options	both, inband, outband
Default	both
Introduced	21.5.R1

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Platforms	All

server [index] *number*

Synopsis	Enter the **server** list instance
Context	**configure** system security aaa remote-servers ldap server *number*
Tree	server
Max. Instances	5
Introduced	16.0.R1
Platforms	All

[**index**] *number*

Synopsis	LDAP server ID
Context	**configure** system security aaa remote-servers ldap server *number*
Tree	server
Range	1 to 5
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

address [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **address** list instance
Context	**configure** system security aaa remote-servers ldap server *number* address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	address
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	LDAP server address

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Context	**configure** system security aaa remote-servers ldap server *number* address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

port *number*

Synopsis	Port number on which to contact the LDAP server
Context	**configure** system security aaa remote-servers ldap server *number* address *(ipv4-address-no-zone | ipv6-address-no-zone)* port *number*
Tree	port
Range	1 to 65535
Default	389
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LDAP server
Context	**configure** system security aaa remote-servers ldap server *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

bind-authentication

Synopsis	Enter the **bind-authentication** context
Context	**configure** system security aaa remote-servers ldap server *number* bind-authentication
Tree	bind-authentication
Introduced	16.0.R1
Platforms	All

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password *string*

Synopsis	Password used for authentication with the LDAP server
Context	**configure** system security aaa remote-servers ldap server *number* bind-authentication password *string*
Tree	password
String Length	1 to 199
Introduced	16.0.R1
Platforms	All

root-dn *string*

Synopsis	Root domain used for authentication with LDAP server
Context	**configure** system security aaa remote-servers ldap server *number* bind-authentication root-dn *string*
Tree	root-dn
String Length	1 to 512
Introduced	16.0.R1
Platforms	All

search

Synopsis	Enter the **search** context
Context	**configure** system security aaa remote-servers ldap server *number* search
Tree	search
Introduced	16.0.R1
Platforms	All

base-dn *string*

Synopsis	LDAP server search base domain name
Context	**configure** system security aaa remote-servers ldap server *number* search base-dn *string*
Tree	base-dn
String Length	1 to 512
Introduced	16.0.R1

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Platforms	All

server-name *string*

Synopsis	LDAP server name
Context	**configure** system security aaa remote-servers ldap server *number* server-name *string*
Tree	server-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

tls-profile *reference*

Synopsis	TLS client profile used to encrypt the LDAP connection
Context	**configure** system security aaa remote-servers ldap server *number* tls-profile *reference*
Tree	tls-profile
Reference	**configure** system security tls client-tls-profile *string*
Introduced	16.0.R1
Platforms	All

server-retry *number*

Synopsis	Number of attempts to retry contacting the LDAP server
Context	**configure** system security aaa remote-servers ldap server-retry *number*
Tree	server-retry
Range	1 to 10
Default	3
Introduced	16.0.R1
Platforms	All

server-timeout *number*

Synopsis	Timeout for a response from the LDAP server
Context	**configure** system security aaa remote-servers ldap server-timeout *number*
Tree	server-timeout

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Range	1 to 90
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	All

use-default-template *boolean*

Synopsis	Apply the default template to LDAP
Context	**configure** system security aaa remote-servers ldap use-default-template *boolean*
Tree	use-default-template
Default	true
Introduced	16.0.R1
Platforms	All

radius

Synopsis	Enter the **radius** context
Context	**configure** system security aaa remote-servers radius
Tree	radius
Introduced	16.0.R1
Platforms	All

access-algorithm *keyword*

Synopsis	Algorithm used to access the set of RADIUS servers
Context	**configure** system security aaa remote-servers radius access-algorithm *keyword*
Tree	access-algorithm
Options	direct, round-robin
Default	direct
Introduced	16.0.R1
Platforms	All

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accounting *boolean*

Synopsis	Enable RADIUS command accounting
Context	**configure** system security aaa remote-servers radius accounting *boolean*
Tree	accounting
Default	false
Introduced	16.0.R1
Platforms	All

accounting-port *number*

Synopsis	Port number on RADIUS server for accounting requests
Context	**configure** system security aaa remote-servers radius accounting-port *number*
Tree	accounting-port
Range	1 to 65535
Default	1813
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the authentication server
Context	**configure** system security aaa remote-servers radius admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

authorization *boolean*

Synopsis	Enable RADIUS authorization
Context	**configure** system security aaa remote-servers radius authorization *boolean*
Tree	authorization
Default	false
Introduced	16.0.R1

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Platforms	All

interactive-authentication *boolean*

Synopsis	Enable RADIUS interactive authentication
Context	**configure** system security aaa remote-servers radius interactive-authentication *boolean*
Tree	interactive-authentication
Default	false
Introduced	16.0.R1
Platforms	All

port *number*

Synopsis	UDP port number on which to contact RADIUS server
Context	**configure** system security aaa remote-servers radius port *number*
Tree	port
Range	1 to 65535
Default	1812
Introduced	16.0.R1
Platforms	All

route-preference *keyword*

Synopsis	Route preference to reach the AAA server
Context	**configure** system security aaa remote-servers radius route-preference *keyword*
Tree	route-preference
Description	This command specifies the routing preference to reach the AAA server. If the configured option is to use both in-band and out-of-band routes, the out-of-band routes in the Base routing instance are used to reach the server before the in-band routes in the management routing instance.
Options	both, inband, outband
Default	both
Introduced	21.5.R1
Platforms	All

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server [index] *number*

Synopsis	Enter the **server** list instance
Context	**configure** system security aaa remote-servers radius server *number*
Tree	server
Max. Instances	5
Introduced	16.0.R1
Platforms	All

[**index**] *number*

Synopsis	RADIUS server ID
Context	**configure** system security aaa remote-servers radius server *number*
Tree	server
Range	1 to 5
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the RADIUS server
Context	**configure** system security aaa remote-servers radius server *number* address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

authenticator *keyword*

Synopsis	Authenticator hash algorithm for the RADIUS server
Context	**configure** system security aaa remote-servers radius server *number* authenticator *keyword*
Tree	authenticator

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Description	This command specifies the hash algorithm used to authenticate RADIUS Access-Request, Access-Accept, Access-Reject, Access-Challenge, Accounting-Request, and Accounting-Response packets.
Options	md5, sm3
Default	md5
Introduced	22.10.R1
Platforms	All

secret *string*

Synopsis	Secret key to access the RADIUS server
Context	**configure** system security aaa remote-servers radius server *number* secret *string*
Tree	secret
String Length	1 to 115
Introduced	16.0.R1
Platforms	All

tls-client-profile *reference*

Synopsis	TLS client profile for the RADIUS server
Context	**configure** system security aaa remote-servers radius server *number* tls-client-profile *reference*
Tree	tls-client-profile
Description	This command specifies the TLS client profile used to encrypt RADIUS communication. When configured, RADIUS messages are sent using TLS.
Reference	**configure** system security tls client-tls-profile *string*
Introduced	21.10.R1
Platforms	All

server-retry *number*

Synopsis	Number of attempts to retry contacting RADIUS server
Context	**configure** system security aaa remote-servers radius server-retry *number*
Tree	server-retry
Range	1 to 10
Default	3

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Introduced	16.0.R1
Platforms	All

server-timeout *number*

Synopsis	Time to wait for a response from the RADIUS server
Context	**configure** system security aaa remote-servers radius server-timeout *number*
Tree	server-timeout
Range	1 to 90
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	All

use-default-template *boolean*

Synopsis	Apply the RADIUS default user template to RADIUS user
Context	**configure** system security aaa remote-servers radius use-default-template *boolean*
Tree	use-default-template
Default	false
Introduced	16.0.R1
Platforms	All

tacplus

Synopsis	Enter the **tacplus** context
Context	**configure** system security aaa remote-servers tacplus
Tree	tacplus
Introduced	16.0.R1
Platforms	All

accounting

Synopsis	Enable the **accounting** context
Context	**configure** system security aaa remote-servers tacplus accounting

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Tree	accounting
Introduced	16.0.R1
Platforms	All

record-type *keyword*

Synopsis	Type of accounting record packet sent to TACACS+ server
Context	**configure** system security aaa remote-servers tacplus accounting record-type *keyword*
Tree	record-type
Options	start-stop, stop-only
Default	stop-only
Introduced	16.0.R1
Platforms	All

admin-control

Synopsis	Enter the **admin-control** context
Context	**configure** system security aaa remote-servers tacplus admin-control
Tree	admin-control
Introduced	16.0.R1
Platforms	All

tacplus-map-to-priv-lvl *number*

Synopsis	Interactive authentication from node to TACACS+ server
Context	**configure** system security aaa remote-servers tacplus admin-control tacplus-map-to-priv-lvl *number*
Tree	tacplus-map-to-priv-lvl
Range	0 to 15
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the TACACS+ protocol
Context	**configure** system security aaa remote-servers tacplus admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

authorization

Synopsis	Enable the **authorization** context
Context	**configure** system security aaa remote-servers tacplus authorization
Tree	authorization
Introduced	16.0.R1
Platforms	All

request-format

Synopsis	Enter the **request-format** context
Context	**configure** system security aaa remote-servers tacplus authorization request-format
Tree	request-format
Description	Commands in this context configure access operations that are sent to the TACACS+ server during authorization.
Introduced	21.10.R3
Platforms	All

access-operation-cmd *keyword*

Synopsis	Access operations sent in authorization requests
Context	**configure** system security aaa remote-servers tacplus authorization request-format access-operation-cmd *keyword*
Tree	access-operation-cmd
Description	This command sends an operation argument in authorization requests. In model-driven interfaces, this command configures the system to send the operation in the cmd argument, and the path in the cmd-args argument, in TACACS+ authorization requests. This command does not apply to authorization requests in classic interfaces.
Options	delete

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Max. Instances	1
Introduced	21.10.R3
Platforms	All

use-priv-lvl *boolean*

Synopsis	Allow privilege level mapping
Context	**configure** system security aaa remote-servers tacplus authorization use-priv-lvl *boolean*
Tree	use-priv-lvl
Description	When configured to **true**, this command automatically performs a single authorization request to the TACACS+ server for cmd* (all commands) immediately after login, and then uses the local profile associated (via the **priv-lvl-map**) with the priv-lvl returned by the TACACS+ server for all subsequent authorization (except **enable-admin**). After the initial authorization for cmd*, no further authorization requests are sent to the TACACS+ server (except **enable-admin**). When configured to **false**, each command is sent to the TACACS+ server for authorization (this is true regardless of whether the **tacplus use-default-template** setting is enabled).
Default	false
Introduced	16.0.R1
Platforms	All

interactive-authentication *boolean*

Synopsis	Allows TACACS+ interactive authentication
Context	**configure** system security aaa remote-servers tacplus interactive-authentication *boolean*
Tree	interactive-authentication
Default	false
Introduced	16.0.R1
Platforms	All

priv-lvl-map

Synopsis	Enter the **priv-lvl-map** context
Context	**configure** system security aaa remote-servers tacplus priv-lvl-map
Tree	priv-lvl-map

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Introduced	16.0.R1
Platforms	All

priv-lvl [level] *number*

Synopsis	Enter the **priv-lvl** list instance
Context	**configure** system security aaa remote-servers tacplus priv-lvl-map priv-lvl *number*
Tree	priv-lvl
Introduced	16.0.R1
Platforms	All

[**level**] *number*

Synopsis	Privilege level for the mapping
Context	**configure** system security aaa remote-servers tacplus priv-lvl-map priv-lvl *number*
Tree	priv-lvl
Range	0 to 15
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

user-profile-name *reference*

Synopsis	User profile for the mapping
Context	**configure** system security aaa remote-servers tacplus priv-lvl-map priv-lvl *number* user-profile-name *reference*
Tree	user-profile-name
Reference	**configure** system security aaa local-profiles profile *string*
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

route-preference *keyword*

Synopsis	Route preference to reach the AAA server

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Context	**configure** system security aaa remote-servers tacplus route-preference *keyword*
Tree	route-preference
Description	This command specifies the routing preference to reach the AAA server. If the configured option is to use both in-band and out-of-band routes, the out-of-band routes in the Base routing instance are used to reach the server before the in-band routes in the management routing instance.
Options	both, inband, outband
Default	both
Introduced	21.5.R1
Platforms	All

server [index] *number*

Synopsis	Enter the **server** list instance
Context	**configure** system security aaa remote-servers tacplus server *number*
Tree	server
Max. Instances	5
Introduced	16.0.R1
Platforms	All

[**index**] *number*

Synopsis	TACACS+ server ID
Context	**configure** system security aaa remote-servers tacplus server *number*
Tree	server
Range	1 to 5
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the TACACS+ server
Context	**configure** system security aaa remote-servers tacplus server *number* address *(ipv4-address-no-zone | ipv6-address-no-zone)*

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Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

port *number*

Synopsis	TCP port ID on which to contact TACACS+ server
Context	**configure** system security aaa remote-servers tacplus server *number* port *number*
Tree	port
Range	0 | 1 to 65535
Default	49
Introduced	16.0.R1
Platforms	All

secret *string*

Synopsis	Secret key to access the TACACS+ server
Context	**configure** system security aaa remote-servers tacplus server *number* secret *string*
Tree	secret
String Length	1 to 199
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

server-timeout *number*

Synopsis	Time to wait for a response from the TACACS+ server
Context	**configure** system security aaa remote-servers tacplus server-timeout *number*
Tree	server-timeout
Range	1 to 90
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	All

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use-default-template *boolean*

Synopsis	Apply TACACS+ default user-template to TACACS+ user
Context	**configure** system security aaa remote-servers tacplus use-default-template *boolean*
Tree	use-default-template
Default	true
Introduced	16.0.R1
Platforms	All

vprn-server

Synopsis	Enter the **vprn-server** context
Context	**configure** system security aaa remote-servers vprn-server
Tree	vprn-server
Introduced	22.2.R1
Platforms	All

inband *reference*

Synopsis	VPRN service used for AAA by in-band sessions
Context	**configure** system security aaa remote-servers vprn-server inband *reference*
Tree	inband
Description	This command configures TACACS+ or RADIUS servers in a VPRN to be used for AAA by that VPRN and by sessions in the Base routing instance.
Reference	**configure** service vprn *string*
Introduced	22.2.R1
Platforms	All

outband *reference*

Synopsis	VPRN service used for AAA by out-of-band sessions
Context	**configure** system security aaa remote-servers vprn-server outband *reference*
Tree	outband
Description	This command configures TACACS+ and RADIUS servers in a VPRN to be used for AAA by that VPRN and by sessions on the console or out-of-band (OOB) Ethernet ports.

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Reference	**configure** service vprn *string*
Introduced	22.2.R1
Platforms	All

vprn *reference*

Synopsis	VPRN used for AAA in VPRNs without a AAA server
Context	**configure** system security aaa remote-servers vprn-server vprn *reference*
Tree	vprn
Description	This command configures TACACS+ or RADIUS servers in a VPRN to be used for AAA by that VPRN and by sessions in VPRNs without a AAA server configured.
Reference	**configure** service vprn *string*
Introduced	22.2.R1
Platforms	All

user-template [user-template-name] *keyword*

Synopsis	Enter the **user-template** list instance
Context	**configure** system security aaa user-template *keyword*
Tree	user-template
Introduced	16.0.R1
Platforms	All

[**user-template-name**] *keyword*

Synopsis	Default user template applied to the system user
Context	**configure** system security aaa user-template *keyword*
Tree	user-template
Options	ldap-default, radius-default, tacplus-default
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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access

Synopsis	Enter the **access** context
Context	**configure** system security aaa user-template *keyword* access
Tree	access
Introduced	16.0.R1
Platforms	All

console *boolean*

Synopsis	Allow console access (serial port or Telnet)
Context	**configure** system security aaa user-template *keyword* access console *boolean*
Tree	console
Default	true
Introduced	16.0.R1
Platforms	All

ftp *boolean*

Synopsis	Allow FTP access
Context	**configure** system security aaa user-template *keyword* access ftp *boolean*
Tree	ftp
Default	false
Introduced	16.0.R1
Platforms	All

grpc *boolean*

Synopsis	Allow gRPC access
Context	**configure** system security aaa user-template *keyword* access grpc *boolean*
Tree	grpc
Default	false
Introduced	16.0.R1
Platforms	All

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li *boolean*

Synopsis	Allow access to lawful intercept
Context	**configure** system security aaa user-template *keyword* access li *boolean*
Tree	li
Default	false
Introduced	19.10.R1
Platforms	All

netconf *boolean*

Synopsis	Allow NETCONF session access
Context	**configure** system security aaa user-template *keyword* access netconf *boolean*
Tree	netconf
Default	false
Introduced	16.0.R1
Platforms	All

console

Synopsis	Enter the **console** context
Context	**configure** system security aaa user-template *keyword* console
Tree	console
Introduced	16.0.R1
Platforms	All

login-exec *string*

Synopsis	File to execute for a successful user login via console
Context	**configure** system security aaa user-template *keyword* console login-exec *string*
Tree	login-exec
String Length	1 to 200
Introduced	16.0.R1
Platforms	All

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home-directory *(sat-url | cflash-without-slot-url)*

Synopsis	User local home directory based on the template
Context	**configure** system security aaa user-template *keyword* home-directory *(sat-url | cflash-without-slot-url)*
Tree	home-directory
String Length	1 to 200
Introduced	16.0.R1
Platforms	All

profile *string*

Synopsis	User profile based on the template
Context	**configure** system security aaa user-template *keyword* profile *string*
Tree	profile
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

restricted-to-home *boolean*

Synopsis	Restrict file access to the home directory of the user
Context	**configure** system security aaa user-template *keyword* restricted-to-home *boolean*
Tree	restricted-to-home
Default	false
Introduced	16.0.R1
Platforms	All

save-when-restricted *boolean*

Synopsis	Save configurations when the user is restricted to home
Context	**configure** system security aaa user-template *keyword* save-when-restricted *boolean*
Tree	save-when-restricted
Description	When configured to **true**, the system permits all configuration save operations (such as **admin save**) via any management interface (such as CLI and NETCONF) even if **restricted-to-home** is set to **true**. The home directory does not need to be configured.
Default	false

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Introduced	22.10.R1
Platforms	All

cli-script

Synopsis	Enter the **cli-script** context
Context	**configure** system security cli-script
Tree	cli-script
Introduced	16.0.R1
Platforms	All

authorization

Synopsis	Enter the **authorization** context
Context	**configure** system security cli-script authorization
Tree	authorization
Introduced	16.0.R1
Platforms	All

cron

Synopsis	Enter the **cron** context
Context	**configure** system security cli-script authorization cron
Tree	cron
Description	Commands in this context configure authorization for the cron job scheduler.
Introduced	16.0.R1
Platforms	All

cli-user *reference*

Synopsis	User profile name for CLI command script authorization
Context	**configure** system security cli-script authorization cron cli-user *reference*
Tree	cli-user
Reference	**configure** system security user-params local-user user *string*
Introduced	16.0.R1

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Platforms	All

event-handler

Synopsis	Enter the **event-handler** context
Context	**configure** system security cli-script authorization event-handler
Tree	event-handler
Description	Commands in this context configure authorization for the Event Handling System (EHS). EHS allows user-controlled programmatic exception handling by allowing a CLI script to be executed upon the detection of a log event.
Introduced	16.0.R1
Platforms	All

cli-user *reference*

Synopsis	User profile name for CLI command script authorization
Context	**configure** system security cli-script authorization event-handler cli-user *reference*
Tree	cli-user
Reference	**configure** system security user-params local-user user *string*
Introduced	16.0.R1
Platforms	All

cpm-filter

Synopsis	Enter the **cpm-filter** context
Context	**configure** system security cpm-filter
Tree	cpm-filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

default-action *keyword*

Synopsis	Action for packets that do not match any filter entries
Context	**configure** system security cpm-filter default-action *keyword*
Tree	default-action
Options	drop, accept

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Default	accept
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ip-filter

Synopsis	Enter the **ip-filter** context
Context	**configure** system security cpm-filter ip-filter
Tree	ip-filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the CPM filter
Context	**configure** system security cpm-filter ip-filter admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** system security cpm-filter ip-filter entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**entry-id**] *number*

Synopsis	Filter entry ID
Context	**configure** system security cpm-filter ip-filter entry *number*
Tree	entry

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Range	1 to 131072
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

action

Synopsis	Enter the **action** context
Context	**configure** system security cpm-filter ip-filter entry *number* action
Tree	action
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

accept

Synopsis	Forward matching packets
Context	**configure** system security cpm-filter ip-filter entry *number* action accept
Tree	accept
Notes	The following elements are part of a choice: **accept**, **default**, **drop**, or **queue**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

default

Synopsis	Use default action for matching packets
Context	**configure** system security cpm-filter ip-filter entry *number* action default
Tree	default
Notes	The following elements are part of a choice: **accept**, **default**, **drop**, or **queue**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

drop

Synopsis	Drop matching packets
Context	**configure** system security cpm-filter ip-filter entry *number* action drop

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Tree	drop
Notes	The following elements are part of a choice: **accept**, **default**, **drop**, or **queue**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

queue *reference*

Synopsis	Forward matching packets to the CPM hardware queue
Context	**configure** system security cpm-filter ip-filter entry *number* action queue *reference*
Tree	queue
Reference	**configure** system security cpm-queue queue *number*
Notes	The following elements are part of a choice: **accept**, **default**, **drop**, or **queue**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** system security cpm-filter ip-filter entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

log *reference*

Synopsis	Log ID where matching packets are entered
Context	**configure** system security cpm-filter ip-filter entry *number* log *reference*
Tree	log
Reference	**configure** filter log *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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match

Synopsis	Enter the **match** context
Context	**configure** system security cpm-filter ip-filter entry *number* match
Tree	match
Description	Commands in this context specify match criteria for the entry. When the match criteria have been satisfied, the action associated with the entry is executed. If more than one match criterion is configured, all criteria must be met before the action associated with the entry is executed.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dscp *keyword*

Synopsis	DSCP used as the match criterion on the packet
Context	**configure** system security cpm-filter ip-filter entry *number* match dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dst-ip

Synopsis	Enter the **dst-ip** context
Context	**configure** system security cpm-filter ip-filter entry *number* match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

address *(ipv4-prefix-with-host-bits | ipv4-address)*

Synopsis	IPv4 address used as the match criterion
Context	**configure** system security cpm-filter ip-filter entry *number* match dst-ip address *(ipv4-prefix-with-host-bits | ipv4-address)*

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Tree	address
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ip-prefix-list *reference*

Synopsis	IP4 address prefix list used as match criterion
Context	**configure** system security cpm-filter ip-filter entry *number* match dst-ip ip-prefix-list *reference*
Tree	ip-prefix-list
Reference	**configure** filter match-list ip-prefix-list *string*
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *string*

Synopsis	IPv4 address mask used as the match criterion
Context	**configure** system security cpm-filter ip-filter entry *number* match dst-ip mask *string*
Tree	mask
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dst-port

Synopsis	Enter the **dst-port** context
Context	**configure** system security cpm-filter ip-filter entry *number* match dst-port
Tree	dst-port
Notes	The following elements are part of a choice: **port** or (**dst-port** and **src-port**).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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eq *number*

Synopsis	Port number as the match criterion
Context	**configure** system security cpm-filter ip-filter entry *number* match dst-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *number*

Synopsis	Port mask as the match criterion
Context	**configure** system security cpm-filter ip-filter entry *number* match dst-port mask *number*
Tree	mask
Range	1 to 65535
Default	65535
Notes	The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-list *reference*

Synopsis	Port list as the match criterion
Context	**configure** system security cpm-filter ip-filter entry *number* match dst-port port-list *reference*
Tree	port-list
Reference	**configure** filter match-list port-list *string*
Notes	The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enable the **range** context
Context	**configure** system security cpm-filter ip-filter entry *number* match dst-port range

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Tree	range
Notes	The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

end *number*

Synopsis	Upper bound of the port number to match
Context	**configure** system security cpm-filter ip-filter entry *number* match dst-port range end *number*
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

start *number*

Synopsis	Lower bound of the port number to match
Context	**configure** system security cpm-filter ip-filter entry *number* match dst-port range start *number*
Tree	start
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fragment *keyword*

Synopsis	Match criterion based on presence of fragmented packets
Context	**configure** system security cpm-filter ip-filter entry *number* match fragment *keyword*
Tree	fragment
Description	This command specifies the match criterion based on the existence or absence of fragmented IP packets. Matching on fragmented IPv4 packets occurs when all packets have either the MF (more fragment) bit set or have the Fragment Offset field of the IP header set to a non-

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zero value. For IPv6, the existence of the IPv6 Fragmentation Extension Header results in a fragmented packet match.

Matching on non-fragmented IPv4 packets occurs when all packets have the MF bit set to zero and the Fragment Offset field is also set to zero. For IPv6, the absence of an IPv6 Fragmentation Extension Header results in a non-fragmented packet match.

Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

icmp

Synopsis	Enter the **icmp** context
Context	**configure** system security cpm-filter ip-filter entry *number* match icmp
Tree	icmp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

code *number*

Synopsis	ICMP code to match
Context	**configure** system security cpm-filter ip-filter entry *number* match icmp code *number*
Tree	code
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type *number*

Synopsis	ICMP type to match
Context	**configure** system security cpm-filter ip-filter entry *number* match icmp type *number*
Tree	type
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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ip-option

Synopsis	Enable the **ip-option** context
Context	**configure** system security cpm-filter ip-filter entry *number* match ip-option
Tree	ip-option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *number*

Synopsis	Range of option numbers for the mask match criterion
Context	**configure** system security cpm-filter ip-filter entry *number* match ip-option mask *number*
Tree	mask
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type *number*

Synopsis	Specific IP option to match
Context	**configure** system security cpm-filter ip-filter entry *number* match ip-option type *number*
Tree	type
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiple-option *boolean*

Synopsis	Match on packets containing multiple option fields
Context	**configure** system security cpm-filter ip-filter entry *number* match multiple-option *boolean*
Tree	multiple-option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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option-present *boolean*

Synopsis	Match on packets with option field present
Context	**configure** system security cpm-filter ip-filter entry *number* match option-present *boolean*
Tree	option-present
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port

Synopsis	Enter the **port** context
Context	**configure** system security cpm-filter ip-filter entry *number* match port
Tree	port
Notes	The following elements are part of a choice: **port** or (**dst-port** and **src-port**).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eq *number*

Synopsis	Port number as the match criterion
Context	**configure** system security cpm-filter ip-filter entry *number* match port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *number*

Synopsis	Port mask as the match criterion
Context	**configure** system security cpm-filter ip-filter entry *number* match port mask *number*
Tree	mask
Range	1 to 65535
Default	65535
Notes	The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-list *reference*

Synopsis	Port list as the match criterion
Context	**configure** system security cpm-filter ip-filter entry *number* match port port-list *reference*
Tree	port-list
Reference	**configure** filter match-list port-list *string*
Notes	The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enable the **range** context
Context	**configure** system security cpm-filter ip-filter entry *number* match port range
Tree	range
Notes	The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

end *number*

Synopsis	Upper bound of the port number to match
Context	**configure** system security cpm-filter ip-filter entry *number* match port range end *number*
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

start *number*

Synopsis	Lower bound of the port number to match

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Context	**configure** system security cpm-filter ip-filter entry *number* match port range start *number*
Tree	start
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

protocol *(number | keyword)*

Synopsis	IP protocol as the match criterion
Context	**configure** system security cpm-filter ip-filter entry *number* match protocol *(number | keyword)*
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

router-instance *string*

Synopsis	Router instance as the match criteria
Context	**configure** system security cpm-filter ip-filter entry *number* match router-instance *string*
Tree	router-instance
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

src-ip

Synopsis	Enter the **src-ip** context
Context	**configure** system security cpm-filter ip-filter entry *number* match src-ip
Tree	src-ip
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

address *(ipv4-prefix-with-host-bits | ipv4-address)*

Synopsis	IPv4 address used as the match criterion
Context	**configure** system security cpm-filter ip-filter entry *number* match src-ip address *(ipv4-prefix-with-host-bits | ipv4-address)*
Tree	address
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ip-prefix-list *reference*

Synopsis	IP4 address prefix list used as match criterion
Context	**configure** system security cpm-filter ip-filter entry *number* match src-ip ip-prefix-list *reference*
Tree	ip-prefix-list
Reference	**configure** filter match-list ip-prefix-list *string*
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *string*

Synopsis	IPv4 address mask used as the match criterion
Context	**configure** system security cpm-filter ip-filter entry *number* match src-ip mask *string*
Tree	mask
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

src-port

Synopsis	Enter the **src-port** context

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Context	**configure** system security cpm-filter ip-filter entry *number* match src-port
Tree	src-port
Notes	The following elements are part of a choice: **port** or (**dst-port** and **src-port**).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eq *number*

Synopsis	Port number as the match criterion
Context	**configure** system security cpm-filter ip-filter entry *number* match src-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *number*

Synopsis	Port mask as the match criterion
Context	**configure** system security cpm-filter ip-filter entry *number* match src-port mask *number*
Tree	mask
Range	1 to 65535
Default	65535
Notes	The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-list *reference*

Synopsis	Port list as the match criterion
Context	**configure** system security cpm-filter ip-filter entry *number* match src-port port-list *reference*
Tree	port-list
Reference	**configure** filter match-list port-list *string*
Notes	The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enable the **range** context
Context	**configure** system security cpm-filter ip-filter entry *number* match src-port range
Tree	range
Notes	The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

end *number*

Synopsis	Upper bound of the port number to match
Context	**configure** system security cpm-filter ip-filter entry *number* match src-port range end *number*
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

start *number*

Synopsis	Lower bound of the port number to match
Context	**configure** system security cpm-filter ip-filter entry *number* match src-port range start *number*
Tree	start
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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tcp-flags

Synopsis	Enter the **tcp-flags** context
Context	**configure** system security cpm-filter ip-filter entry *number* match tcp-flags
Tree	tcp-flags
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ack *boolean*

Synopsis	ACK bit in TCP header control bits as match criterion
Context	**configure** system security cpm-filter ip-filter entry *number* match tcp-flags ack *boolean*
Tree	ack
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

syn *boolean*

Synopsis	SYN bit in TCP header control bits as match criterion
Context	**configure** system security cpm-filter ip-filter entry *number* match tcp-flags syn *boolean*
Tree	syn
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6-filter

Synopsis	Enter the **ipv6-filter** context
Context	**configure** system security cpm-filter ipv6-filter
Tree	ipv6-filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the CPM filter
Context	**configure** system security cpm-filter ipv6-filter admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** system security cpm-filter ipv6-filter entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**entry-id**] *number*

Synopsis	Filter entry ID
Context	**configure** system security cpm-filter ipv6-filter entry *number*
Tree	entry
Range	1 to 131072
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

action

Synopsis	Enter the **action** context
Context	**configure** system security cpm-filter ipv6-filter entry *number* action
Tree	action
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

accept

Synopsis	Forward matching packets

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Context	**configure** system security cpm-filter ipv6-filter entry *number* action accept
Tree	accept
Notes	The following elements are part of a choice: **accept**, **default**, **drop**, or **queue**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

default

Synopsis	Use default action for matching packets
Context	**configure** system security cpm-filter ipv6-filter entry *number* action default
Tree	default
Notes	The following elements are part of a choice: **accept**, **default**, **drop**, or **queue**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

drop

Synopsis	Drop matching packets
Context	**configure** system security cpm-filter ipv6-filter entry *number* action drop
Tree	drop
Notes	The following elements are part of a choice: **accept**, **default**, **drop**, or **queue**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

queue *reference*

Synopsis	Forward matching packets to the CPM hardware queue
Context	**configure** system security cpm-filter ipv6-filter entry *number* action queue *reference*
Tree	queue
Reference	**configure** system security cpm-queue queue *number*
Notes	The following elements are part of a choice: **accept**, **default**, **drop**, or **queue**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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description *string*

Synopsis	Text description
Context	**configure** system security cpm-filter ipv6-filter entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

log *reference*

Synopsis	Log ID where matching packets are entered
Context	**configure** system security cpm-filter ipv6-filter entry *number* log *reference*
Tree	log
Reference	**configure** filter log *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

match

Synopsis	Enter the **match** context
Context	**configure** system security cpm-filter ipv6-filter entry *number* match
Tree	match
Description	Commands in this context specify match criteria for the entry. When the match criteria have been satisfied, the action associated with the entry is executed. If more than one match criterion is configured, all criteria must be met before the action associated with the entry is executed.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dscp *keyword*

Synopsis	DSCP used as the match criterion on the packet
Context	**configure** system security cpm-filter ipv6-filter entry *number* match dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31,

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	cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dst-ip

Synopsis	Enter the **dst-ip** context
Context	**configure** system security cpm-filter ipv6-filter entry *number* match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

address *(ipv6-prefix-with-host-bits | ipv6-address)*

Synopsis	IPv6 address used as the match criterion
Context	**configure** system security cpm-filter ipv6-filter entry *number* match dst-ip address *(ipv6-prefix-with-host-bits | ipv6-address)*
Tree	address
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6-prefix-list *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	**configure** system security cpm-filter ipv6-filter entry *number* match dst-ip ipv6-prefix-list *reference*
Tree	ipv6-prefix-list
Reference	**configure** filter match-list ipv6-prefix-list *string*
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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mask *string*

Synopsis	IPv6 address mask used as the match criterion
Context	**configure** system security cpm-filter ipv6-filter entry *number* match dst-ip mask *string*
Tree	mask
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dst-port

Synopsis	Enter the **dst-port** context
Context	**configure** system security cpm-filter ipv6-filter entry *number* match dst-port
Tree	dst-port
Notes	The following elements are part of a choice: **port** or (**dst-port** and **src-port**).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eq *number*

Synopsis	Port number as the match criterion
Context	**configure** system security cpm-filter ipv6-filter entry *number* match dst-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *number*

Synopsis	Port mask as the match criterion
Context	**configure** system security cpm-filter ipv6-filter entry *number* match dst-port mask *number*
Tree	mask
Range	1 to 65535
Default	65535

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Notes	The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-list *reference*

Synopsis	Port list as the match criterion
Context	**configure** system security cpm-filter ipv6-filter entry *number* match dst-port port-list *reference*
Tree	port-list
Reference	**configure** filter match-list port-list *string*
Notes	The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enable the **range** context
Context	**configure** system security cpm-filter ipv6-filter entry *number* match dst-port range
Tree	range
Notes	The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

end *number*

Synopsis	Upper bound of the port number to match
Context	**configure** system security cpm-filter ipv6-filter entry *number* match dst-port range end *number*
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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start *number*

Synopsis	Lower bound of the port number to match
Context	**configure** system security cpm-filter ipv6-filter entry *number* match dst-port range start *number*
Tree	start
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

extension-header

Synopsis	Enter the **extension-header** context
Context	**configure** system security cpm-filter ipv6-filter entry *number* match extension-header
Tree	extension-header
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

hop-by-hop *boolean*

Synopsis	Match on existence of Hop-By-Hop Options Header
Context	**configure** system security cpm-filter ipv6-filter entry *number* match extension-header hop-by-hop *boolean*
Tree	hop-by-hop
Description	When configured to **true**, a match occurs when the Hop-by-Hop Options Extension Header is present. When configured to **false**, a match occurs when the Hop-by-Hop Options Extension Header is not present.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

flow-label *number*

Synopsis	Flow label in the IPv6 header as the match criterion
Context	**configure** system security cpm-filter ipv6-filter entry *number* match flow-label *number*

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Tree	flow-label
Range	0 to 1048575
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fragment *keyword*

Synopsis	Match criterion based on presence of fragmented packets
Context	**configure** system security cpm-filter ipv6-filter entry *number* match fragment *keyword*
Tree	fragment
Description	This command specifies the match criterion based on the existence or absence of fragmented IP packets. Matching on fragmented IPv4 packets occurs when all packets have either the MF (more fragment) bit set or have the Fragment Offset field of the IP header set to a non-zero value. For IPv6, the existence of the IPv6 Fragmentation Extension Header results in a fragmented packet match. Matching on non-fragmented IPv4 packets occurs when all packets have the MF bit set to zero and the Fragment Offset field is also set to zero. For IPv6, the absence of an IPv6 Fragmentation Extension Header results in a non-fragmented packet match.
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

icmp

Synopsis	Enter the **icmp** context
Context	**configure** system security cpm-filter ipv6-filter entry *number* match icmp
Tree	icmp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

code *number*

Synopsis	ICMP code as the match criterion
Context	**configure** system security cpm-filter ipv6-filter entry *number* match icmp code *number*
Tree	code
Range	0 to 255

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type *number*

Synopsis	ICMP type as the match criterion
Context	**configure** system security cpm-filter ipv6-filter entry *number* match icmp type *number*
Tree	type
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

next-header *(number | keyword)*

Synopsis	IP protocol to match
Context	**configure** system security cpm-filter ipv6-filter entry *number* match next-header *(number | keyword)*
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port

Synopsis	Enter the **port** context
Context	**configure** system security cpm-filter ipv6-filter entry *number* match port
Tree	port
Notes	The following elements are part of a choice: **port** or (**dst-port** and **src-port**).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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eq *number*

Synopsis	Port number as the match criterion
Context	**configure** system security cpm-filter ipv6-filter entry *number* match port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *number*

Synopsis	Port mask as the match criterion
Context	**configure** system security cpm-filter ipv6-filter entry *number* match port mask *number*
Tree	mask
Range	1 to 65535
Default	65535
Notes	The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-list *reference*

Synopsis	Port list as the match criterion
Context	**configure** system security cpm-filter ipv6-filter entry *number* match port port-list *reference*
Tree	port-list
Reference	**configure** filter match-list port-list *string*
Notes	The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enable the **range** context
Context	**configure** system security cpm-filter ipv6-filter entry *number* match port range

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Tree	range
Notes	The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

end *number*

Synopsis	Upper bound of the port number to match
Context	**configure** system security cpm-filter ipv6-filter entry *number* match port range end *number*
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

start *number*

Synopsis	Lower bound of the port number to match
Context	**configure** system security cpm-filter ipv6-filter entry *number* match port range start *number*
Tree	start
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

router-instance *string*

Synopsis	Router instance as the match criteria
Context	**configure** system security cpm-filter ipv6-filter entry *number* match router-instance *string*
Tree	router-instance
String Length	1 to 64
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

src-ip

Synopsis	Enter the **src-ip** context
Context	**configure** system security cpm-filter ipv6-filter entry *number* match src-ip
Tree	src-ip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

address *(ipv6-prefix-with-host-bits | ipv6-address)*

Synopsis	IPv6 address used as the match criterion
Context	**configure** system security cpm-filter ipv6-filter entry *number* match src-ip address *(ipv6-prefix-with-host-bits | ipv6-address)*
Tree	address
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6-prefix-list *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	**configure** system security cpm-filter ipv6-filter entry *number* match src-ip ipv6-prefix-list *reference*
Tree	ipv6-prefix-list
Reference	**configure** filter match-list ipv6-prefix-list *string*
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *string*

Synopsis	IPv6 address mask used as the match criterion
Context	**configure** system security cpm-filter ipv6-filter entry *number* match src-ip mask *string*
Tree	mask

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Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

src-port

Synopsis	Enter the **src-port** context
Context	**configure** system security cpm-filter ipv6-filter entry *number* match src-port
Tree	src-port
Notes	The following elements are part of a choice: **port** or (**dst-port** and **src-port**).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eq *number*

Synopsis	Port number as the match criterion
Context	**configure** system security cpm-filter ipv6-filter entry *number* match src-port eq *number*
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *number*

Synopsis	Port mask as the match criterion
Context	**configure** system security cpm-filter ipv6-filter entry *number* match src-port mask *number*
Tree	mask
Range	1 to 65535
Default	65535
Notes	The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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port-list *reference*

Synopsis	Port list as the match criterion
Context	**configure** system security cpm-filter ipv6-filter entry *number* match src-port port-list *reference*
Tree	port-list
Reference	**configure** filter match-list port-list *string*
Notes	The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enable the **range** context
Context	**configure** system security cpm-filter ipv6-filter entry *number* match src-port range
Tree	range
Notes	The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

end *number*

Synopsis	Upper bound of the port number to match
Context	**configure** system security cpm-filter ipv6-filter entry *number* match src-port range end *number*
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

start *number*

Synopsis	Lower bound of the port number to match
Context	**configure** system security cpm-filter ipv6-filter entry *number* match src-port range start *number*

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Tree	start
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tcp-flags

Synopsis	Enter the **tcp-flags** context
Context	**configure** system security cpm-filter ipv6-filter entry *number* match tcp-flags
Tree	tcp-flags
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ack *boolean*

Synopsis	ACK bit in TCP header control bits as match criterion
Context	**configure** system security cpm-filter ipv6-filter entry *number* match tcp-flags ack *boolean*
Tree	ack
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

syn *boolean*

Synopsis	SYN bit in TCP header control bits as match criterion
Context	**configure** system security cpm-filter ipv6-filter entry *number* match tcp-flags syn *boolean*
Tree	syn
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-filter

Synopsis	Enter the **mac-filter** context
Context	**configure** system security cpm-filter mac-filter

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Tree	mac-filter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the CPM filter
Context	**configure** system security cpm-filter mac-filter admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** system security cpm-filter mac-filter entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**entry-id**] *number*

Synopsis	Filter entry ID
Context	**configure** system security cpm-filter mac-filter entry *number*
Tree	entry
Range	1 to 131072
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

action

Synopsis	Enter the **action** context

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Context	**configure** system security cpm-filter mac-filter entry *number* action
Tree	action
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

accept

Synopsis	Forward matching packets
Context	**configure** system security cpm-filter mac-filter entry *number* action accept
Tree	accept
Notes	The following elements are part of a choice: **accept**, **default**, **drop**, or **queue**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

default

Synopsis	Use default action for matching packets
Context	**configure** system security cpm-filter mac-filter entry *number* action default
Tree	default
Notes	The following elements are part of a choice: **accept**, **default**, **drop**, or **queue**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

drop

Synopsis	Drop matching packets
Context	**configure** system security cpm-filter mac-filter entry *number* action drop
Tree	drop
Notes	The following elements are part of a choice: **accept**, **default**, **drop**, or **queue**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

queue *reference*

Synopsis	Forward matching packets to the CPM hardware queue

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Context	**configure** system security cpm-filter mac-filter entry *number* action queue *reference*
Tree	queue
Reference	**configure** system security cpm-queue queue *number*
Notes	The following elements are part of a choice: **accept**, **default**, **drop**, or **queue**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** system security cpm-filter mac-filter entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

log *reference*

Synopsis	Log ID where matching packets are entered
Context	**configure** system security cpm-filter mac-filter entry *number* log *reference*
Tree	log
Reference	**configure** filter log *number*
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

match

Synopsis	Enter the **match** context
Context	**configure** system security cpm-filter mac-filter entry *number* match
Tree	match
Description	Commands in this context specify match criteria for the entry. When the match criteria have been satisfied, the action associated with the entry is executed. If more than one match criterion is configured, all criteria must be met before the action associated with the entry is executed.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cfm-opcode

Synopsis	Enter the **cfm-opcode** context
Context	**configure** system security cpm-filter mac-filter entry *number* match cfm-opcode
Tree	cfm-opcode
Description	Commands in this context specify match criteria based on the CFM opcode.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eq *number*

Synopsis	Equal to comparison operator for the CFM opcode
Context	**configure** system security cpm-filter mac-filter entry *number* match cfm-opcode eq *number*
Tree	eq
Range	0 to 255
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

gt *number*

Synopsis	Greater than comparison operator for the CFM opcode
Context	**configure** system security cpm-filter mac-filter entry *number* match cfm-opcode gt *number*
Tree	gt
Range	0 to 254
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lt *number*

Synopsis	Less than comparison operator for the CFM opcode

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Context	**configure** system security cpm-filter mac-filter entry *number* match cfm-opcode lt *number*
Tree	lt
Range	1 to 255
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enable the **range** context
Context	**configure** system security cpm-filter mac-filter entry *number* match cfm-opcode range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

end *number*

Synopsis	Upper bound of the Opcode range to match
Context	**configure** system security cpm-filter mac-filter entry *number* match cfm-opcode range end *number*
Tree	end
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

start *number*

Synopsis	Lower bound of the OpCode range to match
Context	**configure** system security cpm-filter mac-filter entry *number* match cfm-opcode range start *number*
Tree	start
Range	0 to 254

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Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dst-mac

Synopsis	Enable the **dst-mac** context
Context	**configure** system security cpm-filter mac-filter entry *number* match dst-mac
Tree	dst-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

address *string*

Synopsis	MAC address used as the match criterion
Context	**configure** system security cpm-filter mac-filter entry *number* match dst-mac address *string*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *string*

Synopsis	MAC address mask as the match criterion
Context	**configure** system security cpm-filter mac-filter entry *number* match dst-mac mask *string*
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

etype *string*

Synopsis	Ethernet type as the match criterion
Context	**configure** system security cpm-filter mac-filter entry *number* match etype *string*

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Tree	etype
Description	This command specifies an Ethernet type II Ethertype value to be used as a MAC filter match criterion. The Ethernet type field is used by the Ethernet version-II frames and does not apply to IEEE 802.3 Ethernet frames.
String Length	5 to 6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

frame-type *keyword*

Synopsis	MAC frame type as the match criterion
Context	**configure** system security cpm-filter mac-filter entry *number* match frame-type *keyword*
Tree	frame-type
Options	802dot2-llc, ethernet-ii
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

llc-dsap

Synopsis	Enable the **llc-dsap** context
Context	**configure** system security cpm-filter mac-filter entry *number* match llc-dsap
Tree	llc-dsap
Description	Commands in this context specify match criteria based on the Destination Service Access Point (DSAP).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dsap *number*

Synopsis	8-bit DSAP as the match criterion
Context	**configure** system security cpm-filter mac-filter entry *number* match llc-dsap dsap *number*
Tree	dsap
Range	0 to 255
Notes	This element is mandatory.

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *number*

Synopsis	Mask for DSAP value as the match criterion
Context	**configure** system security cpm-filter mac-filter entry *number* match llc-dsap mask *number*
Tree	mask
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

llc-ssap

Synopsis	Enable the **llc-ssap** context
Context	**configure** system security cpm-filter mac-filter entry *number* match llc-ssap
Tree	llc-ssap
Description	Commands in this context specify match criteria based on the Source Service Access Point (SSAP).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *number*

Synopsis	Mask for SSAP value as the match criterion
Context	**configure** system security cpm-filter mac-filter entry *number* match llc-ssap mask *number*
Tree	mask
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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ssap *number*

Synopsis	8-bit SSAP as the match criterion
Context	**configure** system security cpm-filter mac-filter entry *number* match llc-ssap ssap *number*
Tree	ssap
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

service *reference*

Synopsis	Service ID used as the match condition
Context	**configure** system security cpm-filter mac-filter entry *number* match service *reference*
Tree	service
Reference	**configure** service vpls *string*
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

src-mac

Synopsis	Enable the **src-mac** context
Context	**configure** system security cpm-filter mac-filter entry *number* match src-mac
Tree	src-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

address *string*

Synopsis	MAC address used as the match criterion
Context	**configure** system security cpm-filter mac-filter entry *number* match src-mac address *string*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *string*

Synopsis	MAC address mask as the match criterion
Context	**configure** system security cpm-filter mac-filter entry *number* match src-mac mask *string*
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cpm-queue

Synopsis	Enter the **cpm-queue** context
Context	**configure** system security cpm-queue
Tree	cpm-queue
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

queue [queue-id] *number*

Synopsis	Enter the **queue** list instance
Context	**configure** system security cpm-queue queue *number*
Tree	queue
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**queue-id**] *number*

Synopsis	CPM queue ID
Context	**configure** system security cpm-queue queue *number*
Tree	queue
Range	33 to 2000
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cbs *number*

Synopsis	Buffer size that can be drawn from queue buffer pool
Context	**configure** system security cpm-queue queue *number* cbs *number*
Tree	cbs
Description	This command specifies the amount of buffer that can be drawn from the reserved buffer portion of the buffer pool of the queue.
Range	0 to 131072
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mbs *number*

Synopsis	Maximum queue depth to which the queue can grow
Context	**configure** system security cpm-queue queue *number* mbs *number*
Tree	mbs
Range	0 to 131072
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rate

Synopsis	Enter the **rate** context
Context	**configure** system security cpm-queue queue *number* rate
Tree	rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir *(number | keyword)*

Synopsis	Amount of bandwidth committed to the queue

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Context	**configure** system security cpm-queue queue *number* rate cir *(number | keyword)*
Tree	cir
Range	0 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pir *(number | keyword)*

Synopsis	Peak Information Rate for the queue
Context	**configure** system security cpm-queue queue *number* rate pir *(number | keyword)*
Tree	pir
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cpu-protection

Synopsis	Enter the **cpu-protection** context
Context	**configure** system security cpu-protection
Tree	cpu-protection
Description	Commands in this context configure CPU protection policies.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

ip-src-monitoring

Synopsis	Enter the **ip-src-monitoring** context
Context	**configure** system security cpu-protection ip-src-monitoring
Tree	ip-src-monitoring

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

included-protocols

Synopsis	Enter the **included-protocols** context
Context	**configure** system security cpu-protection ip-src-monitoring included-protocols
Tree	included-protocols
Description	Commands in this context specify the protocols included in IP source monitoring. The protocol packets will be subject to the per-source-rate of CPU protection policies. This configuration applies system wide and applies to CPU protection globally.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

dhcp *boolean*

Synopsis	Include extracted DHCP packets for IP source monitoring
Context	**configure** system security cpu-protection ip-src-monitoring included-protocols dhcp *boolean*
Tree	dhcp
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

gtp *boolean*

Synopsis	Include extracted GTP packets for IP source monitoring
Context	**configure** system security cpu-protection ip-src-monitoring included-protocols gtp *boolean*
Tree	gtp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

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icmp *boolean*

Synopsis	Include extracted ICMP packets for IP source monitoring
Context	**configure** system security cpu-protection ip-src-monitoring included-protocols icmp *boolean*
Tree	icmp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

igmp *boolean*

Synopsis	Include extracted IGMP packets for IP source monitoring
Context	**configure** system security cpu-protection ip-src-monitoring included-protocols igmp *boolean*
Tree	igmp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

link-specific-rate *(number | keyword)*

Synopsis	Packet arrival rate limit for link level protocols
Context	**configure** system security cpu-protection link-specific-rate *(number | keyword)*
Tree	link-specific-rate
Description	This command configures a link-specific rate for CPU protection. The limit is applied to all ports within the system. The CPU receives no more than the configured packet rate for all link level protocols, such as LACP, from any one port. The measurement is cleared each second and is based on the ingress port.
Range	1 to 65535
Units	packets per second
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

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policy [policy-id] *number*

Synopsis	Enter the **policy** list instance
Context	**configure** system security cpu-protection policy *number*
Tree	policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

[**policy-id**] *number*

Synopsis	Policy ID
Context	**configure** system security cpu-protection policy *number*
Tree	policy
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

alarm *boolean*

Synopsis	Generate an event when the rate is exceeded
Context	**configure** system security cpu-protection policy *number* alarm *boolean*
Tree	alarm
Description	When configured to **true**, an event is generated when the rate is exceeded. The event includes information about the offending source. Only one event is generated per monitor period. When configured to **false**, notifications are disabled.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** system security cpu-protection policy *number* description *string*
Tree	description

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String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

eth-cfm

Synopsis	Enter the **eth-cfm** context
Context	**configure** system security cpu-protection policy *number* eth-cfm
Tree	eth-cfm
Description	Commands in this context configure CPU policy entries that determine match criteria and overall arrival rate of the Ethernet Connectivity and Fault Management (ETH-CFM) packets at the CPU.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

entry [id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** system security cpu-protection policy *number* eth-cfm entry *number*
Tree	entry
Max. Instances	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

[**id**] *number*

Synopsis	Entry ID
Context	**configure** system security cpu-protection policy *number* eth-cfm entry *number*
Tree	entry
Range	1 to 100
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

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level start *number* end *number*

Synopsis	Add a list entry for **level**
Context	**configure** system security cpu-protection policy *number* eth-cfm entry *number* level start *number* end *number*
Tree	level
Description	Commands in this context specify the range of domain levels for the match criterion.
Min. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

start *number*

Synopsis	Lower bound of the level range
Context	**configure** system security cpu-protection policy *number* eth-cfm entry *number* level start *number* end *number*
Tree	level
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

end *number*

Synopsis	Upper bound of the level range
Context	**configure** system security cpu-protection policy *number* eth-cfm entry *number* level start *number* end *number*
Tree	level
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

opcode start *number* end *number*

Synopsis	Add a list entry for **opcode**

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Context	**configure** system security cpu-protection policy *number* eth-cfm entry *number* opcode start *number* end *number*
Tree	opcode
Description	Commands in this context specify the range of operational codes (that identify the application) for the match criterion.
Min. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

start *number*

Synopsis	Lower bound of the OpCode range
Context	**configure** system security cpu-protection policy *number* eth-cfm entry *number* opcode start *number* end *number*
Tree	opcode
Range	0 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

end *number*

Synopsis	Upper bound of the OpCode range
Context	**configure** system security cpu-protection policy *number* eth-cfm entry *number* opcode start *number* end *number*
Tree	opcode
Range	0 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

pir *(number | keyword)*

Synopsis	Packet arrival rate limit
Context	**configure** system security cpu-protection policy *number* eth-cfm entry *number* pir *(number | keyword)*

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Tree	pir
Range	0 to 65534
Units	packets per second
Options	max
Default	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

out-profile-rate

Synopsis	Enter the **out-profile-rate** context
Context	**configure** system security cpu-protection policy *number* out-profile-rate
Tree	out-profile-rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

log-events *boolean*

Synopsis	Generate a log event when the packet rate is exceeded
Context	**configure** system security cpu-protection policy *number* out-profile-rate log-events *boolean*
Tree	log-events
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

pir *(number | keyword)*

Synopsis	Packet arrival rate limit
Context	**configure** system security cpu-protection policy *number* out-profile-rate pir *(number | keyword)*
Tree	pir
Range	1 to 65534
Units	packets per second
Options	max
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

overall-rate *(number | keyword)*

Synopsis	Packet arrival rate limit for all packets
Context	**configure** system security cpu-protection policy *number* overall-rate *(number | keyword)*
Tree	overall-rate
Range	1 to 65534
Units	packets per second
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

per-source-parameters

Synopsis	Enter the **per-source-parameters** context
Context	**configure** system security cpu-protection policy *number* per-source-parameters
Tree	per-source-parameters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

ip-src-monitoring

Synopsis	Enter the **ip-src-monitoring** context
Context	**configure** system security cpu-protection policy *number* per-source-parameters ip-src-monitoring
Tree	ip-src-monitoring
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

limit-dhcp-ci-addr-zero *boolean*

Synopsis	Apply rate limiting to packets with client IP address 0
Context	**configure** system security cpu-protection policy *number* per-source-parameters ip-src-monitoring limit-dhcp-ci-addr-zero *boolean*
Tree	limit-dhcp-ci-addr-zero

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Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

per-source-rate *(number | keyword)*

Synopsis	Per-source packet arrival rate limit
Context	**configure** system security cpu-protection policy *number* per-source-rate *(number | keyword)*
Tree	per-source-rate
Description	This command configures the per-source packet arrival rate limit. A source is defined as a unique combination of SAP and MAC source address or SAP and source IP address. The CPU receives no more than the specified packet rate from each source. The measurement is cleared every second. This configuration is applicable only if the policy is assigned to an interface (such as SAPs, subscriber interfaces, and spoke SDPs), and MAC monitoring or IP source monitoring is specified in the CPU protection configuration of the interface.
Range	1 to 65534
Units	packets per second
Options	max
Default	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

port-overall-rate

Synopsis	Enter the **port-overall-rate** context
Context	**configure** system security cpu-protection port-overall-rate
Tree	port-overall-rate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

action-low-priority *boolean*

Synopsis	Mark packets that exceed the rate as low-priority
Context	**configure** system security cpu-protection port-overall-rate action-low-priority *boolean*
Tree	action-low-priority

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Description	When configured to **true**, packets that exceed the per-port packet arrival rate limit are marked as low priority for preferential discard later (if there is congestion in the control plane) rather than discarded immediately.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

pir *(number | keyword)*

Synopsis	Per-port packet arrival rate limit
Context	**configure** system security cpu-protection port-overall-rate pir *(number | keyword)*
Tree	pir
Range	1 to 65535
Units	packets per second
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

protocol-protection

Synopsis	Enable the **protocol-protection** context
Context	**configure** system security cpu-protection protocol-protection
Tree	protocol-protection
Description	When enabled, the network processor on the CPM discards all packets received for protocols that are not configured on the interface. This action helps to mitigate DoS attacks by filtering invalid control traffic before it ingresses the CPU. For example, if IS-IS is not configured on an interface, protocol protection discards any IS-IS packets received on the interface. Commands in this context further define the action when the context is enabled.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

allow-sham-links *boolean*

Synopsis	Allow OSPF sham link traffic
Context	**configure** system security cpu-protection protocol-protection allow-sham-links *boolean*
Tree	allow-sham-links

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Description	When configured to **true**, tunneled OSPF packets received over the backbone network must be explicitly allowed when OSPF sham links form an adjacency over the MPLS-VPRN backbone network.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

block-pim-tunneled *boolean*

Synopsis	Block extraction and processing of PIM packets
Context	**configure** system security cpu-protection protocol-protection block-pim-tunneled *boolean*
Tree	block-pim-tunneled
Description	When configured to **true**, PIM packets arriving at the SR OS node inside a tunnel (for example, MPLS or GRE) on a network interface are blocked and not processed. Traffic is not switched from the (*,G) to the (S,G) tree for PIM in an mVPN on the egress DR.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

dist-cpu-protection

Synopsis	Enter the **dist-cpu-protection** context
Context	**configure** system security dist-cpu-protection
Tree	dist-cpu-protection
Description	Commands in this context configure distributed CPU protection (DCP) attributes.
Introduced	16.0.R1
Platforms	All

policy [policy-name] *string*

Synopsis	Enter the **policy** list instance
Context	**configure** system security dist-cpu-protection policy *string*
Tree	policy
Description	Commands in this context configure the attributes of DCP policies. These policies can be applied to objects such as SAPs, network interfaces or ports

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Max. Instances	130
Introduced	16.0.R1
Platforms	All

[**policy-name**] *string*

Synopsis	Policy name
Context	**configure** system security dist-cpu-protection policy *string*
Tree	policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** system security dist-cpu-protection policy *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

local-monitoring-policer [policer-name] *string*

Synopsis	Enter the **local-monitoring-policer** list instance
Context	**configure** system security dist-cpu-protection policy *string* local-monitoring-policer *string*
Tree	local-monitoring-policer
Max. Instances	1
Introduced	16.0.R1
Platforms	All

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[**policer-name**] *string*

Synopsis	Local monitoring policer name
Context	**configure** system security dist-cpu-protection policy *string* local-monitoring-policer *string*
Tree	local-monitoring-policer
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** system security dist-cpu-protection policy *string* local-monitoring-policer *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

exceed-action *keyword*

Synopsis	Action taken when policer rates are exceeded
Context	**configure** system security dist-cpu-protection policy *string* local-monitoring-policer *string* exceed-action *keyword*
Tree	exceed-action
Description	This command specifies the action taken on the extracted control packets when the configured policer rates are exceeded.
Options	discard, low-priority, none
Default	none
Introduced	16.0.R1
Platforms	All

log-events *keyword*

Synopsis	Control of log events creation for status and activity

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Context	**configure** system security dist-cpu-protection policy *string* local-monitoring-policer *string* log-events *keyword*
Tree	log-events
Description	This command controls the creation of log events related to the status and activity of the local monitoring policer.
Options	false, true, verbose
Default	true
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** system security dist-cpu-protection policy *string* local-monitoring-policer *string* rate
Tree	rate
Description	Commands in this context specify the rate and burst tolerance for the policer. The actual hardware may not be able to perfectly rate limit to the exact configured parameters. In this case, the configured parameters will be adapted to the closest supported rate.
Introduced	16.0.R1
Platforms	All

kbps

Synopsis	Enter the **kbps** context
Context	**configure** system security dist-cpu-protection policy *string* local-monitoring-policer *string* rate kbps
Tree	kbps
Notes	The following elements are part of a choice: **kbps** or **packets**.
Introduced	16.0.R1
Platforms	All

limit *(keyword | number)*

Synopsis	Rate limit

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Context	**configure** system security dist-cpu-protection policy *string* local-monitoring-policer *string* rate kbps limit *(keyword | number)*
Tree	limit
Range	1 to 20000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

mbs *number*

Synopsis	Tolerance for the rate
Context	**configure** system security dist-cpu-protection policy *string* local-monitoring-policer *string* rate kbps mbs *number*
Tree	mbs
Range	0 to 4194304
Units	bytes
Introduced	16.0.R1
Platforms	All

packets

Synopsis	Enter the **packets** context
Context	**configure** system security dist-cpu-protection policy *string* local-monitoring-policer *string* rate packets
Tree	packets
Notes	The following elements are part of a choice: **kbps** or **packets**.
Introduced	16.0.R1
Platforms	All

initial-delay *number*

Synopsis	Additional packets allowed in an initial burst
Context	**configure** system security dist-cpu-protection policy *string* local-monitoring-policer *string* rate packets initial-delay *number*

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Tree	initial-delay
Description	This command specifies the number of packets allowed in an initial burst (or a burst after the policer bucket has drained to zero) in addition to the packets per interval limit. The typical setting would be a value equal to the number of received packets in several full handshakes or negotiations of the protocol.
Range	0 to 255
Units	packets
Default	0
Introduced	16.0.R1
Platforms	All

limit *(keyword | number)*

Synopsis	Packets per interval limit
Context	**configure** system security dist-cpu-protection policy *string* local-monitoring-policer *string* rate packets limit *(keyword | number)*
Tree	limit
Range	0 to 8000
Units	packets per interval
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

within *number*

Synopsis	Measurement interval for packets rate
Context	**configure** system security dist-cpu-protection policy *string* local-monitoring-policer *string* rate packets within *number*
Tree	within
Range	1 to 32767
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

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protocol [protocol-name] *keyword*

Synopsis	Enter the **protocol** list instance
Context	**configure** system security dist-cpu-protection policy *string* protocol *keyword*
Tree	protocol
Introduced	16.0.R1
Platforms	All

[**protocol-name**] *keyword*

Synopsis	Protocol name
Context	**configure** system security dist-cpu-protection policy *string* protocol *keyword*
Tree	protocol
Options	arp, dhcp, http-redirect, icmp, igmp, mld, ndis, pppoe-pppoa, all-unspecified, mpls-ttl, bfd-cpm, bgp, eth-cfm, isis, ldp, ospf, pim, rsvp, icmp-ping-check, lacp, vrrp, multi-chassis, multi-chassis-sync, bfd, ftp, icmp-v4, icmp-v6, l3-to-my-ipv4, l3-to-my-ipv6, lsp-ping, mc-lag, mcast-snooping, radius, rip, sbfd-reflector, snmp, ssh, stp, tacacs, telnet, tftp, twamp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

dynamic-parameters

Synopsis	Enter the **dynamic-parameters** context
Context	**configure** system security dist-cpu-protection policy *string* protocol *keyword* dynamic-parameters
Tree	dynamic-parameters
Introduced	16.0.R1
Platforms	All

detection-time *number*

Synopsis	Minimum time the dynamic policer remains allocated
Context	**configure** system security dist-cpu-protection policy *string* protocol *keyword* dynamic-parameters detection-time *number*
Tree	detection-time
Range	1 to 128000

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Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

exceed-action

Synopsis	Enter the **exceed-action** context
Context	**configure** system security dist-cpu-protection policy *string* protocol *keyword* dynamic-parameters exceed-action
Tree	exceed-action
Description	Commands in this context specify the settings for the scenario when the configured policer rates are exceeded.
Introduced	16.0.R1
Platforms	All

action *keyword*

Synopsis	Action taken on control packets when rates are exceeded
Context	**configure** system security dist-cpu-protection policy *string* protocol *keyword* dynamic-parameters exceed-action action *keyword*
Tree	action
Options	discard, low-priority, none
Default	none
Introduced	16.0.R1
Platforms	All

hold-down *(keyword | number)*

Synopsis	Hold down behavior
Context	**configure** system security dist-cpu-protection policy *string* protocol *keyword* dynamic-parameters exceed-action hold-down *(keyword | number)*
Tree	hold-down
Description	This command specifies the behavior when the system detects that an enforcement policer has marked or discarded one or more packets and there is no action specified for the scenario when the rates are exceeded.

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The hold time condition is cleared after the specified time has expired. The detection time (the minimum time that the policer remains allocated) begins after the hold down is complete. The hold down behavior is not applicable to a local monitoring policer.

An indefinite hold down behavior must be cleared using the **tools perform security dist-cpu-protection release-hold-down** command.

Range	1 to 10080
Units	seconds
Options	indefinite, none
Default	none
Introduced	16.0.R1
Platforms	All

log-events *keyword*

Synopsis	Control of log events creation for status and activity
Context	**configure** system security dist-cpu-protection policy *string* protocol *keyword* dynamic-parameters log-events *keyword*
Tree	log-events
Description	This command controls the creation of log events related to the status and activity of the local monitoring policer.
Options	false, true, verbose
Default	true
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** system security dist-cpu-protection policy *string* protocol *keyword* dynamic-parameters rate
Tree	rate
Description	Commands in this context specify the rate and burst tolerance for the policer. The actual hardware may not be able to perfectly rate limit to the exact configured parameters. In this case, the configured parameters will be adapted to the closest supported rate.
Introduced	16.0.R1
Platforms	All

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kbps

Synopsis	Enter the **kbps** context
Context	**configure** system security dist-cpu-protection policy *string* protocol *keyword* dynamic-parameters rate kbps
Tree	kbps
Notes	The following elements are part of a choice: **kbps** or **packets**.
Introduced	16.0.R1
Platforms	All

limit *(keyword | number)*

Synopsis	Rate limit
Context	**configure** system security dist-cpu-protection policy *string* protocol *keyword* dynamic-parameters rate kbps limit *(keyword | number)*
Tree	limit
Range	1 to 20000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

mbs *number*

Synopsis	Tolerance for the rate
Context	**configure** system security dist-cpu-protection policy *string* protocol *keyword* dynamic-parameters rate kbps mbs *number*
Tree	mbs
Range	0 to 4194304
Units	bytes
Introduced	16.0.R1
Platforms	All

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packets

Synopsis	Enter the **packets** context
Context	**configure** system security dist-cpu-protection policy *string* protocol *keyword* dynamic-parameters rate packets
Tree	packets
Notes	The following elements are part of a choice: **kbps** or **packets**.
Introduced	16.0.R1
Platforms	All

initial-delay *number*

Synopsis	Additional packets allowed in an initial burst
Context	**configure** system security dist-cpu-protection policy *string* protocol *keyword* dynamic-parameters rate packets initial-delay *number*
Tree	initial-delay
Description	This command specifies the number of packets allowed in an initial burst (or a burst after the policer bucket has drained to zero) in addition to the packets per interval limit. The typical setting would be a value equal to the number of received packets in several full handshakes or negotiations of the protocol.
Range	0 to 255
Units	packets
Default	0
Introduced	16.0.R1
Platforms	All

limit *(keyword | number)*

Synopsis	Packets per interval limit
Context	**configure** system security dist-cpu-protection policy *string* protocol *keyword* dynamic-parameters rate packets limit *(keyword | number)*
Tree	limit
Range	0 to 8000
Units	packets per interval
Options	max
Default	max
Introduced	16.0.R1

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Platforms	All

within *number*

Synopsis	Measurement interval for packets rate
Context	**configure** system security dist-cpu-protection policy *string* protocol *keyword* dynamic-parameters rate packets within *number*
Tree	within
Range	1 to 32767
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

enforcement

Synopsis	Enter the **enforcement** context
Context	**configure** system security dist-cpu-protection policy *string* protocol *keyword* enforcement
Tree	enforcement
Introduced	16.0.R1
Platforms	All

dynamic

Synopsis	Enter the **dynamic** context
Context	**configure** system security dist-cpu-protection policy *string* protocol *keyword* enforcement dynamic
Tree	dynamic
Notes	The following elements are part of a choice: **dynamic**, **dynamic-local-mon-bypass**, **shared**, or **static**.
Introduced	16.0.R1
Platforms	All

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mon-policer-name *reference*

Synopsis	Dynamic enforcement policer for the protocol
Context	**configure** system security dist-cpu-protection policy *string* protocol *keyword* enforcement dynamic mon-policer-name *reference*
Tree	mon-policer-name
Description	This command specifies the dynamic enforcement policer that is instantiated when the associated local monitoring policer is determined to be in a nonconforming state (at the end of a minimum monitoring time of 60 seconds to reduce thrashing).
Reference	**configure** system security dist-cpu-protection policy *string* local-monitoring-policer *string*
Introduced	16.0.R1
Platforms	All

dynamic-local-mon-bypass

Synopsis	Do not include packets in the local monitoring function
Context	**configure** system security dist-cpu-protection policy *string* protocol *keyword* enforcement dynamic-local-mon-bypass
Tree	dynamic-local-mon-bypass
Description	When configured, packets from the protocol are not included in the local monitoring function and the dynamic enforcement policer is not instantiated for the protocol.
Notes	The following elements are part of a choice: **dynamic**, **dynamic-local-mon-bypass**, **shared**, or **static**.
Introduced	16.0.R1
Platforms	All

static

Synopsis	Enter the **static** context
Context	**configure** system security dist-cpu-protection policy *string* protocol *keyword* enforcement static
Tree	static
Notes	The following elements are part of a choice: **dynamic**, **dynamic-local-mon-bypass**, **shared**, or **static**.
Introduced	16.0.R1
Platforms	All

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policer-name *reference*

Synopsis	Static policer enforced by the protocol
Context	**configure** system security dist-cpu-protection policy *string* protocol *keyword* enforcement static policer-name *reference*
Tree	policer-name
Reference	**configure** system security dist-cpu-protection policy *string* static-policer *string*
Introduced	16.0.R1
Platforms	All

static-policer [policer-name] *string*

Synopsis	Enter the **static-policer** list instance
Context	**configure** system security dist-cpu-protection policy *string* static-policer *string*
Tree	static-policer
Description	Commands in this context configure a static enforcement policer that can be referenced by one or more protocols in the policy. When a policer is referenced by a protocol, the policer is instantiated for each object (for example, a SAP or network interface) that is created and references the policer. If no policer resources are available on the associated card or FP, the object is not created.
Max. Instances	18
Introduced	16.0.R1
Platforms	All

[**policer-name**] *string*

Synopsis	Static policer name
Context	**configure** system security dist-cpu-protection policy *string* static-policer *string*
Tree	static-policer
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** system security dist-cpu-protection policy *string* static-policer *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

detection-time *number*

Synopsis	Minimum time the dynamic policer remains allocated
Context	**configure** system security dist-cpu-protection policy *string* static-policer *string* detection-time *number*
Tree	detection-time
Range	1 to 128000
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

exceed-action

Synopsis	Enter the **exceed-action** context
Context	**configure** system security dist-cpu-protection policy *string* static-policer *string* exceed-action
Tree	exceed-action
Description	Commands in this context specify the settings for the scenario when the configured policer rates are exceeded.
Introduced	16.0.R1
Platforms	All

action *keyword*

Synopsis	Action taken on control packets when rates are exceeded

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Context	**configure** system security dist-cpu-protection policy *string* static-policer *string* exceed-action action *keyword*
Tree	action
Options	discard, low-priority, none
Default	none
Introduced	16.0.R1
Platforms	All

hold-down *(keyword | number)*

Synopsis	Hold down behavior
Context	**configure** system security dist-cpu-protection policy *string* static-policer *string* exceed-action hold-down *(keyword | number)*
Tree	hold-down
Description	This command specifies the behavior when the system detects that an enforcement policer has marked or discarded one or more packets and there is no action specified for the scenario when the rates are exceeded. The hold time condition is cleared after the specified time has expired. The detection time (the minimum time that the policer remains allocated) begins after the hold down is complete. The hold down behavior is not applicable to a local monitoring policer. An indefinite hold down behavior must be cleared using the **tools perform security dist-cpu-protection release-hold-down** command.
Range	1 to 10080
Units	seconds
Options	indefinite, none
Default	none
Introduced	16.0.R1
Platforms	All

log-events *keyword*

Synopsis	Control of log events creation for status and activity
Context	**configure** system security dist-cpu-protection policy *string* static-policer *string* log-events *keyword*
Tree	log-events
Description	This command controls the creation of log events related to the status and activity of the local monitoring policer.
Options	false, true, verbose

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Default	true
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the **rate** context
Context	**configure** system security dist-cpu-protection policy *string* static-policer *string* rate
Tree	rate
Description	Commands in this context specify the rate and burst tolerance for the policer. The actual hardware may not be able to perfectly rate limit to the exact configured parameters. In this case, the configured parameters will be adapted to the closest supported rate.
Introduced	16.0.R1
Platforms	All

kbps

Synopsis	Enter the **kbps** context
Context	**configure** system security dist-cpu-protection policy *string* static-policer *string* rate kbps
Tree	kbps
Notes	The following elements are part of a choice: **kbps** or **packets**.
Introduced	16.0.R1
Platforms	All

limit *(keyword | number)*

Synopsis	Rate limit
Context	**configure** system security dist-cpu-protection policy *string* static-policer *string* rate kbps limit *(keyword | number)*
Tree	limit
Range	1 to 20000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1

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Platforms	All

mbs *number*

Synopsis	Tolerance for the rate
Context	**configure** system security dist-cpu-protection policy *string* static-policer *string* rate kbps mbs *number*
Tree	mbs
Range	0 to 4194304
Units	bytes
Introduced	16.0.R1
Platforms	All

packets

Synopsis	Enter the **packets** context
Context	**configure** system security dist-cpu-protection policy *string* static-policer *string* rate packets
Tree	packets
Notes	The following elements are part of a choice: **kbps** or **packets**.
Introduced	16.0.R1
Platforms	All

initial-delay *number*

Synopsis	Additional packets allowed in an initial burst
Context	**configure** system security dist-cpu-protection policy *string* static-policer *string* rate packets initial-delay *number*
Tree	initial-delay
Description	This command specifies the number of packets allowed in an initial burst (or a burst after the policer bucket has drained to zero) in addition to the packets per interval limit. The typical setting would be a value equal to the number of received packets in several full handshakes or negotiations of the protocol.
Range	0 to 255
Units	packets
Default	0
Introduced	16.0.R1

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Platforms	All

limit *(keyword | number)*

Synopsis	Packets per interval limit
Context	**configure** system security dist-cpu-protection policy *string* static-policer *string* rate packets limit *(keyword | number)*
Tree	limit
Range	0 to 8000
Units	packets per interval
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

within *number*

Synopsis	Measurement interval for packets rate
Context	**configure** system security dist-cpu-protection policy *string* static-policer *string* rate packets within *number*
Tree	within
Range	1 to 32767
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

type *keyword*

WARNING:
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Synopsis	Policy type
Context	**configure** system security dist-cpu-protection policy *string* type *keyword*
Tree	type

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Options	access-network, port
Introduced	21.5.R1
Platforms	All

dot1x

Synopsis	Enter the **dot1x** context
Context	**configure** system security dot1x
Tree	dot1x
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of 802.1x network access control
Context	**configure** system security dot1x admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

radius-policy [policy-name] *string*

Synopsis	Enter the **radius-policy** list instance
Context	**configure** system security dot1x radius-policy *string*
Tree	radius-policy
Introduced	16.0.R1
Platforms	All

[policy-name] *string*

Synopsis	RADIUS server policy name for 802.1X authentication
Context	**configure** system security dot1x radius-policy *string*
Tree	radius-policy

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String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the server for authentication
Context	**configure** system security dot1x radius-policy *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

retry *number*

Synopsis	Number of RADIUS requests toward the same RADIUS server
Context	**configure** system security dot1x radius-policy *string* retry *number*
Tree	retry
Range	1 to 10
Default	3
Introduced	16.0.R1
Platforms	All

server [server-index] *number*

Synopsis	Enter the **server** list instance
Context	**configure** system security dot1x radius-policy *string* server *number*
Tree	server
Max. Instances	5
Introduced	16.0.R1
Platforms	All

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[**server-index**] *number*

Synopsis	RADIUS server index
Context	**configure** system security dot1x radius-policy *string* server *number*
Tree	server
Range	1 to 5
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

accounting-port *number*

Synopsis	UDP port to contact the RADIUS server for accounting
Context	**configure** system security dot1x radius-policy *string* server *number* accounting-port *number*
Tree	accounting-port
Range	1 to 65535
Default	1813
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	IP address of the RADIUS dot1x server
Context	**configure** system security dot1x radius-policy *string* server *number* address *string*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

authentication-port *number*

Synopsis	UDP port to contact RADIUS server for authentication
Context	**configure** system security dot1x radius-policy *string* server *number* authentication-port *number*
Tree	authentication-port

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Range	1 to 65535
Default	1812
Introduced	16.0.R1
Platforms	All

secret *string*

Synopsis	Secret key associated with the RADIUS server
Context	**configure** system security dot1x radius-policy *string* server *number* secret *string*
Tree	secret
String Length	1 to 54
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	RADIUS server type
Context	**configure** system security dot1x radius-policy *string* server *number* type *keyword*
Tree	type
Options	authorization, accounting, combined
Default	authorization
Introduced	16.0.R1
Platforms	All

source-address *string*

Synopsis	Source address of the RADIUS packet
Context	**configure** system security dot1x radius-policy *string* source-address *string*
Tree	source-address
Introduced	16.0.R1
Platforms	All

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timeout *number*

Synopsis	Time to wait for a response from the RADIUS server
Context	**configure** system security dot1x radius-policy *string* timeout *number*
Tree	timeout
Range	1 to 90
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

ftp-server *boolean*

Synopsis	Enable FTP servers running on the system
Context	**configure** system security ftp-server *boolean*
Tree	ftp-server
Default	false
Introduced	16.0.R1
Platforms	All

hash-control

Synopsis	Enter the **hash-control** context
Context	**configure** system security hash-control
Tree	hash-control
Introduced	16.0.R4
Platforms	All

management-interface

Synopsis	Enter the **management-interface** context
Context	**configure** system security hash-control management-interface
Tree	management-interface
Description	Commands in this context configure encryption parameters for different management interfaces.
Introduced	16.0.R4

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Platforms	All

classic-cli

Synopsis	Enter the **classic-cli** context
Context	**configure** system security hash-control management-interface classic-cli
Tree	classic-cli
Introduced	16.0.R4
Platforms	All

read-algorithm *keyword*

Synopsis	Input encryption algorithm for configuration secrets
Context	**configure** system security hash-control management-interface classic-cli read-algorithm *keyword*
Tree	read-algorithm
Description	This command specifies how encrypted configuration secrets are interpreted and which encryption types are accepted when secrets are input into the system or read from a configuration file (for example, at system bootup time).
Options	all-hash, hash, hash2, custom
Default	all-hash
Introduced	16.0.R4
Platforms	All

write-algorithm *keyword*

Synopsis	Output encryption algorithm for configuration secrets
Context	**configure** system security hash-control management-interface classic-cli write-algorithm *keyword*
Tree	write-algorithm
Description	This command specifies the format of the output for encrypted configuration secrets (for example, in the saved configuration file, or in the output of the **info** or **show** commands).
Options	cleartext, hash, hash2, custom
Default	hash2
Introduced	16.0.R4
Platforms	All

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grpc

Synopsis	Enter the **grpc** context
Context	**configure** system security hash-control management-interface grpc
Tree	grpc
Introduced	16.0.R4
Platforms	All

hash-algorithm *keyword*

Synopsis	Encryption algorithm for configuration secrets
Context	**configure** system security hash-control management-interface grpc hash-algorithm *keyword*
Tree	hash-algorithm
Description	This command specifies the format of the input and output for encrypted configuration secrets.
Options	cleartext, hash, hash2, custom
Default	hash2
Introduced	16.0.R4
Platforms	All

md-cli

Synopsis	Enter the **md-cli** context
Context	**configure** system security hash-control management-interface md-cli
Tree	md-cli
Introduced	16.0.R4
Platforms	All

hash-algorithm *keyword*

Synopsis	Encryption algorithm for configuration secrets
Context	**configure** system security hash-control management-interface md-cli hash-algorithm *keyword*
Tree	hash-algorithm

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Description	This command specifies the format of the input and output for encrypted configuration secrets.
Options	cleartext, hash, hash2, custom
Default	hash2
Introduced	16.0.R4
Platforms	All

netconf

Synopsis	Enter the **netconf** context
Context	**configure** system security hash-control management-interface netconf
Tree	netconf
Introduced	16.0.R4
Platforms	All

hash-algorithm *keyword*

Synopsis	Encryption algorithm for configuration secrets
Context	**configure** system security hash-control management-interface netconf hash-algorithm *keyword*
Tree	hash-algorithm
Description	This command specifies the format of the input and output for encrypted configuration secrets.
Options	cleartext, hash, hash2, custom
Default	hash2
Introduced	16.0.R4
Platforms	All

keychains

Synopsis	Enter the **keychains** context
Context	**configure** system security keychains
Tree	keychains
Introduced	16.0.R1
Platforms	All

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keychain [keychain-name] *string*

Synopsis	Enter the **keychain** list instance
Context	**configure** system security keychains keychain *string*
Tree	keychain
Max. Instances	256
Introduced	16.0.R1
Platforms	All

[**keychain-name**] *string*

Synopsis	Keychain name
Context	**configure** system security keychains keychain *string*
Tree	keychain
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the keychain
Context	**configure** system security keychains keychain *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

bidirectional

Synopsis	Enter the **bidirectional** context
Context	**configure** system security keychains keychain *string* bidirectional
Tree	bidirectional

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Introduced	16.0.R1
Platforms	All

entry [keychain-entry-index] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** system security keychains keychain *string* bidirectional entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**keychain-entry-index**] *number*

Synopsis	Keychain identifier
Context	**configure** system security keychains keychain *string* bidirectional entry *number*
Tree	entry
Range	0 to 63 | 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the keychain entry
Context	**configure** system security keychains keychain *string* bidirectional entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

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algorithm *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Encryption algorithm used by the keychain key
Context	**configure** system security keychains keychain *string* bidirectional entry *number* algorithm *keyword*
Tree	algorithm
Options	aes-128-cmac-96, hmac-sha-1-96, password, message-digest, hmac-md5, hmac-sha-1, hmac-sha-256, aes-128-gcm-16
Introduced	16.0.R1
Platforms	All

authentication-key *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Authentication key used by the encryption algorithm
Context	**configure** system security keychains keychain *string* bidirectional entry *number* authentication-key *string*
Tree	authentication-key
String Length	1 to 54
Introduced	16.0.R1
Platforms	All

begin-time *string*

Synopsis	Calendar date and time to start using the key
Context	**configure** system security keychains keychain *string* bidirectional entry *number* begin-time *string*
Tree	begin-time
Introduced	16.0.R1
Platforms	All

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option *keyword*

Synopsis	Keychain key option
Context	**configure** system security keychains keychain *string* bidirectional entry *number* option *keyword*
Tree	option
Options	none, basic, isis-enhanced
Default	none
Introduced	16.0.R1
Platforms	All

tolerance *(number | keyword)*

Synopsis	Time eligible receive key overlaps with active send key
Context	**configure** system security keychains keychain *string* bidirectional entry *number* tolerance *(number | keyword)*
Tree	tolerance
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	300
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** system security keychains keychain *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

receive

Synopsis	Enter the **receive** context

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Context	**configure** system security keychains keychain *string* receive
Tree	receive
Introduced	16.0.R1
Platforms	All

entry [keychain-entry-index] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** system security keychains keychain *string* receive entry *number*
Tree	entry
Introduced	16.0.R1
Platforms	All

[**keychain-entry-index**] *number*

Synopsis	Keychain identifier
Context	**configure** system security keychains keychain *string* receive entry *number*
Tree	entry
Range	0 to 63 | 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the keychain entry
Context	**configure** system security keychains keychain *string* receive entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

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algorithm *keyword*

WARNING:
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Synopsis	Encryption algorithm used by the keychain key
Context	**configure** system security keychains keychain *string* receive entry *number* algorithm *keyword*
Tree	algorithm
Options	aes-128-cmac-96, hmac-sha-1-96, password, message-digest, hmac-md5, hmac-sha-1, hmac-sha-256, aes-128-gcm-16
Introduced	16.0.R1
Platforms	All

authentication-key *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Authentication key used by the encryption algorithm
Context	**configure** system security keychains keychain *string* receive entry *number* authentication-key *string*
Tree	authentication-key
String Length	1 to 54
Introduced	16.0.R1
Platforms	All

begin-time *string*

Synopsis	Calendar date and time to start using the key
Context	**configure** system security keychains keychain *string* receive entry *number* begin-time *string*
Tree	begin-time
Introduced	16.0.R1
Platforms	All

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end-time *string*

Synopsis	Calendar date and time when system stops using the key
Context	**configure** system security keychains keychain *string* receive entry *number* end-time *string*
Tree	end-time
Introduced	16.0.R1
Platforms	All

tolerance *(number | keyword)*

Synopsis	Time eligible receive key overlaps with active send key
Context	**configure** system security keychains keychain *string* receive entry *number* tolerance *(number | keyword)*
Tree	tolerance
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	300
Introduced	16.0.R1
Platforms	All

send

Synopsis	Enter the **send** context
Context	**configure** system security keychains keychain *string* send
Tree	send
Introduced	16.0.R1
Platforms	All

entry [keychain-entry-index] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** system security keychains keychain *string* send entry *number*
Tree	entry
Introduced	16.0.R1

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Platforms	All

[**keychain-entry-index**] *number*

Synopsis	Keychain identifier
Context	**configure** system security keychains keychain *string* send entry *number*
Tree	entry
Range	0 to 63 | 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the keychain entry
Context	**configure** system security keychains keychain *string* send entry *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

algorithm *keyword*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Encryption algorithm used by the keychain key
Context	**configure** system security keychains keychain *string* send entry *number* algorithm *keyword*
Tree	algorithm
Options	aes-128-cmac-96, hmac-sha-1-96, password, message-digest, hmac-md5, hmac-sha-1, hmac-sha-256, aes-128-gcm-16
Introduced	16.0.R1
Platforms	All

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authentication-key *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Authentication key used by the encryption algorithm
Context	**configure** system security keychains keychain *string* send entry *number* authentication-key *string*
Tree	authentication-key
String Length	1 to 54
Introduced	16.0.R1
Platforms	All

begin-time *string*

Synopsis	Calendar date and time to start using the key
Context	**configure** system security keychains keychain *string* send entry *number* begin-time *string*
Tree	begin-time
Introduced	16.0.R1
Platforms	All

tcp-option-number

Synopsis	Enter the **tcp-option-number** context
Context	**configure** system security keychains keychain *string* tcp-option-number
Tree	tcp-option-number
Introduced	16.0.R1
Platforms	All

receive *keyword*

Synopsis	TCP option accepted in received TCP packets
Context	**configure** system security keychains keychain *string* tcp-option-number receive *keyword*
Tree	receive

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Options	option-253, option-254, both, tcp-ao
Default	option-254
Introduced	16.0.R1
Platforms	All

send *keyword*

Synopsis	TCP option accepted in sent TCP packets
Context	**configure** system security keychains keychain *string* tcp-option-number send *keyword*
Tree	send
Options	option-253, option-254, tcp-ao
Default	option-254
Introduced	16.0.R1
Platforms	All

management

Synopsis	Enter the **management** context
Context	**configure** system security management
Tree	management
Description	Commands in this context control which management protocols can be used to access the SR OS router via the 'Base' and 'management' router instances.
Introduced	16.0.R5
Platforms	All

allow-ftp *boolean*

Synopsis	Allow access to the FTP server
Context	**configure** system security management allow-ftp *boolean*
Tree	allow-ftp
Description	When configured to **true**, this command allows FTP access to the SR OS router via the 'Base' and 'management' router instances. When configured to **false**, this command disallows access to the SR OS FTP server.
Default	true
Introduced	16.0.R6

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Platforms	All

allow-grpc *boolean*

Synopsis	Allow access to the gRPC server
Context	**configure** system security management allow-grpc *boolean*
Tree	allow-grpc
Description	When configured to **true**, the system allows access to the gRPC server via the 'Base' and 'management' router instances.
Default	true
Introduced	19.5.R1
Platforms	All

allow-netconf *boolean*

Synopsis	Allow access to the NETCONF server
Context	**configure** system security management allow-netconf *boolean*
Tree	allow-netconf
Description	When configured to **true**, the system allows NETCONF server access to the SR OS router via the 'Base' and 'management' router instances.
Default	true
Introduced	19.5.R1
Platforms	All

allow-ssh *boolean*

Synopsis	Allow access to the SSH server
Context	**configure** system security management allow-ssh *boolean*
Tree	allow-ssh
Description	When configured to **true**, this command allows SSH server access to the SR OS router via the 'Base' and 'management' router instances. When configured to **false**, this command disallows SSH server access.
Default	true
Introduced	16.0.R5
Platforms	All

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allow-telnet *boolean*

Synopsis	Allow access to the IPv4 Telnet server
Context	**configure** system security management allow-telnet *boolean*
Tree	allow-telnet
Description	When configured to **true**, the system allows IPv4 Telnet server access to the SR OS router via the 'Base' and 'management' router instances. When configured to **false**, access to the IPv4 Telnet server is not allowed.
Default	true
Introduced	16.0.R5
Platforms	All

allow-telnet6 *boolean*

Synopsis	Allow access to the Telnet IPv6 server
Context	**configure** system security management allow-telnet6 *boolean*
Tree	allow-telnet6
Description	When configured to **true**, the system allows IPv6 Telnet server access to the SR OS router via the 'Base' and 'management' router instances. When configured to **false**, the system prevents access to the IPv6 Telnet server.
Default	true
Introduced	16.0.R5
Platforms	All

management-access-filter

Synopsis	Enter the **management-access-filter** context
Context	**configure** system security management-access-filter
Tree	management-access-filter
Description	Commands in this context configure the attributes for management access filters. Management access filters control all traffic in and out of the CPM. The filters can be used to restrict management of the router by other nodes outside of specific networks (or sub-networks) or through designated ports. Management filters are enforced by the system software.
Introduced	16.0.R4
Platforms	All

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ip-filter

Synopsis	Enter the **ip-filter** context
Context	**configure** system security management-access-filter ip-filter
Tree	ip-filter
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of management-access filters
Context	**configure** system security management-access-filter ip-filter admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

default-action *keyword*

Synopsis	Default action for the management access filter
Context	**configure** system security management-access-filter ip-filter default-action *keyword*
Tree	default-action
Description	This command specifies the default action for management access in the absence of a specific management access filter match.
Options	ignore-match, accept, drop, reject
Default	ignore-match
Introduced	16.0.R4
Platforms	All

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** system security management-access-filter ip-filter entry *number*
Tree	entry

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Introduced	16.0.R4
Platforms	All

[**entry-id**] *number*

Synopsis	Entry ID to identify the match criteria and the action
Context	**configure** system security management-access-filter ip-filter entry *number*
Tree	entry
Description	This command specifies the entry ID to identify the match criteria and the corresponding action. It is recommended that entries are numbered in staggered increments. This allows users to insert a new entry in an existing policy without having to renumber the existing entries.
Range	1 to 9999
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

action *keyword*

Synopsis	Action associated with the management access filter
Context	**configure** system security management-access-filter ip-filter entry *number* action *keyword*
Tree	action
Description	This command specifies the action associated with the management access filter match criteria entry. If the packet does not meet any of the match criteria, the configured default action is applied.
Options	ignore-match, accept, drop, reject
Default	ignore-match
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** system security management-access-filter ip-filter entry *number* description *string*

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Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

log-events *boolean*

Synopsis	Enable match logging
Context	**configure** system security management-access-filter ip-filter entry *number* log-events *boolean*
Tree	log-events
Description	When configured to **true**, this command enables match logging. When enabled, matches on the entry cause the Security event mafEntryMatch to be raised. When configured to **false**, match logging is disabled.
Default	false
Introduced	16.0.R4
Platforms	All

match

Synopsis	Enter the **match** context
Context	**configure** system security management-access-filter ip-filter entry *number* match
Tree	match
Description	Commands in this context specify match criteria for the entry.
Introduced	16.0.R4
Platforms	All

dst-port

Synopsis	Enable the **dst-port** context
Context	**configure** system security management-access-filter ip-filter entry *number* match dst-port
Tree	dst-port
Introduced	16.0.R4
Platforms	All

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mask *number*

Synopsis	IP address mask as the match criterion
Context	**configure** system security management-access-filter ip-filter entry *number* match dst-port mask *number*
Tree	mask
Range	1 to 65535
Default	65535
Introduced	16.0.R4
Platforms	All

port *number*

Synopsis	TCP or UDP port number as the match criterion
Context	**configure** system security management-access-filter ip-filter entry *number* match dst-port port *number*
Tree	port
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

mgmt-port

Synopsis	Enter the **mgmt-port** context
Context	**configure** system security management-access-filter ip-filter entry *number* match mgmt-port
Tree	mgmt-port
Description	Commands in this context specify match criteria based on the Ethernet port.
Introduced	16.0.R4
Platforms	All

cpm

Synopsis	Match any traffic received on any Ethernet port

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Context	**configure** system security management-access-filter ip-filter entry *number* match mgmt-port cpm
Tree	cpm
Notes	The following elements are part of a choice: **cpm**, (**lag** and **lag-id**), or **port-id**.
Introduced	16.0.R4
Platforms	All

lag *string*

Synopsis	LAG ID as the match criterion
Context	**configure** system security management-access-filter ip-filter entry *number* match mgmt-port lag *string*
Tree	lag
String Length	1 to 27
Notes	The following elements are part of a choice: **cpm**, (**lag** and **lag-id**), or **port-id**.
Introduced	21.2.R1
Platforms	All

port-id *string*

Synopsis	Port ID as the match criterion
Context	**configure** system security management-access-filter ip-filter entry *number* match mgmt-port port-id *string*
Tree	port-id
Notes	The following elements are part of a choice: **cpm**, (**lag** and **lag-id**), or **port-id**.
Introduced	16.0.R4
Platforms	All

protocol *(number | keyword)*

Synopsis	IP protocol as the match criterion
Context	**configure** system security management-access-filter ip-filter entry *number* match protocol *(number | keyword)*
Tree	protocol
Range	0 to 255

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Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R4
Platforms	All

router-instance *string*

Synopsis	Router instance as the match criterion
Context	**configure** system security management-access-filter ip-filter entry *number* match router-instance *string*
Tree	router-instance
Introduced	16.0.R4
Platforms	All

src-ip

Synopsis	Enter the **src-ip** context
Context	**configure** system security management-access-filter ip-filter entry *number* match src-ip
Tree	src-ip
Description	Commands in this context specify match criteria based on the source IP address.
Introduced	16.0.R4
Platforms	All

address *(ipv4-prefix | ipv4-address)*

Synopsis	IP address or IP prefix as the match criterion
Context	**configure** system security management-access-filter ip-filter entry *number* match src-ip address *(ipv4-prefix | ipv4-address)*
Tree	address
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R4
Platforms	All

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ip-prefix-list *reference*

Synopsis	IP prefix list as the match criterion
Context	**configure** system security management-access-filter ip-filter entry *number* match src-ip ip-prefix-list *reference*
Tree	ip-prefix-list
Reference	**configure** filter match-list ip-prefix-list *string*
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	20.7.R1
Platforms	All

mask *string*

Synopsis	IP address mask as the match criterion
Context	**configure** system security management-access-filter ip-filter entry *number* match src-ip mask *string*
Tree	mask
Notes	The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
Introduced	16.0.R4
Platforms	All

src-port

Synopsis	Enable the **src-port** context
Context	**configure** system security management-access-filter ip-filter entry *number* match src-port
Tree	src-port
Introduced	21.7.R1
Platforms	All

mask *number*

Synopsis	IP address mask as the match criterion
Context	**configure** system security management-access-filter ip-filter entry *number* match src-port mask *number*
Tree	mask
Range	1 to 65535

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Default	65535
Introduced	21.7.R1
Platforms	All

port *number*

Synopsis	TCP or UDP port number as the match criterion
Context	**configure** system security management-access-filter ip-filter entry *number* match src-port port *number*
Tree	port
Range	1 to 65535
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	All

ipv6-filter

Synopsis	Enter the **ipv6-filter** context
Context	**configure** system security management-access-filter ipv6-filter
Tree	ipv6-filter
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of management-access filters
Context	**configure** system security management-access-filter ipv6-filter admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

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default-action *keyword*

Synopsis	Default action for the management access filter
Context	**configure** system security management-access-filter ipv6-filter default-action *keyword*
Tree	default-action
Description	This command specifies the default action for management access in the absence of a specific management access filter match.
Options	ignore-match, accept, drop, reject
Default	ignore-match
Introduced	16.0.R4
Platforms	All

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** system security management-access-filter ipv6-filter entry *number*
Tree	entry
Introduced	16.0.R4
Platforms	All

[**entry-id**] *number*

Synopsis	Entry ID to identify the match criteria and the action
Context	**configure** system security management-access-filter ipv6-filter entry *number*
Tree	entry
Description	This command specifies the entry ID to identify the match criteria and the corresponding action. It is recommended that entries are numbered in staggered increments. This allows users to insert a new entry in an existing policy without having to renumber the existing entries.
Range	1 to 9999
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

action *keyword*

Synopsis	Action associated with the management access filter

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Context	**configure** system security management-access-filter ipv6-filter entry *number* action *keyword*
Tree	action
Description	This command specifies the action associated with the management access filter match criteria entry. If the packet does not meet any of the match criteria, the configured default action is applied.
Options	ignore-match, accept, drop, reject
Default	ignore-match
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** system security management-access-filter ipv6-filter entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

log-events *boolean*

Synopsis	Enable match logging
Context	**configure** system security management-access-filter ipv6-filter entry *number* log-events *boolean*
Tree	log-events
Description	When configured to **true**, this command enables match logging. When enabled, matches on the entry cause the Security event mafEntryMatch to be raised. When configured to **false**, match logging is disabled.
Default	false
Introduced	16.0.R4
Platforms	All

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match

Synopsis	Enter the **match** context
Context	**configure** system security management-access-filter ipv6-filter entry *number* match
Tree	match
Description	Commands in this context specify match criteria for the entry.
Introduced	16.0.R4
Platforms	All

dst-port

Synopsis	Enable the **dst-port** context
Context	**configure** system security management-access-filter ipv6-filter entry *number* match dst-port
Tree	dst-port
Description	Commands in this context specify match criteria based on the destination port.
Introduced	16.0.R4
Platforms	All

mask *number*

Synopsis	IP address mask as the match criterion
Context	**configure** system security management-access-filter ipv6-filter entry *number* match dst-port mask *number*
Tree	mask
Range	1 to 65535
Default	65535
Introduced	16.0.R4
Platforms	All

port *number*

Synopsis	TCP or UDP port number as the match criterion
Context	**configure** system security management-access-filter ipv6-filter entry *number* match dst-port port *number*
Tree	port
Range	1 to 65535

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Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

flow-label *number*

Synopsis	Flow identifier used to discriminate traffic flows
Context	**configure** system security management-access-filter ipv6-filter entry *number* match flow-label *number*
Tree	flow-label
Range	0 to 1048575
Introduced	16.0.R4
Platforms	All

mgmt-port

Synopsis	Enter the **mgmt-port** context
Context	**configure** system security management-access-filter ipv6-filter entry *number* match mgmt-port
Tree	mgmt-port
Description	Commands in this context specify match criteria based on the Ethernet port.
Introduced	16.0.R4
Platforms	All

cpm

Synopsis	Match any traffic received on any Ethernet port
Context	**configure** system security management-access-filter ipv6-filter entry *number* match mgmt-port cpm
Tree	cpm
Notes	The following elements are part of a choice: **cpm**, (**lag** and **lag-id**), or **port-id**.
Introduced	16.0.R4
Platforms	All

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lag *string*

Synopsis	LAG ID as the match criterion
Context	**configure** system security management-access-filter ipv6-filter entry *number* match mgmt-port lag *string*
Tree	lag
String Length	1 to 27
Notes	The following elements are part of a choice: **cpm**, (**lag** and **lag-id**), or **port-id**.
Introduced	21.2.R1
Platforms	All

port-id *string*

Synopsis	Port ID as the match criterion
Context	**configure** system security management-access-filter ipv6-filter entry *number* match mgmt-port port-id *string*
Tree	port-id
Notes	The following elements are part of a choice: **cpm**, (**lag** and **lag-id**), or **port-id**.
Introduced	16.0.R4
Platforms	All

next-header *(number | keyword)*

Synopsis	IP protocol to match
Context	**configure** system security management-access-filter ipv6-filter entry *number* match next-header *(number | keyword)*
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R4
Platforms	All

router-instance *string*

Synopsis	Router instance as the match criterion

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Context	**configure** system security management-access-filter ipv6-filter entry *number* match router-instance *string*
Tree	router-instance
Introduced	16.0.R4
Platforms	All

src-ip

Synopsis	Enter the **src-ip** context
Context	**configure** system security management-access-filter ipv6-filter entry *number* match src-ip
Tree	src-ip
Description	Commands in this context specify match criteria based on the source port.
Introduced	16.0.R4
Platforms	All

address *(ipv6-prefix | ipv6-address)*

Synopsis	IPv6 address or IPv6 prefix to match
Context	**configure** system security management-access-filter ipv6-filter entry *number* match src-ip address *(ipv6-prefix | ipv6-address)*
Tree	address
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R4
Platforms	All

ipv6-prefix-list *reference*

Synopsis	IPv6 prefix list as the match criterion
Context	**configure** system security management-access-filter ipv6-filter entry *number* match src-ip ipv6-prefix-list *reference*
Tree	ipv6-prefix-list
Reference	**configure** filter match-list ipv6-prefix-list *string*
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	20.7.R1
Platforms	All

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mask *string*

Synopsis	IP address mask as the match criterion
Context	**configure** system security management-access-filter ipv6-filter entry *number* match src-ip mask *string*
Tree	mask
Notes	The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced	16.0.R4
Platforms	All

src-port

Synopsis	Enable the **src-port** context
Context	**configure** system security management-access-filter ipv6-filter entry *number* match src-port
Tree	src-port
Description	Commands in this context specify match criteria based on the source port.
Introduced	21.7.R1
Platforms	All

mask *number*

Synopsis	IP address mask as the match criterion
Context	**configure** system security management-access-filter ipv6-filter entry *number* match src-port mask *number*
Tree	mask
Range	1 to 65535
Default	65535
Introduced	21.7.R1
Platforms	All

port *number*

Synopsis	TCP or UDP port number as the match criterion
Context	**configure** system security management-access-filter ipv6-filter entry *number* match src-port port *number*

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Tree	port
Range	1 to 65535
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	All

mac-filter

Synopsis	Enter the **mac-filter** context
Context	**configure** system security management-access-filter mac-filter
Tree	mac-filter
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of management access MAC filter
Context	**configure** system security management-access-filter mac-filter admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

default-action *keyword*

Synopsis	Default action for the management access filter
Context	**configure** system security management-access-filter mac-filter default-action *keyword*
Tree	default-action
Description	This command specifies the default action for management access in the absence of a specific management access filter match.
Options	ignore-match, accept, drop
Default	ignore-match
Introduced	16.0.R4
Platforms	All

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entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** system security management-access-filter mac-filter entry *number*
Tree	entry
Introduced	16.0.R4
Platforms	All

[**entry-id**] *number*

Synopsis	Entry ID to identify the match criteria and the action
Context	**configure** system security management-access-filter mac-filter entry *number*
Tree	entry
Description	This command specifies the entry ID to identify the match criteria and the corresponding action. It is recommended that entries are numbered in staggered increments. This allows users to insert a new entry in an existing policy without having to renumber the existing entries.
Range	1 to 9999
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

action *keyword*

Synopsis	Action associated with the management access filter
Context	**configure** system security management-access-filter mac-filter entry *number* action *keyword*
Tree	action
Description	This command specifies the action associated with the management access filter match criteria entry. If the packet does not meet any of the match criteria, the configured default action is applied.
Options	ignore-match, accept, drop
Default	ignore-match
Introduced	16.0.R4
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** system security management-access-filter mac-filter entry *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

log-events *boolean*

Synopsis	Enable match logging
Context	**configure** system security management-access-filter mac-filter entry *number* log-events *boolean*
Tree	log-events
Description	When configured to **true**, this command enables match logging. When enabled, matches on the entry cause the Security event mafEntryMatch to be raised. When configured to **false**, match logging is disabled.
Default	false
Introduced	16.0.R4
Platforms	All

match

Synopsis	Enter the **match** context
Context	**configure** system security management-access-filter mac-filter entry *number* match
Tree	match
Description	Commands in this context specify match criteria for the entry.
Introduced	16.0.R4
Platforms	All

cfm-opcode

Synopsis	Enter the **cfm-opcode** context

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Context	**configure** system security management-access-filter mac-filter entry *number* match cfm-opcode
Tree	cfm-opcode
Description	Commands in this context specify match criteria based on the CFM opcode.
Introduced	16.0.R4
Platforms	All

eq *number*

Synopsis	Equal to comparison operator for the CFM opcode
Context	**configure** system security management-access-filter mac-filter entry *number* match cfm-opcode eq *number*
Tree	eq
Range	0 to 255
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R4
Platforms	All

gt *number*

Synopsis	Greater than comparison operator for the CFM opcode
Context	**configure** system security management-access-filter mac-filter entry *number* match cfm-opcode gt *number*
Tree	gt
Range	0 to 254
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R4
Platforms	All

lt *number*

Synopsis	Less than comparison operator for the CFM opcode
Context	**configure** system security management-access-filter mac-filter entry *number* match cfm-opcode lt *number*
Tree	lt
Range	1 to 255

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Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R4
Platforms	All

range

Synopsis	Enable the **range** context
Context	**configure** system security management-access-filter mac-filter entry *number* match cfm-opcode range
Tree	range
Notes	The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
Introduced	16.0.R4
Platforms	All

end *number*

Synopsis	Upper bound of the range for the OpCode to match
Context	**configure** system security management-access-filter mac-filter entry *number* match cfm-opcode range end *number*
Tree	end
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

start *number*

Synopsis	Lower bound of the range for the OpCode to match
Context	**configure** system security management-access-filter mac-filter entry *number* match cfm-opcode range start *number*
Tree	start
Range	0 to 254
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

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dot1p

Synopsis	Enable the **dot1p** context
Context	**configure** system security management-access-filter mac-filter entry *number* match dot1p
Tree	dot1p
Description	Commands in this context specify match criteria based on the IEEE 802.1p value.
Introduced	16.0.R4
Platforms	All

mask *number*

Synopsis	3-bit mask as the match criterion
Context	**configure** system security management-access-filter mac-filter entry *number* match dot1p mask *number*
Tree	mask
Range	1 to 7
Default	7
Introduced	16.0.R4
Platforms	All

priority *number*

Synopsis	IEEE 802.1p value as the match criterion
Context	**configure** system security management-access-filter mac-filter entry *number* match dot1p priority *number*
Tree	priority
Range	0 to 7
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

dst-mac

Synopsis	Enable the **dst-mac** context

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Context	**configure** system security management-access-filter mac-filter entry *number* match dst-mac
Tree	dst-mac
Description	Commands in this context specify match criteria based on the destination MAC.
Introduced	16.0.R4
Platforms	All

address *string*

Synopsis	MAC address used as the match criterion
Context	**configure** system security management-access-filter mac-filter entry *number* match dst-mac address *string*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

mask *string*

Synopsis	MAC address mask as the match criterion
Context	**configure** system security management-access-filter mac-filter entry *number* match dst-mac mask *string*
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	16.0.R4
Platforms	All

etype *string*

Synopsis	Ethernet type II Ethertype value as the match criterion
Context	**configure** system security management-access-filter mac-filter entry *number* match etype *string*
Tree	etype
Description	This command specifies an Ethernet type II Ethertype value to be used as a MAC filter match criterion. The Ethernet type field is used by the Ethernet version-II frames and does not apply to IEEE 802.3 Ethernet frames.

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String Length	5 to 6
Introduced	16.0.R4
Platforms	All

frame-type *keyword*

Synopsis	MAC frame type as the match criterion
Context	**configure** system security management-access-filter mac-filter entry *number* match frame-type *keyword*
Tree	frame-type
Options	802dot3, 802dot2-llc, 802dot2-snap, ethernet-ii, 802dot1-ag
Default	802dot3
Introduced	16.0.R4
Platforms	All

llc-dsap

Synopsis	Enable the **llc-dsap** context
Context	**configure** system security management-access-filter mac-filter entry *number* match llc-dsap
Tree	llc-dsap
Description	Commands in this context specify match criteria based on the Destination Service Access Point (DSAP).
Introduced	16.0.R4
Platforms	All

dsap *number*

Synopsis	8-bit DSAP as the match criterion
Context	**configure** system security management-access-filter mac-filter entry *number* match llc-dsap dsap *number*
Tree	dsap
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

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mask *number*

Synopsis	Mask for DSAP value as the match criterion
Context	**configure** system security management-access-filter mac-filter entry *number* match llc-dsap mask *number*
Tree	mask
Range	1 to 255
Default	255
Introduced	16.0.R4
Platforms	All

llc-ssap

Synopsis	Enable the **llc-ssap** context
Context	**configure** system security management-access-filter mac-filter entry *number* match llc-ssap
Tree	llc-ssap
Description	Commands in this context specify match criteria based on the Source Service Access Point (SSAP).
Introduced	16.0.R4
Platforms	All

mask *number*

Synopsis	Mask for SSAP value as the match criterion
Context	**configure** system security management-access-filter mac-filter entry *number* match llc-ssap mask *number*
Tree	mask
Range	1 to 255
Default	255
Introduced	16.0.R4
Platforms	All

ssap *number*

Synopsis	8-bit SSAP as the match criterion

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Context	**configure** system security management-access-filter mac-filter entry *number* match llc-ssap ssap *number*
Tree	ssap
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

service *string*

Synopsis	Service ID used as the match condition
Context	**configure** system security management-access-filter mac-filter entry *number* match service *string*
Tree	service
String Length	1 to 64
Introduced	16.0.R4
Platforms	All

snap-oui *keyword*

Synopsis	IEEE 802.3 LLC SNAP Ethernet Frame OUI value for match
Context	**configure** system security management-access-filter mac-filter entry *number* match snap-oui *keyword*
Tree	snap-oui
Description	This command specifies the IEEE 802.3 LLC SNAP Ethernet Frame OUI value as the MAC filter match criterion.
Options	zero, non-zero
Introduced	16.0.R4
Platforms	All

snap-pid *number*

Synopsis	IEEE 802.3 LLC SNAP Ethernet Frame PID as the match
Context	**configure** system security management-access-filter mac-filter entry *number* match snap-pid *number*
Tree	snap-pid

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Description	This command specifies an IEEE 802.3 LLC SNAP Ethernet Frame PID value used as the MAC filter match criterion. The SNAP PID match criterion is independent of the OUI field within the SNAP header. Two packets with different 3-byte OUI fields but the same PID field match the same filter entry based on a SNAP PID match criterion.
Range	0 to 65535
Introduced	16.0.R4
Platforms	All

src-mac

Synopsis	Enable the **src-mac** context
Context	**configure** system security management-access-filter mac-filter entry *number* match src-mac
Tree	src-mac
Description	Commands in this context specify match criteria based on the source MAC.
Introduced	16.0.R4
Platforms	All

address *string*

Synopsis	MAC address used as the match criterion
Context	**configure** system security management-access-filter mac-filter entry *number* match src-mac address *string*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

mask *string*

Synopsis	MAC address mask as the match criterion
Context	**configure** system security management-access-filter mac-filter entry *number* match src-mac mask *string*
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	16.0.R4

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Platforms	All

per-peer-queuing *boolean*

Synopsis	Allow CPM hardware queuing per peer
Context	**configure** system security per-peer-queuing *boolean*
Tree	per-peer-queuing
Description	When configured to **true**, the router automatically allocates a separate CPM hardware queue for the peer when a peering session is established. When configured to **false**, a separate CPM hardware queue is not allowed.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pki

Synopsis	Enter the **pki** context
Context	**configure** system security pki
Tree	pki
Introduced	16.0.R1
Platforms	All

ca-profile [ca-profile-name] *string*

Synopsis	Enter the **ca-profile** list instance
Context	**configure** system security pki ca-profile *string*
Tree	ca-profile
Max. Instances	128
Introduced	16.0.R1
Platforms	All

[**ca-profile-name**] *string*

Synopsis	CA profile name
Context	**configure** system security pki ca-profile *string*
Tree	ca-profile

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String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the CA profile
Context	**configure** system security pki ca-profile *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

auto-crl-update

Synopsis	Enable the **auto-crl-update** context
Context	**configure** system security pki ca-profile *string* auto-crl-update
Tree	auto-crl-update
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the automatic CRL update
Context	**configure** system security pki ca-profile *string* auto-crl-update admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

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crl-urls

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **crl-urls** context
Context	**configure** system security pki ca-profile *string* auto-crl-update crl-urls
Tree	crl-urls
Introduced	16.0.R1
Platforms	All

url-entry [entry-id] *number*

Synopsis	Enter the **url-entry** list instance
Context	**configure** system security pki ca-profile *string* auto-crl-update crl-urls url-entry *number*
Tree	url-entry
Introduced	16.0.R1
Platforms	All

[**entry-id**] *number*

Synopsis	URL on this system
Context	**configure** system security pki ca-profile *string* auto-crl-update crl-urls url-entry *number*
Tree	url-entry
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

transmission-profile *reference*

Synopsis	File transmission profile to update CRL
Context	**configure** system security pki ca-profile *string* auto-crl-update crl-urls url-entry *number* transmission-profile *reference*
Tree	transmission-profile
Reference	**configure** system transmission-profile *string*

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Introduced	16.0.R4
Platforms	All

url *http-url-path-loose*

Synopsis	Location of updated CRL
Context	**configure** system security pki ca-profile *string* auto-crl-update crl-urls url-entry *number* url *http-url-path-loose*
Tree	url
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

periodic-update-interval *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval between two consecutive CRL updates
Context	**configure** system security pki ca-profile *string* auto-crl-update periodic-update-interval *number*
Tree	periodic-update-interval
Range	3600 to 31622400
Units	seconds
Default	86400
Introduced	16.0.R1
Platforms	All

pre-update-time *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time prior to the next update time of the current CRL
Context	**configure** system security pki ca-profile *string* auto-crl-update pre-update-time *number*

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Tree	pre-update-time
Range	0 to 31622400
Units	seconds
Default	3600
Introduced	16.0.R1
Platforms	All

retry-interval *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval before retrying to update CRL
Context	**configure** system security pki ca-profile *string* auto-crl-update retry-interval *number*
Tree	retry-interval
Range	0 to 31622400
Units	seconds
Default	3600
Introduced	16.0.R1
Platforms	All

schedule-type *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time scheduler type for an automated CRL update
Context	**configure** system security pki ca-profile *string* auto-crl-update schedule-type *keyword*
Tree	schedule-type
Options	next-update-based, periodic
Default	next-update-based
Introduced	16.0.R1
Platforms	All

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cert-file *string*

WARNING:
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Synopsis	Certificate file name
Context	**configure** system security pki ca-profile *string* cert-file *string*
Tree	cert-file
String Length	1 to 95
Introduced	16.0.R1
Platforms	All

cmpv2

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **cmpv2** context
Context	**configure** system security pki ca-profile *string* cmpv2
Tree	cmpv2
Description	Commands in this context configure CMPv2 options.
Introduced	16.0.R1
Platforms	All

accept-unprotected-message

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **accept-unprotected-message** context
Context	**configure** system security pki ca-profile *string* cmpv2 accept-unprotected-message
Tree	accept-unprotected-message
Introduced	16.0.R1
Platforms	All

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error-message *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept unprotected error messages
Context	**configure** system security pki ca-profile *string* cmpv2 accept-unprotected-message error-message *boolean*
Tree	error-message
Default	false
Introduced	16.0.R1
Platforms	All

pkiconf-message *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept unprotected PKI confirmation messages
Context	**configure** system security pki ca-profile *string* cmpv2 accept-unprotected-message pkiconf-message *boolean*
Tree	pkiconf-message
Default	false
Introduced	16.0.R1
Platforms	All

always-set-sender-for-ir *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Set subject name in CMPv2 header for all IR messages
Context	**configure** system security pki ca-profile *string* cmpv2 always-set-sender-for-ir *boolean*
Tree	always-set-sender-for-ir
Default	false

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Introduced	16.0.R1
Platforms	All

http

WARNING:
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Synopsis	Enter the **http** context
Context	**configure** system security pki ca-profile *string* cmpv2 http
Tree	http
Introduced	16.0.R1
Platforms	All

response-timeout *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	HTTP response timeout
Context	**configure** system security pki ca-profile *string* cmpv2 http response-timeout *number*
Tree	response-timeout
Range	1 to 3600
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

version *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	HTTP version for CMPv2 messages
Context	**configure** system security pki ca-profile *string* cmpv2 http version *keyword*

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Tree	version
Options	1.0, 1.1
Default	1.1
Introduced	16.0.R1
Platforms	All

key-list

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **key-list** context
Context	**configure** system security pki ca-profile *string* cmpv2 key-list
Tree	key-list
Introduced	16.0.R1
Platforms	All

key [reference-number] *string*

Synopsis	Enter the **key** list instance
Context	**configure** system security pki ca-profile *string* cmpv2 key-list key *string*
Tree	key
Max. Instances	128
Introduced	16.0.R1
Platforms	All

[**reference-number**] *string*

Synopsis	Unique identifier for the CA initial authentication key
Context	**configure** system security pki ca-profile *string* cmpv2 key-list key *string*
Tree	key
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

password *string*

Synopsis	Shared secret for this CA initial authentication key
Context	**configure** system security pki ca-profile *string* cmpv2 key-list key *string* password *string*
Tree	password
String Length	1 to 115
Introduced	16.0.R1
Platforms	All

recipient-subject *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DN attributes for recipient subject of CMPv2 requests
Context	**configure** system security pki ca-profile *string* cmpv2 recipient-subject *string*
Tree	recipient-subject
String Length	1 to 256
Notes	The following elements are part of a choice: **recipient-subject** or **use-ca-subject**.
Introduced	22.10.R1
Platforms	All

response-signing-cert *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	File name of the certificate to verify CMPv2 responses
Context	**configure** system security pki ca-profile *string* cmpv2 response-signing-cert *string*
Tree	response-signing-cert
Description	This command specifies an imported certificate used to verify the CMP response message that they are protected by signature. When unconfigured, CA's certificate is used.

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String Length	1 to 95
Notes	The following elements are part of a choice: **response-signing-cert** or **response-signing-use-extracert**.
Introduced	16.0.R1
Platforms	All

response-signing-use-extracert

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use extraCerts certificate to verify response signature
Context	**configure** system security pki ca-profile *string* cmpv2 response-signing-use-extracert
Tree	response-signing-use-extracert
Notes	The following elements are part of a choice: **response-signing-cert** or **response-signing-use-extracert**.
Introduced	22.10.R1
Platforms	All

same-recipient-nonce-for-poll-request *boolean*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use same recipNonce as last CMPv2 response
Context	**configure** system security pki ca-profile *string* cmpv2 same-recipient-nonce-for-poll-request *boolean*
Tree	same-recipient-nonce-for-poll-request
Default	false
Introduced	16.0.R1
Platforms	All

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signing-cert-subject *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Subject DN attributes to identify signing certificate
Context	**configure** system security pki ca-profile *string* cmpv2 signing-cert-subject *string*
Tree	signing-cert-subject
String Length	1 to 256
Introduced	23.3.R1
Platforms	All

url

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **url** context
Context	**configure** system security pki ca-profile *string* cmpv2 url
Tree	url
Introduced	16.0.R1
Platforms	All

service-name *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	**configure** system security pki ca-profile *string* cmpv2 url service-name *string*
Tree	service-name
String Length	1 to 64
Notes	The following elements are part of a choice: **service-name** or **transmission-profile**.
Introduced	16.0.R1
Platforms	All

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transmission-profile *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Transmission profile for CMPv2
Context	**configure** system security pki ca-profile *string* cmpv2 url transmission-profile *reference*
Tree	transmission-profile
Reference	**configure** system transmission-profile *string*
Notes	The following elements are part of a choice: **service-name** or **transmission-profile**.
Introduced	23.3.R1
Platforms	All

url-string *http-optional-url-loose*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	URL for CMPv2
Context	**configure** system security pki ca-profile *string* cmpv2 url url-string *http-optional-url-loose*
Tree	url-string
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

use-ca-subject

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use subject DN in CA certificate as CMPv2 request recipient
Context	**configure** system security pki ca-profile *string* cmpv2 use-ca-subject
Tree	use-ca-subject
Notes	The following elements are part of a choice: **recipient-subject** or **use-ca-subject**.

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Introduced	22.10.R1
Platforms	All

crl-file *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Certificate Revocation List (CRL) file name
Context	**configure** system security pki ca-profile *string* crl-file *string*
Tree	crl-file
String Length	1 to 95
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** system security pki ca-profile *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

ocsp

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the **ocsp** context
Context	**configure** system security pki ca-profile *string* ocsp
Tree	ocsp
Introduced	16.0.R1
Platforms	All

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responder-url *http-optional-url-loose*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	HTTP URL of the OCSP responder for the CA
Context	**configure** system security pki ca-profile *string* ocsp responder-url *http-optional-url-loose*
Tree	responder-url
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

service-name *string*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	**configure** system security pki ca-profile *string* ocsp service-name *string*
Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

transmission-profile *reference*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Transmission profile for the OCSP
Context	**configure** system security pki ca-profile *string* ocsp transmission-profile *reference*
Tree	transmission-profile
Reference	**configure** system transmission-profile *string*
Introduced	16.0.R6

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Platforms	All

revocation-check *keyword*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Revocation method to check status of CA certificates
Context	**configure** system security pki ca-profile *string* revocation-check *keyword*
Tree	revocation-check
Options	crl, crl-optional
Default	crl
Introduced	16.0.R1
Platforms	All

certificate-auto-update [certificate-file-name] *string*

Synopsis	Enter the **certificate-auto-update** list instance
Context	**configure** system security pki certificate-auto-update *string*
Tree	certificate-auto-update
Description	Commands in this context configure automatic certificate update associations.
Max. Instances	256
Introduced	22.10.R1
Platforms	All

[**certificate-file-name**] *string*

Synopsis	Certificate file name
Context	**configure** system security pki certificate-auto-update *string*
Tree	certificate-auto-update
String Length	1 to 95
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

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key-file-name *string*

Synopsis	Imported key filename
Context	**configure** system security pki certificate-auto-update *string* key-file-name *string*
Tree	key-file-name
String Length	1 to 95
Introduced	22.10.R1
Platforms	All

profile *reference*

Synopsis	Certificate update profile name
Context	**configure** system security pki certificate-auto-update *string* profile *reference*
Tree	profile
Reference	**configure** system security pki certificate-update-profile *string*
Introduced	22.10.R1
Platforms	All

certificate-display-format *keyword*

Synopsis	Display format for Certificates and CRLs
Context	**configure** system security pki certificate-display-format *keyword*
Tree	certificate-display-format
Options	ascii, utf8
Default	ascii
Introduced	16.0.R1
Platforms	All

certificate-expiration-warning

Synopsis	Enter the **certificate-expiration-warning** context
Context	**configure** system security pki certificate-expiration-warning
Tree	certificate-expiration-warning
Introduced	16.0.R1
Platforms	All

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hours *number*

Synopsis	Time before system generates certificate warning trap
Context	**configure** system security pki certificate-expiration-warning hours *number*
Tree	hours
Range	0 to 8760
Units	hours
Introduced	16.0.R1
Platforms	All

repeat-hours *number*

Synopsis	Time system repeats certificate expiration warning trap
Context	**configure** system security pki certificate-expiration-warning repeat-hours *number*
Tree	repeat-hours
Range	0 to 8760
Units	hours
Default	0
Introduced	16.0.R1
Platforms	All

certificate-update-profile [name] *string*

Synopsis	Enter the **certificate-update-profile** list instance
Context	**configure** system security pki certificate-update-profile *string*
Tree	certificate-update-profile
Description	Commands in this context configure a certificate update profile that specifies the behavior of the automatic update certificate.
Max. Instances	256
Introduced	22.10.R1
Platforms	All

[**name**] *string*

Synopsis	Certificate update profile name

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Context	**configure** system security pki certificate-update-profile *string*
Tree	certificate-update-profile
Description	This command configures the certificate update profile name.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

after-issue *number*

Synopsis	Time for scheduler updates after certificate issuance
Context	**configure** system security pki certificate-update-profile *string* after-issue *number*
Tree	after-issue
Description	This command configures the time for scheduler updates after the certificate issue time.
Range	864000 to 157680000
Units	seconds
Notes	The following elements are part of a choice: **after-issue** or **before-expiry**.
Introduced	22.10.R1
Platforms	All

before-expiry *number*

Synopsis	Time scheduler updates before certificate expiry
Context	**configure** system security pki certificate-update-profile *string* before-expiry *number*
Tree	before-expiry
Description	This command configures the time that the scheduler updates before the certificate expiration time.
Range	3600 to 157680000
Units	seconds
Default	86400
Notes	The following elements are part of a choice: **after-issue** or **before-expiry**.
Introduced	22.10.R1
Platforms	All

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cmpv2

Synopsis	Enter the **cmpv2** context
Context	**configure** system security pki certificate-update-profile *string* cmpv2
Tree	cmpv2
Notes	The following elements are part of a choice: **cmpv2** or **est**.
Introduced	22.10.R1
Platforms	All

ca-profile *reference*

Synopsis	CA profile name
Context	**configure** system security pki certificate-update-profile *string* cmpv2 ca-profile *reference*
Tree	ca-profile
Description	This command specifies the use of CMPv2 as the protocol to update the certificate. The CMPv2 configuration is derived from the referenced CA profile.
Reference	**configure** system security pki ca-profile *string*
Introduced	22.10.R1
Platforms	All

dsa

Synopsis	Enter the **dsa** context
Context	**configure** system security pki certificate-update-profile *string* dsa
Tree	dsa
Notes	The following elements are part of a choice: **dsa**, **ecdsa**, **rsa**, or **same-as-existing-key**.
Introduced	22.10.R1
Platforms	All

key-size *number*

Synopsis	Length of the generated DSA key
Context	**configure** system security pki certificate-update-profile *string* dsa key-size *number*
Tree	key-size
Description	This command specifies that the newly generated key is an DSA key with the specified key length in bits.

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Range	512 to 8192
Default	2048
Introduced	22.10.R1
Platforms	All

ecdsa

Synopsis	Enter the **ecdsa** context
Context	**configure** system security pki certificate-update-profile *string* ecdsa
Tree	ecdsa
Notes	The following elements are part of a choice: **dsa**, **ecdsa**, **rsa**, or **same-as-existing-key**.
Introduced	22.10.R1
Platforms	All

curve *keyword*

Synopsis	Elliptic curve to be used in ECDSA key generation
Context	**configure** system security pki certificate-update-profile *string* ecdsa curve *keyword*
Tree	curve
Description	This command specifies that the newly generated key is an ECDSA key with the specified curve.
Options	secp256r1, secp384r1, secp521r1
Default	secp256r1
Introduced	22.10.R1
Platforms	All

est

Synopsis	Enter the **est** context
Context	**configure** system security pki certificate-update-profile *string* est
Tree	est
Notes	The following elements are part of a choice: **cmpv2** or **est**.
Introduced	22.10.R1
Platforms	All

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est-profile *reference*

Synopsis	EST profile name
Context	**configure** system security pki certificate-update-profile *string* est est-profile *reference*
Tree	est-profile
Description	This command specifies the use of EST as the protocol to update the certificate. The EST configuration is derived from the referenced EST profile.
Reference	**configure** system security pki est-profile *string*
Introduced	22.10.R1
Platforms	All

hash-algorithm *keyword*

Synopsis	Hash algorithm for a certificate request
Context	**configure** system security pki certificate-update-profile *string* hash-algorithm *keyword*
Tree	hash-algorithm
Description	This command specifies the hash algorithm used to generate a certificate request.
Options	md5, sha1, sha224, sha256, sha384, sha512
Default	sha256
Introduced	22.10.R1
Platforms	All

retry-interval *number*

Synopsis	Retry interval after a failed update
Context	**configure** system security pki certificate-update-profile *string* retry-interval *number*
Tree	retry-interval
Description	This command configures the retry interval after the update fails.
Range	60 to 36000
Units	seconds
Default	3600
Introduced	22.10.R1
Platforms	All

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rsa

Synopsis	Enter the **rsa** context
Context	**configure** system security pki certificate-update-profile *string* rsa
Tree	rsa
Notes	The following elements are part of a choice: **dsa**, **ecdsa**, **rsa**, or **same-as-existing-key**.
Introduced	22.10.R1
Platforms	All

key-size *number*

Synopsis	Length of the generated RSA key
Context	**configure** system security pki certificate-update-profile *string* rsa key-size *number*
Tree	key-size
Description	This command specifies that the newly generated key is a RSA key with the specified key length in bits.
Range	512 to 8192
Default	2048
Introduced	22.10.R1
Platforms	All

same-as-existing-key

Synopsis	Generate the new key to same type and key length
Context	**configure** system security pki certificate-update-profile *string* same-as-existing-key
Tree	same-as-existing-key
Description	When configured, this command specifies that the newly generated key is the same type and key length as the existing key.
Notes	The following elements are part of a choice: **dsa**, **ecdsa**, **rsa**, or **same-as-existing-key**.
Introduced	22.10.R1
Platforms	All

common-name-list [cn-list-name] *string*

Synopsis	Enter the **common-name-list** list instance
Context	**configure** system security pki common-name-list *string*

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Tree	common-name-list
Max. Instances	64
Introduced	16.0.R1
Platforms	All

[**cn-list-name**] *string*

Synopsis	CN list name
Context	**configure** system security pki common-name-list *string*
Tree	common-name-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

common-name [cn-index] *number*

Synopsis	Enter the **common-name** list instance
Context	**configure** system security pki common-name-list *string* common-name *number*
Tree	common-name
Introduced	16.0.R1
Platforms	All

[**cn-index**] *number*

Synopsis	Common name index
Context	**configure** system security pki common-name-list *string* common-name *number*
Tree	common-name
Range	1 to 128
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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cn-type *keyword*

Synopsis	Common name type
Context	**configure** system security pki common-name-list *string* common-name *number* cn-type *keyword*
Tree	cn-type
Options	ip-address, domain-name
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

cn-value *string*

Synopsis	Common name value
Context	**configure** system security pki common-name-list *string* common-name *number* cn-value *string*
Tree	cn-value
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

crl-expiration-warning

Synopsis	Enter the **crl-expiration-warning** context
Context	**configure** system security pki crl-expiration-warning
Tree	crl-expiration-warning
Introduced	16.0.R1
Platforms	All

hours *number*

Synopsis	Time before system generates CRL expiration warning trap
Context	**configure** system security pki crl-expiration-warning hours *number*
Tree	hours
Range	0 to 8760

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Units	hours
Introduced	16.0.R1
Platforms	All

repeat-hours *number*

Synopsis	Time system repeats CRL expiration warning trap
Context	**configure** system security pki crl-expiration-warning repeat-hours *number*
Tree	repeat-hours
Range	0 to 8760
Units	hours
Default	0
Introduced	16.0.R1
Platforms	All

est-profile [name] *string*

Synopsis	Enter the **est-profile** list instance
Context	**configure** system security pki est-profile *string*
Tree	est-profile
Description	Commands in this context configure an Enrollment over Secure Transport (EST) profile.
Max. Instances	128
Introduced	21.10.R1
Platforms	All

[**name**] *string*

Synopsis	Enrollment over Secured Transport profile name
Context	**configure** system security pki est-profile *string*
Tree	est-profile
Description	This command configures the EST profile name.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1

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Platforms	All

check-id-kp-cmcra-only *boolean*

Synopsis	Check id-kp-cmcra in the EST certificate
Context	**configure** system security pki est-profile *string* check-id-kp-cmcra-only *boolean*
Tree	check-id-kp-cmcra-only
Default	false
Introduced	21.10.R1
Platforms	All

client-tls-profile *string*

Synopsis	TLS client profile assigned to applications
Context	**configure** system security pki est-profile *string* client-tls-profile *string*
Tree	client-tls-profile
Description	This command specifies the TLS client profile to be assigned to applications for encryption. The profile creates the TLS connection to the EST server.
String Length	1 to 32
Introduced	21.10.R1
Platforms	All

http-authentication

Synopsis	Enter the **http-authentication** context
Context	**configure** system security pki est-profile *string* http-authentication
Tree	http-authentication
Introduced	21.10.R1
Platforms	All

password *string*

Synopsis	Password for EST authentication
Context	**configure** system security pki est-profile *string* http-authentication password *string*
Tree	password

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String Length	1 to 115
Introduced	21.10.R1
Platforms	All

username *string*

Synopsis	Username for the EST authentication
Context	**configure** system security pki est-profile *string* http-authentication username *string*
Tree	username
String Length	1 to 32
Introduced	21.10.R1
Platforms	All

server

Synopsis	Enter the **server** context
Context	**configure** system security pki est-profile *string* server
Tree	server
Description	Commands in this context configure EST server parameters.
Introduced	21.10.R1
Platforms	All

fqdn *string*

Synopsis	Fully Qualified Domain Name (FQDN) of the EST server
Context	**configure** system security pki est-profile *string* server fqdn *string*
Tree	fqdn
Description	This command specifies to use the FQDN of the EST server.
String Length	1 to 255
Notes	The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.
Introduced	21.10.R1
Platforms	All

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ipv4 *string*

Synopsis	IPv4 address of the EST server
Context	**configure** system security pki est-profile *string* server ipv4 *string*
Tree	ipv4
Notes	The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.
Introduced	21.10.R1
Platforms	All

ipv6 *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IPv6 address of the EST server
Context	**configure** system security pki est-profile *string* server ipv6 *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	ipv6
Notes	The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.
Introduced	21.10.R1
Platforms	All

port *number*

Synopsis	Port number of the EST server
Context	**configure** system security pki est-profile *string* server port *number*
Tree	port
Range	1 to 65535
Default	443
Introduced	21.10.R1
Platforms	All

transmission-profile *string*

Synopsis	Transmission profile name for EST
Context	**configure** system security pki est-profile *string* transmission-profile *string*
Tree	transmission-profile
Description	This command associates a file transmission profile to the EST profile.

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The transmission profile defines transport parameters for protocol such as HTTP, include routing instance, source address, timeout value, and so on.

String Length	1 to 32
Introduced	21.10.R1
Platforms	All

imported-format *keyword*

Synopsis	The supported encrypted file formats
Context	**configure** system security pki imported-format *keyword*
Tree	imported-format
Options	any, secure
Default	any
Introduced	16.0.R6
Platforms	All

maximum-cert-chain-depth *number*

Synopsis	Maximum depth of certificate chain verification
Context	**configure** system security pki maximum-cert-chain-depth *number*
Tree	maximum-cert-chain-depth
Range	1 to 7
Default	7
Introduced	16.0.R1
Platforms	All

python-script

Synopsis	Enter the **python-script** context
Context	**configure** system security python-script
Tree	python-script
Introduced	21.10.R1
Platforms	All

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authorization

Synopsis	Enter the **authorization** context
Context	**configure** system security python-script authorization
Tree	authorization
Introduced	21.10.R1
Platforms	All

cron

Synopsis	Enter the **cron** context
Context	**configure** system security python-script authorization cron
Tree	cron
Introduced	21.10.R1
Platforms	All

cli-user *reference*

Synopsis	User profile name when executing a Python application
Context	**configure** system security python-script authorization cron cli-user *reference*
Tree	cli-user
Reference	**configure** system security user-params local-user user *string*
Introduced	21.10.R1
Platforms	All

event-handler

Synopsis	Enter the **event-handler** context
Context	**configure** system security python-script authorization event-handler
Tree	event-handler
Introduced	21.10.R1
Platforms	All

cli-user *reference*

Synopsis	User profile name when executing a Python application

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Context	**configure** system security python-script authorization event-handler cli-user *reference*
Tree	cli-user
Reference	**configure** system security user-params local-user user *string*
Introduced	21.10.R1
Platforms	All

snmp

Synopsis	Enter the **snmp** context
Context	**configure** system security snmp
Tree	snmp
Introduced	16.0.R1
Platforms	All

access [group] *string* context *string* security-model *keyword* security-level *keyword*

Synopsis	Enter the **access** list instance
Context	**configure** system security snmp access *string* context *string* security-model *keyword* security-level *keyword*
Tree	access
Introduced	16.0.R1
Platforms	All

[**group**] *string*

Synopsis	Group name
Context	**configure** system security snmp access *string* context *string* security-model *keyword* security-level *keyword*
Tree	access
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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context *string*

Synopsis	String to match context name for access rights
Context	**configure** system security snmp access *string* context *string* security-model *keyword* security-level *keyword*
Tree	access
String Length	0 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

security-model *keyword*

Synopsis	Security model
Context	**configure** system security snmp access *string* context *string* security-model *keyword* security-level *keyword*
Tree	access
Options	snmpv1, snmpv2c, usm
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

security-level *keyword*

Synopsis	Minimum security level required to gain access rights
Context	**configure** system security snmp access *string* context *string* security-model *keyword* security-level *keyword*
Tree	access
Options	no-auth-no-privacy, auth-no-privacy, privacy
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

notify *string*

Synopsis	SNMP view for notification access

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Context	**configure** system security snmp access *string* context *string* security-model *keyword* security-level *keyword* notify *string*
Tree	notify
Description	This command specifies the SNMP view used to control which MIB objects can be accessed for notifications.
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

prefix-match *keyword*

Synopsis	Match type for the context
Context	**configure** system security snmp access *string* context *string* security-model *keyword* security-level *keyword* prefix-match *keyword*
Tree	prefix-match
Options	exact, prefix
Introduced	16.0.R1
Platforms	All

read *string*

Synopsis	SNMP view for read access
Context	**configure** system security snmp access *string* context *string* security-model *keyword* security-level *keyword* read *string*
Tree	read
Description	This command specifies the SNMP view used to control which MIB objects can be accessed using a read (get) operation.
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

write *string*

Synopsis	SNMP view for write access
Context	**configure** system security snmp access *string* context *string* security-model *keyword* security-level *keyword* write *string*
Tree	write

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Description	This command specifies the SNMP view used to control which MIB objects can be accessed using a write (set) operation.
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

attempts

Synopsis	Enter the **attempts** context
Context	**configure** system security snmp attempts
Tree	attempts
Description	Commands in this context configure settings for SNMPv2 or SNMPv3 connection attempts. The command settings are used to counter Denial of Service (DOS) attacks through SNMP. If the threshold is exceeded, the host is locked out for the lockout time period.
Introduced	16.0.R1
Platforms	All

count *number*

Synopsis	Unsuccessful attempts allowed within time period
Context	**configure** system security snmp attempts count *number*
Tree	count
Range	1 to 64
Default	20
Introduced	16.0.R1
Platforms	All

lockout *number*

Synopsis	Lockout period during which the host cannot log in
Context	**configure** system security snmp attempts lockout *number*
Tree	lockout
Description	This command configures the time period during which the host cannot log in. When the host exceeds the attempted counts setting, the host is locked out from further login attempts for the configured time period.

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Range	0 to 1440
Units	minutes
Default	10
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time before host lockout after unsuccessful attempts
Context	**configure** system security snmp attempts time *number*
Tree	time
Range	0 to 60
Units	minutes
Default	5
Introduced	16.0.R1
Platforms	All

community [community-string] *string*

Synopsis	Enter the **community** list instance
Context	**configure** system security snmp community *string*
Tree	community
Introduced	16.0.R1
Platforms	All

[**community-string**] *string*

Synopsis	SNMPv1 or SNMPv2c community string
Context	**configure** system security snmp community *string*
Tree	community
String Length	1 to 114
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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access-permissions *keyword*

Synopsis	Access permissions for objects in the MIB
Context	**configure** system security snmp community *string* access-permissions *keyword*
Tree	access-permissions
Options	r, rw, rwa, mgmt, vpls-mgmt
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

source-access-list *reference*

Synopsis	Source access list to validate received SNMP requests
Context	**configure** system security snmp community *string* source-access-list *reference*
Tree	source-access-list
Reference	**configure** system security snmp source-access-list *string*
Introduced	16.0.R1
Platforms	All

version *keyword*

Synopsis	SNMP version
Context	**configure** system security snmp community *string* version *keyword*
Tree	version
Options	v1, v2c, both
Default	both
Introduced	16.0.R1
Platforms	All

source-access-list [list-name] *string*

Synopsis	Enter the **source-access-list** list instance
Context	**configure** system security snmp source-access-list *string*
Tree	source-access-list
Description	Commands in this context configure SNMP source access lists.

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	SNMP source access lists are used to validate the source IP address of received SNMP requests. Multiple community (VPRN or Base router) and USM community instances can reference the same SNMP source access list.
Max. Instances	16
Introduced	16.0.R1
Platforms	All

[**list-name**] *string*

Synopsis	Source access list name
Context	**configure** system security snmp source-access-list *string*
Tree	source-access-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source-host [host-name] *string*

Synopsis	Enter the **source-host** list instance
Context	**configure** system security snmp source-access-list *string* source-host *string*
Tree	source-host
Max. Instances	16
Introduced	16.0.R1
Platforms	All

[**host-name**] *string*

Synopsis	Source host entry name
Context	**configure** system security snmp source-access-list *string* source-host *string*
Tree	source-host
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms	All

address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Source IP address entry used to validate SNMP requests
Context	**configure** system security snmp source-access-list *string* source-host *string* address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

usm-community [community-string] *string*

Synopsis	Enter the **usm-community** list instance
Context	**configure** system security snmp usm-community *string*
Tree	usm-community
Introduced	16.0.R1
Platforms	All

[**community-string**] *string*

Synopsis	Community string associated with SNMPv3 access group
Context	**configure** system security snmp usm-community *string*
Tree	usm-community
String Length	1 to 114
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

group *string*

Synopsis	Group to manage access rights of the community string
Context	**configure** system security snmp usm-community *string* group *string*
Tree	group

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String Length	1 to 32
Introduced	16.0.R1
Platforms	All

source-access-list *reference*

Synopsis	Source access list to validate received SNMP requests
Context	**configure** system security snmp usm-community *string* source-access-list *reference*
Tree	source-access-list
Reference	**configure** system security snmp source-access-list *string*
Introduced	16.0.R1
Platforms	All

view [view-name] *string* subtree *string*

Synopsis	Enter the **view** list instance
Context	**configure** system security snmp view *string* subtree *string*
Tree	view
Introduced	16.0.R1
Platforms	All

[**view-name**] *string*

Synopsis	View name
Context	**configure** system security snmp view *string* subtree *string*
Tree	view
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

subtree *string*

Synopsis	Object Identifier (OID) value
Context	**configure** system security snmp view *string* subtree *string*

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Tree	view
String Length	1 to 256
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	Mask value as binary value, or hex value
Context	**configure** system security snmp view *string* subtree *string* mask *string*
Tree	mask
String Length	1 to 16
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Type of SNMP security view mask
Context	**configure** system security snmp view *string* subtree *string* type *keyword*
Tree	type
Options	included, excluded
Introduced	16.0.R1
Platforms	All

source-address

Synopsis	Enter the **source-address** context
Context	**configure** system security source-address
Tree	source-address
Description	Commands in this context configure the IP source address that is used in all unsolicited packets sent by the specified applications. This configuration applies to packets transmitted in-band (for example, a network port on an IOM) and does not apply to packets transmitted out-of-band on the management interface on the CPM Ethernet port. Packets transmitted using the CPM Ethernet port use the address of the CPM Ethernet port as the IP source address in the packet. When a source address is specified for the PTP application, the port-based 1588 hardware timestamping assist function is applied to PTP packets matching the IPv4

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address of the router interface used to ingress the SR/ESS or IP address specified in this command. If the IP address is removed, the port-based 1588 hardware timestamping assist function is only applied to PTP packets matching the IPv4 address of the router interface.

Introduced	16.0.R1
Platforms	All

ipv4 [application] *keyword*

Synopsis	Enter the **ipv4** list instance
Context	**configure** system security source-address ipv4 *keyword*
Tree	ipv4
Introduced	16.0.R1
Platforms	All

[**application**] *keyword*

Synopsis	Application that uses the source IP address
Context	**configure** system security source-address ipv4 *keyword*
Tree	ipv4
Options	telnet, ftp, ssh, radius, tacplus, snmptrap, syslog, ping, traceroute, dns, sntp, ntp, cflowd, ptp, mcreporter, sflow, icmp-error, ldap
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

address *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Source IPv4 address
Context	**configure** system security source-address ipv4 *keyword* address *string*
Tree	address
Notes	The following elements are part of a mandatory choice: **address** or **interface-name**.
Introduced	16.0.R1

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Platforms	All

interface-name *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP interface name
Context	**configure** system security source-address ipv4 *keyword* interface-name *string*
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: **address** or **interface-name**.
Introduced	16.0.R1
Platforms	All

ipv6 [application] *keyword*

Synopsis	Enter the **ipv6** list instance
Context	**configure** system security source-address ipv6 *keyword*
Tree	ipv6
Introduced	16.0.R1
Platforms	All

[**application**] *keyword*

Synopsis	Application which uses the source IPv6 address
Context	**configure** system security source-address ipv6 *keyword*
Tree	ipv6
Options	telnet, ftp, radius, tacplus, snmptrap, syslog, ping, traceroute, dns, cflowd, ntp, sflow, icmp6-error, ldap, ssh, ptp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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address *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Source IPv6 address
Context	**configure** system security source-address ipv6 *keyword* address *string*
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

ssh

Synopsis	Enter the **ssh** context
Context	**configure** system security ssh
Tree	ssh
Introduced	16.0.R1
Platforms	All

authentication-method

Synopsis	Enter the **authentication-method** context
Context	**configure** system security ssh authentication-method
Tree	authentication-method
Introduced	23.7.R1
Platforms	All

server

Synopsis	Enter the **server** context
Context	**configure** system security ssh authentication-method server
Tree	server
Introduced	23.7.R1
Platforms	All

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public-key-only *boolean*

Synopsis	Accept only public-key authentication for SSH session
Context	**configure** system security ssh authentication-method server public-key-only *boolean*
Tree	public-key-only
Description	When configured to **true**, the system accepts only public key client authentication for the SSH server. This command defines the authentication method at the system level. When configured to **false**, the system accepts public key or password client authentication. If **interactive-authentication** is configured to **true** in the **configure system security aaa remote-servers radius** or **configure system security aaa remote-servers tacplus** context, the system also accepts interactive keyboard authentication.
Default	false
Introduced	23.7.R1
Platforms	All

client-cipher-list-v2

Synopsis	Enter the **client-cipher-list-v2** context
Context	**configure** system security ssh client-cipher-list-v2
Tree	client-cipher-list-v2
Introduced	16.0.R1
Platforms	All

cipher [index] *number*

Synopsis	Enter the **cipher** list instance
Context	**configure** system security ssh client-cipher-list-v2 cipher *number*
Tree	cipher
Description	Commands in this context configure a client-cipher instance. Client-ciphers are used when the SR OS is acting as an SSH client.
Introduced	16.0.R1
Platforms	All

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[**index**] *number*

Synopsis	Cipher index in the list
Context	**configure** system security ssh client-cipher-list-v2 cipher *number*
Tree	cipher
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

name *keyword*

Synopsis	Algorithm for performing encryption or decryption
Context	**configure** system security ssh client-cipher-list-v2 cipher *number* name *keyword*
Tree	name
Options	3des-cbc, aes128-cbc, aes192-cbc, aes256-cbc, aes128-ctr, aes192-ctr, aes256-ctr
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

client-kex-list-v2

Synopsis	Enter the **client-kex-list-v2** context
Context	**configure** system security ssh client-kex-list-v2
Tree	client-kex-list-v2
Introduced	19.10.R3
Platforms	All

kex [index] *number*

Synopsis	Enter the **kex** list instance
Context	**configure** system security ssh client-kex-list-v2 kex *number*
Tree	kex
Description	Commands in this context configure SSH Key Exchange (KEX) algorithms for SR OS as a client.

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If a list is configured, SSH uses the list with the first-listed algorithm having the highest priority.

By default, the client list is empty. The default list contains the following:

- diffie-hellman-group16-sha512
- diffie-hellman-group14-sha256
- diffie-hellman-group14-sha1
- diffie-hellman-group1-sha1

Introduced 19.10.R3

Platforms All

[**index**] *number*

Synopsis SSHv2 KEX algorithm index

Context **configure** system security ssh client-kex-list-v2 kex *number*

Tree kex

Description This command configures the index of the KEX algorithm in the list. The lowest index in the list is negotiated first on the SSH negotiation list, while the highest index is at the bottom of the SSH negotiation list.

Range 1 to 255

Notes This element is part of a list key.

Introduced 19.10.R3

Platforms All

name *keyword*

Synopsis KEX algorithm for computing a shared secret key

Context **configure** system security ssh client-kex-list-v2 kex *number* name *keyword*

Tree name

Options diffie-hellman-group1-sha1, diffie-hellman-group14-sha1, diffie-hellman-group-exchange-sha1, diffie-hellman-group14-sha256, diffie-hellman-group16-sha512

Notes This element is mandatory.

Introduced 19.10.R3

Platforms All

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client-mac-list-v2

Synopsis	Enter the **client-mac-list-v2** context
Context	**configure** system security ssh client-mac-list-v2
Tree	client-mac-list-v2
Introduced	16.0.R1
Platforms	All

mac [index] *number*

Synopsis	Enter the **mac** list instance
Context	**configure** system security ssh client-mac-list-v2 mac *number*
Tree	mac
Description	Commands in this context configure SSH MAC algorithms for SR OS as a client.
Introduced	16.0.R1
Platforms	All

[**index**] *number*

Synopsis	MAC algorithm index
Context	**configure** system security ssh client-mac-list-v2 mac *number*
Tree	mac
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

name *keyword*

Synopsis	Algorithm for calculating message authentication code
Context	**configure** system security ssh client-mac-list-v2 mac *number* name *keyword*
Tree	name
Options	hmac-sha2-512, hmac-sha2-256, hmac-sha1, hmac-sha1-96, hmac-md5, hmac-md5-96
Notes	This element is mandatory.
Introduced	16.0.R1

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Platforms	All

key-re-exchange

Synopsis	Enter the **key-re-exchange** context
Context	**configure** system security ssh key-re-exchange
Tree	key-re-exchange
Introduced	16.0.R1
Platforms	All

client

Synopsis	Enter the **client** context
Context	**configure** system security ssh key-re-exchange client
Tree	client
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the key re-exchange
Context	**configure** system security ssh key-re-exchange client admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

mbytes *(number | keyword)*

Synopsis	Maximum bytes transmitted before key re-exchange begins
Context	**configure** system security ssh key-re-exchange client mbytes *(number | keyword)*
Tree	mbytes
Range	1 to 64000
Units	megabytes

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Options	infinite
Default	1024
Introduced	16.0.R1
Platforms	All

minutes *(number | keyword)*

Synopsis	Maximum time before key re-exchange is initiated
Context	**configure** system security ssh key-re-exchange client minutes *(number | keyword)*
Tree	minutes
Range	1 to 1440
Units	minutes
Options	infinite
Default	60
Introduced	16.0.R1
Platforms	All

server

Synopsis	Enter the **server** context
Context	**configure** system security ssh key-re-exchange server
Tree	server
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the key re-exchange
Context	**configure** system security ssh key-re-exchange server admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

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mbytes *(number | keyword)*

Synopsis	Maximum bytes transmitted before key re-exchange begins
Context	**configure** system security ssh key-re-exchange server mbytes *(number | keyword)*
Tree	mbytes
Range	1 to 64000
Units	megabytes
Options	infinite
Default	1024
Introduced	16.0.R1
Platforms	All

minutes *(number | keyword)*

Synopsis	Maximum time before key re-exchange is initiated
Context	**configure** system security ssh key-re-exchange server minutes *(number | keyword)*
Tree	minutes
Range	1 to 1440
Units	minutes
Options	infinite
Default	60
Introduced	16.0.R1
Platforms	All

permit-empty-passwords *boolean*

Synopsis	Permit users with empty password strings to log in
Context	**configure** system security ssh permit-empty-passwords *boolean*
Tree	permit-empty-passwords
Default	true
Introduced	22.10.R1
Platforms	All

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preserve-key *boolean*

Synopsis	Preserve keys and restore on system or server restart
Context	**configure** system security ssh preserve-key *boolean*
Tree	preserve-key
Description	When configured to **true**, private, public, and host keys are saved by the server. The keys are restored following a system reboot or a restart of an SSH server. When configured to **false**, the keys are held in memory by an SSH server but are not restored following a system reboot.
Default	false
Introduced	16.0.R1
Platforms	All

server-admin-state *keyword*

Synopsis	Administrative state of the SSH server
Context	**configure** system security ssh server-admin-state *keyword*
Tree	server-admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

server-cipher-list-v2

Synopsis	Enter the **server-cipher-list-v2** context
Context	**configure** system security ssh server-cipher-list-v2
Tree	server-cipher-list-v2
Introduced	16.0.R1
Platforms	All

cipher [index] *number*

Synopsis	Enter the **cipher** list instance
Context	**configure** system security ssh server-cipher-list-v2 cipher *number*
Tree	cipher

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Description	Commands in this context configure a server-cipher instance. Server-ciphers are used when SR OS is acting as an SSH server.
Introduced	16.0.R1
Platforms	All

[**index**] *number*

Synopsis	Cipher index in the list
Context	**configure** system security ssh server-cipher-list-v2 cipher *number*
Tree	cipher
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

name *keyword*

Synopsis	Algorithm for performing encryption or decryption
Context	**configure** system security ssh server-cipher-list-v2 cipher *number* name *keyword*
Tree	name
Options	3des-cbc, aes128-cbc, aes192-cbc, aes256-cbc, aes128-ctr, aes192-ctr, aes256-ctr
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

server-kex-list-v2

Synopsis	Enter the **server-kex-list-v2** context
Context	**configure** system security ssh server-kex-list-v2
Tree	server-kex-list-v2
Introduced	19.10.R3
Platforms	All

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kex [index] *number*

Synopsis	Enter the **kex** list instance
Context	**configure** system security ssh server-kex-list-v2 kex *number*
Tree	kex
Introduced	19.10.R3
Platforms	All

[**index**] *number*

Synopsis	SSHv2 KEX algorithm index
Context	**configure** system security ssh server-kex-list-v2 kex *number*
Tree	kex
Description	This command configures the index of the KEX algorithm in the list. The lowest index in the list is negotiated first on the SSH negotiation list, while the highest index is at the bottom of the SSH negotiation list.
Range	1 to 255
Notes	This element is part of a list key.
Introduced	19.10.R3
Platforms	All

name *keyword*

Synopsis	KEX algorithm for computing a shared secret key
Context	**configure** system security ssh server-kex-list-v2 kex *number* name *keyword*
Tree	name
Options	diffie-hellman-group1-sha1, diffie-hellman-group14-sha1, diffie-hellman-group-exchange-sha1, diffie-hellman-group14-sha256, diffie-hellman-group16-sha512
Notes	This element is mandatory.
Introduced	19.10.R3
Platforms	All

server-mac-list-v2

Synopsis	Enter the **server-mac-list-v2** context
Context	**configure** system security ssh server-mac-list-v2

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Tree	server-mac-list-v2
Introduced	16.0.R1
Platforms	All

mac [index] *number*

Synopsis	Enter the **mac** list instance
Context	**configure** system security ssh server-mac-list-v2 mac *number*
Tree	mac
Introduced	16.0.R1
Platforms	All

[**index**] *number*

Synopsis	MAC algorithm index
Context	**configure** system security ssh server-mac-list-v2 mac *number*
Tree	mac
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

name *keyword*

Synopsis	Algorithm for calculating message authentication code
Context	**configure** system security ssh server-mac-list-v2 mac *number* name *keyword*
Tree	name
Options	hmac-sha2-512, hmac-sha2-256, hmac-sha1, hmac-sha1-96, hmac-md5, hmac-md5-96
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

system-passwords

Synopsis	Enter the **system-passwords** context

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Context	**configure** system security system-passwords
Tree	system-passwords
Description	This command enters the context to configure system passwords.
Introduced	16.0.R1
Platforms	All

admin-password *string*

Synopsis	Context to configure system passwords
Context	**configure** system security system-passwords admin-password *string*
Tree	admin-password
Description	This command allows a user with administrative permissions to configure a password that enables a user to become an administrator. This password is valid only for one session. When enabled, no authorization to TACACS + or RADIUS is performed and the user is locally regarded as an administrative user. If the **admin-password** is configured in the **configure system security system-passwords admin-password** context, any user can enter the special mode by entering the **enable** command. **enable** is in the default profile. By default, all users are given access to this command. After the **enable** command is entered, the user is prompted for a password. If the password matches, user is given unrestricted access to all commands. The minimum length of the password is determined by the **minimum-length** command. The complexity requirements for the password are determined by the **complexity** command. **Note:** This command applies to a local user, in addition to users on RADIUS, TACACS, and LDAP.
String Length	3 to 136
Introduced	16.0.R1
Platforms	All

tech-support

Synopsis	Enter the **tech-support** context
Context	**configure** system security tech-support
Tree	tech-support
Introduced	16.0.R1
Platforms	All

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ts-location *(ts-sat-url | cflash-url | string)*

Synopsis	Default file path for generated tech-support files
Context	**configure** system security tech-support ts-location *(ts-sat-url | cflash-url | string)*
Tree	ts-location
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

telnet-server *boolean*

Synopsis	Enable Telnet servers running on the system
Context	**configure** system security telnet-server *boolean*
Tree	telnet-server
Default	false
Introduced	16.0.R1
Platforms	All

telnet6-server *boolean*

Synopsis	Enable Telnet IPv6 servers running on the system
Context	**configure** system security telnet6-server *boolean*
Tree	telnet6-server
Default	false
Introduced	16.0.R1
Platforms	All

tls

Synopsis	Enter the **tls** context
Context	**configure** system security tls
Tree	tls
Introduced	16.0.R1
Platforms	All

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cert-profile [cert-profile-name] *string*

Synopsis	Enter the **cert-profile** list instance
Context	**configure** system security tls cert-profile *string*
Tree	cert-profile
Max. Instances	16
Introduced	16.0.R1
Platforms	All

[**cert-profile-name**] *string*

Synopsis	TLS certificate profile name
Context	**configure** system security tls cert-profile *string*
Tree	cert-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the certificate profile
Context	**configure** system security tls cert-profile *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

entry [entry-id] *number*

Synopsis	Enter the **entry** list instance
Context	**configure** system security tls cert-profile *string* entry *number*
Tree	entry

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Max. Instances	8
Introduced	16.0.R1
Platforms	All

[**entry-id**] *number*

Synopsis	Certificate profile ID
Context	**configure** system security tls cert-profile *string* entry *number*
Tree	entry
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

certificate-file *string*

Synopsis	Certificate file name
Context	**configure** system security tls cert-profile *string* entry *number* certificate-file *string*
Tree	certificate-file
String Length	1 to 95
Introduced	16.0.R1
Platforms	All

key-file *string*

Synopsis	Key file name
Context	**configure** system security tls cert-profile *string* entry *number* key-file *string*
Tree	key-file
String Length	1 to 95
Introduced	16.0.R1
Platforms	All

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send-chain

Synopsis	Enter the **send-chain** context
Context	**configure** system security tls cert-profile *string* entry *number* send-chain
Tree	send-chain
Introduced	16.0.R1
Platforms	All

ca-profile [ca-profile-name] *reference*

Synopsis	Add a list entry for **ca-profile**
Context	**configure** system security tls cert-profile *string* entry *number* send-chain ca-profile *reference*
Tree	ca-profile
Max. Instances	7
Introduced	16.0.R1
Platforms	All

[**ca-profile-name**] *reference*

Synopsis	CA profile name
Context	**configure** system security tls cert-profile *string* entry *number* send-chain ca-profile *reference*
Tree	ca-profile
Reference	**configure** system security pki ca-profile *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

client-cipher-list [client-cipher-list-name] *string*

Synopsis	Enter the **client-cipher-list** list instance
Context	**configure** system security tls client-cipher-list *string*
Tree	client-cipher-list
Max. Instances	16

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Introduced	16.0.R1
Platforms	All

[**client-cipher-list-name**] *string*

Synopsis	Client cipher list name
Context	**configure** system security tls client-cipher-list *string*
Tree	client-cipher-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

tls12-cipher [index] *number*

Synopsis	Enter the **tls12-cipher** list instance
Context	**configure** system security tls client-cipher-list *string* tls12-cipher *number*
Tree	tls12-cipher
Introduced	22.2.R1
Platforms	All

[**index**] *number*

Synopsis	Index of the cipher
Context	**configure** system security tls client-cipher-list *string* tls12-cipher *number*
Tree	tls12-cipher
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

name *keyword*

Synopsis	Cipher suite code
Context	**configure** system security tls client-cipher-list *string* tls12-cipher *number* name *keyword*

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Tree	name
Options	tls-rsa-with3des-ede-cbc-sha, tls-rsa-with-aes128-cbc-sha, tls-rsa-with-aes256-cbc-sha, tls-rsa-with-aes128-cbc-sha256, tls-rsa-with-aes256-cbc-sha256, tls-rsa-with-aes128-gcm-sha256, tls-rsa-with-aes256-gcm-sha384
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	All

tls13-cipher [index] *number*

Synopsis	Enter the **tls13-cipher** list instance
Context	**configure** system security tls client-cipher-list *string* tls13-cipher *number*
Tree	tls13-cipher
Description	Commands in this context configure the TLS 1.3-supported ciphers used by the client.
Introduced	22.7.R1
Platforms	All

[**index**] *number*

Synopsis	Index number of the TLS 1.3 cipher
Context	**configure** system security tls client-cipher-list *string* tls13-cipher *number*
Tree	tls13-cipher
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

name *keyword*

Synopsis	Name of the TLS 1.3 cipher suite code
Context	**configure** system security tls client-cipher-list *string* tls13-cipher *number* name *keyword*
Tree	name
Options	tls-aes256-gcm-sha384, tls-aes128-gcm-sha256, tls-chacha20-poly1305-sha256, tls-aes128-ccm8-sha256, tls-aes128-ccm-sha256
Notes	This element is mandatory.

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Introduced	22.7.R1
Platforms	All

client-group-list [client-group-list-name] *string*

Synopsis	Enter the **client-group-list** list instance
Context	**configure** system security tls client-group-list *string*
Tree	client-group-list
Description	Commands in this context configure the list of TLS 1.3-supported group suite codes that the client sends in a client Hello message.
Max. Instances	16
Introduced	22.7.R1
Platforms	All

[**client-group-list-name**] *string*

Synopsis	Name of the TLS client group list
Context	**configure** system security tls client-group-list *string*
Tree	client-group-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

tls13-group [index] *number*

Synopsis	Enter the **tls13-group** list instance
Context	**configure** system security tls client-group-list *string* tls13-group *number*
Tree	tls13-group
Description	Commands in this context configure the TLS 1.3-supported group suite codes sent by the client in its Hello messages. SR OS supports the use of Elliptic-Curve Diffie-Hellman Ephemeral (ECDHE) groups.
Introduced	22.7.R1
Platforms	All

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[**index**] *number*

Synopsis	Index number of the TLS 1.3 group
Context	**configure** system security tls client-group-list *string* tls13-group *number*
Tree	tls13-group
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

name *keyword*

Synopsis	Name of the TLS 1.3 group suite code
Context	**configure** system security tls client-group-list *string* tls13-group *number* name *keyword*
Tree	name
Options	tls-ecdhe-256, tls-ecdhe-384, tls-ecdhe-521, tls-x25519, tls-x448
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	All

client-signature-list [client-signature-list-name] *string*

Synopsis	Enter the **client-signature-list** list instance
Context	**configure** system security tls client-signature-list *string*
Tree	client-signature-list
Description	Commands in this context configure the list of TLS 1.3-supported signature suite codes that the client sends in a client Hello message.
Max. Instances	16
Introduced	22.7.R1
Platforms	All

[**client-signature-list-name**] *string*

Synopsis	Name of the TLS 1.3 client signature list

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Context	**configure** system security tls client-signature-list *string*
Tree	client-signature-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

tls13-signature [index] *number*

Synopsis	Enter the **tls13-signature** list instance
Context	**configure** system security tls client-signature-list *string* tls13-signature *number*
Tree	tls13-signature
Description	Commands in this context configure the TLS 1.3-supported signature suite codes sent by the client in its Hello messages.
Introduced	22.7.R1
Platforms	All

[**index**] *number*

Synopsis	Index number of the TLS 1.3 signature
Context	**configure** system security tls client-signature-list *string* tls13-signature *number*
Tree	tls13-signature
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

name *keyword*

Synopsis	Name of the TLS 1.3 signature suite code
Context	**configure** system security tls client-signature-list *string* tls13-signature *number* name *keyword*
Tree	name
Options	tls-rsa-pkcs1-sha256, tls-ecdsa-secp256r1-sha256, tls-rsa-pkcs1-sha384, tls-ecdsa-secp384r1-sha384, tls-rsa-pkcs1-sha512, tls-ecdsa-secp521r1-sha512,

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	tls-rsa-pss-rsae-sha256, tls-rsa-pss-rsae-sha384, tls-rsa-pss-rsae-sha512, tls-ed25519, tls-ed448, tls-rsa-pss-pss-sha256, tls-rsa-pss-pss-sha384, tls-rsa-pss-pss-sha512
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	All

client-tls-profile [client-profile-name] *string*

Synopsis	Enter the **client-tls-profile** list instance
Context	**configure** system security tls client-tls-profile *string*
Tree	client-tls-profile
Max. Instances	16
Introduced	16.0.R1
Platforms	All

[**client-profile-name**] *string*

Synopsis	Client TLS profile name
Context	**configure** system security tls client-tls-profile *string*
Tree	client-tls-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the client TLS profile
Context	**configure** system security tls client-tls-profile *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

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cert-profile *reference*

Synopsis	Certificate profile ID
Context	**configure** system security tls client-tls-profile *string* cert-profile *reference*
Tree	cert-profile
Reference	**configure** system security tls cert-profile *string*
Introduced	16.0.R1
Platforms	All

cipher-list *reference*

Synopsis	Cipher list for negotiation in the client Hello message
Context	**configure** system security tls client-tls-profile *string* cipher-list *reference*
Tree	cipher-list
Reference	**configure** system security tls client-cipher-list *string*
Introduced	16.0.R1
Platforms	All

group-list *reference*

Synopsis	Name of the list of supported group suite codes
Context	**configure** system security tls client-tls-profile *string* group-list *reference*
Tree	group-list
Description	This command assigns an existing TLS 1.3 group list to the TLS client profile.
Reference	**configure** system security tls client-group-list *string*
Introduced	22.7.R1
Platforms	All

protocol-version *keyword*

Synopsis	TLS protocol version used by the TLS client profile
Context	**configure** system security tls client-tls-profile *string* protocol-version *keyword*
Tree	protocol-version
Description	This command configures the TLS version to be negotiated between the client and the server.

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	The client adds the specified version as a supported version in its Hello message to the server.
Options	tls-version-all, tls-version-12, tls-version-13
Default	tls-version-12
Introduced	22.7.R1
Platforms	All

signature-list *reference*

Synopsis	Name of the list of supported signature suite codes
Context	**configure** system security tls client-tls-profile *string* signature-list *reference*
Tree	signature-list
Description	This command assigns an existing TLS 1.3 signature list to the TLS client profile.
Reference	**configure** system security tls client-signature-list *string*
Introduced	22.7.R1
Platforms	All

status-verify

Synopsis	Enter the **status-verify** context
Context	**configure** system security tls client-tls-profile *string* status-verify
Tree	status-verify
Description	Commands in this context configure certificate revocation status verification options for the end-entity certificate in a TLS client.
Introduced	23.7.R1
Platforms	All

default-result *keyword*

Synopsis	Default result of certificate status verification
Context	**configure** system security tls client-tls-profile *string* status-verify default-result *keyword*
Tree	default-result
Description	This command configures the default result of the entity certificate verification in the TLS client profile. This command overwrites the EE certificate revocation verification for the TLS client profile.

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By default the router checks the certification revocation status, but if this command is set to **good**, the end-entity certificate revocation status is overwritten and a good revocation status is returned for the EE certificate.

If this command is set to **revoked**, the router returns the actual revocation status of the end-entity certificate.

Options	revoked, good
Default	revoked
Introduced	23.7.R1
Platforms	All

trust-anchor-profile *reference*

Synopsis	Trust anchor profile
Context	**configure** system security tls client-tls-profile *string* trust-anchor-profile *reference*
Tree	trust-anchor-profile
Reference	**configure** system security tls trust-anchor-profile *string*
Introduced	16.0.R1
Platforms	All

server-cipher-list [server-cipher-list-name] *string*

Synopsis	Enter the **server-cipher-list** list instance
Context	**configure** system security tls server-cipher-list *string*
Tree	server-cipher-list
Max. Instances	16
Introduced	16.0.R1
Platforms	All

[**server-cipher-list-name**] *string*

Synopsis	Server cipher list name
Context	**configure** system security tls server-cipher-list *string*
Tree	server-cipher-list
String Length	1 to 32
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	All

tls12-cipher [index] *number*

Synopsis	Enter the **tls12-cipher** list instance
Context	**configure** system security tls server-cipher-list *string* tls12-cipher *number*
Tree	tls12-cipher
Introduced	22.2.R1
Platforms	All

[**index**] *number*

Synopsis	Index of the cipher
Context	**configure** system security tls server-cipher-list *string* tls12-cipher *number*
Tree	tls12-cipher
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

name *keyword*

Synopsis	Cipher suite code
Context	**configure** system security tls server-cipher-list *string* tls12-cipher *number* name *keyword*
Tree	name
Options	tls-rsa-with3des-ede-cbc-sha, tls-rsa-with-aes128-cbc-sha, tls-rsa-with-aes256-cbc-sha, tls-rsa-with-aes128-cbc-sha256, tls-rsa-with-aes256-cbc-sha256, tls-rsa-with-aes128-gcm-sha256, tls-rsa-with-aes256-gcm-sha384
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	All

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tls13-cipher [index] *number*

Synopsis	Enter the **tls13-cipher** list instance
Context	**configure** system security tls server-cipher-list *string* tls13-cipher *number*
Tree	tls13-cipher
Description	Commands in this context configure the TLS 1.3-supported ciphers used by the server.
Introduced	22.7.R1
Platforms	All

[**index**] *number*

Synopsis	Index number of the TLS 1.3 cipher
Context	**configure** system security tls server-cipher-list *string* tls13-cipher *number*
Tree	tls13-cipher
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

name *keyword*

Synopsis	Name of the TLS 1.3 cipher suite code
Context	**configure** system security tls server-cipher-list *string* tls13-cipher *number* name *keyword*
Tree	name
Options	tls-aes256-gcm-sha384, tls-aes128-gcm-sha256, tls-chacha20-poly1305-sha256, tls-aes128-ccm8-sha256, tls-aes128-ccm-sha256
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	All

server-group-list [server-group-list-name] *string*

Synopsis	Enter the **server-group-list** list instance
Context	**configure** system security tls server-group-list *string*
Tree	server-group-list

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Description	Commands in this context configure the list of TLS 1.3-supported group suite codes that the server sends in a server Hello message.
Max. Instances	16
Introduced	22.7.R1
Platforms	All

[**server-group-list-name**] *string*

Synopsis	Name of the TLS server group list
Context	**configure** system security tls server-group-list *string*
Tree	server-group-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

tls13-group [index] *number*

Synopsis	Enter the **tls13-group** list instance
Context	**configure** system security tls server-group-list *string* tls13-group *number*
Tree	tls13-group
Description	Commands in this context configure the TLS 1.3-supported group suite codes sent by the server in its Hello messages. SR OS supports the use of Elliptic-Curve Diffie-Hellman Ephemeral (ECDHE) groups.
Introduced	22.7.R1
Platforms	All

[**index**] *number*

Synopsis	Index number of the TLS 1.3 group
Context	**configure** system security tls server-group-list *string* tls13-group *number*
Tree	tls13-group
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.7.R1

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Platforms	All

name *keyword*

Synopsis	Name of the TLS 1.3 group suite code
Context	**configure** system security tls server-group-list *string* tls13-group *number* name *keyword*
Tree	name
Options	tls-ecdhe-256, tls-ecdhe-384, tls-ecdhe-521, tls-x25519, tls-x448
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	All

server-signature-list [server-signature-list-name] *string*

Synopsis	Enter the **server-signature-list** list instance
Context	**configure** system security tls server-signature-list *string*
Tree	server-signature-list
Description	Commands in this context configure the list of TLS 1.3-supported signature suite codes for the digital signature that the server sends in a server Hello message.
Max. Instances	16
Introduced	22.7.R1
Platforms	All

[**server-signature-list-name**] *string*

Synopsis	Name of the TLS 1.3 server signature list
Context	**configure** system security tls server-signature-list *string*
Tree	server-signature-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

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tls13-signature [index] *number*

Synopsis	Enter the **tls13-signature** list instance
Context	**configure** system security tls server-signature-list *string* tls13-signature *number*
Tree	tls13-signature
Description	Commands in this context configure the TLS 1.3-supported signature suite codes sent by the server in its Hello messages.
Introduced	22.7.R1
Platforms	All

[**index**] *number*

Synopsis	Index number of the TLS 1.3 signature
Context	**configure** system security tls server-signature-list *string* tls13-signature *number*
Tree	tls13-signature
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

name *keyword*

Synopsis	Name of the TLS 1.3 signature suite code
Context	**configure** system security tls server-signature-list *string* tls13-signature *number* name *keyword*
Tree	name
Options	tls-rsa-pkcs1-sha256, tls-ecdsa-secp256r1-sha256, tls-rsa-pkcs1-sha384, tls-ecdsa-secp384r1-sha384, tls-rsa-pkcs1-sha512, tls-ecdsa-secp521r1-sha512, tls-rsa-pss-rsae-sha256, tls-rsa-pss-rsae-sha384, tls-rsa-pss-rsae-sha512, tls-ed25519, tls-ed448, tls-rsa-pss-pss-sha256, tls-rsa-pss-pss-sha384, tls-rsa-pss-pss-sha512
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	All

server-tls-profile [server-profile-name] *string*

Synopsis	Enter the **server-tls-profile** list instance

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Context	**configure** system security tls server-tls-profile *string*
Tree	server-tls-profile
Max. Instances	16
Introduced	16.0.R1
Platforms	All

[**server-profile-name**] *string*

Synopsis	TLS server profile name
Context	**configure** system security tls server-tls-profile *string*
Tree	server-tls-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the server TLS profile
Context	**configure** system security tls server-tls-profile *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

authenticate-client

Synopsis	Enter the **authenticate-client** context
Context	**configure** system security tls server-tls-profile *string* authenticate-client
Tree	authenticate-client
Introduced	16.0.R1
Platforms	All

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common-name-list *reference*

Synopsis	Common name list for client certificate authentication
Context	**configure** system security tls server-tls-profile *string* authenticate-client common-name-list *reference*
Tree	common-name-list
Reference	**configure** system security pki common-name-list *string*
Introduced	16.0.R1
Platforms	All

trust-anchor-profile *reference*

Synopsis	Trust anchor profile for client authentication
Context	**configure** system security tls server-tls-profile *string* authenticate-client trust-anchor-profile *reference*
Tree	trust-anchor-profile
Reference	**configure** system security tls trust-anchor-profile *string*
Introduced	16.0.R1
Platforms	All

cert-profile *reference*

Synopsis	Certificate profile ID
Context	**configure** system security tls server-tls-profile *string* cert-profile *reference*
Tree	cert-profile
Reference	**configure** system security tls cert-profile *string*
Introduced	16.0.R1
Platforms	All

cipher-list *reference*

Synopsis	Cipher list used by the TLS server profile
Context	**configure** system security tls server-tls-profile *string* cipher-list *reference*
Tree	cipher-list
Reference	**configure** system security tls server-cipher-list *string*
Introduced	16.0.R1

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Platforms	All

group-list *reference*

Synopsis	Name of the list of supported group suite codes
Context	**configure** system security tls server-tls-profile *string* group-list *reference*
Tree	group-list
Description	This command assigns an existing TLS 1.3 group list to the TLS server profile.
Reference	**configure** system security tls server-group-list *string*
Introduced	22.7.R1
Platforms	All

protocol-version *keyword*

Synopsis	TLS protocol version used by the TLS server profile
Context	**configure** system security tls server-tls-profile *string* protocol-version *keyword*
Tree	protocol-version
Description	This command configures the TLS version to be negotiated between the server and the client. The server adds the specified version as a supported version in its Hello message to the client.
Options	tls-version-all, tls-version-12, tls-version-13
Default	tls-version-12
Introduced	22.7.R1
Platforms	All

signature-list *reference*

Synopsis	Name of the list of supported signature suite codes
Context	**configure** system security tls server-tls-profile *string* signature-list *reference*
Tree	signature-list
Description	This command assigns an existing TLS 1.3 signature list to the TLS server profile.
Reference	**configure** system security tls server-signature-list *string*
Introduced	22.7.R1
Platforms	All

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status-verify

Synopsis	Enter the **status-verify** context
Context	**configure** system security tls server-tls-profile *string* status-verify
Tree	status-verify
Description	Commands in this context configure certificate revocation status verification options for the end-entity certificate in a TLS server.
Introduced	23.7.R1
Platforms	All

default-result *keyword*

Synopsis	Default result of certificate status verification
Context	**configure** system security tls server-tls-profile *string* status-verify default-result *keyword*
Tree	default-result
Description	This command configures the default result of the entity certificate verification in the TLS server profile. This command overwrites the EE certificate revocation verification for the TLS server profile. By default the router checks the certification revocation status, but if this command is set to **good**, the end-entity certificate revocation status is overwritten and a good revocation status is returned for the EE certificate. If this command is set to **revoked**, the router returns the actual revocation status of the end-entity certificate.
Options	revoked, good
Default	revoked
Introduced	23.7.R1
Platforms	All

tls-re-negotiate-timer *number*

Synopsis	TLS HELLO request timer
Context	**configure** system security tls server-tls-profile *string* tls-re-negotiate-timer *number*
Tree	tls-re-negotiate-timer
Range	0 to 65000
Units	minutes
Default	0
Introduced	16.0.R1

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Platforms	All

trust-anchor-profile [trust-anchor-profile-name] *string*

Synopsis	Enter the **trust-anchor-profile** list instance
Context	**configure** system security tls trust-anchor-profile *string*
Tree	trust-anchor-profile
Max. Instances	16
Introduced	16.0.R1
Platforms	All

[**trust-anchor-profile-name**] *string*

Synopsis	Trust anchor profile name
Context	**configure** system security tls trust-anchor-profile *string*
Tree	trust-anchor-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

trust-anchor [ca-profile-name] *reference*

Synopsis	Add a list entry for **trust-anchor**
Context	**configure** system security tls trust-anchor-profile *string* trust-anchor *reference*
Tree	trust-anchor
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[**ca-profile-name**] *reference*

Synopsis	Trusted CA profile name
Context	**configure** system security tls trust-anchor-profile *string* trust-anchor *reference*

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Tree	trust-anchor
Reference	**configure** system security pki ca-profile *string*
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

user-params

Synopsis	Enter the **user-params** context
Context	**configure** system security user-params
Tree	user-params
Introduced	16.0.R1
Platforms	All

attempts

Synopsis	Enter the **attempts** context
Context	**configure** system security user-params attempts
Tree	attempts
Introduced	16.0.R1
Platforms	All

count *number*

Synopsis	Number of unsuccessful login attempts
Context	**configure** system security user-params attempts count *number*
Tree	count
Range	1 to 64
Default	3
Introduced	16.0.R1
Platforms	All

lockout *number*

Synopsis	Lockout period after unsuccessful login attempts

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Context	**configure** system security user-params attempts lockout *number*
Tree	lockout
Range	0 to 1440
Units	minutes
Default	10
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time frame of unsuccessful login attempts
Context	**configure** system security user-params attempts time *number*
Tree	time
Range	0 to 60
Units	minutes
Default	5
Introduced	16.0.R1
Platforms	All

authentication-order

Synopsis	Enter the **authentication-order** context
Context	**configure** system security user-params authentication-order
Tree	authentication-order
Introduced	16.0.R1
Platforms	All

exit-on-reject *boolean*

Synopsis	Ignore subsequent AAA methods after a reject
Context	**configure** system security user-params authentication-order exit-on-reject *boolean*
Tree	exit-on-reject
Default	false
Introduced	16.0.R1
Platforms	All

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order *keyword*

Synopsis	Preferred order of password authentication
Context	**configure** system security user-params authentication-order order *keyword*
Tree	order
Options	local, radius, tacplus, ldap
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

local-user

Synopsis	Enter the **local-user** context
Context	**configure** system security user-params local-user
Tree	local-user
Introduced	16.0.R1
Platforms	All

password

Synopsis	Enter the **password** context
Context	**configure** system security user-params local-user password
Tree	password
Introduced	16.0.R1
Platforms	All

aging *number*

Synopsis	Maximum time during which a user password is valid
Context	**configure** system security user-params local-user password aging *number*
Tree	aging
Range	1 to 500
Units	days

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Introduced	16.0.R1
Platforms	All

complexity-rules

Synopsis	Enter the **complexity-rules** context
Context	**configure** system security user-params local-user password complexity-rules
Tree	complexity-rules
Introduced	16.0.R1
Platforms	All

allow-user-name *boolean*

Synopsis	Allow the username to be used as part of the password
Context	**configure** system security user-params local-user password complexity-rules allow-user-name *boolean*
Tree	allow-user-name
Default	false
Introduced	16.0.R1
Platforms	All

credits

Synopsis	Enter the **credits** context
Context	**configure** system security user-params local-user password complexity-rules credits
Tree	credits
Notes	The following elements are part of a choice: **credits** or **required**.
Introduced	16.0.R1
Platforms	All

lowercase *number*

Synopsis	Maximum credits for the use of lowercase letters
Context	**configure** system security user-params local-user password complexity-rules credits lowercase *number*
Tree	lowercase

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Range	1 to 10
Introduced	16.0.R1
Platforms	All

numeric *number*

Synopsis	Maximum credits for the use of numeric characters
Context	**configure** system security user-params local-user password complexity-rules credits numeric *number*
Tree	numeric
Range	1 to 10
Introduced	16.0.R1
Platforms	All

special-character *number*

Synopsis	Maximum credits for the use of special characters
Context	**configure** system security user-params local-user password complexity-rules credits special-character *number*
Tree	special-character
Range	1 to 10
Introduced	16.0.R1
Platforms	All

uppercase *number*

Synopsis	Maximum credits for the use of uppercase letters
Context	**configure** system security user-params local-user password complexity-rules credits uppercase *number*
Tree	uppercase
Range	1 to 10
Introduced	16.0.R1
Platforms	All

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minimum-classes *number*

Synopsis	Minimum number of different character classes to use
Context	**configure** system security user-params local-user password complexity-rules minimum-classes *number*
Tree	minimum-classes
Range	2 to 4
Introduced	16.0.R1
Platforms	All

minimum-length *number*

Synopsis	Minimum length required for local passwords
Context	**configure** system security user-params local-user password complexity-rules minimum-length *number*
Tree	minimum-length
Range	6 to 50
Default	6
Introduced	16.0.R1
Platforms	All

repeated-characters *number*

Synopsis	Number of times same character can repeat consecutively
Context	**configure** system security user-params local-user password complexity-rules repeated-characters *number*
Tree	repeated-characters
Range	2 to 8
Introduced	16.0.R1
Platforms	All

required

Synopsis	Enter the **required** context
Context	**configure** system security user-params local-user password complexity-rules required
Tree	required
Notes	The following elements are part of a choice: **credits** or **required**.

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Introduced	16.0.R1
Platforms	All

lowercase *number*

Synopsis	Number of lowercase letters required
Context	**configure** system security user-params local-user password complexity-rules required lowercase *number*
Tree	lowercase
Range	1 to 10
Introduced	16.0.R1
Platforms	All

numeric *number*

Synopsis	Number of numeric characters required
Context	**configure** system security user-params local-user password complexity-rules required numeric *number*
Tree	numeric
Range	1 to 10
Introduced	16.0.R1
Platforms	All

special-character *number*

Synopsis	Number of special characters required
Context	**configure** system security user-params local-user password complexity-rules required special-character *number*
Tree	special-character
Range	1 to 10
Introduced	16.0.R1
Platforms	All

uppercase *number*

Synopsis	Number of uppercase letters required

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Context	**configure** system security user-params local-user password complexity-rules required uppercase *number*
Tree	uppercase
Range	1 to 10
Introduced	16.0.R1
Platforms	All

hashing *keyword*

Synopsis	Hashing algorithm for user passwords
Context	**configure** system security user-params local-user password hashing *keyword*
Tree	hashing
Options	bcrypt, sha2-pbkdf2, sha3-pbkdf2
Default	bcrypt
Introduced	20.7.R1
Platforms	All

history-size *number*

Synopsis	Number of previous passwords to compare against
Context	**configure** system security user-params local-user password history-size *number*
Tree	history-size
Range	0 to 20
Introduced	16.0.R1
Platforms	All

minimum-age *number*

Synopsis	Minimum age required for a password before changing it
Context	**configure** system security user-params local-user password minimum-age *number*
Tree	minimum-age
Range	0 to 86400
Units	seconds
Default	600
Introduced	16.0.R1

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Platforms	All

minimum-change *number*

Synopsis	Minimum character differences between passwords
Context	**configure** system security user-params local-user password minimum-change *number*
Tree	minimum-change
Range	1 to 20
Default	5
Introduced	16.0.R1
Platforms	All

user [user-name] *string*

Synopsis	Enter the **user** list instance
Context	**configure** system security user-params local-user user *string*
Tree	user
Introduced	16.0.R1
Platforms	All

[**user-name**] *string*

Synopsis	Local user name
Context	**configure** system security user-params local-user user *string*
Tree	user
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

access

Synopsis	Enter the **access** context
Context	**configure** system security user-params local-user user *string* access
Tree	access

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Introduced	16.0.R1
Platforms	All

console *boolean*

Synopsis	Allow console port, Telnet, and SSH access
Context	**configure** system security user-params local-user user *string* access console *boolean*
Tree	console
Default	false
Introduced	16.0.R1
Platforms	All

ftp *boolean*

Synopsis	Allow FTP access
Context	**configure** system security user-params local-user user *string* access ftp *boolean*
Tree	ftp
Default	false
Introduced	16.0.R1
Platforms	All

grpc *boolean*

Synopsis	Allow gRPC access
Context	**configure** system security user-params local-user user *string* access grpc *boolean*
Tree	grpc
Default	false
Introduced	16.0.R1
Platforms	All

li *boolean*

Synopsis	Allow access to LI
Context	**configure** system security user-params local-user user *string* access li *boolean*
Tree	li

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Default	false
Introduced	19.10.R1
Platforms	All

netconf *boolean*

Synopsis	Allow NETCONF access
Context	**configure** system security user-params local-user user *string* access netconf *boolean*
Tree	netconf
Default	false
Introduced	16.0.R1
Platforms	All

snmp *boolean*

Synopsis	Allow SNMP access
Context	**configure** system security user-params local-user user *string* access snmp *boolean*
Tree	snmp
Default	false
Introduced	16.0.R1
Platforms	All

cli-engine *keyword*

Synopsis	User level override for CLI engine access
Context	**configure** system security user-params local-user user *string* cli-engine *keyword*
Tree	cli-engine
Options	classic-cli, md-cli
Default	md-cli
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

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console

Synopsis	Enter the **console** context
Context	**configure** system security user-params local-user user *string* console
Tree	console
Introduced	16.0.R1
Platforms	All

cannot-change-password *boolean*

Synopsis	Change password privileges
Context	**configure** system security user-params local-user user *string* console cannot-change-password *boolean*
Tree	cannot-change-password
Default	false
Introduced	16.0.R1
Platforms	All

login-exec *(sat-url | cflash-url | ftp-tftp-url | filename)*

Synopsis	File to execute when a user successfully logs in
Context	**configure** system security user-params local-user user *string* console login-exec *(sat-url | cflash-url | ftp-tftp-url | filename)*
Tree	login-exec
String Length	1 to 200
Introduced	16.0.R1
Platforms	All

member *reference*

Synopsis	User profiles for this user
Context	**configure** system security user-params local-user user *string* console member *reference*
Tree	member
Reference	**configure** system security aaa local-profiles profile *string*
Max. Instances	8

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Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

new-password-at-login *boolean*

Synopsis	Prompt a user to change password at next console login
Context	**configure** system security user-params local-user user *string* console new-password-at-login *boolean*
Tree	new-password-at-login
Default	false
Introduced	16.0.R1
Platforms	All

home-directory *(sat-url | cflash-without-slot-url)*

Synopsis	Home directory for the user
Context	**configure** system security user-params local-user user *string* home-directory *(sat-url | cflash-without-slot-url)*
Tree	home-directory
String Length	1 to 200
Introduced	16.0.R1
Platforms	All

password *string*

Synopsis	User password for console and FTP access
Context	**configure** system security user-params local-user user *string* password *string*
Tree	password
String Length	3 to 136
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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public-keys

Synopsis	Enter the **public-keys** context
Context	**configure** system security user-params local-user user *string* public-keys
Tree	public-keys
Description	Commands in this context configure public keys for SSH.
Introduced	16.0.R1
Platforms	All

ecdsa

Synopsis	Enter the **ecdsa** context
Context	**configure** system security user-params local-user user *string* public-keys ecdsa
Tree	ecdsa
Description	Commands in this context configure Elliptic Curve Digital Signature Algorithm (ECDSA) public keys.
Introduced	16.0.R1
Platforms	All

ecdsa-key [ecdsa-public-key-id] *number*

Synopsis	Enter the **ecdsa-key** list instance
Context	**configure** system security user-params local-user user *string* public-keys ecdsa ecdsa-key *number*
Tree	ecdsa-key
Description	Commands in this context configure an ECDSA public key and associate the key with a username. A user can associate multiple public keys with a username. The key ID identifies these keys for the user.
Introduced	16.0.R1
Platforms	All

[**ecdsa-public-key-id**] *number*

Synopsis	ECDSA public key identifier
Context	**configure** system security user-params local-user user *string* public-keys ecdsa ecdsa-key *number*
Tree	ecdsa-key

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Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** system security user-params local-user user *string* public-keys ecdsa ecdsa-key *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

key-value *string*

Synopsis	ECDSA public key value
Context	**configure** system security user-params local-user user *string* public-keys ecdsa ecdsa-key *number* key-value *string*
Tree	key-value
Description	This command configures a value for the ECDSA public key. The public key must be enclosed in quotation marks. For ECDSA, the key is between 1 and 1024 bits.
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

rsa

Synopsis	Enter the **rsa** context
Context	**configure** system security user-params local-user user *string* public-keys rsa
Tree	rsa
Description	Commands in this context configure RSA public keys.
Introduced	16.0.R1
Platforms	All

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rsa-key [rsa-public-key-id] *number*

Synopsis	Enter the **rsa-key** list instance
Context	**configure** system security user-params local-user user *string* public-keys rsa rsa-key *number*
Tree	rsa-key
Description	Commands in this context configure an RSA public key and associate the key with a username. A user can associate multiple public keys with a username. The key ID identifies these keys for the user.
Introduced	16.0.R1
Platforms	All

[**rsa-public-key-id**] *number*

Synopsis	RSA public key identifier
Context	**configure** system security user-params local-user user *string* public-keys rsa rsa-key *number*
Tree	rsa-key
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** system security user-params local-user user *string* public-keys rsa rsa-key *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

key-value *string*

Synopsis	RSA public key value

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Context	**configure** system security user-params local-user user *string* public-keys rsa rsa-key *number* key-value *string*
Tree	key-value
Description	This command configures a value for the RSA public key. The public key must be enclosed in quotation marks. For RSA, the key is between 768 and 4096 bits.
String Length	1 to 800
Introduced	16.0.R1
Platforms	All

restricted-to-home *boolean*

Synopsis	Restrict file access to the home directory of the user
Context	**configure** system security user-params local-user user *string* restricted-to-home *boolean*
Tree	restricted-to-home
Default	false
Introduced	16.0.R1
Platforms	All

save-when-restricted *boolean*

Synopsis	Save configurations when the user is restricted to home
Context	**configure** system security user-params local-user user *string* save-when-restricted *boolean*
Tree	save-when-restricted
Description	When configured to **true**, the system permits all configuration save operations (such as **admin save**) via any management interface (such as CLI and NETCONF) even if **restricted-to-home** is set to **true**. The home directory does not need to be configured.
Default	false
Introduced	22.10.R1
Platforms	All

snmp

Synopsis	Enter the **snmp** context
Context	**configure** system security user-params local-user user *string* snmp
Tree	snmp

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Introduced	16.0.R1
Platforms	All

authentication

Synopsis	Enable the **authentication** context
Context	**configure** system security user-params local-user user *string* snmp authentication
Tree	authentication
Description	Commands in this context configure the SNMPv3 authentication and privacy protocols for the user to communicate with the router. The keys are stored in an encrypted format in the configuration. The keys configured with these commands must be localized keys, which are a hash of the SNMP engine ID and a password. The password is not entered directly in this command. Use the **tools perform system management-interface snmp generate-key** command to generate localized authentication and privacy keys. If authentication is not configured, only the username is required to allow and authenticate SNMPv3 operations.
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Localized authentication key
Context	**configure** system security user-params local-user user *string* snmp authentication authentication-key *string*
Tree	authentication-key
Description	This command specifies the authentication key for the authentication protocol. The key must be a localized key, which is a hash of the SNMP engine ID and a password. The password is not entered directly in this command. Use the **tools perform system management-interface snmp generate-key** command to generate a localized authentication key.
String Length	1 to 115
Introduced	16.0.R1
Platforms	All

authentication-protocol *keyword*

Synopsis	Authentication protocol

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Context	**configure** system security user-params local-user user *string* snmp authentication authentication-protocol *keyword*
Tree	authentication-protocol
Options	hmac-md5-96, hmac-sha1-96, hmac-sha2-224, hmac-sha2-256, hmac-sha2-384, hmac-sha2-512
Introduced	16.0.R1
Platforms	All

privacy

Synopsis	Enable the **privacy** context
Context	**configure** system security user-params local-user user *string* snmp authentication privacy
Tree	privacy
Introduced	16.0.R1
Platforms	All

privacy-key *string*

Synopsis	Localized privacy key
Context	**configure** system security user-params local-user user *string* snmp authentication privacy privacy-key *string*
Tree	privacy-key
Description	This command specifies the privacy key for the privacy protocol. The key must be a localized key, which is a hash of the SNMP engine ID and a password. The password is not entered directly in this command. Use the **tools perform system management-interface snmp generate-key** command to generate a localized privacy key.
String Length	1 to 71
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

privacy-protocol *keyword*

Synopsis	Privacy protocol
Context	**configure** system security user-params local-user user *string* snmp authentication privacy privacy-protocol *keyword*

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Tree	privacy-protocol
Options	cbc-des, cfb128-aes-128, cfb128-aes-192, cfb128-aes-256
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

group *string*

Synopsis	User to associate with a group name
Context	**configure** system security user-params local-user user *string* snmp group *string*
Tree	group
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

ssh-authentication-method

Synopsis	Enter the **ssh-authentication-method** context
Context	**configure** system security user-params local-user user *string* ssh-authentication-method
Tree	ssh-authentication-method
Introduced	23.7.R1
Platforms	All

server

Synopsis	Enter the **server** context
Context	**configure** system security user-params local-user user *string* ssh-authentication-method server
Tree	server
Introduced	23.7.R1
Platforms	All

public-key-only *keyword*

Synopsis	Public key only SSH authentication for this user

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Context	**configure** system security user-params local-user user *string* ssh-authentication-method server public-key-only *keyword*
Tree	public-key-only
Description	This command configures the authentication method accepted for the SSH session for the specified user. This user-level configuration overrides the system-level configuration defined in the **configure system security ssh authentication-method public-key-only** command. When unconfigured, the command inherits the setting from the system level command. The command options are: • **true** — accept only public key client authentication for the SSH server • **false** — accept public key or password client authentication for the SSH server. If **interactive-authentication** is configured to **true** in the **configure system security aaa remote-servers radius** or **configure system security aaa remote-servers tacplus** context, the system also accepts interactive keyboard authentication.
Options	false, true
Introduced	23.7.R1
Platforms	All

vprn-network-exceptions

Synopsis	Enable the **vprn-network-exceptions** context
Context	**configure** system security vprn-network-exceptions
Tree	vprn-network-exceptions
Description	Commands in this context configure the rate limiting attributes for processing packets with label TTL expiry received within an LSP shortcut or VPRN instances in the system and from all network IP interfaces. This includes labeled user and control plan packets, ping, and traceroute packets within GRT and VPRN, and ICMP replies. These commands do not rate limit MPLS or service OAM packets.
Introduced	16.0.R1
Platforms	All

count *number*

Synopsis	Limit of exception messages received
Context	**configure** system security vprn-network-exceptions count *number*
Tree	count
Description	This command specifies the threshold limit of exception messages. If the threshold value is exceeded within the configured time interval, packets are dropped.

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Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

window *number*

Synopsis	Time interval to measure exception messages
Context	**configure** system security vprn-network-exceptions window *number*
Tree	window
Description	This command configures the time interval within which exception messages are counted. If the threshold value is exceeded within the configured time interval, packets are dropped.
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

selective-fib *boolean*

Synopsis	FIB assigned to the system
Context	**configure** system selective-fib *boolean*
Tree	selective-fib
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

software-repository [repository-name] *string*

Synopsis	Enter the **software-repository** list instance
Context	**configure** system software-repository *string*
Tree	software-repository
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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[**repository-name**] *string*

Synopsis	Software repository name
Context	**configure** system software-repository *string*
Tree	software-repository
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** system software-repository *string* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

primary-location *string*

Synopsis	Primary location for files in the software repository
Context	**configure** system software-repository *string* primary-location *string*
Tree	primary-location
String Length	1 to 180
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

secondary-location *string*

Synopsis	Secondary location for files in the software repository
Context	**configure** system software-repository *string* secondary-location *string*
Tree	secondary-location
String Length	1 to 180
Introduced	16.0.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tertiary-location *string*

Synopsis	Tertiary location for files in the software repository
Context	**configure** system software-repository *string* tertiary-location *string*
Tree	tertiary-location
String Length	1 to 180
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

switch-fabric

Synopsis	Enter the **switch-fabric** context
Context	**configure** system switch-fabric
Tree	switch-fabric
Description	Commands in this context configure system level attributes related to the switch fabric.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR-7, 7750 SR-12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

failure-recovery

Synopsis	Enter the **failure-recovery** context
Context	**configure** system switch-fabric failure-recovery
Tree	failure-recovery
Description	Commands in this context configure the attributes related to the automatic switch fabric recovery process. This process is triggered when there are two resets of an IOM/XCM due to ICC failures within a small time frame. The recovery process involves the sequential resetting of SFM in case the issues are due to one of the SFM in the ICC communication path. As the final step in the recovery process, a CPM switchover is triggered to reset the active CPM.
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR-7, 7750 SR-12e, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the failure recovery process

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Context	**configure** system switch-fabric failure-recovery admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR-7, 7750 SR-12e, 7950 XRS

sfm-loss-threshold *number*

Synopsis	Number of SFMs that can fail before SFM overload state
Context	**configure** system switch-fabric sfm-loss-threshold *number*
Tree	sfm-loss-threshold
Description	This command specifies the number of SFMs that are permitted to fail before the system goes into SFM overload state. The default value for the 7750 SR-7s is 1 and the default value for the 7750 SR-14s is 2. Users can select the SFM limit based on the number possible for the system minus one. For the 7750 SR-7s, the limit is 3 and the limit for the 7750 SR-14s is 7.
Range	1 to 7
Introduced	20.5.R1
Platforms	7750 SR-7s, 7750 SR-14s

telemetry

Synopsis	Enter the **telemetry** context
Context	**configure** system telemetry
Tree	telemetry
Description	Commands in this context configure the parameters for the dial-out telemetry functionality.
Introduced	20.2.R1
Platforms	All

destination-group [name] *string*

Synopsis	Enter the **destination-group** list instance
Context	**configure** system telemetry destination-group *string*
Tree	destination-group

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Description	Commands in this context configure parameters for destination groups.
Max. Instances	225
Introduced	20.5.R1
Platforms	All

[**name**] *string*

Synopsis	Destination group name
Context	**configure** system telemetry destination-group *string*
Tree	destination-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

allow-unsecure-connection

Synopsis	Allow connection without secured transport protocol
Context	**configure** system telemetry destination-group *string* allow-unsecure-connection
Tree	allow-unsecure-connection
Description	When configured, this command allows an unsecured connection to remote managers; TCP connections are not encrypted, including username and password information.
Notes	The following elements are part of a choice: **allow-unsecure-connection** or **tls-client-profile**.
Introduced	20.5.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** system telemetry destination-group *string* description *string*
Tree	description
String Length	1 to 80
Introduced	20.5.R1

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Platforms	All

destination [address] *(ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name)* port *number*

Synopsis	Enter the **destination** list instance
Context	**configure** system telemetry destination-group *string* destination *(ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name)* port *number*
Tree	destination
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	20.5.R1
Platforms	All

[**address**] *(ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name)*

Synopsis	Address of the destination within the destination group
Context	**configure** system telemetry destination-group *string* destination *(ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name)* port *number*
Tree	destination
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

port *number*

Synopsis	TCP port number for the destination
Context	**configure** system telemetry destination-group *string* destination *(ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name)* port *number*
Tree	destination
Range	0 | 1 to 65535
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

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router-instance *string*

Synopsis	Router name or VPRN service name
Context	**configure** system telemetry destination-group *string* destination *(ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name)* port *number* router-instance *string*
Tree	router-instance
Introduced	20.5.R1
Platforms	All

tcp-keepalive

Synopsis	Enter the **tcp-keepalive** context
Context	**configure** system telemetry destination-group *string* tcp-keepalive
Tree	tcp-keepalive
Introduced	20.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the TCP keep-alive algorithm
Context	**configure** system telemetry destination-group *string* tcp-keepalive admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.5.R1
Platforms	All

idle-time *number*

Synopsis	Time until the first TCP keepalive probe is sent
Context	**configure** system telemetry destination-group *string* tcp-keepalive idle-time *number*
Tree	idle-time
Range	1 to 100000
Units	seconds
Default	600

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Introduced	20.5.R1
Platforms	All

interval *number*

Synopsis	Time between TCP keepalive probes
Context	**configure** system telemetry destination-group *string* tcp-keepalive interval *number*
Tree	interval
Range	1 to 100000
Units	seconds
Default	15
Introduced	20.5.R1
Platforms	All

retries *number*

Synopsis	Number of probe retries before closing the connection
Context	**configure** system telemetry destination-group *string* tcp-keepalive retries *number*
Tree	retries
Description	This command configures the number of missed TCP keepalive probes before closing the TCP connection and attempting to reach the other destinations within the same destination group.
Range	3 to 100
Default	4
Introduced	20.5.R1
Platforms	All

tls-client-profile *reference*

Synopsis	TLS client profile assigned to the destination group
Context	**configure** system telemetry destination-group *string* tls-client-profile *reference*
Tree	tls-client-profile
Reference	**configure** system security tls client-tls-profile *string*
Notes	The following elements are part of a choice: **allow-unsecure-connection** or **tls-client-profile**.
Introduced	20.5.R1

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Platforms	All

notification-bundling

Synopsis	Enter the **notification-bundling** context
Context	**configure** system telemetry notification-bundling
Tree	notification-bundling
Description	Commands in this context configure the bundling of multiple notifications into one telemetry message.
Introduced	21.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of notification bundling
Context	**configure** system telemetry notification-bundling admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	All

max-msg-count *number*

Synopsis	Maximum notifications count in telemetry message bundle
Context	**configure** system telemetry notification-bundling max-msg-count *number*
Tree	max-msg-count
Range	2 to 1000
Default	100
Introduced	21.10.R1
Platforms	All

max-time-granularity *number*

Synopsis	Maximum interval when bundling of notifications occurs

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Context	**configure** system telemetry notification-bundling max-time-granularity *number*
Tree	max-time-granularity
Description	This command sets the maximum time interval during which telemetry notifications are bundled. All bundled notifications have the same timestamp, which is the timestamp of the bundle.
Range	1 to 1000
Units	milliseconds
Default	100
Introduced	21.10.R1
Platforms	All

persistent-subscriptions

Synopsis	Enter the **persistent-subscriptions** context
Context	**configure** system telemetry persistent-subscriptions
Tree	persistent-subscriptions
Introduced	20.5.R1
Platforms	All

subscription [name] *string*

Synopsis	Enter the **subscription** list instance
Context	**configure** system telemetry persistent-subscriptions subscription *string*
Tree	subscription
Max. Instances	225
Introduced	20.5.R1
Platforms	All

[**name**] *string*

Synopsis	Persistent subscription name
Context	**configure** system telemetry persistent-subscriptions subscription *string*
Tree	subscription
String Length	1 to 32
Notes	This element is part of a list key.

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Introduced	20.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the persistent subscription
Context	**configure** system telemetry persistent-subscriptions subscription *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.5.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** system telemetry persistent-subscriptions subscription *string* description *string*
Tree	description
String Length	1 to 80
Introduced	20.5.R1
Platforms	All

destination-group *reference*

Synopsis	Name of the destination group used in the subscription
Context	**configure** system telemetry persistent-subscriptions subscription *string* destination-group *reference*
Tree	destination-group
Reference	**configure** system telemetry destination-group *string*
Introduced	20.5.R1
Platforms	All

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encoding *keyword*

Synopsis	Encoding used for telemetry notifications
Context	**configure** system telemetry persistent-subscriptions subscription *string* encoding *keyword*
Tree	encoding
Description	This command specifies the encoding used for telemetry notifications as defined by the gNMI OpenConfig standard.
Options	json – JSON encoded text bytes – Encoded according to gnmi.schemas proto – Encoded with scalar TypedValue values json-ietf – JSON encoded text as per RFC 7951
Default	json
Introduced	20.5.R1
Platforms	All

local-source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Local IP address of packets sent from the source
Context	**configure** system telemetry persistent-subscriptions subscription *string* local-source-address *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	local-source-address
Introduced	20.5.R1
Platforms	All

mode *keyword*

Synopsis	Mode for telemetry notifications
Context	**configure** system telemetry persistent-subscriptions subscription *string* mode *keyword*
Tree	mode
Description	This command specifies the subscription path mode for telemetry notifications sent out for the persistent subscription.
Options	target-defined, on-change, sample
Introduced	20.5.R1
Platforms	All

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originated-qos-marking *keyword*

Synopsis	QoS marking used for telemetry notification packets
Context	**configure** system telemetry persistent-subscriptions subscription *string* originated-qos-marking *keyword*
Tree	originated-qos-marking
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	20.5.R1
Platforms	All

sample-interval *number*

Synopsis	Sampling interval for the persistent subscription
Context	**configure** system telemetry persistent-subscriptions subscription *string* sample-interval *number*
Tree	sample-interval
Description	This command configures the sampling interval for the persistent subscription. The interval applies only in sampling or target-defined modes.
Range	1000 to 18446744073709551615
Units	milliseconds
Default	10000
Introduced	20.5.R1
Platforms	All

sensor-group *reference*

Synopsis	Sensor group used in the persistent subscription
Context	**configure** system telemetry persistent-subscriptions subscription *string* sensor-group *reference*
Tree	sensor-group
Description	This command specifies the sensor group to be used in the persistent subscription. If no valid paths exist in the sensor group, the configuration is accepted, however, no gRPC connection is established when persistent subscription is activated.
Reference	**configure** system telemetry sensor-groups sensor-group *string*

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Introduced	20.5.R1
Platforms	All

sensor-groups

Synopsis	Enter the **sensor-groups** context
Context	**configure** system telemetry sensor-groups
Tree	sensor-groups
Introduced	20.5.R1
Platforms	All

sensor-group [name] *string*

Synopsis	Enter the **sensor-group** list instance
Context	**configure** system telemetry sensor-groups sensor-group *string*
Tree	sensor-group
Max. Instances	225
Introduced	20.5.R1
Platforms	All

[**name**] *string*

Synopsis	Sensor group name
Context	**configure** system telemetry sensor-groups sensor-group *string*
Tree	sensor-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** system telemetry sensor-groups sensor-group *string* description *string*

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Tree	description
String Length	1 to 80
Introduced	20.5.R1
Platforms	All

path [xpath] *string*

Synopsis	Add a list entry for **path**
Context	**configure** system telemetry sensor-groups sensor-group *string* path *string*
Tree	path
Max. Instances	4500
Introduced	20.5.R1
Platforms	All

[**xpath**] *string*

Synopsis	gNMI path to be streamed
Context	**configure** system telemetry sensor-groups sensor-group *string* path *string*
Tree	path
Description	The command specifies the path from which data is streamed to the collector. Streamed data includes all descendants of the tree indicated by the path.
String Length	1 to 512
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

thresholds

Synopsis	Enter the **thresholds** context
Context	**configure** system thresholds
Tree	thresholds
Introduced	16.0.R1
Platforms	All

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cflash-cap-alarm-percent [cflash-id] *string*

Synopsis	Enter the **cflash-cap-alarm-percent** list instance
Context	**configure** system thresholds cflash-cap-alarm-percent *string*
Tree	cflash-cap-alarm-percent
Introduced	16.0.R1
Platforms	All

[**cflash-id**] *string*

Synopsis	cflash device name monitored for capacity
Context	**configure** system thresholds cflash-cap-alarm-percent *string*
Tree	cflash-cap-alarm-percent
String Length	1 to 200
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

falling-threshold *number*

Synopsis	Falling threshold for the sampled statistic
Context	**configure** system thresholds cflash-cap-alarm-percent *string* falling-threshold *number*
Tree	falling-threshold
Description	This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single threshold-crossing event is generated. A single threshold-crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated **startup-alarm** command is equal to the **falling** or **either** values. After a falling threshold-crossing event is generated, another such event is not generated until the sampled value rises above this threshold and reaches greater than or equal to the **rising-threshold** command.
Range	0 to 100
Units	percent
Introduced	16.0.R4
Platforms	All

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interval *number*

Synopsis	Polling period over which data is sampled and compared
Context	**configure** system thresholds cflash-cap-alarm-percent *string* interval *number*
Tree	interval
Description	This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds.
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

rising-threshold *number*

Synopsis	Rising threshold for the sampled statistic
Context	**configure** system thresholds cflash-cap-alarm-percent *string* rising-threshold *number*
Tree	rising-threshold
Description	This command specifies a rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold, a single threshold-crossing event is generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated **startup-alarm** command is equal to the **rising** or **either** values. After a rising threshold-crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches less than or equal the **falling-threshold** command.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

rmon-event-type *keyword*

Synopsis	Notification type specifying action when event occurs
Context	**configure** system thresholds cflash-cap-alarm-percent *string* rmon-event-type *keyword*
Tree	rmon-event-type
Options	none, log, trap, both

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Default	both
Introduced	16.0.R1
Platforms	All

startup-alarm *keyword*

Synopsis	Alarm type when the alarm is first created
Context	**configure** system thresholds cflash-cap-alarm-percent *string* startup-alarm *keyword*
Tree	startup-alarm
Description	This command specifies the alarm type that may be sent when this alarm is first created. If the first sample is greater than or equal to the rising threshold value and **startup-alarm** is equal to **rising** or **either**, a single rising threshold crossing event is generated. If the first sample is less than or equal to the falling threshold value and **startup-alarm** is equal to **falling** or **either**, a single falling threshold crossing event is generated.
Options	rising, falling, either
Default	either
Introduced	16.0.R1
Platforms	All

cflash-cap-warn-percent [cflash-id] *string*

Synopsis	Enter the **cflash-cap-warn-percent** list instance
Context	**configure** system thresholds cflash-cap-warn-percent *string*
Tree	cflash-cap-warn-percent
Description	Commands in this context configure the capacity monitoring of the compact flash. The usage is monitored as a percentage of the capacity of the compact flash. The severity level is warning. Both a rising and falling threshold can be specified.
Introduced	16.0.R1
Platforms	All

[**cflash-id**] *string*

Synopsis	cflash device name monitored for capacity
Context	**configure** system thresholds cflash-cap-warn-percent *string*
Tree	cflash-cap-warn-percent
String Length	1 to 200

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

falling-threshold *number*

Synopsis	Falling threshold for the sampled statistic
Context	**configure** system thresholds cflash-cap-warn-percent *string* falling-threshold *number*
Tree	falling-threshold
Description	This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single threshold-crossing event is generated. A single threshold-crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated **startup-alarm** command is equal to the **falling** or **either** values. After a falling threshold-crossing event is generated, another such event is not generated until the sampled value rises above this threshold and reaches greater than or equal to the **rising-threshold** command.
Range	0 to 100
Units	percent
Introduced	16.0.R4
Platforms	All

interval *number*

Synopsis	Polling period over which data is sampled and compared
Context	**configure** system thresholds cflash-cap-warn-percent *string* interval *number*
Tree	interval
Description	This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds.
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

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rising-threshold *number*

Synopsis	Rising threshold for the sampled statistic
Context	**configure** system thresholds cflash-cap-warn-percent *string* rising-threshold *number*
Tree	rising-threshold
Description	This command specifies a rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold, a single threshold-crossing event is generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated **startup-alarm** command is equal to the **rising** or **either** values. After a rising threshold-crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches less than or equal the **falling-threshold** command.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

rmon-event-type *keyword*

Synopsis	Notification type specifying action when event occurs
Context	**configure** system thresholds cflash-cap-warn-percent *string* rmon-event-type *keyword*
Tree	rmon-event-type
Options	none, log, trap, both
Default	both
Introduced	16.0.R1
Platforms	All

startup-alarm *keyword*

Synopsis	Alarm type when the alarm is first created
Context	**configure** system thresholds cflash-cap-warn-percent *string* startup-alarm *keyword*
Tree	startup-alarm
Description	This command specifies the alarm type that may be sent when this alarm is first created. If the first sample is greater than or equal to the rising threshold value and **startup-alarm** is equal to **rising** or **either**, a single rising threshold crossing event is generated.

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If the first sample is less than or equal to the falling threshold value and **startup-alarm** is equal to **falling** or **either**, a single falling threshold crossing event is generated.

Options	rising, falling, either
Default	either
Introduced	16.0.R1
Platforms	All

kb-memory-use-alarm

Synopsis	Enable the **kb-memory-use-alarm** context
Context	**configure** system thresholds kb-memory-use-alarm
Tree	kb-memory-use-alarm
Introduced	16.0.R4
Platforms	All

falling-threshold *number*

Synopsis	Falling threshold for the sampled statistic
Context	**configure** system thresholds kb-memory-use-alarm falling-threshold *number*
Tree	falling-threshold
Description	This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single threshold-crossing event is generated. A single threshold-crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated **startup-alarm** command is equal to the **falling** or **either** values. After a falling threshold-crossing event is generated, another such event is not generated until the sampled value rises above this threshold and reaches greater than or equal to the **rising-threshold** command.
Range	-2147483648 to 2147483647
Introduced	16.0.R4
Platforms	All

interval *number*

Synopsis	Polling period over which data is sampled and compared
Context	**configure** system thresholds kb-memory-use-alarm interval *number*
Tree	interval

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Description	This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds.
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

rising-threshold *number*

Synopsis	Rising threshold for the sampled statistic
Context	**configure** system thresholds kb-memory-use-alarm rising-threshold *number*
Tree	rising-threshold
Description	This command specifies a rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold, a single threshold-crossing event is generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated **startup-alarm** command is equal to the **rising** or **either** values. After a rising threshold-crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches less than or equal the **falling-threshold** command.
Range	-2147483648 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

rmon-event-type *keyword*

Synopsis	Notification type specifying action when event occurs
Context	**configure** system thresholds kb-memory-use-alarm rmon-event-type *keyword*
Tree	rmon-event-type
Options	none, log, trap, both
Default	both
Introduced	16.0.R4
Platforms	All

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startup-alarm *keyword*

Synopsis	Alarm type when the alarm is first created
Context	**configure** system thresholds kb-memory-use-alarm startup-alarm *keyword*
Tree	startup-alarm
Description	This command specifies the alarm type that may be sent when this alarm is first created. If the first sample is greater than or equal to the rising threshold value and **startup-alarm** is equal to **rising** or **either**, a single rising threshold crossing event is generated. If the first sample is less than or equal to the falling threshold value and **startup-alarm** is equal to **falling** or **either**, a single falling threshold crossing event is generated.
Options	rising, falling, either
Default	either
Introduced	16.0.R4
Platforms	All

kb-memory-use-warn

Synopsis	Enable the **kb-memory-use-warn** context
Context	**configure** system thresholds kb-memory-use-warn
Tree	kb-memory-use-warn
Introduced	16.0.R4
Platforms	All

falling-threshold *number*

Synopsis	Falling threshold for the sampled statistic
Context	**configure** system thresholds kb-memory-use-warn falling-threshold *number*
Tree	falling-threshold
Description	This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single threshold-crossing event is generated. A single threshold-crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated **startup-alarm** command is equal to the **falling** or **either** values. After a falling threshold-crossing event is generated, another such event is not generated until the sampled value rises above this threshold and reaches greater than or equal to the **rising-threshold** command.
Range	-2147483648 to 2147483647

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Introduced	16.0.R4
Platforms	All

interval *number*

Synopsis	Polling period over which data is sampled and compared
Context	**configure** system thresholds kb-memory-use-warn interval *number*
Tree	interval
Description	This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds.
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

rising-threshold *number*

Synopsis	Rising threshold for the sampled statistic
Context	**configure** system thresholds kb-memory-use-warn rising-threshold *number*
Tree	rising-threshold
Description	This command specifies a rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold, a single threshold-crossing event is generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated **startup-alarm** command is equal to the **rising** or **either** values. After a rising threshold-crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches less than or equal the **falling-threshold** command.
Range	-2147483648 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

rmon-event-type *keyword*

Synopsis	Notification type specifying action when event occurs

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Context	**configure** system thresholds kb-memory-use-warn rmon-event-type *keyword*
Tree	rmon-event-type
Options	none, log, trap, both
Default	both
Introduced	16.0.R4
Platforms	All

startup-alarm *keyword*

Synopsis	Alarm type when the alarm is first created
Context	**configure** system thresholds kb-memory-use-warn startup-alarm *keyword*
Tree	startup-alarm
Description	This command specifies the alarm type that may be sent when this alarm is first created. If the first sample is greater than or equal to the rising threshold value and **startup-alarm** is equal to **rising** or **either**, a single rising threshold crossing event is generated. If the first sample is less than or equal to the falling threshold value and **startup-alarm** is equal to **falling** or **either**, a single falling threshold crossing event is generated.
Options	rising, falling, either
Default	either
Introduced	16.0.R4
Platforms	All

rmon

Synopsis	Enter the **rmon** context
Context	**configure** system thresholds rmon
Tree	rmon
Introduced	16.0.R1
Platforms	All

alarm [rmon-alarm-id] *number*

Synopsis	Enter the **alarm** list instance
Context	**configure** system thresholds rmon alarm *number*
Tree	alarm

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Max. Instances	1200
Introduced	16.0.R1
Platforms	All

[**rmon-alarm-id**] *number*

Synopsis	Index ID for an entry in the alarm table
Context	**configure** system thresholds rmon alarm *number*
Tree	alarm
Range	0 to 65400
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

falling-event *number*

Synopsis	RMON event ID for falling threshold crossing event
Context	**configure** system thresholds rmon alarm *number* falling-event *number*
Tree	falling-event
Range	0 to 65400
Introduced	16.0.R1
Platforms	All

falling-threshold *number*

Synopsis	Falling threshold for the sampled statistic
Context	**configure** system thresholds rmon alarm *number* falling-threshold *number*
Tree	falling-threshold
Description	This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold and the value at the last sampling interval was greater than this threshold, a single threshold crossing event is generated. A single threshold crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated **startup-alarm** command is set to **falling** or **either**.

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	After a falling threshold crossing event is generated, another such event is not generated until the sampled value exceeds this threshold and reaches or exceeds the **rising-threshold** command setting.
Range	-2147483648 to 2147483647
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Polling period over which data is sampled and compared
Context	**configure** system thresholds rmon alarm *number* interval *number*
Tree	interval
Description	This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

owner *string*

Synopsis	Owner that created this entry and uses the resources
Context	**configure** system thresholds rmon alarm *number* owner *string*
Tree	owner
String Length	1 to 80
Default	TiMOS CLI
Introduced	16.0.R1
Platforms	All

rising-event *number*

Synopsis	RMON event ID for rising threshold crossing event
Context	**configure** system thresholds rmon alarm *number* rising-event *number*
Tree	rising-event
Range	0 to 65400
Introduced	16.0.R1

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Platforms	All

rising-threshold *number*

Synopsis	Rising threshold for the sampled statistic
Context	**configure** system thresholds rmon alarm *number* rising-threshold *number*
Tree	rising-threshold
Description	This command specifies the rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold and the value at the last sampling interval was below this threshold, a single threshold crossing event is generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated **startup-alarm** command is set to **rising** or **either**. After a rising threshold crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches or falls below the **falling-threshold** command setting.
Range	-2147483648 to 2147483647
Introduced	16.0.R1
Platforms	All

sample-type *keyword*

Synopsis	Sampling type for value comparison with thresholds
Context	**configure** system thresholds rmon alarm *number* sample-type *keyword*
Tree	sample-type
Options	absolute, delta
Default	absolute
Introduced	16.0.R1
Platforms	All

startup-alarm *keyword*

Synopsis	Alarm to send when this entry is first set to valid
Context	**configure** system thresholds rmon alarm *number* startup-alarm *keyword*
Tree	startup-alarm
Options	rising, falling, either
Default	either

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Introduced	16.0.R1
Platforms	All

variable-oid *string*

Synopsis	Object identifier to sample the specific variable
Context	**configure** system thresholds rmon alarm *number* variable-oid *string*
Tree	variable-oid
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

event [rmon-event-id] *number*

Synopsis	Enter the **event** list instance
Context	**configure** system thresholds rmon event *number*
Tree	event
Max. Instances	1200
Introduced	16.0.R1
Platforms	All

[**rmon-event-id**] *number*

Synopsis	Index ID for an entry in the event table
Context	**configure** system thresholds rmon event *number*
Tree	event
Range	1 to 65400
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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description *string*

Synopsis	Text description
Context	**configure** system thresholds rmon event *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

event-type *keyword*

Synopsis	Notification action to be taken when the event occurs
Context	**configure** system thresholds rmon event *number* event-type *keyword*
Tree	event-type
Options	none, log, trap, both
Default	both
Introduced	16.0.R1
Platforms	All

owner *string*

Synopsis	Owner that created this entry and uses the resources
Context	**configure** system thresholds rmon event *number* owner *string*
Tree	owner
String Length	1 to 80
Default	TiMOS CLI
Introduced	16.0.R1
Platforms	All

time

Synopsis	Enter the **time** context
Context	**configure** system time
Tree	time
Introduced	16.0.R1
Platforms	All

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dst-zone [summer-time-zone] *string*

Synopsis	Enter the **dst-zone** list instance
Context	**configure** system time dst-zone *string*
Tree	dst-zone
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[**summer-time-zone**] *string*

Synopsis	Summer time zone name
Context	**configure** system time dst-zone *string*
Tree	dst-zone
String Length	1 to 5
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end

Synopsis	Enter the **end** context
Context	**configure** system time dst-zone *string* end
Tree	end
Introduced	16.0.R1
Platforms	All

day *keyword*

Synopsis	Day of the week to end Daylight Savings Time
Context	**configure** system time dst-zone *string* end day *keyword*
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Default	sunday

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Introduced	16.0.R1
Platforms	All

hours-minutes *string*

Synopsis	Time to end Daylight Savings Time in hh:mm format
Context	**configure** system time dst-zone *string* end hours-minutes *string*
Tree	hours-minutes
String Length	5
Default	00:00
Introduced	16.0.R1
Platforms	All

month *keyword*

Synopsis	Month to end Daylight Savings Time
Context	**configure** system time dst-zone *string* end month *keyword*
Tree	month
Options	january, february, march, april, may, june, july, august, september, october, november, december
Default	january
Introduced	16.0.R1
Platforms	All

week *keyword*

Synopsis	Week of the month to end Daylight Savings Time
Context	**configure** system time dst-zone *string* end week *keyword*
Tree	week
Options	first, second, third, fourth, last
Default	first
Introduced	16.0.R1
Platforms	All

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offset *number*

Synopsis	Offset for Daylight Savings Time
Context	**configure** system time dst-zone *string* offset *number*
Tree	offset
Range	0 to 60
Units	minutes
Default	60
Introduced	16.0.R1
Platforms	All

start

Synopsis	Enter the **start** context
Context	**configure** system time dst-zone *string* start
Tree	start
Introduced	16.0.R1
Platforms	All

day *keyword*

Synopsis	Day of the week to start Daylight Savings Time
Context	**configure** system time dst-zone *string* start day *keyword*
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Default	sunday
Introduced	16.0.R1
Platforms	All

hours-minutes *string*

Synopsis	Time to start Daylight Savings Time in hh:mm format
Context	**configure** system time dst-zone *string* start hours-minutes *string*
Tree	hours-minutes
String Length	5
Default	00:00

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Introduced	16.0.R1
Platforms	All

month *keyword*

Synopsis	Month to start Daylight Savings Time
Context	**configure** system time dst-zone *string* start month *keyword*
Tree	month
Options	january, february, march, april, may, june, july, august, september, october, november, december
Default	january
Introduced	16.0.R1
Platforms	All

week *keyword*

Synopsis	Week of the month to start Daylight Savings Time
Context	**configure** system time dst-zone *string* start week *keyword*
Tree	week
Options	first, second, third, fourth, last
Default	first
Introduced	16.0.R1
Platforms	All

ntp

Synopsis	Enable the **ntp** context
Context	**configure** system time ntp
Tree	ntp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of NTP execution
Context	**configure** system time ntp admin-state *keyword*

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Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

authentication-check *boolean*

Synopsis	Authenticate NTP PDUs and reject mismatches
Context	**configure** system time ntp authentication-check *boolean*
Tree	authentication-check
Default	true
Introduced	16.0.R1
Platforms	All

authentication-key [key-id] *number*

Synopsis	Enter the **authentication-key** list instance
Context	**configure** system time ntp authentication-key *number*
Tree	authentication-key
Introduced	16.0.R1
Platforms	All

[**key-id**] *number*

Synopsis	Authentication key ID used for NTP packets
Context	**configure** system time ntp authentication-key *number*
Tree	authentication-key
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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key *string*

Synopsis	Key to authenticate NTP packets
Context	**configure** system time ntp authentication-key *number* key *string*
Tree	key
String Length	1 to 71
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Authentication method to authenticate NTP packet
Context	**configure** system time ntp authentication-key *number* type *keyword*
Tree	type
Options	des, message-digest
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

broadcast [router-instance] *reference* interface-name *string*

Synopsis	Enter the **broadcast** list instance
Context	**configure** system time ntp broadcast *reference* interface-name *string*
Tree	broadcast
Introduced	16.0.R1
Platforms	All

[**router-instance**] *reference*

Synopsis	Router name
Context	**configure** system time ntp broadcast *reference* interface-name *string*
Tree	broadcast
Reference	**configure** router *string*
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	All

interface-name *string*

Synopsis	Interface to transmit or receive NTP broadcast packets
Context	**configure** system time ntp broadcast *reference* interface-name *string*
Tree	broadcast
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

key-id *reference*

Synopsis	Authentication key and type used by the node
Context	**configure** system time ntp broadcast *reference* interface-name *string* key-id *reference*
Tree	key-id
Reference	**configure** system time ntp authentication-key *number*
Introduced	16.0.R1
Platforms	All

ttl *number*

Synopsis	TTL of messages transmitted by the broadcast address
Context	**configure** system time ntp broadcast *reference* interface-name *string* ttl *number*
Tree	ttl
Range	1 to 255
Default	127
Introduced	16.0.R1
Platforms	All

version *number*

Synopsis	NTP version number generated by the node

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Context	**configure** system time ntp broadcast *reference* interface-name *string* version *number*
Tree	version
Range	2 to 4
Default	4
Introduced	16.0.R1
Platforms	All

broadcast-client [router-instance] *string* interface-name *string*

Synopsis	Enter the **broadcast-client** list instance
Context	**configure** system time ntp broadcast-client *string* interface-name *string*
Tree	broadcast-client
Introduced	16.0.R1
Platforms	All

[**router-instance**] *string*

Synopsis	Router name or VPRN service name
Context	**configure** system time ntp broadcast-client *string* interface-name *string*
Tree	broadcast-client
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

interface-name *string*

Synopsis	Interface to transmit or receive NTP broadcast packets
Context	**configure** system time ntp broadcast-client *string* interface-name *string*
Tree	broadcast-client
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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authenticate *boolean*

Synopsis	Enforce authentication of NTP PDUs
Context	**configure** system time ntp broadcast-client *string* interface-name *string* authenticate *boolean*
Tree	authenticate
Default	false
Introduced	16.0.R1
Platforms	All

multicast

Synopsis	Enable the **multicast** context
Context	**configure** system time ntp multicast
Tree	multicast
Introduced	16.0.R1
Platforms	All

key-id *reference*

Synopsis	Authentication key and type used by the node
Context	**configure** system time ntp multicast key-id *reference*
Tree	key-id
Reference	**configure** system time ntp authentication-key *number*
Introduced	16.0.R1
Platforms	All

version *number*

Synopsis	NTP version number generated by the node
Context	**configure** system time ntp multicast version *number*
Tree	version
Description	This command specifies the NTP version number that is generated by the node. This command does not need to be configured when in client mode, in which case all three versions are accepted.
Range	2 to 4
Default	4

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Introduced	16.0.R1
Platforms	All

multicast-client

Synopsis	Enable the **multicast-client** context
Context	**configure** system time ntp multicast-client
Tree	multicast-client
Introduced	16.0.R1
Platforms	All

authenticate *boolean*

Synopsis	Enforce authentication of NTP PDUs
Context	**configure** system time ntp multicast-client authenticate *boolean*
Tree	authenticate
Default	false
Introduced	16.0.R1
Platforms	All

ntp-server

Synopsis	Enable the **ntp-server** context
Context	**configure** system time ntp ntp-server
Tree	ntp-server
Introduced	16.0.R1
Platforms	All

authenticate *boolean*

Synopsis	Authentication of NTP PDUs when acting as a server
Context	**configure** system time ntp ntp-server authenticate *boolean*
Tree	authenticate
Default	false
Introduced	16.0.R1

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Platforms	All

peer [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)* router-instance *string*

Synopsis	Enter the **peer** list instance
Context	**configure** system time ntp peer *(ipv4-address-no-zone | ipv6-address-no-zone)* router-instance *string*
Tree	peer
Introduced	16.0.R1
Platforms	All

[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the peer for a peering relationship
Context	**configure** system time ntp peer *(ipv4-address-no-zone | ipv6-address-no-zone)* router-instance *string*
Tree	peer
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

router-instance *string*

Synopsis	Router name or VPRN service name
Context	**configure** system time ntp peer *(ipv4-address-no-zone | ipv6-address-no-zone)* router-instance *string*
Tree	peer
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

key-id *reference*

Synopsis	Authentication key and type used by the node
Context	**configure** system time ntp peer *(ipv4-address-no-zone | ipv6-address-no-zone)* router-instance *string* key-id *reference*

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Tree	key-id
Reference	**configure** system time ntp authentication-key *number*
Introduced	16.0.R1
Platforms	All

prefer *boolean*

Synopsis	Set NTP server as preferred to receive time
Context	**configure** system time ntp peer *(ipv4-address-no-zone | ipv6-address-no-zone)* router-instance *string* prefer *boolean*
Tree	prefer
Default	false
Introduced	16.0.R1
Platforms	All

version *number*

Synopsis	NTP version number generated by the node
Context	**configure** system time ntp peer *(ipv4-address-no-zone | ipv6-address-no-zone)* router-instance *string* version *number*
Tree	version
Description	This command specifies the NTP version number that is generated by the node. This command does not need to be configured when in client mode, in which case all three versions are accepted.
Range	2 to 4
Default	4
Introduced	16.0.R1
Platforms	All

server [ip-address] *(ipv4-address-no-zone \| ipv6-address-no-zone \| keyword)* router-instance *string*

Synopsis	Enter the **server** list instance
Context	**configure** system time ntp server *(ipv4-address-no-zone | ipv6-address-no-zone | keyword)* router-instance *string*
Tree	server
Introduced	16.0.R1

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Platforms	All

[**ip-address**] *(ipv4-address-no-zone | ipv6-address-no-zone | keyword)*

Synopsis	IP address of an external NTP server
Context	**configure** system time ntp server *(ipv4-address-no-zone | ipv6-address-no-zone | keyword)* router-instance *string*
Tree	server
Options	ptp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

router-instance *string*

Synopsis	Router name or VPRN service name
Context	**configure** system time ntp server *(ipv4-address-no-zone | ipv6-address-no-zone | keyword)* router-instance *string*
Tree	server
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

key-id *reference*

Synopsis	Authentication key and type used by the node
Context	**configure** system time ntp server *(ipv4-address-no-zone | ipv6-address-no-zone | keyword)* router-instance *string* key-id *reference*
Tree	key-id
Reference	**configure** system time ntp authentication-key *number*
Introduced	16.0.R1
Platforms	All

prefer *boolean*

Synopsis	Set NTP server as preferred to receive time

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Context	**configure** system time ntp server *(ipv4-address-no-zone | ipv6-address-no-zone | keyword)* router-instance *string* prefer *boolean*
Tree	prefer
Default	false
Introduced	16.0.R1
Platforms	All

version *number*

Synopsis	NTP version number generated by the node
Context	**configure** system time ntp server *(ipv4-address-no-zone | ipv6-address-no-zone | keyword)* router-instance *string* version *number*
Tree	version
Description	This command specifies the NTP version number that is generated by the node. This command does not need to be configured when in client mode, in which case all three versions are accepted.
Range	2 to 4
Default	4
Introduced	16.0.R1
Platforms	All

prefer-local-time *boolean*

Synopsis	Use local time over UTC time in the system
Context	**configure** system time prefer-local-time *boolean*
Tree	prefer-local-time
Description	When configured to **true**, the system uses local time. This preference is applied to objects such as log file names, created and completed times reported in log files, NETCONF and gRPC date-and-time leafs, and rollback times displayed in **show** command outputs. When configured to **false**, the system uses UTC time. **Note**: The timezone used for **show** command outputs during a CLI session can be controlled using the **environment time-display** command. **Note**: The format used for the date-time strings may change, depending on the command setting. For example, when this command is set to **true**, all date-time strings include a suffix of three to five characters that indicates the timezone used. **Note**: The time format for timestamps on log events is controlled on a per-log basis, using the **configure log log-id time-format** command.

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Default	false
Introduced	16.0.R1
Platforms	All

sntp

Synopsis	Enter the **sntp** context
Context	**configure** system time sntp
Tree	sntp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of SNTP
Context	**configure** system time sntp admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

server [ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the **server** list instance
Context	**configure** system time sntp server *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	server
Introduced	16.0.R1
Platforms	All

[ip-address] *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	IP address of the SNTP server
Context	**configure** system time sntp server *(ipv4-address-no-zone | ipv6-address-no-zone)*
Tree	server

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Frequency of querying the server
Context	**configure** system time sntp server *(ipv4-address-no-zone | ipv6-address-no-zone)* interval *number*
Tree	interval
Range	64 to 1024
Units	seconds
Default	64
Introduced	16.0.R1
Platforms	All

prefer *boolean*

Synopsis	Preference value for this SNTP server
Context	**configure** system time sntp server *(ipv4-address-no-zone | ipv6-address-no-zone)* prefer *boolean*
Tree	prefer
Default	false
Introduced	16.0.R1
Platforms	All

version *number*

Synopsis	SNTP version supported by this server
Context	**configure** system time sntp server *(ipv4-address-no-zone | ipv6-address-no-zone)* version *number*
Tree	version
Range	1 to 3
Default	3
Introduced	16.0.R1
Platforms	All

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sntp-state *keyword*

Synopsis	Mode for Simple Network Time Protocol (SNTP)
Context	**configure** system time sntp sntp-state *keyword*
Tree	sntp-state
Options	unicast, broadcast
Default	unicast
Introduced	16.0.R1
Platforms	All

zone

Synopsis	Enter the **zone** context
Context	**configure** system time zone
Tree	zone
Introduced	16.0.R1
Platforms	All

non-standard

Synopsis	Enter the **non-standard** context
Context	**configure** system time zone non-standard
Tree	non-standard
Notes	The following elements are part of a choice: **non-standard** or **standard**.
Introduced	16.0.R1
Platforms	All

name *string*

Synopsis	Non-standard time zone name
Context	**configure** system time zone non-standard name *string*
Tree	name
String Length	1 to 5
Introduced	16.0.R1
Platforms	All

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offset *string*

Synopsis	Offset from UTC
Context	**configure** system time zone non-standard offset *string*
Tree	offset
String Length	5 to 6
Introduced	16.0.R1
Platforms	All

standard

Synopsis	Enter the **standard** context
Context	**configure** system time zone standard
Tree	standard
Notes	The following elements are part of a choice: **non-standard** or **standard**.
Introduced	16.0.R1
Platforms	All

name *keyword*

Synopsis	Standard time zone name
Context	**configure** system time zone standard name *keyword*
Tree	name
Options	hst, akst, pst, mst, cst, est, ast, nst, utc, gmt, wet, cet, eet, msk, msd, awst, acst, aest, nzst
Default	utc
Introduced	16.0.R1
Platforms	All

transmission-profile [name] *string*

Synopsis	Enter the **transmission-profile** list instance
Context	**configure** system transmission-profile *string*
Tree	transmission-profile
Introduced	16.0.R4

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Platforms	All

[**name**] *string*

Synopsis	File transmission profile name
Context	**configure** system transmission-profile *string*
Tree	transmission-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

http-version *keyword*

Synopsis	HTTP version
Context	**configure** system transmission-profile *string* http-version *keyword*
Tree	http-version
Options	1.0, 1.1
Default	1.1
Introduced	23.3.R1
Platforms	All

ipv4-source-address *string*

Synopsis	IPv4 source address used for the transport protocol
Context	**configure** system transmission-profile *string* ipv4-source-address *string*
Tree	ipv4-source-address
Introduced	16.0.R4
Platforms	All

ipv6-source-address *string*

Synopsis	IPv6 source address used for the transport protocol
Context	**configure** system transmission-profile *string* ipv6-source-address *string*
Tree	ipv6-source-address

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Introduced	16.0.R4
Platforms	All

redirection *number*

Synopsis	Maximum level of redirection
Context	**configure** system transmission-profile *string* redirection *number*
Tree	redirection
Range	1 to 8
Introduced	16.0.R4
Platforms	All

retry *number*

Synopsis	Number of attempts to reconnecting to the server
Context	**configure** system transmission-profile *string* retry *number*
Tree	retry
Range	1 to 256
Introduced	16.0.R4
Platforms	All

router-instance *string*

Synopsis	Router instance used by the transport protocol
Context	**configure** system transmission-profile *string* router-instance *string*
Tree	router-instance
String Length	1 to 64
Default	Base
Introduced	16.0.R4
Platforms	All

timeout *number*

Synopsis	Timeout for a response from the server
Context	**configure** system transmission-profile *string* timeout *number*

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Tree	timeout
Range	1 to 3600
Units	seconds
Default	60
Introduced	16.0.R4
Platforms	All

usb [usb-cflash] *keyword*

Synopsis	Enter the **usb** list instance
Context	**configure** system usb *keyword*
Tree	usb
Description	Commands in this context configure the operational state of the USB port.
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

[**usb-cflash**] *keyword*

Synopsis	Specifies the compact flash ID
Context	**configure** system usb *keyword*
Tree	usb
Options	cf2
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

admin-state *keyword*

Synopsis	Administrative state of the USB port
Context	**configure** system usb *keyword* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable

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Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

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3.47 test-oam commands

```
configure
   –  test-oam
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  icmp
         –  ipv6
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  length-field boolean
            –  maximum-original-datagram boolean
         –  ping-template string
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  description string
            –  dot1p number
            –  dscp keyword
            –  failure-threshold number
            –  interval number
            –  reactivation-failure-threshold number
            –  reactivation-interval number
            –  reactivation-threshold number
            –  reactivation-timeout number
            –  size number
            –  timeout number
            –  ttl number
      –  link-measurement
         –  measurement-template string
            –  admin-state keyword
            –  aggregate-sample-window
               –  multiplier number
               –  threshold
                  –  absolute number
                  –  relative number
               –  window-integrity number
            –  apply-groups reference
            –  apply-groups-exclude reference
            –  delay keyword
            –  description string
            –  interval number
            –  last-reported-delay-hold number
            –  reporting boolean
            –  sample-window
               –  multiplier number
               –  threshold
                  –  absolute number
                  –  relative number
               –  window-integrity number
            –  twamp-light
               –  allow-egress-remark-dscp boolean
               –  allow-ipv6-udp-checksum-zero boolean
               –  dest-udp-port number
               –  dscp keyword
               –  fc keyword
               –  ipv6-destination-discovery
                  –  admin-state keyword
                  –  discovery-interval number
                  –  discovery-timer number
                  –  update-interval number
               –  pad-tlv-size number
```


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configure test-oam link-measurement measurement-template twamp-light profile

```
                - profile keyword
                - return-path
                  - link boolean
                - src-udp-port number
                - timestamp-format keyword
                - ttl number
            - unidirectional-measurement keyword
      - mpls
         - apply-groups reference
         - apply-groups-exclude reference
         - echo-request-downstream-map keyword
         - timestamp-format keyword
      - mpls-dm
         - admin-state keyword
         - apply-groups reference
         - apply-groups-exclude reference
      - twamp
         - apply-groups reference
         - apply-groups-exclude reference
         - server
            - admin-state keyword
            - allow-ipv6-udp-checksum-zero boolean
            - apply-groups reference
            - apply-groups-exclude reference
            - enforce-test-session-start-time boolean
            - inactivity-timeout number
            - max-connections number
            - max-sessions number
            - prefix (ipv4-prefix | ipv6-prefix)
               - apply-groups reference
               - apply-groups-exclude reference
               - description string
               - max-connections number
               - max-sessions number
         - twamp-light
            - apply-groups reference
            - apply-groups-exclude reference
            - inactivity-timeout number
            - source-udp-port-pools
               - port number
                  - apply-groups reference
                  - apply-groups-exclude reference
                  - pool-type keyword
```


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3.47.1 test-oam command descriptions

test-oam

Synopsis	Enter the **test-oam** context
Context	**configure** test-oam
Tree	test-oam
Introduced	16.0.R4
Platforms	All

icmp

Synopsis	Enter the **icmp** context
Context	**configure** test-oam icmp
Tree	icmp
Introduced	20.10.R1
Platforms	All

ipv6

Synopsis	Enter the **ipv6** context
Context	**configure** test-oam icmp ipv6
Tree	ipv6
Introduced	22.7.R1
Platforms	All

length-field *boolean*

Synopsis	Use length field in ICMPv6 responses
Context	**configure** test-oam icmp ipv6 length-field *boolean*
Tree	length-field
Default	false
Introduced	22.7.R1
Platforms	All

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maximum-original-datagram *boolean*

Synopsis	ICMPv6 traceroute responses with largest datagram
Context	**configure** test-oam icmp ipv6 maximum-original-datagram *boolean*
Tree	maximum-original-datagram
Description	When configured to **true**, this command enables the original datagram field of the ICMPv6 error message to be a maximum of 1232 bytes. When configured to **false**, the original datagram field of the ICMPv6 error message smaller than 1232 bytes be built smaller.
Default	false
Introduced	22.7.R1
Platforms	All

ping-template [name] *string*

Synopsis	Enter the **ping-template** list instance
Context	**configure** test-oam icmp ping-template *string*
Tree	ping-template
Description	Commands in this context define ping timers and thresholds that verify connectivity and the the operational state of the IP interface.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**name**] *string*

Synopsis	Ping template name
Context	**configure** test-oam icmp ping-template *string*
Tree	ping-template
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description

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Context	**configure** test-oam icmp ping-template *string* description *string*
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dot1p *number*

Synopsis	Dot1p in Ethernet header of outgoing ping packets
Context	**configure** test-oam icmp ping-template *string* dot1p *number*
Tree	dot1p
Range	0 to 7
Default	7
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dscp *keyword*

Synopsis	DSCP value used in the outgoing ping packet
Context	**configure** test-oam icmp ping-template *string* dscp *keyword*
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Default	nc1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

failure-threshold *number*

Synopsis	Failure threshold to declare inter-connectivity down
Context	**configure** test-oam icmp ping-template *string* failure-threshold *number*
Tree	failure-threshold
Range	2 to 10

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Default	3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number*

Synopsis	Packet transmit interval
Context	**configure** test-oam icmp ping-template *string* interval *number*
Tree	interval
Range	1 to 60
Units	seconds
Default	60
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

reactivation-failure-threshold *number*

Synopsis	Threshold of consecutive failures at reactivation
Context	**configure** test-oam icmp ping-template *string* reactivation-failure-threshold *number*
Tree	reactivation-failure-threshold
Description	This command configures the number of consecutive failures that must occur when transmitting at the reactivation interval without success before the transmission interval is changed to the standard interval.
Range	1 to 10
Default	4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

reactivation-interval *number*

Synopsis	Ping reactivation interval
Context	**configure** test-oam icmp ping-template *string* reactivation-interval *number*
Tree	reactivation-interval
Description	This command configures the packet transmit interval used when the IP interface becomes operationally down because of a ping template failure after receiving a successful response to the previous ICMP echo request.

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Range	1 to 60
Units	seconds
Default	1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

reactivation-threshold *number*

Synopsis	Success threshold to declare inter-connectivity up
Context	**configure** test-oam icmp ping-template *string* reactivation-threshold *number*
Tree	reactivation-threshold
Description	This command configures the minimum number of consecutive successful responses of ICMP replies that must occur before the IP interface transitions from operationally down (due to ping validation failure) to operationally up. This value is a stability metric intended to prevent flapping.
Range	1 to 10
Default	3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

reactivation-timeout *number*

Synopsis	Reactivation wait time before packet is declared lost
Context	**configure** test-oam icmp ping-template *string* reactivation-timeout *number*
Tree	reactivation-timeout
Range	1 to 60
Units	seconds
Default	1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

size *number*

Synopsis	Data field size of the outgoing ICMP echo packet
Context	**configure** test-oam icmp ping-template *string* size *number*
Tree	size

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Range	12 to 9786
Units	octets
Default	56
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

timeout *number*

Synopsis	Wait time before ICMP echo request is declared lost
Context	**configure** test-oam icmp ping-template *string* timeout *number*
Tree	timeout
Range	1 to 60
Units	seconds
Default	5
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ttl *number*

Synopsis	TTL value for the outgoing ping packet
Context	**configure** test-oam icmp ping-template *string* ttl *number*
Tree	ttl
Description	This command configures the TTL value used in the outgoing ping packet. The tested interface must be directly connected on the same subnet.
Range	1 to 255
Default	1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

link-measurement

Synopsis	Enter the **link-measurement** context
Context	**configure** test-oam link-measurement
Tree	link-measurement

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Description	Commands in this context configure the link measurement template attributes that are inherited on associated IP interfaces for delay reporting to the routing engine.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

measurement-template [template-name] *string*

Synopsis	Enter the **measurement-template** list instance
Context	**configure** test-oam link-measurement measurement-template *string*
Tree	measurement-template
Description	Commands in this context configure the attributes of the measurement template that can be assigned to an IP interface. Changes can be made without disabling the template, although some modifications cause the test on associated IP interfaces to terminate and restart. A measurement template can be removed if no interfaces reference it.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**template-name**] *string*

Synopsis	Measurement template name
Context	**configure** test-oam link-measurement measurement-template *string*
Tree	measurement-template
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the measurement template
Context	**configure** test-oam link-measurement measurement-template *string* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable

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Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

aggregate-sample-window

Synopsis	Enter the **aggregate-sample-window** context
Context	**configure** test-oam link-measurement measurement-template *string* aggregate-sample-window
Tree	aggregate-sample-window
Description	Commands in this context configure the attributes of the aggregate sample window used with the measurement template assigned to an IP interface. The aggregate sample window is the collection of sample windows.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *number*

Synopsis	Number of sample windows in the aggregate sample window
Context	**configure** test-oam link-measurement measurement-template *string* aggregate-sample-window multiplier *number*
Tree	multiplier
Range	1 to 12
Default	12
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

threshold

Synopsis	Enter the **threshold** context
Context	**configure** test-oam link-measurement measurement-template *string* aggregate-sample-window threshold
Tree	threshold
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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absolute *number*

Synopsis	Absolute delta for delay measurement reporting
Context	**configure** test-oam link-measurement measurement-template *string* aggregate-sample-window threshold absolute *number*
Tree	absolute
Description	This command configures the absolute minimum delta by which a new delay measurement must differ from the previously reported measurement to be reported to the routing engine. If an absolute value is not configured the threshold is disabled.
Range	1 to 100000
Units	microseconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

relative *number*

Synopsis	Relative delta for measurement reporting
Context	**configure** test-oam link-measurement measurement-template *string* aggregate-sample-window threshold relative *number*
Tree	relative
Description	This command configures the relative minimum delta by which a new delay measurement must differ from the previously reported measurement to be reported to the routing engine. If a relative value is not configured, the threshold is disabled.
Range	1 to 100
Units	percent
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

window-integrity *number*

Synopsis	Sample percentage required for window integrity report
Context	**configure** test-oam link-measurement measurement-template *string* aggregate-sample-window window-integrity *number*
Tree	window-integrity
Description	This command configures the percentage value that is used to determine whether the aggregate sample window is integral, by comparing the number of samples received from the sample window to the percentage configured.

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The configured percentage translates to a required sample window count that must be included in the aggregate sample window. The number of samples is computed as follows:

(window-integrity (%)) x (((aggregate-sample-window length (s)) / (sample-window length (s)))

If the number of samples in the aggregate sample window is equal to or greater than the computed number of required samples, the sample window has integrity and the aggregate sample window result is compared to the configured sample window thresholds.

If the count is less than the computed number of required samples, the aggregate sample window does not have integrity and the value is not considered as representative. In this case the aggregate sample window results are not compared to the configured sample window thresholds.

If this parameter is not configured, integrity checking is disabled and all results are compared to the configured thresholds.

Range	1 to 100
Units	percent
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

delay *keyword*

Synopsis	Delay measurement statistic type
Context	**configure** test-oam link-measurement measurement-template *string* delay *keyword*
Tree	delay
Description	This command configures the type of delay measurement statistic used in the sample window and aggregate sample window.
Options	min, max, avg
Default	min
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** test-oam link-measurement measurement-template *string* description *string*
Tree	description
String Length	1 to 80

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Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number*

Synopsis	Interval between test packet transmissions
Context	**configure** test-oam link-measurement measurement-template *string* interval *number*
Tree	interval
Range	1 to 10
Units	seconds
Default	1
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

last-reported-delay-hold *number*

Synopsis	Time to wait to flush the last reported delay
Context	**configure** test-oam link-measurement measurement-template *string* last-reported-delay-hold *number*
Tree	last-reported-delay-hold
Description	This command configures the timer that specifies the wait time before the last reported delay measurement is flushed after a link measurement test enters the operationally down state. The aging timer delays the flushing of the last reported delay metric to the routing engine. This timer starts a countdown to zero when an administrative function causes the operational state of the test on that specific interface to transition from up to down. If the timer expires before the operational state transitions to up, the previously reported value is flushed. The Delay Measurement Last Reported indicates “Cleared”. The timestamp indicates the time of the clear event. The Triggered By indicates “Expired”. If the administrative state recovers to operationally up before the expiration of the timer, the previous reported value is not flushed. The aging timer does not apply to failure conditions that do not affect the administrative state of the interface, for example interface failure or routing changes.
Range	0 | 1 to 86400
Units	seconds
Default	86400
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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reporting *boolean*

Synopsis	Report behavior for values for the configured threshold
Context	**configure** test-oam link-measurement measurement-template *string* reporting *boolean*
Tree	reporting
Description	When configured to **true**, the system reports a reached threshold to the routing engine.Reaching a configured **sample-window** or **aggregate-sample-window** indicates a value of interest. When configured to **false**, values reaching thresholds are not reported to the routing engine. In both enabled and disabled cases, the sample-window and aggregate-sample-window information and computed values are stored on the node until overwriting occurs.
Default	true
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sample-window

Synopsis	Enter the **sample-window** context
Context	**configure** test-oam link-measurement measurement-template *string* sample-window
Tree	sample-window
Description	Commands in this context configure sample window attributes used when the measurement template is assigned to an IP interface. The sample window is the collection of individual probe results over a defined period.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *number*

Synopsis	Multiplier of interval used for sample window length
Context	**configure** test-oam link-measurement measurement-template *string* sample-window multiplier *number*
Tree	multiplier
Description	This command configures the number of probe results that should be in the sample window. For example, a multiplier of 10 and an interval of 5 equals 50 probes being transmitted from an individual sample window. Consequently, 50 probe results are expected within the 50 second duration that the sample window is “In-progress”.
Range	1 to 900

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Default	10
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

threshold

Synopsis	Enter the **threshold** context
Context	**configure** test-oam link-measurement measurement-template *string* sample-window threshold
Tree	threshold
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

absolute *number*

Synopsis	Absolute delta for delay measurement reporting
Context	**configure** test-oam link-measurement measurement-template *string* sample-window threshold absolute *number*
Tree	absolute
Description	This command configures the absolute minimum delta by which a new delay measurement must differ from the previously reported measurement to be reported to the routing engine. If an absolute value is not configured the threshold is disabled.
Range	1 to 100000
Units	microseconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

relative *number*

Synopsis	Relative delta for delay measurement reporting
Context	**configure** test-oam link-measurement measurement-template *string* sample-window threshold relative *number*
Tree	relative
Description	This command configures the relative minimum delta by which a new delay measurement must differ from the previously reported measurement to be reported to the routing engine.

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If a relative value is not configured, the threshold is disabled.

Range	1 to 500
Units	percent
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

window-integrity *number*

Synopsis	Sample percentage required for window integrity report
Context	**configure** test-oam link-measurement measurement-template *string* sample-window window-integrity *number*
Tree	window-integrity
Description	This command configures the percentage value that is used to determine whether the sample window has enough samples to be considered representative for that window (integrity), by comparing the number of samples received from the sample window to the percentage configured. The configured percentage considers the interval of probes and the length of the sample window to determine the number of packets required in the sample: (window-integrity (%)) x ((sample-window length (s)) / pps per test (interval)) If the count is less than the computed number of required samples, the sample window does not have integrity and the sample window results are not compared to configured sample window thresholds. If the count is equal to or greater than the computed number of required samples, the sample window has integrity and the aggregate sample window result is compared to the configured sample window thresholds. If the count is less than the computed number of required samples, the sample window does not have integrity and the value is not considered as representative. In this case the sample window results are not compared to the configured sample window thresholds. If this parameter is not configured, integrity checking is disabled and all results are compared to the configured thresholds.
Range	1 to 100
Units	percent
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

twamp-light

Synopsis	Enter the **twamp-light** context

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Context	**configure** test-oam link-measurement measurement-template *string* twamp-light
Tree	twamp-light
Description	Commands in this context configure TWAMP Light attributes that are used with the measurement template when assigned to IP interfaces.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

allow-egress-remark-dscp *boolean*

Synopsis	Allow overwrite of DSCP value by the egress QoS policy
Context	**configure** test-oam link-measurement measurement-template *string* twamp-light allow-egress-remark-dscp *boolean*
Tree	allow-egress-remark-dscp
Description	When configured to **true**, the egress QoS process is able to modify the DSCP based on the egress QoS configuration and expose the DSCP to egress DSCP processing rules. When configured to **false**, the egress QoS process uses the DSCP as configured and bypasses egress QoS DSCP marking. If the **configure qos network egress remark-trusted force-egress-marking** command is configured for the network egress QoS profile, the egress QoS process is applied and the DSCP can be overwritten regardless of the **allow-egress-remark-dscp** configuration.
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

allow-ipv6-udp-checksum-zero *boolean*

Synopsis	Process IPv6 packets with UDP check sum zero
Context	**configure** test-oam link-measurement measurement-template *string* twamp-light allow-ipv6-udp-checksum-zero *boolean*
Tree	allow-ipv6-udp-checksum-zero
Description	When configured to **true**, processing of IPv6 packets that arrive with a UDP checksum of zero is allowed. The destination UDP ports that are registered as TWAMP Test packets in the template allow this behavior. When configured to **false**, IPv6 packets that arrive with a UDP checksum of zero are discarded.
Default	false
Introduced	21.7.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dest-udp-port *number*

Synopsis	Destination UDP port used by link measurement tests
Context	**configure** test-oam link-measurement measurement-template *string* twamp-light dest-udp-port *number*
Tree	dest-udp-port
Description	This command configures the destination UDP port on outbound TWAMP Light measurement packets sent from the session controller. The destination UDP port must match the UDP port value configured on the TWAMP Light reflector that responds to this specific TWAMP Light test.
Range	1 to 65535
Default	862
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dscp *keyword*

Synopsis	DSCP copied to TWAMP Light echo request packet header
Context	**configure** test-oam link-measurement measurement-template *string* twamp-light dscp *keyword*
Tree	dscp
Description	This command configures the DSCP to be copied into the IP header of each TWAMP Light echo request packet launched for the test.
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Default	nc1
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc *keyword*

Synopsis	Forwarding class name for the TWAMP Light packets

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Context	**configure** test-oam link-measurement measurement-template *string* twamp-light fc *keyword*
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Default	h1
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6-destination-discovery

Synopsis	Enter the **ipv6-destination-discovery** context
Context	**configure** test-oam link-measurement measurement-template *string* twamp-light ipv6-destination-discovery
Tree	ipv6-destination-discovery
Description	Commands in this context configure IPv6 discovery of a directly-connected IPv6 peer address.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of IPv6 auto destination discovery
Context	**configure** test-oam link-measurement measurement-template *string* twamp-light ipv6-destination-discovery admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

discovery-interval *number*

Synopsis	Transmission frequency for discovery packets
Context	**configure** test-oam link-measurement measurement-template *string* twamp-light ipv6-destination-discovery discovery-interval *number*
Tree	discovery-interval

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Description	This command configures transmission frequency of the discovery packet to the all-routers multicast group (ff02::2) to discover the link-local address of the peer. This frequency is used during the **discover-timer** interval.
Range	1 to 10
Units	seconds
Default	10
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

discovery-timer *number*

Synopsis	Maximum time to remain in the discovery phase
Context	**configure** test-oam link-measurement measurement-template *string* twamp-light ipv6-destination-discovery discovery-timer *number*
Tree	discovery-timer
Description	This command configures the amount of time to transmit peer discovery packets at the **discovery-interval**. The timer starts when the IPv6 protocols is enabled under the **configure router interface if-attribute delay dynamic twamp-light ipv6** context. At the expiration of the **discovery-interval** or when a peer is discovered, whichever comes first, the probe interval changes to the value configured for the **update-interval**.
Range	1 to 1800
Units	seconds
Default	60
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

update-interval *number*

Synopsis	Transmission frequency to maintain the peer address
Context	**configure** test-oam link-measurement measurement-template *string* twamp-light ipv6-destination-discovery update-interval *number*
Tree	update-interval
Range	0 | 1 to 3600
Units	seconds
Default	600
Introduced	22.7.R1

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pad-tlv-size *number*

Synopsis	Optional PAD TLV size
Context	**configure** test-oam link-measurement measurement-template *string* twamp-light pad-tlv-size *number*
Tree	pad-tlv-size
Description	This command enables a STAMP PDU to include the PAD TLV. This increases the size of the STAMP PDU by the size of the added TLV. The PAD TLV includes an all zeros pattern.
Range	4 to 9714
Units	bytes
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

profile *keyword*

Synopsis	QoS profile for packet treatment in local node
Context	**configure** test-oam link-measurement measurement-template *string* twamp-light profile *keyword*
Tree	profile
Description	This command specifies if the packets should be treated as in or out of profile as they move through the local node.
Options	in, out
Default	in
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

return-path

Synopsis	Enter the **return-path** context
Context	**configure** test-oam link-measurement measurement-template *string* twamp-light return-path
Tree	return-path
Description	Commands in this context configure the return-path TLV carried in the STAMP PDU.
Introduced	22.7.R1

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Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

link *boolean*

Synopsis The Return Path sub-TLV specifying link

Context **configure** test-oam link-measurement measurement-template *string* twamp-light return-path link *boolean*

Tree link

Description When configured to **true**, the system includes the **return-path** TLV link. The link sub-tlv instructs a Session-Reflector configured for type **stamp** to use the receiving logical IP interface for the transmission of the response packet from the reflector to the **session-sender**. The destination of the reflected packet must be installed in the forwarding table and reachable out the IP interface or the packet is dropped by the Session-Reflector. When there are parallel non-equal cost return paths between the Session-Reflector and the Session-Sender the response packet can only be returned on the lowest cost path.

When configured to **false**, the Return Path TLV carried in the STAMP PDU is not included with the test packet.

Default false

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

src-udp-port *number*

Synopsis Fixed source UDP port for link measurement tests

Context **configure** test-oam link-measurement measurement-template *string* twamp-light src-udp-port *number*

Tree src-udp-port

Description This command specifies a source UDP port for link measurement tests.

Unless required, Nokia suggests that the link measurement dynamically select an available source UDP port from the dynamic range. Before a UDP port in the configurable range can be configured as a source it must be owned by the application. Use the **configure test-oam twamp twamp-light source-udp-port-pools port pool-type** command to map the port range to the application.

By default a source UDP port allocates from the dynamic range. The configuration of the source port should only be configured when required for interoperability. When the source IP, destination IP, and destination UPD port are the same for a test, the source UDP port must be different in order to uniquely identify the session.

Range 64374 to 64383

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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timestamp-format *keyword*

Synopsis	Format of the timestamp used in TWAMP Light PDU
Context	**configure** test-oam link-measurement measurement-template *string* twamp-light timestamp-format *keyword*
Tree	timestamp-format
Description	This command configures the format of the timestamp used in the TWAMP Light PDU and places the requested timestamp format in the packet using the appropriate epoch. This is unrelated to any time distribution protocol used to synchronize time between clocks.
Options	ntp, ptp
Default	ntp
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ttl *number*

Synopsis	Time to live value used in the TWAMP Light test packet
Context	**configure** test-oam link-measurement measurement-template *string* twamp-light ttl *number*
Tree	ttl
Range	1 to 255
Default	1
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

unidirectional-measurement *keyword*

Synopsis	Method used to compute the unidirectional delay value
Context	**configure** test-oam link-measurement measurement-template *string* unidirectional-measurement *keyword*
Tree	unidirectional-measurement
Description	This command specifies the unidirectional delay computation method as the actual forward delay (calculated using T2-T1 timestamps) or as derived using the round-trip delay divided by two (required if nodal clocks are not synchronized using an accurate time-synchronization method or protocol such as PTP).
Options	derived, actual

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Default	derived
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mpls

Synopsis	Enter the **mpls** context
Context	**configure** test-oam mpls
Tree	mpls
Introduced	23.7.R1
Platforms	All

echo-request-downstream-map *keyword*

Synopsis	Format of the downstream mapping TLV
Context	**configure** test-oam mpls echo-request-downstream-map *keyword*
Tree	echo-request-downstream-map
Description	This command specifies the format of the downstream mapping TLV to use in all LSP trace packets and LDP tree trace packets originated on this node. The following downstream mapping TLVs are supported: the original Downstream Mapping (DSMAP) TLV, defined in RFC 4379 (obsoleted by RFC 8029) and the Downstream Detailed Mapping (DDMAP) TLV, defined in RFC 6424. See the "DDMAP TLV" section in the *7450 ESS, 7750 SR, 7950 XRS, and VSR OAM and Diagnostics Guide* for more information.
Options	dsmap, ddmap
Default	dsmap
Introduced	23.7.R1
Platforms	All

timestamp-format *keyword*

Synopsis	Timestamp format for MPLS ping request and reply PDUs
Context	**configure** test-oam mpls timestamp-format *keyword*
Tree	timestamp-format
Options	rfc4379, unix
Default	unix

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Introduced	23.7.R1
Platforms	All

mpls-dm

Synopsis	Enter the **mpls-dm** context
Context	**configure** test-oam mpls-dm
Tree	mpls-dm
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of MPLS DM packet processing
Context	**configure** test-oam mpls-dm admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

twamp

Synopsis	Enter the **twamp** context
Context	**configure** test-oam twamp
Tree	twamp
Introduced	16.0.R4
Platforms	All

server

Synopsis	Enter the **server** context
Context	**configure** test-oam twamp server
Tree	server
Introduced	16.0.R4

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Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the TWAMP server
Context	**configure** test-oam twamp server admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

allow-ipv6-udp-checksum-zero *boolean*

Synopsis	Process IPv6 packets with a zero UDP checksum
Context	**configure** test-oam twamp server allow-ipv6-udp-checksum-zero *boolean*
Tree	allow-ipv6-udp-checksum-zero
Description	When configured to **true**, this command configures the acceptance of IPv6 packets with UDP checksums of 0. This optional configuration allows the router to process arriving IPv6 TWAMP Test packets that contain IPv6 UDP checksum of 0x0000. The UDP port specific to this TWAMP Light test bypasses the default discard IPv6 UDP checksum 0x0000. If this optional command is not configured, IPv6 UDP checksum 0x000 arriving packets are discarded. When configured to **false**, packets that arrive with an IPv6 UDP checksum of 0x0000 are discarded.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

enforce-test-session-start-time *boolean*

Synopsis	Discard TWAMP packets before test-session start time
Context	**configure** test-oam twamp server enforce-test-session-start-time *boolean*
Tree	enforce-test-session-start-time
Description	When configured to **true**, the router checks the signalled test-session start time against the server time and discards TWAMP test packets that arrive before the negotiated test-session start time.

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When configured to **false**, the router processes all TWAMP test packets without checking the test-session start time against the server time.

Default	true
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

inactivity-timeout *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Inactivity timeout for TWAMP control connections
Context	**configure** test-oam twamp server inactivity-timeout *number*
Tree	inactivity-timeout
Range	60 to 3600
Units	seconds
Default	900
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-connections *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Limit of concurrent TWAMP server control connections
Context	**configure** test-oam twamp server max-connections *number*
Tree	max-connections
Range	0 to 64
Default	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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max-sessions *number*

WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of concurrent TWAMP server test sessions
Context	**configure** test-oam twamp server max-sessions *number*
Tree	max-sessions
Range	0 to 128
Default	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

prefix [ip-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **prefix** list instance
Context	**configure** test-oam twamp server prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Max. Instances	100
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**ip-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Prefix to match against TWAMP client address
Context	**configure** test-oam twamp server prefix *(ipv4-prefix | ipv6-prefix)*
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	**configure** test-oam twamp server prefix *(ipv4-prefix | ipv6-prefix)* description *string*

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Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-connections *number*

Synopsis	Maximum number of control connections for TWAMP prefix
Context	**configure** test-oam twamp server prefix *(ipv4-prefix* | *ipv6-prefix)* max-connections *number*
Tree	max-connections
Range	0 to 64
Default	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-sessions *number*

Synopsis	Maximum concurrent TWAMP test sessions based on prefix
Context	**configure** test-oam twamp server prefix *(ipv4-prefix* | *ipv6-prefix)* max-sessions *number*
Tree	max-sessions
Range	0 to 128
Default	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

twamp-light

Synopsis	Enter the **twamp-light** context
Context	**configure** test-oam twamp twamp-light
Tree	twamp-light
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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inactivity-timeout *number*

Synopsis	Time to maintain stale state on the session reflector
Context	**configure** test-oam twamp twamp-light inactivity-timeout *number*
Tree	inactivity-timeout
Range	10 to 100
Units	seconds
Default	100
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-udp-port-pools

Synopsis	Enter the **source-udp-port-pools** context
Context	**configure** test-oam twamp twamp-light source-udp-port-pools
Tree	source-udp-port-pools
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port [port-number] *number*

Synopsis	Enter the **port** list instance
Context	**configure** test-oam twamp twamp-light source-udp-port-pools port *number*
Tree	port
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**port-number**] *number*

Synopsis	Source UDP port pools port number
Context	**configure** test-oam twamp twamp-light source-udp-port-pools port *number*
Tree	port
Range	64374 to 64383
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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pool-type *keyword*

Synopsis	Pool type of an application pool
Context	**configure** test-oam twamp twamp-light source-udp-port-pools port *number* pool-type *keyword*
Tree	pool-type
Description	This command maps the specified source UDP port to the TWAMP Light application allowed to configure the source UDP port. OAM-PM IP tests can only configure the source UDP port when the port pool UDP source port is configured with a **pool-type oam-pm**. The **test-oam link-measurement measurement-template** can only configure the **src-udp-port** when the port pool UDP source port is configured with **pool-type link-measurement**. This command maps the specified source UDP port to the application allowed to configure the source UDP port. The OAM-PM IP family of tests can only configure the source UDP port when the port pool UDP source port is configured with a pool-type oam-pm. The test-oam link-measurement measurement-template can only configure the src-udp-port when the port pool UDP source port is configured with a pool-type link-measurement. A pool-type cannot be changed if its current application is a test (either an oam-pm session or link-measurement template) and is configured to use the specified port, regardless of the administrative or operational state. The configuration reference linking to the source UDP prevents the change.
Options	oam-pm, link-measurement
Default	oam-pm
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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3.48 vrrp commands

```
configure
   –  vrrp
      –  apply-groups reference
      –  apply-groups-exclude reference
      –  policy number
         –  admin-state keyword
         –  apply-groups reference
         –  apply-groups-exclude reference
         –  context string
         –  delta-in-use-limit number
         –  description string
         –  priority-event
            –  host-unreachable (ipv4-address-with-zone | ipv6-address-with-zone)
               –  apply-groups reference
               –  apply-groups-exclude reference
               –  drop-count number
               –  hold-clear number
               –  hold-set number
               –  padding-size number
               –  priority
                  –  event-type keyword
                  –  priority-level number
               –  request-interval number
               –  timeout number
            –  lag-port-down string
               –  apply-groups reference
               –  apply-groups-exclude reference
               –  hold-clear number
               –  hold-set number
               –  number-down number
                  –  apply-groups reference
                  –  apply-groups-exclude reference
                  –  priority
                     –  event-type keyword
                     –  priority-level number
               –  weight-down number
                  –  apply-groups reference
                  –  apply-groups-exclude reference
                  –  priority
                     –  event-type keyword
                     –  priority-level number
            –  mc-ipsec-non-forwarding number
               –  apply-groups reference
               –  apply-groups-exclude reference
               –  hold-clear number
               –  hold-set number
               –  priority
                  –  event-type keyword
                  –  priority-level number
            –  port-down string
               –  apply-groups reference
               –  apply-groups-exclude reference
               –  hold-clear number
               –  hold-set number
               –  priority
                  –  event-type keyword
                  –  priority-level number
            –  route-unknown (ipv4-prefix | ipv6-prefix)
               –  apply-groups reference
```


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configure vrrp policy priority-event route-unknown apply-groups-exclude

```
                - apply-groups-exclude reference
                - hold-clear number
                - hold-set number
                - less-specific
                  - allow-default boolean
                - next-hop (ipv4-address-with-zone | ipv6-address-with-zone)
                - priority
                  - event-type keyword
                  - priority-level number
                - protocol keyword
```


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3.48.1 vrrp command descriptions

vrrp

Synopsis	Enter the **vrrp** context
Context	**configure** vrrp
Tree	vrrp
Introduced	16.0.R1
Platforms	All

policy [policy-id] *number*

Synopsis	Enter the **policy** list instance
Context	**configure** vrrp policy *number*
Tree	policy
Introduced	16.0.R1
Platforms	All

[**policy-id**] *number*

Synopsis	Policy ID
Context	**configure** vrrp policy *number*
Tree	policy
Range	1 to 9999
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of VRRP priority control policy
Context	**configure** vrrp policy *number* admin-state *keyword*
Tree	admin-state
Options	enable, disable
Default	enable

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Introduced	16.0.R1
Platforms	All

context *string*

WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service name to which this policy applies
Context	**configure** vrrp policy *number* context *string*
Tree	context
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

delta-in-use-limit *number*

Synopsis	Limit on the delta priority control events
Context	**configure** vrrp policy *number* delta-in-use-limit *number*
Tree	delta-in-use-limit
Range	1 to 254
Default	1
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	**configure** vrrp policy *number* description *string*
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

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priority-event

Synopsis	Enter the **priority-event** context
Context	**configure** vrrp policy *number* priority-event
Tree	priority-event
Introduced	16.0.R1
Platforms	All

host-unreachable [ip-address] *(ipv4-address-with-zone | ipv6-address-with-zone)*

Synopsis	Enter the **host-unreachable** list instance
Context	**configure** vrrp policy *number* priority-event host-unreachable *(ipv4-address-with-zone | ipv6-address-with-zone)*
Tree	host-unreachable
Introduced	16.0.R1
Platforms	All

[ip-address] *(ipv4-address-with-zone | ipv6-address-with-zone)*

Synopsis	Host IP address that receives a constant ping probe
Context	**configure** vrrp policy *number* priority-event host-unreachable *(ipv4-address-with-zone | ipv6-address-with-zone)*
Tree	host-unreachable
Description	This command configures the host IP address for which the specific host unreachable priority event monitors connectivity with a continuous ICMP echo request (ping) probe.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

drop-count *number*

Synopsis	Threshold for consecutive message send attempts
Context	**configure** vrrp policy *number* priority-event host-unreachable *(ipv4-address-with-zone | ipv6-address-with-zone)* drop-count *number*
Tree	drop-count
Range	1 to 60
Default	3

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Introduced	16.0.R1
Platforms	All

hold-clear *number*

Synopsis	Delay time for a cleared event on the router instance
Context	**configure** vrrp policy *number* priority-event host-unreachable *(ipv4-address-with-zone | ipv6-address-with-zone)* hold-clear *number*
Tree	hold-clear
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	All

hold-set *number*

Synopsis	Hold time before transitioning to cleared state
Context	**configure** vrrp policy *number* priority-event host-unreachable *(ipv4-address-with-zone | ipv6-address-with-zone)* hold-set *number*
Tree	hold-set
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	All

padding-size *number*

Synopsis	Packet length padding of the ICMP packet
Context	**configure** vrrp policy *number* priority-event host-unreachable *(ipv4-address-with-zone | ipv6-address-with-zone)* padding-size *number*
Tree	padding-size
Range	0 to 16384
Units	bytes
Default	56
Introduced	16.0.R1
Platforms	All

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priority

Synopsis	Enter the **priority** context
Context	**configure** vrrp policy *number* priority-event host-unreachable *(ipv4-address-with-zone | ipv6-address-with-zone)* priority
Tree	priority
Introduced	16.0.R1
Platforms	All

event-type *keyword*

Synopsis	Effect of priority-level value on base priority value
Context	**configure** vrrp policy *number* priority-event host-unreachable *(ipv4-address-with-zone | ipv6-address-with-zone)* priority event-type *keyword*
Tree	event-type
Options	delta, explicit
Default	delta
Introduced	16.0.R1
Platforms	All

priority-level *number*

Synopsis	Priority level associated with this event
Context	**configure** vrrp policy *number* priority-event host-unreachable *(ipv4-address-with-zone | ipv6-address-with-zone)* priority priority-level *number*
Tree	priority-level
Range	1 to 254
Introduced	16.0.R1
Platforms	All

request-interval *number*

Synopsis	Time interval between consecutive ICMP echo requests
Context	**configure** vrrp policy *number* priority-event host-unreachable *(ipv4-address-with-zone | ipv6-address-with-zone)* request-interval *number*
Tree	request-interval

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Range	1 to 60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout for ICMP echo request messages
Context	**configure** vrrp policy *number* priority-event host-unreachable *(ipv4-address-with-zone | ipv6-address-with-zone)* timeout *number*
Tree	timeout
Range	1 to 60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

lag-port-down [lag-name] *string*

Synopsis	Enter the **lag-port-down** list instance
Context	**configure** vrrp policy *number* priority-event lag-port-down *string*
Tree	lag-port-down
Introduced	16.0.R1
Platforms	All

[**lag-name**] *string*

Synopsis	LAG name
Context	**configure** vrrp policy *number* priority-event lag-port-down *string*
Tree	lag-port-down
String Length	1 to 27
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

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hold-clear *number*

Synopsis	Delay time for a cleared event on the router instance
Context	**configure** vrrp policy *number* priority-event lag-port-down *string* hold-clear *number*
Tree	hold-clear
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	All

hold-set *number*

Synopsis	Hold time before transitioning to cleared state
Context	**configure** vrrp policy *number* priority-event lag-port-down *string* hold-set *number*
Tree	hold-set
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	All

number-down [number-of-lag-ports-down] *number*

Synopsis	Enter the **number-down** list instance
Context	**configure** vrrp policy *number* priority-event lag-port-down *string* number-down *number*
Tree	number-down
Introduced	16.0.R1
Platforms	All

[**number-of-lag-ports-down**] *number*

Synopsis	Threshold of down LAG ports that create a set event
Context	**configure** vrrp policy *number* priority-event lag-port-down *string* number-down *number*
Tree	number-down
Range	1 to 64
Notes	This element is part of a list key.

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Introduced	16.0.R1
Platforms	All

priority

Synopsis	Enter the **priority** context
Context	**configure** vrrp policy *number* priority-event lag-port-down *string* number-down *number* priority
Tree	priority
Introduced	16.0.R1
Platforms	All

event-type *keyword*

Synopsis	Effect of priority-level value on base priority value
Context	**configure** vrrp policy *number* priority-event lag-port-down *string* number-down *number* priority event-type *keyword*
Tree	event-type
Options	delta, explicit
Default	delta
Introduced	16.0.R1
Platforms	All

priority-level *number*

Synopsis	Priority level associated with this event
Context	**configure** vrrp policy *number* priority-event lag-port-down *string* number-down *number* priority priority-level *number*
Tree	priority-level
Range	1 to 254
Introduced	16.0.R1
Platforms	All

weight-down [lag-ports-down-weight] *number*

Synopsis	Enter the **weight-down** list instance

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Context	**configure** vrrp policy *number* priority-event lag-port-down *string* weight-down *number*
Tree	weight-down
Introduced	16.0.R1
Platforms	All

[**lag-ports-down-weight**] *number*

Synopsis	LAG name for the reduced LAG ports
Context	**configure** vrrp policy *number* priority-event lag-port-down *string* weight-down *number*
Tree	weight-down
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

priority

Synopsis	Enter the **priority** context
Context	**configure** vrrp policy *number* priority-event lag-port-down *string* weight-down *number* priority
Tree	priority
Introduced	16.0.R1
Platforms	All

event-type *keyword*

Synopsis	Effect of priority-level value on base priority value
Context	**configure** vrrp policy *number* priority-event lag-port-down *string* weight-down *number* priority event-type *keyword*
Tree	event-type
Options	delta, explicit
Default	delta
Introduced	16.0.R1
Platforms	All

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priority-level *number*

Synopsis	Priority level associated with this event
Context	**configure** vrrp policy *number* priority-event lag-port-down *string* weight-down *number* priority priority-level *number*
Tree	priority-level
Range	1 to 254
Introduced	16.0.R1
Platforms	All

mc-ipsec-non-forwarding [tunnel-group-id] *number*

Synopsis	Enter the **mc-ipsec-non-forwarding** list instance
Context	**configure** vrrp policy *number* priority-event mc-ipsec-non-forwarding *number*
Tree	mc-ipsec-non-forwarding
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**tunnel-group-id**] *number*

Synopsis	IPSEC tunnel group monitored by priority control event
Context	**configure** vrrp policy *number* priority-event mc-ipsec-non-forwarding *number*
Tree	mc-ipsec-non-forwarding
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-clear *number*

Synopsis	Delay time for a cleared event on the router instance
Context	**configure** vrrp policy *number* priority-event mc-ipsec-non-forwarding *number* hold-clear *number*
Tree	hold-clear
Range	1 to 86400
Units	seconds

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-set *number*

Synopsis	Hold time before transitioning to cleared state
Context	**configure** vrrp policy *number* priority-event mc-ipsec-non-forwarding *number* hold-set *number*
Tree	hold-set
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority

Synopsis	Enter the **priority** context
Context	**configure** vrrp policy *number* priority-event mc-ipsec-non-forwarding *number* priority
Tree	priority
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-type *keyword*

Synopsis	Event type
Context	**configure** vrrp policy *number* priority-event mc-ipsec-non-forwarding *number* priority event-type *keyword*
Tree	event-type
Options	delta, explicit
Default	delta
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority-level *number*

Synopsis	Priority level associated with this event

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Context	**configure** vrrp policy *number* priority-event mc-ipsec-non-forwarding *number* priority priority-level *number*
Tree	priority-level
Range	1 to 254
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-down [port-id] *string*

Synopsis	Enter the **port-down** list instance
Context	**configure** vrrp policy *number* priority-event port-down *string*
Tree	port-down
Introduced	16.0.R1
Platforms	All

[**port-id**] *string*

Synopsis	Port ID for the reduced LAG ports
Context	**configure** vrrp policy *number* priority-event port-down *string*
Tree	port-down
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

hold-clear *number*

Synopsis	Delay time for a cleared event on the router instance
Context	**configure** vrrp policy *number* priority-event port-down *string* hold-clear *number*
Tree	hold-clear
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	All

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hold-set *number*

Synopsis	Hold time before transitioning to cleared state
Context	**configure** vrrp policy *number* priority-event port-down *string* hold-set *number*
Tree	hold-set
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	All

priority

Synopsis	Enter the **priority** context
Context	**configure** vrrp policy *number* priority-event port-down *string* priority
Tree	priority
Introduced	16.0.R1
Platforms	All

event-type *keyword*

Synopsis	Effect of priority-level value on base priority value
Context	**configure** vrrp policy *number* priority-event port-down *string* priority event-type *keyword*
Tree	event-type
Options	delta, explicit
Default	delta
Introduced	16.0.R1
Platforms	All

priority-level *number*

Synopsis	Priority level associated with this event
Context	**configure** vrrp policy *number* priority-event port-down *string* priority priority-level *number*
Tree	priority-level
Range	1 to 254
Introduced	16.0.R1

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Platforms	All

route-unknown [ip-prefix] *(ipv4-prefix | ipv6-prefix)*

Synopsis	Enter the **route-unknown** list instance
Context	**configure** vrrp policy *number* priority-event route-unknown *(ipv4-prefix | ipv6-prefix)*
Tree	route-unknown
Introduced	16.0.R1
Platforms	All

[**ip-prefix**] *(ipv4-prefix | ipv6-prefix)*

Synopsis	IP prefix of route monitored by priority control event
Context	**configure** vrrp policy *number* priority-event route-unknown *(ipv4-prefix | ipv6-prefix)*
Tree	route-unknown
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

hold-clear *number*

Synopsis	Delay time for a cleared event on the router instance
Context	**configure** vrrp policy *number* priority-event route-unknown *(ipv4-prefix | ipv6-prefix)* hold-clear *number*
Tree	hold-clear
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	All

hold-set *number*

Synopsis	Hold time before transitioning to cleared state
Context	**configure** vrrp policy *number* priority-event route-unknown *(ipv4-prefix | ipv6-prefix)* hold-set *number*
Tree	hold-set

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Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	All

less-specific

Synopsis	Enable the **less-specific** context
Context	**configure** vrrp policy *number* priority-event route-unknown *(ipv4-prefix | ipv6-prefix)* less-specific
Tree	less-specific
Introduced	16.0.R1
Platforms	All

allow-default *boolean*

Synopsis	Match on default route
Context	**configure** vrrp policy *number* priority-event route-unknown *(ipv4-prefix | ipv6-prefix)* less-specific allow-default *boolean*
Tree	allow-default
Default	false
Introduced	16.0.R1
Platforms	All

next-hop [ip-address] *(ipv4-address-with-zone | ipv6-address-with-zone)*

Synopsis	Add a list entry for **next-hop**
Context	**configure** vrrp policy *number* priority-event route-unknown *(ipv4-prefix | ipv6-prefix)* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)*
Tree	next-hop
Introduced	19.5.R1
Platforms	All

[ip-address] *(ipv4-address-with-zone | ipv6-address-with-zone)*

Synopsis	Next-hop IP address for a returned route prefix

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Context	**configure** vrrp policy *number* priority-event route-unknown *(ipv4-prefix | ipv6-prefix)* next-hop *(ipv4-address-with-zone | ipv6-address-with-zone)*
Tree	next-hop
Description	This command configures the next-hop IP address used to match the route prefix being monitored by the priority control event with the results of a route table lookup.
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

priority

Synopsis	Enter the **priority** context
Context	**configure** vrrp policy *number* priority-event route-unknown *(ipv4-prefix | ipv6-prefix)* priority
Tree	priority
Introduced	16.0.R1
Platforms	All

event-type *keyword*

Synopsis	Effect of priority-level value on base priority value
Context	**configure** vrrp policy *number* priority-event route-unknown *(ipv4-prefix | ipv6-prefix)* priority event-type *keyword*
Tree	event-type
Options	delta, explicit
Default	delta
Introduced	16.0.R1
Platforms	All

priority-level *number*

Synopsis	Priority level associated with this event
Context	**configure** vrrp policy *number* priority-event route-unknown *(ipv4-prefix | ipv6-prefix)* priority priority-level *number*
Tree	priority-level
Range	1 to 254

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Introduced	16.0.R1
Platforms	All

protocol *keyword*

Synopsis	Routing protocol as match criterion
Context	**configure** vrrp policy *number* priority-event route-unknown *(ipv4-prefix* | *ipv6-prefix)* protocol *keyword*
Tree	protocol
Options	bgp, ospf, isis, rip, static, bgp-vpn
Max. Instances	6
Introduced	16.0.R1
Platforms	All

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4 Deprecated and obsolete commands

This section lists the deprecated and obsolete commands in this major release.

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4.1 Deprecated commands

This chapter provides a list of commands that are marked as “status deprecated” in the Nokia YANG models and the MD-CLI and should no longer be used. Only releases in which commands are initially deprecated are included in this section. If applicable, the equivalent configuration groups command is also deprecated (but not explicitly listed).

See the SR OS Software Release Notes for more information.

4.1.1 23.3.R1

subscriber-mgmt commands:

- configure subscriber-mgmt radius-accounting-policy triggered-updates gtp-mobility

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4.2 Obsolete commands

This chapter provides a list of commands that are marked as “status obsolete” in the Nokia YANG models and the MD-CLI. These commands can no longer be used and are considered invalid. Only releases in which commands are initially obsoleted are included in this section. If applicable, the equivalent configuration groups command is also obsoleted (but not explicitly listed).

See the SR OS Software Release Notes for more information.

4.2.1 23.3.R1

aaa commands:

- configure aaa diameter peer-policy
- configure aaa diameter peer-policy applications
- configure aaa diameter peer-policy applications gx
- configure aaa diameter peer-policy applications gy
- configure aaa diameter peer-policy applications nasreq
- configure aaa diameter peer-policy apply-groups
- configure aaa diameter peer-policy apply-groups-exclude
- configure aaa diameter peer-policy connection-timer
- configure aaa diameter peer-policy description
- configure aaa diameter peer-policy ipv4-source-address
- configure aaa diameter peer-policy ipv6-source-address
- configure aaa diameter peer-policy name
- configure aaa diameter peer-policy origin-host
- configure aaa diameter peer-policy origin-realm
- configure aaa diameter peer-policy peer
- configure aaa diameter peer-policy peer address
- configure aaa diameter peer-policy peer admin-state
- configure aaa diameter peer-policy peer apply-groups
- configure aaa diameter peer-policy peer apply-groups-exclude
- configure aaa diameter peer-policy peer connection-timer
- configure aaa diameter peer-policy peer destination-host
- configure aaa diameter peer-policy peer destination-realm
- configure aaa diameter peer-policy peer peer-name
- configure aaa diameter peer-policy peer preference
- configure aaa diameter peer-policy peer statistics
- configure aaa diameter peer-policy peer transaction-timer

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- configure aaa diameter peer-policy peer transport
- configure aaa diameter peer-policy peer transport port-number
- configure aaa diameter peer-policy peer watchdog-timer
- configure aaa diameter peer-policy proxy
- configure aaa diameter peer-policy proxy admin-state
- configure aaa diameter peer-policy proxy local-address
- configure aaa diameter peer-policy proxy mcs-peer
- configure aaa diameter peer-policy proxy mcs-peer address
- configure aaa diameter peer-policy proxy mcs-peer apply-groups
- configure aaa diameter peer-policy proxy mcs-peer apply-groups-exclude
- configure aaa diameter peer-policy proxy mcs-peer sync-tag
- configure aaa diameter peer-policy proxy router-instance
- configure aaa diameter peer-policy python-policy
- configure aaa diameter peer-policy role
- configure aaa diameter peer-policy router-instance
- configure aaa diameter peer-policy transaction-timer
- configure aaa diameter peer-policy vendor-support
- configure aaa diameter peer-policy watchdog-timer

isa commands:

- configure isa video-group ad-insert
- configure isa video-group rt-client

lag commands:

- configure lag port-weight-speed
- configure lag weight-threshold
- configure lag weight-threshold action
- configure lag weight-threshold cost
- configure lag weight-threshold value

python commands:

- configure python python-policy vsd
- configure python python-policy vsd apply-groups
- configure python python-policy vsd apply-groups-exclude
- configure python python-policy vsd script

redundancy commands:

- configure redundancy multi-chassis peer sync diameter-proxy

router commands:

- configure router interface ip-tunnel

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- configure router interface ip-tunnel remote-ip
- configure router nat inside large-scale dual-stack-lite deterministic policy-map
- configure router nat inside large-scale dual-stack-lite deterministic policy-map admin-state
- configure router nat inside large-scale dual-stack-lite deterministic policy-map apply-groups
- configure router nat inside large-scale dual-stack-lite deterministic policy-map apply-groups-exclude
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map apply-groups
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map apply-groups-exclude
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map first-outside-address
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map from
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map to
- configure router nat inside large-scale dual-stack-lite deterministic policy-map nat-policy
- configure router nat inside large-scale dual-stack-lite deterministic policy-map source-prefix
- configure router nat inside large-scale nat44 deterministic policy-map
- configure router nat inside large-scale nat44 deterministic policy-map admin-state
- configure router nat inside large-scale nat44 deterministic policy-map apply-groups
- configure router nat inside large-scale nat44 deterministic policy-map apply-groups-exclude
- configure router nat inside large-scale nat44 deterministic policy-map map
- configure router nat inside large-scale nat44 deterministic policy-map map apply-groups
- configure router nat inside large-scale nat44 deterministic policy-map map apply-groups-exclude
- configure router nat inside large-scale nat44 deterministic policy-map map first-outside-address
- configure router nat inside large-scale nat44 deterministic policy-map map from
- configure router nat inside large-scale nat44 deterministic policy-map map to
- configure router nat inside large-scale nat44 deterministic policy-map nat-policy
- configure router nat inside large-scale nat44 deterministic policy-map source-prefix

service commands:

- configure service ies video-interface adi
- configure service ies video-interface adi scte30
- configure service ies video-interface adi scte30 ad-server
- configure service ies video-interface adi scte30 ad-server address
- configure service ies video-interface adi scte30 local-address
- configure service ies video-interface adi scte30 local-address apply-groups
- configure service ies video-interface adi scte30 local-address apply-groups-exclude
- configure service ies video-interface adi scte30 local-address control
- configure service ies video-interface adi scte30 local-address data
- configure service ies video-interface rt-client

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- configure service ies video-interface rt-client apply-groups
- configure service ies video-interface rt-client apply-groups-exclude
- configure service ies video-interface rt-client src-address
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map admin-state
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map apply-groups
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map apply-groups-exclude
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map apply-groups
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map apply-groups-exclude
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map first-outside-address
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map from
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map to
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map nat-policy
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map source-prefix
- configure service vprn nat inside large-scale nat44 deterministic policy-map
- configure service vprn nat inside large-scale nat44 deterministic policy-map admin-state
- configure service vprn nat inside large-scale nat44 deterministic policy-map apply-groups
- configure service vprn nat inside large-scale nat44 deterministic policy-map apply-groups-exclude
- configure service vprn nat inside large-scale nat44 deterministic policy-map map
- configure service vprn nat inside large-scale nat44 deterministic policy-map map apply-groups
- configure service vprn nat inside large-scale nat44 deterministic policy-map map apply-groups-exclude
- configure service vprn nat inside large-scale nat44 deterministic policy-map map first-outside-address
- configure service vprn nat inside large-scale nat44 deterministic policy-map map from
- configure service vprn nat inside large-scale nat44 deterministic policy-map map to
- configure service vprn nat inside large-scale nat44 deterministic policy-map nat-policy
- configure service vprn nat inside large-scale nat44 deterministic policy-map source-prefix
- configure service vprn video-interface adi
- configure service vprn video-interface adi scte30
- configure service vprn video-interface adi scte30 ad-server
- configure service vprn video-interface adi scte30 ad-server address
- configure service vprn video-interface adi scte30 local-address
- configure service vprn video-interface adi scte30 local-address apply-groups
- configure service vprn video-interface adi scte30 local-address apply-groups-exclude

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- configure service vprn video-interface adi scte30 local-address control
- configure service vprn video-interface adi scte30 local-address data
- configure service vprn video-interface rt-client
- configure service vprn video-interface rt-client apply-groups
- configure service vprn video-interface rt-client apply-groups-exclude
- configure service vprn video-interface rt-client src-address

subscriber-mgmt commands:

- configure subscriber-mgmt bgp-peering-policy prefix-limit
- configure subscriber-mgmt diameter-gx-policy peer-policy
- configure subscriber-mgmt diameter-gy-policy peer-policy
- configure subscriber-mgmt diameter-nasreq-policy peer-policy

system commands:

- configure system management-interface netconf capabilities writable-running
- configure system management-interface yang-modules base-r13-modules
- configure system security cli-script authorization vsd
- configure system security cli-script authorization vsd cli-user

4.2.2 23.3.R2

subscriber-mgmt commands:

- configure subscriber-mgmt pfcp association association-setup-retry

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